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Cover photo by Ellen Foust, Instructional Designer, IT eLearning and Instructional Support

CIO Welcome and Summary

I want to take this opportunity to thank you for your support and collaboration during the 2018/2019 academic year. It has been a year of many changes; two in particular – first, our CIO for the past four years resigned and we conducted a national search for a successor. Our new CIO is Raymond Lefebvre, formerly the CIO from Bridgewater State University – one of the most technologically advanced state universities in the system. The second major change is organizational. The CIO and ITS will now be located directly under the Chancellor instead of Academic Affairs– reflecting ITS' strategic importance within the university.

This report summarizes the AY2018-2019 achievements for ITS. You will see that we have met most of our FY2019 goals. We worked on many critical projects, including Salesforce, CIVITAS, iHUB, VoIP,

Cybersecurity, Website Redesign, Computer Replace Program, ALLY and many others - details for which are listed in this report.

As a service organization, we take great pride in offering superior service to our faculty, students and staff so they can succeed. Each year we survey our clients to get feedback on things that work well and things that do not, so we can address the pain points. We are pleased to note that in FY2019, 80% of our clients have been 'Very Satisfied' or 'Satisfied' with our service. A summary of the survey results is listed below.

Overall Satisfaction with 115 Services 112017			
	Students	Faculty	Staff
Very Satisfied	32%	38%	34%
Satisfied	47%	43%	47%
Satisfied – Total	79%	81%	81%
Neutral	12%	12%	14%
Dissatisfied	3%	3%	4%
Very Dissatisfied	6%	4%	1%
Dissatisfied – Total	9%	7%	5%

Overall Satisfaction with ITS Services – FY2019

Detailed survey results, including services that need improvement are included in the appendices section of this report.

The University has implemented a number of critical systems including Salesforce, CIVITAS, Residential Housing Systems, Blackboard Outcomes, a new Student Applicant Portal– all systems to improve student success and help with student retention. With little to no training, the staff in ITS have played a crucial role in supporting the implementation of these highly visible and critical applications, showing great leadership, strength and dedication to the university. We see the trend of investing in enterprise systems to continue over the coming years. On the horizon are systems or services such as Shorelight, Expansion of Salesforce, the rollout of Dell Boomi (which helps integrate applications and allows for data to move freely between disparate systems), VDI and Gradescope to name a few. I am confident that the ITS staff under the leadership of the new CIO will continue to support the administrative systems and infrastructure that the University implements. Perhaps most importantly, ITS will continue to lead with implementing and supporting technologies that enhance teaching, learning, and research.

None of our accomplishments listed in this report and the commitment to providing a high-level of service to our students, faculty and staff would be possible without the contribution of each and every member in ITS - a 95-member strong team. I would like to thank them for their dedication, professionalism and team work in moving ITS forward during these difficult times.

On behalf of everyone in ITS, we would like to welcome our new Vice Chancellor for Information Technology & CIO Ray Lefebvre and commit to supporting him and his initiatives to move ITS forward.

Sincerely, Apurva Mehta Associate CIO UMass Boston

Org Chart Overview

As in prior academic years, we have seen a fair amount of positive change in personnel. We were very fortunate to welcome four new staff to the ITS team allowing us to enhance our services in the areas of Program Management (Alex Simovici), Desktop Support (Nadya Clark), Telecommunication Services (Larry McKeon) and our new CIO, Ray Lefebvre.

The most impactful change came with the resignation of the CIO in February 2019; however, with strong leadership from within ITS, we were able to continue moving forward. We were sad to see one of our most productive and service centered staff, Rosa Oculto from 'Classroom Technology' resign and head out west. We wish her the very best. We did not have any staff retire in FY2019 and are fortunate to have a very low attrition rate.

ITS is fairly large, 95-member strong team, providing service and support from Application Development to Web Services. ITS encompasses eight broad areas:

- Office of the CIO
- Application and Web Services
- Business Operations
- Client Services & Computer Labs
- Communications and Infrastructure
- Information Security
- Educational Technology
- Research Computing

There was one reorganizational change within IT. The Telecom and Operations teams recently reorganized under one leadership role displaying new strengths and capabilities including but not limited to cross-functional knowledge transfer and cooperation between the two groups under a unified financial model that assists the ITS business office in budget planning, rate adjustments and business processes. There continue to be a few open positions, some in critical areas such as Salesforce Administration,

Application Administration and Instructional Technology. Filling these important positions will allow us to introduce newer technologies that support student success initiatives and enhance teaching, learning, and research.

A copy of our current organization chart is included in the Appendices.

Unit Goals Achieved for AY 2018-2019

Advance student success and development

- Creation of Salesforce Academic Advising application for University Advising Center and College Advisors (PASS/ACM).
 - This program was key to the Chancellor's Student Success initiative. With the implementation
 of multiple program phases, an initial centralized advising application has been developed and
 will continue to be expanded to meet the needs of the University Advising Center and faculty by

centralizing all academic advising case management activities under the Salesforce platform.

- Creation of Salesforce Prospecting Application for Graduate Studies (SFGA).
 - This program was key to the Chancellor's Office request for a student prospecting application for graduate students. An initial

Praise for IT – AV Services

"I cannot thank you enough for John Jessoe and his team's seamless AV support yesterday! Everything went beautifully, you guys were absolutely on point and very patient with all the organized chaos happening around you."

centralized application has been developed and will be expanded in phases to meet the needs

of all graduate prospecting and marketing initiatives. Additional colleges such as the McCormack Graduate School are being imported into this application.

- Review and revise student pay-for-print incorporating OneCard for managing student charges.
 - IN PROGRESS. With the Beacon OneCard expected to go live this summer and the goal to have students use the OneCard for their printing, an RFP was issued to select a vendor that would pilot a new system for the Residence Halls for the Fall Semester with a campus wide deployment for Spring 2020.

Improve the learning, teaching and working environment

- Pilot late-night laptop loans for both residential and commuter students allowing them to have access to a laptop from their dorm and/or home.
 - We purchased five new Dell laptops and a laptop charging cart for the residence hall front desk, with the service advertised by flyer distributed to all residence hall rooms.
 - Limited use and checkout tracking challenges led to a decision to combine these laptops into the library's laptop loan program.
- Grow the Makerspace services by introducing Virtual Reality services for faculty to integrate into their curriculum.
 - Labster company, makers of Virtual lab simulations for faculty in Biology, Chemistry, and Nursing fields presented their offering. One faculty member in Biology is piloting the tool.
 - The ITS department has purchased ten VR headsets for use in classes in any academic department, as well as two 360 Cameras to develop UMB-made content for VR.
- Support the formation and delivery of services of two student clubs attached to the Makerspace. The graduate and undergraduate student clubs aim to develop services that enhance the quality of life for those less fortunate.
 - Two student clubs have been formed, named FUSE (Funding, Understanding, Society and Education) and FUSE-U (The partner group, for undergrad students). The purpose of the clubs is to investigate various ways that immerging technology can improve society.

Praise for IT – Makerspace

"On behalf of WorldBoston and the United States Department of State, I want to extend my sincere thanks for such an insightful meeting with our recent faculty visitors from the Caucasus region. Please know how honored the delegation was to be able to participate in such an informative meeting. The delegation greatly enjoyed the opportunity to engage with you and learn more about the different resources and programs that the Makerspace has for students in a variety of departments."

- The clubs have collaborated with the TAG/Alerta group on campus, as well as with Roxbury Community College.
- The two clubs currently total 40 student members.
- Publish a support catalog for all IT services This will build on the service catalog work done as the underpinning of ServiceNow and will be part of our rolling out of the ServiceNow "Service Portal" module.
 - IN PROGRESS. The process of reviewing and updating all services in ServiceNow is underway.
 Review and update of service descriptions on website are also being completed
- Expand and upgrade Echo360 Capture services by Purchasing 5 to 10 Echo Appliances
 - A total of twelve echo360 devices have been purchased. The plan is to replace five aging systems and to introduce five in new classrooms, to be completed in Summer 2019.

- A number of classrooms, computer labs and non-formal teaching spaces were upgraded to the latest
- technologies allowing faculty & staff to use the latest laptops, iPad and mobile devices. For example, presentation rooms P1 and P2 and the ITC conference room had systems upgraded. AV technology in nineteen classrooms was upgraded from analog to digital. The classrooms now have new projectors, document cameras and most importantly a resident computer and a podium.

