fostering and supporting the George Mason community in the use of technology for research, teaching and learning

Teaching and Learning with Technology

Division of Instructional Technology

Annual Report for Fiscal Year 2012-2013

Information Technology Unit
George Mason University
Fall 2013

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Division of Instructional Technology

Annual Report for FY2012-2013

The **Division of Instructional Technology** (DoIT) fosters and supports George Mason University's community in the use of technology for research, teaching and learning. To accomplish its mission–and advance the strategic goals of Mason's Information Technology Unit–DoIT works collaboratively with a broad spectrum of individuals and entities and within diverse academic and corporate settings. This includes work with faculty, staff, students, academic and administrative departments, academic support units, and external institutions and organizations. At the heart of the division are five departments. The goals of these departments ensure access to the quality tools, resources and knowledge required by faculty, staff and students to effectively connect and integrate pedagogy and technology in Mason's learning environment and beyond.

Classroom and Lab Technologies (CaLT) enhances the learning experience across Mason's campuses by designing, supporting and maintaining technology-enabled learning spaces and by providing access to well-maintained and up-to-date hardware and software in open computer labs. CaLT also supports Mason's Virtual Computing Lab (VCL). The units within CaLT are Computing Services, Fairfax Classroom Support, Learning Space Design, and Regional Campus Support.

Communication and Planning (CaP) engages the university community in two-way communication regarding DoIT services and academic technology needs. The department maintains the division's web presence, provides direction and support for DoIT's long-range strategic planning and assessments, and disseminates information pertaining to the division's goals, priorities, and activities.

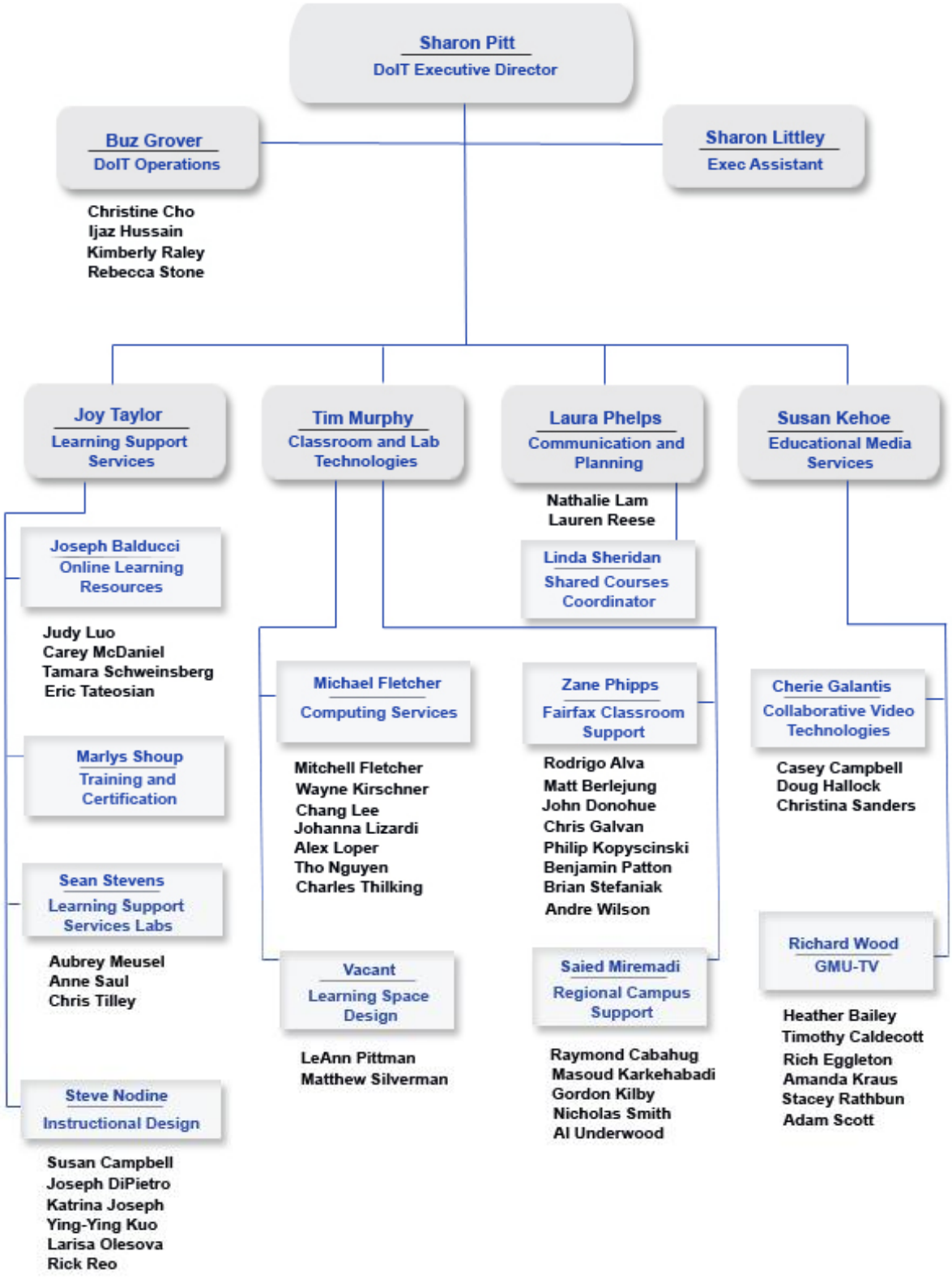
Educational Media Services (EdMS) supports the university community by providing the infrastructure for voice, video, and data communications and by creating media content for teaching, learning and research. EdMS content is distributed through a variety of media formats and systems. Units housed within EdMS include George Mason University Television and Collaborative Video Technologies.