Praise for IT – Client Services "The technician quickly diagnosed and resolved a long-standing, intermittent problem. I truly appreciate the professionalism and skill of my IT colleagues!"

- Invest in tools that integrate with Blackboard that ensure courses meet a certain set of protocols as defined by the OSCQR consortium; help automate manual processes (online course evaluation); assist faculty with academic integrity issues as well as ensure that all content is "fully accessible". Use ALLY as a tool to check and ensure documents are accessible.
 - Achieved: Several initiatives and investments were made to make courses in Blackboard be more useful for our students. The Auto Captioning Tool for VoiceThread was acquired. A similar process is underway for Echo360.
 - Other enhancements: the ability to export grades from Blackboard to WISER; the Respondus LockDown Browser and Monitor; piloted Proctorio system to ensure academic integrity for online courses; and ALLY, an app that helps identify documents that are not accessible.
- Host events that promote the use of tools and pedagogies
 - Held 3rd Annual MakerFest event in October to bring the Makerspace 3D Printing and Virtual Reality services to faculty and students, and to improve awareness of the service.
 - Held a total of 31 Makerspace workshops, either for specific UMass Boston classes, or open to the community at large. These classes were customized for the attending group, with focuses in 3D printing, 3D CAD design, and Virtual Reality
- Contribute to student academic success by facilitation of OER adoption across curriculum.
 - Ongoing: successfully secured initial funding to get the initiative off the ground, supported by the Provost Office; however due to severe budget constraints the incentive program has been
 - placed on hold. Most universities have an incentive program in place to attract faculty. We are optimistic that once funding is made available we will be able to launch the OER initiative.

Praise for IT – eLearning and Instructional Support

"Thanks to Gene Shwalb and Rrezarta Hyseni for this morning and her great work with David Matz, and kudos to Ellen Foust for her work with Professor Kappa."

- Continue to promote adoption of Blackboard to increase access and support to all student populations; Introduce the Blackboard Mobile app to students.
 - Ongoing: The adoption of Blackboard courses by faculty has plateaued. Although several outreach efforts have been completed, the adoption of Blackboard has not increased. Metrics on the adoption of Blackboard for the past four years are included in the appendices.
- Host events that promote the use of tools and pedagogies that support ALS (Active Learning Systems); echo360 (Classroom capture); Virtual and Augmented Reality and other software systems that enhance teaching & learning.
 - Achieved: During the academic year, the Educational Technology Team has hosted monthly lunch and learn events where faculty have the opportunity to learn about new technologies and pedagogies and get questions answered by Instructional Designers. During the Spring semester, lunch-n-learn sessions were taken to the colleges allowing more faculty to attend. VR/AR training sessions were not offered as the technology was being acquired and content created.
- The deployment of Ally, a tool that checks for inaccessible documents within Blackboard.

- After the deployment of Ally, the accessibility rate increased from 49% to 73% in online courses.
- In the Summer of 2018 with the help of money from the Office of Diversity and Inclusion we created a SWAT team. We hired 4 undergraduate students and taught them to mitigate accessibility issues within Blackboard courses focused on pure scans and syllabi. The SWAT team repaired over 370 documents and helped to improve 15 of our online courses that had the lowest accessibility scores.
- Moving Forward: Using the SWAT team approach was a very useful learning experience as we gained great insight by having students find and improve documents that professors were using in an inaccessible way. Unfortunately, we discovered many issues with copyright and questionable course design of which we have no real mandates to repair or processes in place to address.

Enrich and Expand Academic Programs and Research

- Enhance the Research Computing environment by redesigning the website, expanding the local HPC cluster & market the services to attract new faculty to the GHPCC.
 - The Research Computing website redesign is essentially complete, with minor edits ongoing. Due to a lack of funding, the technology refresh for local HPC resources has been postponed until FY2020. The number of new faculty this year was the smallest since the creation of the Research Computing group. Nonetheless, we have added 4 labs and 16 users to the Green High-Performance Compute Cluster in the past year.
- We produced and uploaded over 100 videos to the UMass Boston YouTube channel, including a series
- of lectures for the Applied Ethics Center. We also recorded and edited several videos for Departments and Centers in FY2019, including the Chancellor's Office, the Office of Institutional Advancement, the College of Nursing, Advising Office, Infant Parent Mental Health Program, McNair Program, the English Department and others
- Continue to upgrade and expand the Digital Signage System to market events, programs and courses.
 - Due to budget constraints, we did not increase the number of digital signage locations on campus, but hope to invest in digital signage upgrades in FY2020.
- Provide support for the growth of Online Programs

• Achieved: successful launch of the fully

Praise for IT – Scantron Service

"I have been mentoring a new faculty member and was assisting him with his exam. We had not received the results so I stopped by the library to check. Christine Boseman was in the library when I went over. She dropped what she was doing and spent time checking on this. She discovered that It was listed as scanned but found that the results were never sent. She immediately re-scanned the exams, got the new faculty member in the reporting system and sent the results. I so appreciated her willingness to spend the time investigating and immediately rectifying the problem. I wanted you to know what a good job she had done."

- online Blackboard course Teaching and Learning Online Summer 2019 to train McCormack faculty cohort to develop a new online Graduate Certificate for the Fall 2019
- Introducing virtual labs to meet the demand for Introductory Level Science courses.
 - Achieved: In collaboration with Healey Library, eLIS helped investigate possible virtual lab platforms for introductory Anatomy and Physiology courses. Helped set up trials for faculty and staff. David Sigmon, professor in the Biology Department piloted Visible Body--one of the platforms--in Fall 2018. However, we found that the solutions were costly and accessibility was a concern.
- Widespread deployment of Course Evaluation an online system migrating from Blackboard Course Evaluation System

 Achieved: The system EvaluationKIT (EK) was selected as a replacement to Blackboard own course evaluation system. The EK system went live in April 2018 and for the Spring and Summer 2018 semesters the eLearning team offered training for all the academic departments that had used Blackboards' Enterprise Survey tool. To date, EK is mainly being used by online courses. To expand adoption additional investment in licenses and training would need to be offered.

Develop an infrastructure supportive of the preceding goals

- Replacement of My Password / Applicant Portal User Provisioning
 - To provide a more user-friendly and secure password management experience, the Boston campus served as the UITS proof of concept for the design and implementation of a new Oracle Password management application (part of the oracle identify management suite of applications). The new password management application streamlines the students credential management experience, and provides a true 7/24 self-service capability. In conjunction with the password management project the campus also served as a proof of concept for the design

and implementation of auto account provisioning and account claiming for undergraduate applicants. This new functionality provides new undergraduate applicants with UMB account credentials immediately upon submitting their application for admissions and provides

Praise for IT – Client Services

"I want to thank my technician for being so caring. You have made my work space so much more efficient. For that... I am so thankful!"

- them direct access to the new MyUMB admissions portal.
- Add ISC Crestron Rooms to Fusion Monitoring System
 - The Crestron systems being used in the ISC classrooms were integrated with the Fusion Monitoring System. This allows the technicians to monitor and support the technology remotely.
- Upgrade Digital Signage System Content Server.
 - The Digital Signage Content that manages and pushes the content out across campus TV's was upgraded. Purchase and install additional Visix Media Players to replace outdated
- Vbrick set top boxes.
 Review and revise the Kace 1000 implementation to enable better workstation management across campus.

Praise for IT – AV Services "John Jessoe and the AV tech team did a perfect job on audio and visual (I was talking with the WBUR tech team at the end who sang the praises of the UMB tech team)."

- COMPLETED. Implemented a new Kace
 instance in a faster performing server environment. Integration with AD allowed us to push Kace client to all devices in managed computer domain. We went from less than 800 devices minimally managed by Kace to close to 2,000 devices fully managed, with improved ability to push applications in addition to patches.
- Conduct a complete a review of workstation lifecycle process and develop project plans for streamlining critical parts of that process.
 - CANCELLED as a goal, though Kace update and Replace process modifications have improved key parts of lifecycle process.
- Access to resources Enhance/improve VDI services so faculty and students can access software resources from off-campus.
 - VDI functionality footprint has been expanding beyond the KIOSK offering to a number of labs within the Healey library. The need for this effort was driven primarily by the retirement of the Virtual Computing Lab service hosted in UMass Dartmouth. The VDI service is used by a number

of departments to meet computer lab needs allowing students access to specific proprietary software.

- Invest in services such as file storage (OneDrive); mobile apps, VDI, and pay-for-print that enhance faculty, staff and student experiences.
 - Xythos individual and file shares are in the process of being migrated to OneDrive which encrypts data at rest and in transit. OneDrive provides an 'anywhere' access as well as collaboration features in real time and meets regulatory data compliance.
- Complete the implementation of the Unified Communications Plan, including the deployment of SIP (Internet) Phones, implementation of Pinnacle Billing System, Automated Call Distribution (ACD), and E911.
 - All eligible campus phones have been converted to SIP phones. Pinnacle is up and running and includes a production environment and test environment. ACD has been re-established for critical enrollment management departments. A modern contact center will be implemented by Fall 2019 to be followed by E911and SIP trunking.
- Working in close collaboration with Facilities, continue developing plans to build out the new iHub facility in the Service and Supply building.
 - iHub was off to a slow start but steadily progressing. Early stages of demolition have begun, and permits are being acquired. iHub site readiness for construction in Quinn, Upper Level room 014 is ahead of schedule. iHub site readiness is directly tied to legacy phone system decommissioning.
- Complete the Utility Corridor and Roadway Relocation (UCRR) plan by providing connectivity to all campus building BDF locations, by eliminating all garage level low voltage connections and by

absorbing these connections into UCRR low voltage cabling distribution.

 UCRR optical and copper connectivity is approximately 95% completed and will remain as such until the Science data center is decanted and vacated. *Praise for IT – Client Services* "Super efficient, quick and professional. Answered all of my questions and made sure I had no more questions before he left. I am grateful for the support!"

- Upgrade the Active Directory (AD) system that allows for managing client computers across the enterprise
 - The campus AD system has been rearchitected to provide redundant highly available services by deploying virtual instances on-premise, at the UMass Private Cloud, and in Azure.
- Develop reporting for system utilization and capacity planning for the virtual environment
 - VMWare reporting capabilities for evaluating the system utilization and overall health of the virtual environment have been added. The data collected include system utilization, CPU utilization, memory usage and storage. With the continued efforts to virtualize servers these reports become ever more valuable to create benchmarks for capacity planning.
- Deploy read-only Domain Controller in Shrewsbury as part of the Data Center Optimization (DCO) environment.
 - \circ $\;$ This task was completed with the Active Directory redesign and upgrade.
- Move Wireless Network Address Translation (NAT) to the border.
 - The Wireless offering on campus was re-architected as part of the Firewall Consolidation Program. A major component of this was moving the NAT functionality to the new firewalls. This was done in conjunction with moving the wireless controllers to the new firewalls.
- Implement anti-malware strategy for virtual machines and kiosks.
 - Hardware was purchased to run McAfee's VM software MOVE, however Sophos was selected independently for endpoint protection. Now that Sophos has been acquired, all VMs and kiosk

images can use the new supported software and receive the same protections as that of non-VM endpoints.

- Selection and implementation of a NAC (Network Access Control) System.
 - We have evaluated network access control (NAC) solutions. Given the timing of the Network Refresh Program, we plan on integrating the Extreme Network's NAC solution with Extreme Network's network equipment. The NAC deployment will be phased-in to minimize disruption. This work is halted pending the funding of the Edge Network Refresh project.
- Consolidation and virtualization of web server footprint to Shrewsbury as part of the DCO environment.
 - Faculty and students' webservers were virtualized and migrated to the virtual environment in the Shrewsbury DCO.
- Migrate license servers into new environment to accommodate a greater selection of applications that depend upon software licensing.
 - License servers were redesigned and virtualized to accommodate further expansion or additions of applications.
- Unified Communications Program
 - The completion of this multi-year program has brought us into the 21st century by replacing the outdated PBX, moving to Voice Over IP technology, and implementation of Automated Call Distribution capabilities for all telecommunications across our existing data network.
- Content Management System Hardware and Software Upgrade(s)
 - This was a one-year initiative to upgrade our Expression Engine Content Management system which supports the University of Massachusetts Boston's web presence. The upgrade consisted of software and hosted hardware architecture upgrades.

Praise for IT – Client Services "I was very impressed that the technicians so quickly identified the problem and then were able to quickly fix the problem (which was non-trivial and involved broken hardware). Thank you!!"

- Xythos to Microsoft OneDrive Migration
 - This was a one-year initiative to retire our Xythos Document Management and Collaboration software and to migrate all existing files, folders, and structures to our existing Office365 OneDrive solution. This involved the migration of over 21,600 users and files, providing user training and ongoing support throughout the migration.
- Initial Implementation of UITS sanctioned Digital Data Integration Tool DELL Boomi.
 - This is a multi-campus and President's Office initiative to replace outdated ETL processing with the implementation of the DELL Boomi ETL tool. This is a multi-year program which affects all data feed processing across all campuses. Our initial implementation provides Student Administration data to our Salesforce Academic Advising Case Management application PASS/ACM.
- StarRez Housing Application
 - With the introduction of on campus housing at the University of Massachusetts Boston, we acquired and implemented the StarRez application to provide services for housing students in the residence halls. The system is also integrated with the Atrium Beacon Card System, PeopleSoft and the COCM application Property Boss.
- Kuali Research for Office of Research and Sponsored Programs.
 - The implementation of Kuali Research will allow ORSP the ability to manage the multitude of Grant processes across the campus that were previously accomplished via manual processes and tools.
- We utilized the Extron Global Viewer and Crestron Fusion systems to monitor the AV Systems in 225 Classrooms in FY2019. These systems allow us to monitor the status of our AV Systems and projectors

so we know when to replace the lamps to avoid lost teaching time by having a lamp burn out during a class. These systems also allow us to program some of our classrooms to turn off the projection systems each evening so we do not have lamps burning when our classrooms are not in use. We were to expand this service to include the Crestron equipped rooms in the ISC in FY2019.

Major Unit Achievements for AY 2018-2019

UMass Mobile App Redevelopment/Redesign

This was a 6-month effort by our in-house web designers to redesign and expand our mobile presence. With mobile device traffic now exceeding 40%, a major revamp of the site was initiated and included new applications and modules. We were able to deploy prior to commencement activities and were able to spotlight the commencement on the new mobile app. Additional work will be accomplished in AY 2019-2020

to continue to expand our mobile footprint to meet the needs of our students, faculty and staff.

Cybersecurity

Endpoint Security: Program to harden endpoints: The University of Massachusetts System has selected Sophos Intercept X to replace McAfee Endpoint Protection Suite. ITS Information Security and the Desktop Services Team

Praise for IT – Web Services

"Lisa Link was very energetic and enjoyable. It is nice to have workshops like this! Love your enthusiasm and knowledge of topic!! Thank you! I have a lot of new ideas & insight for program marketing."

have begun transitioning university computers to the new platform. To stop a wide range of ever evolving threats, Sophos Intercept X employs a comprehensive defense-in-depth approach to endpoint protection including Intelligent Endpoint Detection and Response with Machine Learning and Artificial Intelligence rather than simply relying on one primary security technique.

Endpoint Vulnerability Scanning: The University of Massachusetts System selected Tenable to replace Qualys as the endpoint vulnerability scanning platform. ITS Information Security has rolled out Tenable and is actively scanning wired end-user networks on Campus. ITS Information Security Team and Desktop Services work together to mitigate threats found on end-user networks. ITS Information Security will continue to deploy Tenable to other areas on the Network.

Enterprise Systems

O365 Advanced Threat Protection: Information Technology Infrastructure Services rolled out new security features as part of a suite of tools including Microsoft's Advanced Threat Protection (ATP). These tools were rolled out to students, faculty, and staff to combat phishing scams and to otherwise better protect our university community. Many of the newly introduced security features work seamlessly in the background, with minimal interactions, if any. Tools that were rolled out are Anti-Phishing, Anti-Impersonation, Anti-Malware, ATP Safe Links, and ATP Safe Attachments. This resulted in a considerable drop in Service Desk tickets and emails to the abuse list.