Learning Support Services (LSS) facilitates faculty, staff, and student development of information technology skills to enhance the learning environment of the university. LSS supports a broad array of web productivity and multimedia tools, including the university's portal and learning management system. The department offers consultations, equipment checkouts, free workshops, and extensive resources related to learning online. The department is home to Training & Certification, Online Learning Resources, Instructional Design, the Collaborative Learning Hub (CLUB) and the Student Technology Assistance & Resource (STAR) Labs.

Operations (Ops) provides administrative support to the Division of Instructional Technology and handles functions that require central coordination and oversight.

Division of Instructional Technology

Organizational Chart (as of June 24, 2013)



Division of Instructional Technology

Executive Summary

This fiscal year, the Division of Instructional Technology made many strides in the pursuit of delivering high-quality, cost-efficient, and secure and reliable resources, services, and support to the George Mason University community. As with previous years, the achievements listed within this report speak volumes to the organization's noteworthy ability to face challenges with resiliency, serve the university with unwavering dedication, live the division's core values with steadfast commitment, and meet the goals of the broader Information Technology Unit with resolute leadership. Working closely with Mason's decision makers, including the university's new president, Ángel Cabrera, DoIT has met or exceeded many of the goals previously outlined in the ITU strategic plan while keeping cost, convenience, and customer service at the forefront. As a result of this year's work and growth, the university community is better positioned for the future with improved learning resources, teaching spaces and labs, and technology services provided by DoIT.

In review, this year has once again been one of keen organizational reflection paired with equally significant outreach and collaboration. Looking ahead, DoIT recognizes the critical role that strategic planning, stable growth and high quality teaching, learning and research environments will continue to play in the future of the institution. It has been an exciting time of innovation and change at Mason as the president, along with members of the Mason community, collaborated to create the new vision for the university this fiscal year. As the strategic plan that follows that vision is developed, goals articulated, and the outcomes realized, DoIT will work to align its goals with those of George Mason University and the Informational Technology Unit to ensure the university remains a leading educational institution. Through continued focus on its mission and the needs of the institution, DoIT leadership fully anticipates that the coming year's achievements of its highly talented staff will be substantive, impactful and a source of pride for ITU and GMU. By leveraging the enterprise-level solutions and improved efficiencies in its support and services, the division will be well positioned to help the broader organization achieve balance and provide superior support to the university community as a whole.