Network Engineering

Network Expansion: ITS Infrastructure Services expanded the UMB data network to include a new BDF at Bayside bringing it closer in architecture to that found on campus main buildings. An Extreme S1 Chassis has been installed, configured and is now online and providing greater *Praise for IT – Client Services* "Quick service to respond and issue resolved; your techs know their information!!"

redundancy than existed previously. The Network has expanded to include new residence halls, parking garages, and the Building Maintenance System (environmental controls). A new DMZ is being added for the use of Raspberry Pi devices that can collect data to monitor network use and performance.

Telecom Operations

Campus Topology Redesign: Infrastructure/Telecom Operations completed the connection of the (Utility Corridor and Roadway Relocation). The team populated the UCRR fiber and copper cable plants to redesign

the Campus communications topology. The legacy phone equipment has been retired and is replaced by a state-of-the-art MX-One phone system. Digital phones have been replaced with VoIP phones. This retirement has freed up space for the iHub. The telecom operations team has been fully engaged in the design meetings related to iHub construction. The REAB design and ITS construction management of staff office moves (including phones, systems and services) is ongoing. CIS Operations is participating in the design and is advocating for the technology infrastructure for SQSD (Substructure, Quad, Science Demolition).

Client Services

From an efficiency standpoint, and as way to enhance service, we have implemented a streamlined and more consistent approach to computer imaging using Microsoft Deployment Tookit for computers deployed to faculty/staff as well as Windows computers in our labs. We have also leveraged ServiceNow to facilitate delivery of services for our faculty, staff and students. The knowledge base is being built with articles on

commonly asked questions and reports are being used to better monitor trends. Other enhancements include the upgrade to the Bomgar System allowing us to better support both Mac and PC's; distribution of Sophos Anti-Virus via Kace and the upgrade of computers to Windows 10.

Classroom Technology & AV Services

The team provided AV Support, Video Recording and Live Streaming for a number of major university events including the Undergraduate & Graduate Studies Commencement, Doctoral Hooding Ceremony, Fall Praise for IT – Instructional Technology Center "The following is a small selection of the words of praise from Katherine Ananis's training workshops this year: 'Excellent!' 'Perfect speed.' 'Wonderful!!' 'Patient instructor, well-paced class.' 'Exceeded all expectations. Terrific' 'Why didn't I take this sooner?' 'Excellent class.' 'Katherine was resourceful and knowledgeable. She did a wonderful job'"

Convocation, Open Houses, Welcome Day events and various other events for the Chancellor's Office, such as the Town Hall Forums and Faculty Research Celebrations. State and National events such as the Massachusetts Congressional Debate and the Massachusetts Attorney General Debate, both of which were broadcast live on WBUR, and a "Green New Deal" event with Senator Ed Markey were delivered by the AV team In addition to our AV Support for campus-wide events, we also provided audio engineering services for the fall and spring Performing Arts concerts for the Jazz Band, Rock Band, Chamber Singers, Choir, etc.

eLearning and Instructional Support

Blackboard Outcomes: The Boston campus is the first University of Massachusetts campus to use Blackboard Outcomes for evaluation purposes. Some instructors are conducting departmental writing evaluations in the departments of Chemistry, History, Sociology, and Political Science. One of the projects using Blackboard outcomes is a Davis Foundation funded initiative - Electronic Writing Assessment Portfolio (EWRAP). We continued working with Dr. Karen Ricciardi on a pilot that supplements the goal of assessing writing proficiency for Juniors taking intermediate seminar courses. This is part of a large Davis Foundation grant from 2015, which has been extended for this data collection. In Fall 2018 there were 280 portfolios submitted and reviewed using Blackboard Outcomes tool. In Spring 2019, that number increased to 623. Members of the Instructional Design team met regularly with the key stakeholder (Dr. Karen Ricciardi) to plan data collection and design the support structure, as well as with UMOL support team to troubleshoot issues related to Blackboard updates. We evaluated data collection methods, redeveloped support materials in a way that are more efficient for participants, as well as changed the data collection method from having a content area in 20 different intermediate seminar courses, to using a non-credit course created by the Registrar, where approximately 1200 intermediate seminar students were enrolled. Using one course allowed us to better streamline and maintain the process. We saw improvements, not only in the numbers of participants, but in the decreased number of empty portfolios.

ALLY and Accessibility Project: In order to address the needs of all students, we made accessibility a priority. The goal is to use ALLY to scan all the documents in online courses for accessibility issues and have them corrected. Along with the deployment of ALLY for all courses, we added accessibility pages to our website,

https://www.umb.edu/eLearning; launched a SWAT team (students) with funds from the Office of Diversity and Inclusion, worked with the Disability Services group to build training around accommodations, and provided many workshops and webinars to educate faculty. Since we began using ALLY, we have seen an overall increase in our accessibility scores of 20% and a 26% decrease for our main goal of reducing scans in courses. We still have a long way to go but the improvements seem to be gaining traction as courses are copied forward.

FY2020 Goals

Advance Student Success and Development

- Enhance the remote software service offering through an additional cloud-based service. This will provide greater flexibility to students and teachers allowing for telecommuting and near constant access to class teachings, labs, exam materials and more.
- Increase by 5% the use of Blackboard for all students by focusing on the LMS as a "Universal Access Port" for all academic content.
- Promote best practices in its use among faculty with on-campus training workshops, webinars and outreach events in innovative formats
- Contribute to learners' equity and access by establishing clear expectations among academic administration and faculty about online course quality standards, including accessibility, through the continuous deployment of ALLY, principles of OSCQR and UDL (Universal Design for Learning). Develop at least ONE exemplary Blackboard course in each college by partnering with academic administration and faculty.
- In collaboration with librarians facilitate adoption of high-quality OER and Healey Library "free" digital collections across curriculum by conducting outreach events throughout the academic year, plus:
 - \circ $\,$ Conduct at least 4 outreach events throughout the academic year $\,$
 - Implement a faculty incentive program
 - Partner with at least one GenED faculty to adopt a Lumen Learning OER content for one of the 100-level math courses
 - Analyze OER Survey for Faculty and establish working relationships with 17 interested faculty;
 - Form a Steering Committee with stakeholders (eLIS, faculty, students, librarians) to facilitate OER adoption. See if a Faculty Fellowship program can help achieve our goals.

Praise for IT – Makerspace

"We have used one day to teach middle school girls on how to program in Computer Science at UMass Boston since 2010. In 2018 UMass Boston MakerSpace helped us with this event, providing an amazing experience with VR technology through a game. Additionally, Maker Space generously provided 3D printed souvenirs for each participant and a Trophy Cup for the winner of a CS competition. I would like to thank everyone in MakerSpace for their help during Tech Savvy 2018!"

• Increase the ALC success by expanding the number of active learning classrooms and spaces on campus

by adding/creating 2-3 classrooms besides ALC and TEAL. Promote learners' engagement with the use of mobile devices in the classroom:

- Create an awareness campaign to publicize Blackboard mobile app among students
- Expose faculty to gamification apps (e.g. Kahoot) to develop learning activities in the classroom
- Create equitable access to active learning opportunities by implementing and supporting High-Impact Educational Practices, identified by AACU to benefit diverse student populations, including engagement and retention:
 - Launch the Project-Based Learning initiative in collaboration with the Office of the Provost.

- Partner with the Office for Faculty Development and the Office of the Provost to design and implement the next TAL Fellows programming, specifically targeting teaching in large enrollment courses (pre-selected 22 faculty: 2 cohorts each consisting of 11 faculty).
- Participate in Phase 2 of the Practitioners Scholars Program (PSP) implementation of community-engaged learning in collaboration with the UMB Office of Community Partnerships.
- New One Stop Application Development in Salesforce Enterprise HEDA org.
 - The original One Stop application resides within the Enrollment Management Salesforce org.
 For integration with PASS/ACM Academic Advising Salesforce application the application must be redeveloped in the Salesforce Enterprise HEDA org.
- Expansion of Salesforce Academic Advising application for University Advising Center and College Advisors (PASS/ACM).
 - Continuous expansion to the application includes additional system of record data, introduction of predictive analytics for Student Success, and expansion of users to the Home Offices, including Bursar, Financial Aid, and Registrar with integration with the new One Stop within the Salesforce Enterprise HEDA org.
 - Expansion of Salesforce Prospecting Application for Graduate Studies (SFGA).
 - This program is key to the Chancellors Office request for a student prospecting application for Graduate students.
- UMass Mobile App Redevelopment/Redesign
 - Continue to expand the mobile app to allow additional applications to be integrated with the mobile app such as Blackboard Learning and Enterprise Applications.
- In partnership with UMass Lowell, participate in the Student Payment RFP, select, and implement the Student Payment System. Participate in SA Governance projects such as Curriculog, CIVITAS and Student Billing that impact the Boston campus.