Thank you to DoIT staff members who have contributed to making this fiscal year a truly successful one. Special acknowledgement is given to the DoIT Leadership Team who strategically leveraged their talents, knowledge and energies in support of the institution's vision and the mission and goals of the Information Technology Unit and the Division of Instructional Technology

Project highlights of the Division of Instructional Technology for 2012-2013 included:

- Streamlined the **refresh process** for technology enhanced classroom upgrades and refreshes
- Planned and engaged faculty for Mason's first **Active Learning with Technology Classroom**
- Consolidated the **Fairfax Classroom Support Offices** to reduce costs and increase staff collaboration
- Improved the **data collection** process for DoIT supported computer labs
- Launched **The Knowledge Network** to distribute scholarly research from institutions and organizations
- Developed video components for Mason's first **Massive Open Online Course (MOOC)**

- Expanded **conferencing services and locations** and updated existing conferencing enabled spaces
- Unveiled the **Game Design Lab** to provide student access to game design software and equipment
- Redesigned of the **STAR Lab multimedia area** for increased efficiency and collaboration among students
- Introduced new technologies and best practices for **e-Learning** while transitioning more programs online
- Rolled out **Service Pack 11** to enhance the myMason Portal, Organizations, and Blackboard 9.1
- Distributed a **Blackboard** users survey and used feedback and results to improve user support

Key Accomplishments of the Division of Instructional Technology, 2012-2013:

Classroom and Lab Technologies

- Supported 228,714 computer lab visits
- Supported 4,688 projector checkouts and 2,696 laptop checkouts
- Maintained a total of 176 technology enhanced classrooms
- Supported over 3,500 unique users made 33,135 reservations in the Virtual Computing Lab, a 112% increase and 149% increase, respectively, from last year

Educational Media Services

- Supported 61 video enhanced courses that accommodated 4,122 student enrollments
- Provided a live stream of GMU-TV's broadcast (viewed 482,426 times, an 66% increase over last year) and video on demand services (files played 93,796 times, a 123% increase from last year)
- George Mason University's 2012 Team Excellence Award awarded to Collaborative Video Technologies
- Hosted nearly 1,400 videoconferencing and telepresence sessions, a 30% increase from last year

Learning Support Services

- Unveiled the new Game Design Lab in the STAR Lab
- Supported 697 users of Skillport who accessed 1,549 distinct courses
- Hosted 985 scheduled instructional design consultations with faculty and supported 99 courses
- Supported approximately 40,000 active users of Blackboard 9.1
- Supported 6224 active Blackboard courses (46% of total courses), a 20% increase from last year
- Created approximately 708 Collaborate sessions each month (8,501 in total)
- Reached highest unique users of the Blackboard Mobile Learn app in May 2013 with 11,357
- Managed more than 600 PBWorks sites each month and reached highest total number of sites supported in May 2013 with 676 sites and highest total users in March 2013 with 10,201 students and faculty
- Taught 495 training sessions and workshops for 1,940 participants
- Supported 5,893 users at the CLUB (includes conference room events)
- Proctored 308 exams, a 79% increase from last year
- Supported 12,738 student visits to the STAR Lab, a 15% increase from last year

Division of Instructional Technology

2012-2013 Accomplishments

Classroom and Lab Technologies

Classroom & Lab Technologies (CaLT) enhances the learning experience across Mason's campuses by provisioning, supporting, and maintaining technology-enabled learning spaces and by providing access to well-maintained and up-to-date hardware and software in open computer labs. CaLT also supports Mason's Virtual Computing Lab (VCL). The four units within CaLT are Fairfax Classroom Support, Regional Classroom Support (Arlington and Prince William), Learning Space Design, and Computing Services.

- Computing Services serves as system administrators for the university's general purpose classrooms and labs. Computing Services works to enhance the availability and usefulness of Mason's academic computing labs and classrooms through virtual computing and remote software delivery technologies. Computing Services installs requested software into classrooms and computer labs for specialized academic use. Software and licensing information are required.
- Classroom Support provides support for all university general purpose and technology enhanced classrooms as well as audiovisual checkout equipment. Classroom Support assists faculty and students with technical issues via phone and in the classroom. Classroom Support maintains AV equipment in all Registrar-scheduled classrooms. CaLT also supports seven general access computer labs. Labs are available to all students and have the technology resources needed for preparing assignments, conducting research, and pursuing other academic-related services. Consultants are available in the labs to assist students with computer-related issues and basic software help with university software packages, printer support, and monitoring of the lab facility to ensure a good experience for patrons.
- Equipment Checkout is available on campus for faculty who require additional equipment to support instructional activity in the classroom. Equipment may be checked out on a first-come, first-served basis by Mason faculty and staff. Checkout equipment includes laptops, data projectors, VHS players, and a variety of other equipment.
- The Virtual Computing Lab (VCL) serves as a learning resource for students, faculty, and staff. The VCL is a technological way of remotely delivering software to users, through the Internet, regardless of their physical location or the time of day. Utilizing the VCL is easy and only requires an Internet-enabled computer and Mason credentials. Once logged in and connected, the VCL provides access to specialized software, in a safe computing environment, without the need to purchase or install it to one's personal device.
- Learning Spaces Design constructs, engineers, and tests various classroom technologies throughout Mason. With plans that must account for more than a year in advance, Learning Spaces must keep ahead of technology change while maintaining a reliable and supportable learning environment. Further, classroom refreshes of end-of-lifecycle equipment must be scheduled around ongoing classroom activities.