Enrich and expand academic programs and research

 Replace aging hardware on the local HPC cluster & market the services to attract new faculty to both local HPC resources and the GHPCC. We will also implement a new Open OnDemand service to enable user-friendly access to High Performance Compute resources via a browser based graphical user interface. "Please forward my appreciation to the team who made it possible for the university to the use scheduling assistant function in Outlook by automatically showing busy/free times. I have used it for many years prior to my time here at UMB, and am now encouraging everyone to use it. It's great that we are promoting simple, readily available tools to increase efficiency."

- As a result of last year's successful collaboration with Cohasset Center for Student Coastal Research (CSCR), a new offering of Coasts and Communities Open Online Course will be made available in Fall 2019. A grant awarded by MASSIDEAS will fund the teaching expenses for the course.
- Provide support for the growth of Online Programs.
 - Support Nursing faculty in developing and teaching courses for the new Advanced Online Nursing Program being launched for Fall 2020 by training, support new technology such as Examsoft, and providing ongoing consultations on best practices for teaching online
- Collaborate with McCormack Graduate School of Policy and Global Studies to launch an online version of the award-winning Gender, Leadership, and Public Policy (GLPP) Graduate Certificate for Fall 2019 by providing training and best practice consultations. Partner with Qualitative Reasoning (part of the GenEd program) faculty to adopt the Lumen Learning OER content for one of the 100-level math courses
- Plan and scale up an adoption of flexible models of teaching (e.g., flipped, hybrid, blended) across curricula

- Plan and roll out a flipped/blended section of the QR 114 course for Fall 2019 with Math Department faculty
- Collaborate with Communications Dept faculty to increase the number of hybrid courses by 5% during AY 2019-2020
- Increase the awareness and use of Blackboard Outcomes as a data collection tool to enrich student learning by:
 - \circ $\;$ Schedule four or more workshops on the use and value of Blackboard Outcomes.
 - Reorganizing Blackboard nodes to support increased use of Blackboard Outcomes (this also supports ALLY reporting use).
- Host training, events, and marketing to promote Makerspace use to the University of Massachusetts Boston community, with a focus on its benefits for curriculum delivery.
- Roll out Virtual Reality services to faculty as a pilot for a campus-wide service.

Improve the learning, teaching, and working environment.

- Reach and engage with the University of Massachusetts Boston community by:
 - Producing and distributing a monthly e-newsletter
 - Establishing multiple social media channels and posting to them consistently at least once a month
 - Engaging with student advocacy groups
- Promote quality, accessibility and standards of online classes with academic tools, integrated with Blackboard and teaching of best practices (ALLY, OSCQR, academic integrity, etc.) through workshops and webinars that increase the accessibility of courses by 15%
- Plan and host an annual "Teaching with Technology" day/half-day event in late Fall 2019 or early Spring 2020 that is open to all faculty.
- Work with EvaluationKit company to reevaluate the way it is implemented and deployed and develop training for staff to standardize the deployment of course evaluations
- Work with UMass Online and Registrar office to have faculty self-select their courses from each semester. Learn from UMass Lowell and Dartmouth how they have implemented this solution.
- Partner with The Ross Center for Disability Services to implement an online training on Ross Center (Accommodations) and eLIS (Accessibility) Services for people with learning differences.
- Add Campus Center Meeting Rooms to Crestron Fusion Monitoring System.
- Install Echo360 Capture Appliances in six new classrooms and replace six end of life echo360 Capture Appliances.
- Order and install six to twelve additional echo360 Capture systems to replace end of life units currently in service
- Work with external AV vendor to upgrade ten to fifteen classrooms from analog to digital, adding a resident computer and a teaching cart
- Upgrade the AV system in Presentation Room 6 and M-2-107 from analog to digital
- Upgrade UMB digital signage system by replacing end of life set top boxes with new Visix media players
- Add digital signage in residence halls
- Configure permanent fiber paths between Healey LL control room and University Hall auditorium and ISC atrium
- Provide project management and certification for REAB 1 and REAB 2 classroom, meeting room and lab upgrades.
- Configure Presentation Room 6 for One Button Studio recording.

Praise for IT – Client Services

"Just want to send a note of thanks for all your professionalism and speediness in getting my new PC up and running. Follow up emails after PC replace typically detail additional assistance, but in this case, I have everything I need, and wanted to reach out and say thank you. It's always a pleasure working with you!"

- Work with ITS senior leadership to increase awareness of distance learning classroom capabilities.
- Increase Zoom Meeting usage on campus, by increasing the amount of available license from 300 to 400.
- Move the Makerspace to its new location in McCormack, partnering with the REAB team to coordinate the move.
- Launch training and marketing projects for Office 2019 and Office 365.

Develop an infrastructure supportive of the preceding goals

- Expand the cybersecurity awareness program with increased activities during the October National Cybersecurity month for students, faculty and staff.
 - IP Address Management (IPAM): Upgrade the IPAM environment and clean up the records to offer a more accurate authoritative source for all IP addresses and DNS entries on campus in preparation for a planned major architectural upgrade.
- Data Compliance: Deploy the Varonis tool across campus so as to increase visibility to the locations of sensitive data on campus.
- The UMB edge network refresh will enhance performance, reliability and security for all UMB network users. It will also strategically position the University to meet the technology needs for the foreseeable future offering the latest in technology advancements. This will be a significant competitive advantage amongst our competing higher education institutions.
- Provide student employment opportunities within the Systems, Networking, and Linux groups to offset staffing needs and provide real time experience for the students. Additional flexibility, functionality and cost effectiveness will allow for the enrichment and expansion of existing academic programs and research, while allowing for the creation of even more learning opportunities.
- iHub completion and full commissioning.
 - Relocation of all Science data center assets to IHUB once completed.
 - Decommissioning of Science data center.
- Improve services and security in the parking garages and open lots across campus
 - West garage stabilization and service and support level agreement finalization.
 - Upgrade additional parking lots and Campus Center garage to West garage PCI environment.
- Participate in the REAB and the Science Building Demolition Projects
 - SQSD participation and garage and science building demolition participation.
 - REAB completion to include new networks, continued space moves and service delivery, and project participation.
- Roll out Mitel MiCenter Contact Center Enterprise as the "ACD" or call management solution to the Service Desk. The Service Desk will be the first implementation and act as the pilot to inform rollouts to other groups on campus including Admissions.
- Jamf implementation. Apple hardware can only be minimally managed through Kace. Jamf will enable much greater endpoint management solutions for the Apple hardware on campus. We will aim to deploy Jamf clients to 350-400 devices this coming year.
- Review of proposals to Student Printing RFP, select a vendor, and implement an improved student print solution across campus.
- Convene ServiceNow knowledge team to establish standards and guidelines and to populate ServiceNow with a core set of articles that get reviewed, updated and added to on a consistent basis.
- Complete the Xythos to Microsoft OneDrive migration
 - \circ Complete the migration by the end of July 2019 and decommission the Xythos hardware and software system.
- Continued Implementation of UITS sanctioned digital data integration tool DELL Boomi.

- Replace current Talend ETL which supplies data from PeopleSoft to the Graduate Studies (GASF) Salesforce application. Retire Talend. Additional expansions to Boomi architecture and data feeds is planned as this architecture is implemented across the campus for all data feed processing in the upcoming years.
- Complete the Document Imaging implementation for Graduate Studies that was interrupted by the Peoplesoft 9.2 upgrade.
- Expand the AlertUS Emergency Notification system to integrate with Panic Buttons.
- Implement the Kuali Research system for ORSP. This will allow them to manage the multitude of grant processes across the campus that were previously
 Praise for IT Client Services
 - accomplished via manual processes and tools.
 Completion of multi-year full web site redesign - After 2 years of development and
 - design the remainder of departments will be redesigned bringing an end to this multi-year program.