CaLT's FY2013 accomplishments include:

- Increased the number of technology enhanced classrooms and further transitioned university classrooms to meet digital media standards
- Completed planning for the Alternative Learning with Technology Classroom and began implementation
- Streamlined the refresh process of technology enhanced classrooms with modular building techniques to increase efficiency and reduce time in which rooms are offline
- Combined the Fairfax Classroom Support offices for improved support and reduced costs; improved the process for monitoring lab utilization
- Increased traffic in several university labs and online software services to the Mason VCL.

Increased Technology Enhanced Classrooms

This fiscal year, the number of Technology Enhanced Classroom (TEC) continued to grow. CaLT supported a total of 212 university classrooms across Mason's Fairfax, Arlington, Prince William, and Loudoun locations— 36 general purpose classrooms and 176 technology enhanced classrooms. Five technology enhanced classrooms were added to the Fairfax Campus in Hanover Hall, Robinson Hall and Aquia. Arlington added one to bring the total to 41 technology enhanced classrooms while Loudoun and Prince William remained the same with 7 (86%) and 16 (100%) TECs respectively.

Arlington Campus				
Fiscal Year	**General Purpose Classrooms**	**Technology Enhanced Classrooms**	**Total Classrooms**	**Percentage of Tech Enhanced Classrooms**
2009	10	28	38	74%
2010	10	28	38	74%
2011	5	40	45	89%
2012	5	40	45	89%
2013	0	41	41	100%

Fairfax Campus				
Fiscal Year	**General Purpose Classrooms**	**Technology Enhanced Classrooms**	**Total Classrooms**	**Percentage of Tech Enhanced Classrooms**
2009	58	94	152	62%
2010	53	94	147	64%
2011	44	99	153	65%
2012	36	106	142	75%
2013	35	113	148	76%

Loudoun Campus				
Fiscal Year	**General Purpose Classrooms**	**Technology Enhanced Classrooms**	**Total Classrooms**	**Percentage of Tech Enhanced Classrooms**
2009	1	6	7	86%
2010	1	6	7	86%
2011	1	6	7	86%
2012	1	6	7	86%
2013	1	6	7	86%

Prince William Campus				
Fiscal Year	**General Purpose Classrooms**	**Technology Enhanced Classrooms**	**Total Classrooms**	**Percentage of Tech Enhanced Classrooms**
2009	0	18	18	100%
2010	0	15	15	100%
2011	0	15	15	100%
2012	0	16	16	100%
2013	0	16	16	100%

Total (All Campuses)				
Fiscal Year	General Purpose Classrooms	Technology Enhanced Classrooms	Total Classrooms	Percentage of Tech Enhanced Classrooms
2009	69	146	215	68%
2010	64	143	207	69%
2011	50	170	220	77%
2012	41	169	210	80%
2013	36	176	212	83%

- General Purpose Classroom (GC)– classrooms with limited technology (TV with VHS/DVD and overhead)
- Technology Enhanced Classrooms (TC)– classrooms with an overhead, LCD projector, instructor computer, laptop connection, DVD playback via computer, auxiliary video input, and speech reinforcement (in classrooms >50 seats). There are several types of technology enhanced classrooms including:
    - Technology Enhanced Classroom with Document Camera (DC)
    - Technology Enhanced Classroom with Video Conferencing (TVC)
    - Technology Enhanced Classroom with Video Recording (TREC)
    - Technology Enhanced Classroom with Student Computers (TSC)
    - Technology Enhanced Classroom with Mac Student Computers (TMAC)
    - Technology Enhanced Classroom with Student PC Computers and Multimedia Software (TSCM)