Praise for IT – Client Services "The problem was complex, and I also, inadvertently, added to its complexity. I know the system administration sufficiently to be able to appreciate how professional the IT staff was."

- Complete the implementation of 311 (Here4U) web application. Development started in AY2018-201919. The application will be implemented in AY2019-2020 to the population.
- Launch ServiceNow self-service ITS portal. The self-service portal will provide a one-stop structure for the intake of incidents and requests for ITS service approval and fulfillment processing. This includes the migration of all submission forms to the ServiceNow platform
- Commence the planning and design for the implementation of the ServiceNow change management module.
- With appropriate funding, and sponsorship of HR leadership, license the HR Connector module to track and provide metrics for a HR service requests.
- Implement enhancements to the 25Live system:
 - Upgrade 25Live to 25Live PRO, which provides an improved user interface.
 - Add JReports to improve our ability to customize 25Live reports for our clients.
 - Continue to work with CollegeNet to improve the LYNX interface that was upgraded last year.
- With the completion of the Unified Communication Program, implement the Automated Call Distribution capabilities for the ITS Service Desk and other departments across the campus.
- Upgrade Code42 CrashPlan software to the newest web-based version.

Beyond IT: Collaboration and Outreach in the last year

Project-Based Learning Summit with Cohasset Center for Student Coastal Research, July 26, 2018

In July 2018, members of eLearning and Instructional Support. along with UMass Boston's Center for Innovation and Excellence (CIE) in eLearning partnered with Cohasset Center for Student Coastal Research for the Center's first Project-Based Learning Summit, in Cohasset MA. Over 70 educators from various educational institutions, and leaders from community organizations, participated at the summit.

1919 Boston Police Strike Project, Online Training Course for Biographical Researchers

eLearning and Instructional Support (eLIS) expertise in Open Education and experience with Massive Open Online Courses (MOOCs) enabled the UMass Boston Library Archives team to successfully recruit and train volunteer researchers for the Doing Biographical Research: the 1919 Boston Police Strike Research Project in preparation for the strike's centennial on September 9, 2019. Over 70 educators from various educational institutions, and leaders from community organizations, participated at the summit.

[To learn more about these two initiatives please see the Appendices section]

Practitioner Scholars Program (PSP) Pilot in collaboration with Office of Community Partnerships Launched in Fall 2018, the Practitioner Scholars Program Pilot is a first of its kind co-teaching pilot program that aims to enhance existing courses with real world, practical, field-based experiences by bringing in practitioners to co-teach with faculty in the classroom. The eLIS in collaboration with the Office of Community Partnerships implemented the 8-month pilot program by supporting a cohort of four faculty and practitioner pairs who co-taught four courses in the Spring 2019 semester.

The program began with a one-day institute for all the co-teaching pairs of faculty and practitioners to get to know each other and develop a shared understanding of the values and goals of this program. The co-teaching pairs then met with eLIS members to develop a curriculum and pedagogy with community-engaged teaching and project-based learning keeping community needs in mind and with deliverables that will benefit the community that the practitioner works with. At the end of this 8-month program in May 2019, we had a culminating public event to share the experiences and learnings from this program.

The 2018-2019 PSP initiative involved 4 classes, co-taught by a UMB faculty and a community partner, and more than 80 students.

Makerspace

The UMB Makerspace formed collaborative partnerships with a large number of outside organizations/institutions this year. Makerspace collaborated with Roxbury Community College (RCC) to share knowledge and staff time to present several training programs to RCC and UMB students. They also collaborated with HATCH, a public Makerspace run by the Watertown Public Library system to share knowledge, supplies, and volunteer time. Makerspace connected with Fab Foundation, a non-profit arm of GE to connect with area K12 schools and partnered with UMB's Upward Bound program to present an 8-week class to area high school students. They organized a two-day meeting with staff from École Royal Vale School in Canada with several UMB faculty to discuss their use of the UMB Makerspace in their classrooms. They hosted events for delegations from Srinakharinwirot University (SWU) in Bangkok, Thailand and teachers from the Ukraine. Plans are underway for future collaborations with Everett and Winthrop high schools.

Addressing ITS Weaknesses

FY2019 has been a fiscally tight year; however, our newly enhanced Business Office has worked with each

department to ensure that we stay within our budget with responsible spending throughout the fiscal year. However, FY2020 looks to be more daunting than FY2019; and will require tighter controls on spending if we are to meet our budget targets.

Praise for IT – Client Services "I really appreciate the timely, efficient, thoughtful and knowledgeable help I receive every time I reach out to IT... Thank you!"

Today ITS depends heavily on student staffing for Tier 1

support in the areas of Service Desk, Computer Labs, Classroom Technology Support and Instructional Support at a cost of over \$500k annually. With tight budgets, this is one area that will likely be impacted; the fear being that the level of service we provide our faculty, staff and students will be impacted. ITS staff may need to cover routine calls that were performed by student staffers.

As the University moves to address issues of student success and retention, it has invested in systems such as Salesforce, CIVITAS, and others to help identify students that need assistance, well before they fail and possibly withdraw. Other large systems deployed support the Residence Halls – managing the housing system and interfacing it with our WISER System has required close collaboration with UITS. With so many complex systems being added to our portfolio, managing/supporting them with existing staff has been challenging. This scenario has forced us to think about how we manage projects and we are hoping to create a Project Management Office in FY2020.

In addition, UITS has invested in Dell Boomi – an app that allows us (UMB) to manage moving data between systems – this system requires special technical skills. However, we have not been able to fill open positions. With the new CIO Ray Lefebvre coming onboard, the goal is to have him review the organizational structure and make changes as needed to meet the needs of the university moving forward. Due to the ever-changing and growing cybersecurity requirements (both technical and non-technical) on campus, the Information Security team is finding it increasingly difficult to keep up with daily and project-related tasks. Technologies

are often acquired per audit recommendations but often not fully utilized for lack of personnel. The Research Computing team faced similar issues with limited staff and no project funding in FY2019. As the IT landscape continues to change, staying current with the new and trending technologies becomes ever more critical in higher education. Our increasing technically savvy student population imposes significant new demands on our infrastructure and staff with each new academic year. The systems and network teams have become experts in the traditional offerings they currently provide, such as the virtual server technologies, active directory, virtual networking etc. Some of these projects or technologies are heavily dependent on external vendors for upkeep and upgrades. Is this something we can continue to afford? We continue to transfer parts of our physical footprint to the cloud, including Azure and the UMass Private Cloud. This remains a challenge as the skillsets required have not been developed to accommodate the shift. Significant strengths of the unit are cohesiveness in relationships both within and external to the unit in getting the job done even under the adverse financial and resource constraints that we have endured for the past 2 years.

Appendix

ITS FY 19 Satisfaction Survey

Satisfaction Survey Summary Report

As we did last year, the survey was administered by members of our Institutional Research (IR) office. I would like to thank members of the IR team especially Fatema Ahad for managing the entire process – from conception to reporting. The survey instrument was reviewed by members of the ITS leadership team and we reduced the number of questions (from FY2018) with the aim of making it easier and quicker to complete. However, response rates continued to decline – with just 2% of our students responding. Faculty and staff rates were slightly better with 14% and 16% responding, respectively. Overall Observations:

- 1. There is a very high-level of satisfaction among all three audiences on the services that IT provides coming in around 80%. The percentage of respondents across all three segments who said they were 'unsatisfied' was very small less than 7%
- 2. There has been a lot of improvement in the Wireless Service, both in terms of coverage and dependability and no longer remains a pain point; although it is an area that students shared should be improved.
- 3. The one area that faculty listed needing improvements is the 'technology in the classroom'. As new buildings have come online, much of the attention has been shifted there, resulting in existing classrooms being neglected & the lack of funding to replace older equipment.
- 4. Email and other services offered by the ITS staff all get very high scores in satisfaction levels services include: Instructional Support, WiFi, the Service Desk, Desktop Support, Web Services, ERP Support, etc.
- 5. 'Student Printing', 'Computer labs' and eMail Services were pain points for our students looking to see improvements.
- 6. Besides the 'Technology in the Classroom', the use of Blackboard continues to be a pain point for our faculty, mainly from an 'ease of use' perspective.

Highlight of the survey results: Faculty

The survey was sent to 1,176 faculty with just 162 completing the survey (14%).

81% of the faculty said that they were satisfied or very satisfied with IT Services; while 12% were neutral and just 7% were unsatisfied.

The top three services faculty use are: WISER, WiFi & Blackboard.

What is the one service you would like to see improved - The top three services the faculty listed were: Blackboard (17%), Wi-Fi (14%) & Technology in the Classroom (13%)

Service	Dissatisfied %	Neutral %	Satisfied %
Wireless has been available	10.2	3.9	85.8
Wireless has been reliable	16.6	19	64.3
Blackboard has been available	1.5	7.7	90.8
Blackboard is easy to use	14.9	21.1	64.1

Service	Dissatisfied %	Neutral %	Satisfied %
Instructional Support has been available	1.1	18.2	80.7
Instructional Support has met my needs	4.5	17	78.5
Technology in the classroom has met my needs	15.2	19.2	65.6
Overall Satisfaction with IT Services	7	12	81

Highlight of the survey results: Students

The survey was sent to 1,500 students with only 34 completing the survey (2%). A total of six reminders were sent to the 1,500 students and the end-date was extended by a week; however, the response rate did not improve. Not sure whether a 2% response rate is statistically significant.

79% of the students said that they were satisfied or very satisfied with IT Services; while 12% were neutral and just 9% were dissatisfied.

The top three services students use are: Wi-Fi, Blackboard & Wiser System.

The top three services students have been satisfied with are: Wireless Availability (90%); Blackboard (86%), Service Desk (86%) & WISER (80%)

What is the one service you would like to see improved - The top three services the students listed were: Wi-Fi (40%), WISER (17%) and Printing Services (17%)

Service	Dissatisfied %	Neutral %	Satisfied %
Wireless has been available	3.2	6.5	90.3
Wireless has been reliable	13	16.1	71
Blackboard	4	11	86
WISER	10	10	80
Printing Services	18	9	74
Computer Labs has met my needs	14.3	14.3	71.5
Services Desk (Helpdesk)	0	13.3	86.6
Email Services	14.7	5.9	79.5
Overall Satisfaction with IT Services	9	12	79

Highlight of the survey results: Staff

The survey was sent to 1,369 staff with 211 completing the survey (16%). 81% of the staff said that they were satisfied or very satisfied with IT Services; while 14% were neutral and just 5% were dissatisfied.

The top three services staff have been satisfied with are: Email Services (83.8%), Service Desk (82.1%) & Desktop Services (80.1%)

What is the one service you would like to see improved - The top two services the staff listed were: Wi-Fi (26%) & Service Desk (14%)

Service	Dissatisfied %	Neutral %	Satisfied %
Wireless has been available	5.6	15	79.4
Wireless has been reliable	18.2	17.6	64.2
Desktop Services	3.3	16.5	80.1
ERP (HR, Fin, Procurement) has been available	2.4	17.8	79.8
Services Desk (Helpdesk)	5.1	12.7	82.1
Email Services	4.1	12	83.8
Overall Satisfaction with IT Services	5	14	81

Professional Development

App Services

- Renewal of PMP certification through 2023, 60 PDUs acquired
- Salesforce User Group at Berkeley College of Music
- Salesforce Higher Education Summit
- UMass Salesforce Day, Lowell
- CollegeNet Annual User Conference
- Boomi Digital Integration Software Training
- Code42 Crashplan Annual Conference
- ModoLabs Kurogo Conference
- UMass IT Conference

CIS

- Extreme Network XOS fundamentals
- Extreme Control
- Extreme Management Center
- WorkshopPLUS Office 365: Security and Compliance
- Pluralsight Training Subscription, Phish Hunter, WorkshopPLUS Office 365: Security and Compliance
- Phish Hunter
- VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V6.5]
- Pluralsight Training Subscription
- Electrician recertification

Client Services

- UMass IT Conference at UMass Medical campus.
- 3-day Facilitative Leadership training
- 3-day Kace Bootcamp in NYC.
- 4-day onsite consulting and training on Kace to reinstall and reconfigure our instance.
- Training on new network security software

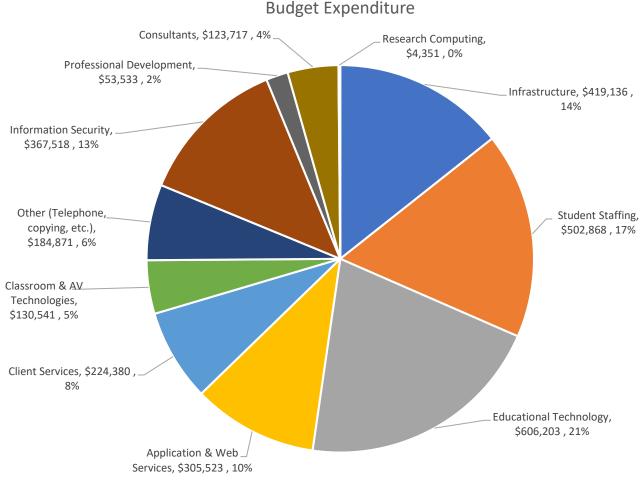
Research Computing

- PEARC18
- Linux Clusters Institute, Intermediate Workshop
- Virtual Residency Intermediate/Advanced Workshop
- HPC Day
- XSEDE HPC Workshop
- ISC High Performance 2019

Educational Technology & Learning Commons

- OLC Workshop PassOnline Learning Consortium
- Project Management for Instructional Designers Online Learning Consortium
- Mass Colleges Online Conference Mass Colleges Online
- MIT Connected Learning Summit MIT Media Lab
- Google G Suite for Education: Inside and Outside of the Box NERCOMP
- Digital Service Learning NERCOMP

Budget Expenditure



Spend % of Total

Beyond IT: Collaboration and Outreach in the last year

Project-Based Learning Summit with Cohasset Center for Student Coastal Research, July 26, 2018 Through this partnership, eLearning and Instructional Support (eLIS) and Center for Innovation and Excellence (CIE) provided the Center for Student Costal research (CSCR) with the opportunity to experience online learning technology and best-practices in pedagogy for project-based learning and learner engagement. Rrezarta Hyseni, Senior Instructional Designer from eLIS created a mobile-first Blackboard open course for the Summit through which participants were guided through hands-on field-work during the day-long Summit and were invited to share photos and reflections directly from their phone or other mobile device. The course space was also provided for participants to collaborate with each other after the Summit. Participants earned digital badges for timely completion of activities. This practical experience allowed CSCR and leaders from other educational institutions present at the Summit, to explore the use of micro-credentialing to motivate participation and measure learner progress, and to experience mobile learning using a Learning Management System. As a next step in this partnership, CSCR was awarded a \$5,000 grant through MASSIDEAS to offer a coastal stewardship opportunity for participants in Coasts and Communities---one of UMass Boston first Massive Open Online Courses---in collaboration with UMass Boston's School for the Environment and Center for Excellence in eLearning.

1919 Boston Police Strike Project, Online Training Course for Biographical Researchers

Rrezarta Hyseni, Senior Instructional Designer with eLearning and Instructional Support worked with subjectmatter experts from Healey Library and UMB Archives to design the online training materials ensuring best practices in eLearning pedagogy, accessibility, ease of use, and alignment with assessments for microcredentialing. The course was an open self-paced course offered on the UKnow, UMass Boston space---UMass Boston's space for open online courses on Blackboard's Open Education platform---and in addition to attracting learners who were direct descendants of one of the 1100 police officers who took part in the strike, also attracted learners not familiar with the project who wanted to learn more about biographical research. Over 180 learners signed up for the free course. Over 60 learners actively participated in the course and completed the required activities earning digital badges for recognition. 24 learners went on to become involved with the project as researchers through Healey Library.