    - Technology Enhanced Collaborative Classroom (TCOL)
- Digital Technology Enhanced Classrooms– classrooms with the same equipment as TEC's, but all technology has been updated from analog to digital

Improved Support through Conversion to Digital Media Standards

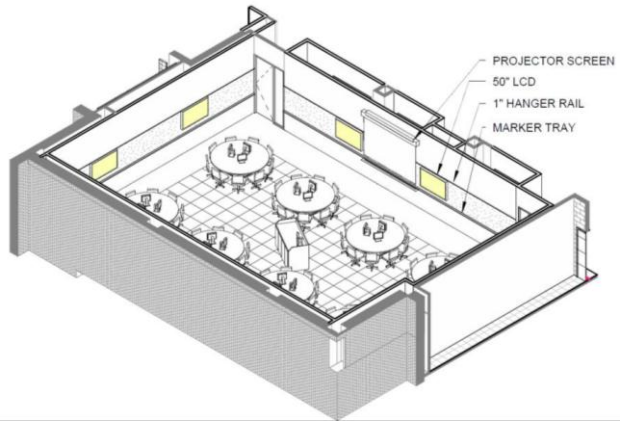
DoIT continued to push forward the full implementation of its digital media standards. Classroom AV technology is gradually replacing older analog equipment with identical units that are digital. From the user's perspective, these units look and act like their analog counterparts, but allow for enterprise level support and compatibility with other devices, while having many advantages over analog, such as compliance with copyright laws.

Since the digital equipment is considered "smart", Mason can now standardize components, operate equipment over a network, and better integrate the electronics that students and faculty bring to the classroom. For example, if a faculty member brings a laptop or tablet to the classroom, with digital equipment there is a greater chance that the technologies will work together. Analog does not have standardization between the various devices and cannot support copyright protocols.

Additionally, with digital technologies, the support personnel can remotely access and control classroom devices. The devices are smart enough that they can monitor all equipment to make sure it is working properly and report back statuses to the technician. This integration allows for faculty and students to use technology with higher confidence, greater reliability, and less disruption. It also allows for a more efficient enterprise-level support model. Support personnel do not need to be in the classroom to resolve issues. Current planning is set that all classrooms will be converted to Mason classroom standards within the next two years.

Implemented Planning for the Active Learning with Technology (ALT) Classroom

This year saw the Active Learning with Technology classroom come to fruition after years of conceptualizing. The room, located in Exploratory Hall, Room L102 on the Fairfax Campus, places a total of 72 students in eight pods of nine students each. Each pod is equipped with microphones, speakers, and network connections making it easy for the teachers and students to collaborate and share information. The complex configuration of the room's technology contains more cable and electronics than the other 31 classrooms in Exploratory Hall combined.



Throughout the design process, DoIT collaborated with the Learning Environment Group, the Center for Teaching Excellence, Campus Planning, and Mason faculty while pulling inspiration for this innovative classroom from North Carolina State University's SCALE-UP Project (Student-Centered Active Learning Environment for Undergraduate Programs) and Massachusetts Institute of Technology's TEAL Project (Technology-Enhanced Active Learning).

This classroom shifts traditional classes from a lecture-based model to problem-based learning which motivates students to interact, experiment, and problem solve together. In preparation for its unveiling and first time

utilization for the fall 2013 semester, 22 faculty members were accepted following an application process to teach in this space. Coming from varying disciplines, the selected faculty members spent FY2013 preparing for their classes in this new space. Here, they will work on teaching effectiveness and experiment with an active learning environment while teaching more students in the process.

Developed a More Effective Refresh Process for Technology Enhanced Classrooms (TECs)

As part of DoIT's commitment to innovative thinking, the Learning Space Design team, along with support from Mason Facilities, introduced a new approach for the classroom refresh process this fiscal year. Classrooms undergo a pre-planned replacement cycle for both the physical space as well as the technology. In previous years, classrooms requiring upgrades were decommissioned, usually during the whole summer, and all work was done inside the room. Many activities among different parties had to be coordinated and completed on time in order for the classroom to open at the start of the new semester. It was a process that did not always run smoothly since each classroom became a customized solution.