Of the learners who attended the course:

- 24 went on to become involved with the project as researchers
- These 24 researchers "started" research on 454 worksheets (which is a significant portion of the total 1142!). We have now "started" every single worksheet.
- It may be worth noting that a handful of the people who became involved with us through the MOOC have become involved in the project in other capacities, as well. One researcher has joined the core project team and has facilitated a collaboration with the Boston City Archives. Another has volunteered to take the helm of a crowdsourced video project, which will feature in our centennial event. Another has presented on research techniques to other volunteers.
- The MOOC also helped us to push the next phase of crowd fueled research work. We were able to add content to train volunteers in the "review" phase of the project. Of the 24 volunteers mentioned above, 8 continued involvement as reviewers. Collectively, they reviewed 319 worksheets.

If you are interested in qualitative data, we have a google doc with some quotes from learners about the value of the MOOC and their learning experience. You can access it here.

Student testimonials about the 1919 Course

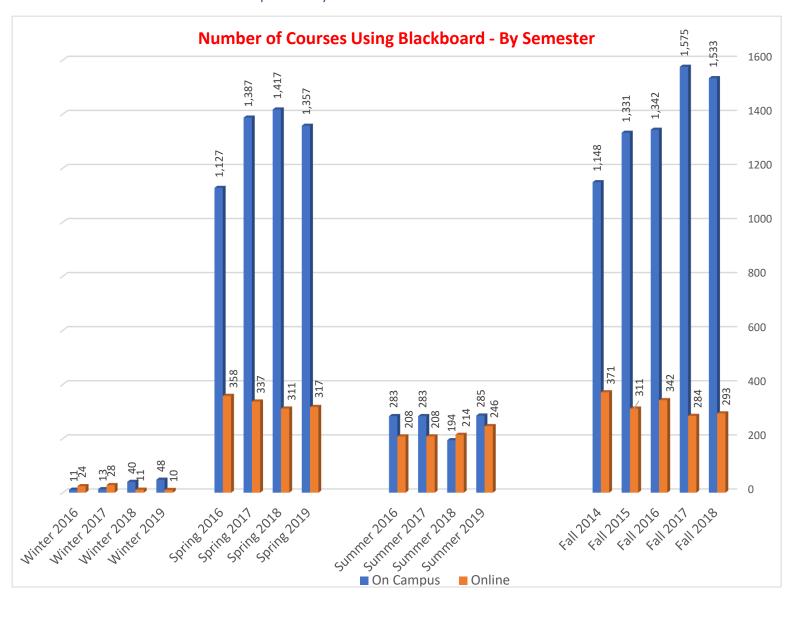
"The course exceeded my expectations. I learned some useful tips and new resources. This is a model online course that could be adapted for other crowd-sourced historical research initiatives. Thank you, everyone, for all the effort that went into this site. I hope you're reaping the dividends throughout 2019."

"The course was wonderful. I really enjoyed it and took the opportunity to hone my skills by looking up a few relatives of my own. Quite a thrill to see my great-grandfather's WWI registration form." "The training course was very helpful and well designed. I enjoyed taking it."

"The course was well structured, very easy to follow."

"The online course that was put together by the project staff was a great introduction to the project and really outlined what they are looking for for each striker. I think this would be a great course to take not only for volunteers, but also anyone who would like to improve on their own online genealogy research skills!"

"...The course was practical and gives students practice using modern tools to solve some difficult problems.... Overall, it was simply an outstanding course!"



Blackboard Courses – Adoption by Semester

 Jonathan Crawford, Web Mary Ryan, Business Systems • Jeeva Arthur, Database • Lisa Berelson, Senior Web Services Alex Simovici, Business Analyst Lisa Moriarty, Business Systems Lisa Link, Senior Web Kevin Gerich, Web Jim Wyse, Director IT Web • Tom McClennan, Business Anthony Manibusan, Program Management Bhavesh Shah, Database **Application Administration** <u>Peter Tierney, Manager,</u> Ξ Peter Tattlebaum, Web Analyst II Analyst II Systems Analyst II erence Phalen, Director IT Administrator Designer/Developer Designer/Developer Designer/Developer Designer/Developer Application Administrator I Developer Information Technology Services Org Chart – June 2019 Linda Modiste - Assistant Vice Provost Application **ITS Organization** Services • Larry McKeon, Telecom PBX Engineer Networking David Bonczar, Senior Information Security Eduardo Luciano, Buyer II Leonard Kroll, Linux/GIS Systems Scott Gilbert, Senior Network Engineer Donald Foye, Senior Network Engineer Azadeh Aslani, Senior Network Engineer Brian Forbes, Manager, Systems and • Ruth Tremblay, Clerk IV Kurt Charlton, Operations Technician Wil Khouri - Assistant Vice Provost Mimoza Papargjir, Administrative Sereynita Altarejos, Administrative Services Jamie Soule, Manager, Telecom Users Jamil Moosavifard, Senior Systems Daniel McDonald, Linux Web and HPC Yuk Fung, Enterprise System Marla Filoso, Systems Administrator John Tansey, Operations Technician Robert Siebert, Staff Assistant Damon Lassiter, CIS Telecom Network Carmine DiFilippo, Technical Jamie Soule, Manager of IT Operations Alison Murray, Senior Information Chhorda Rorth, Enterprise System Engineer Security Engineer Security Specialist Administrator Administrator Specialist II Assistant I Assistant II Administrator Administrator Administrator and CISO, Communications and Infrastructure Services **Raymond V. Lefebvre – Vice Chancellor** Christine Carpenito, IT Service Ananta Sinha, Supervisor, Comp Lucille Nguyen, IT Lab Matt McCubbin, IT Accessibility Binh Ly, ITLC Systems Specialist <u>Max Razdow, Manager, Lab</u> • Daniel Okoh, Desktop Repair Tam Nguyen, Desktop Hung Nguyen, Desktop Quyen Ly, Desktop Support Rocky Haggard, Software Service Desk Peter Adams, Supervisor IT David Wilson, Lab Supervisor Henry Lay, Mobile/iOS/Virtual Dann Brown, EDP Programmer Hung Van Ong, Desktop Support Daniel Mayer, Desktop Support Scott Devillafane, Service Center Nadya Clark, Desktop Andrew Arcadipane, Desktop Desktop and IT User Services Quan Nguyen, Manager, IT Operations Support Specialist Op System and Services **Operations Student Supervisor** Coordinator Lab Supervisor Consultant Application Support Consultant Application Support Consultant Desk Support Consultant Application Support Consultant Consultant Consultant Technician Applications Support Consultant Technician **Assistant Vice Provost** Barbara Goguen -Client Services /CIO Vivian Tran, Instructional Media Mark O'Sullivan, Associate Stephen Siteman, Instructional • Zack Ronald, EDP Systems Analyst Christorpher Rennie, Audio Visual Lauren Luis, EDP Systems Analyst 1 Michael DiFilippo, EDP Systems Irene Yukhananov, Senior Peter Tofuri, Jr, Learning Paula Thorsland, Senior Theresa Nelson-Miller, Kalindi Mehta, Senior Learning Rrezarta Hyseni, Senior Ellen Foust, Instructional Designer Jouliana Bosneva, Instructional Angela Carretta, Administrative Katherine Ananis, Software and Instructional Support Gene Shwalb, Manager, E-Learning <u>íohn Mazzarella, Manager,</u> Christine Boseman, Administrative Salina Allen-Sharpp, Executive Assistant fechnology and AV Services <u>fohn Jessoe, Manager, Classroom</u> **Craining, Communication, and** Linda Sudlesky, Instructional Jeffrey Wade, Chief Audio Visual Specialist Production Coordinator Media Specialist Technician Analyst Management System Administrator Instructional Designer Specialist Design/Sync Online Learning Instructional Technologist Management System Administrator Instructional Designer Assistant Irainer larketing Associate CIO, Educational Instructional Designer Designer **Technology and Learning** Apurva Mehta -Commons Eleanor Brown, Assistant Jiuan Mo, Business Manager **Neil Rosenburg - Assistant** Business Manager Vice Provost Business Operation Raymond V. Lefebvre IT Leadership Team Salina Allen-Sharpp Barbara Goguen Jeff Dusenberry Neil Rosenburg Terence Phalen Linda Modiste Apurva Mehta Wil Khouri Runcong Chen, Research **Computing Associate** Jeffrey Dusenberry -Director Research Computing G

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Manager

<u>David Gorfine, Infrastructure Project</u>

Engineer

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