Instead, a modular building process was implemented. Room designs and equipment were all standardized. Using a build space, systems could be built at any time during the semester. With most of the work done outside the classroom physical space, more care and attention to detail were allotted to the building process. Compared to the previous method, this new process drastically shortened the amount of time the rooms were unavailable for teaching purposes while increasing the amount of planning time for the refresh activity. Within a window of one to two weeks, technology rooms could be demolished and new equipment installed, loaded and tested. Classrooms are now offline for days rather than weeks or weeks rather than months. Having university classroom technology standards for all rooms improved support and decreased labor costs.

Based on the significant reduction in support calls placed after the semester started, this new process proved to be quite successful and led to even better results than expected. The extended planning alleviated a lot of stress that refresh projects often incur, builds were done in a more organized manner, and the additional time helped produce quality work.

Consolidated the Fairfax Classroom Support Offices

Prior to FY2013, the Fairfax Campus Classroom Support occupied two separate locations on the Fairfax Campus-Robinson Hall A and Innovation Hall. This meant using significantly more physical space, maintaining two sets of office supplies, and ensuring two front desks were staffed with technical help. The workload was often unevenly split between the two offices, collaboration and troubleshooting were hindered, and efforts to resolve situations were often duplicated. There was an evident need for more efficient business practices to foster better problem solving and knowledge sharing, stronger procedures, and more teamwork.

This meant relocating support staff from across the Fairfax Campus into the Robinson office. It also meant reorganizing and reconstructing one work space to accommodate more people (10 full-time employees and 5 part-time wages) while maintaining the same level of support. Facilities was brought on to make physical changes to the office. This included increasing surface area for staff to work, ensuring ample front desk space, providing sufficient room for staff, and preserving an open area so that team collaboration could take place. The project manager from Facilities assigned to this task transformed the Robinson space into a fully functional and efficient

work environment. Following three months of planning, the project was completed throughout the spring semester while the office remained open and sustained service commitments.

Since the redesign, collaboration among the team has increased exponentially and is done more effectively now that location is no longer an issue. In addition to the cost savings, there has been a greater sense of camaraderie, and resolutions have been achieved more quickly than before because the team can focus on classroom support rather than traveling between offices. Support calls now go through the central call center and are then dispatched depending on which technician is available. This consolidation also opened up the Innovation Hall space for the Computing Service team to relocate its staff.

Improved Data Tracking with Use of LabStats

In FY2013, the Computing Services (CS) team completed the installation of LabStats, a software tool that records computer usage, to all university lab computers and the system has continued to perform well.

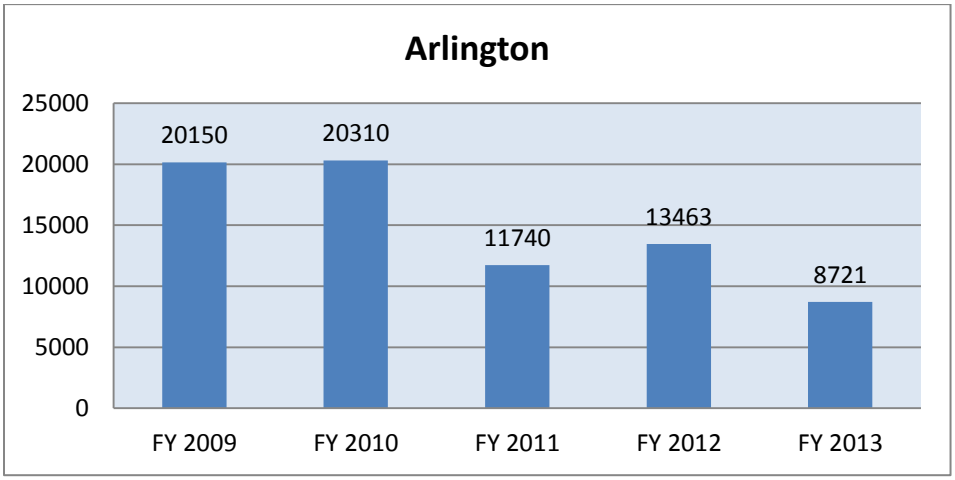
A full academic year of quantitative data has been gathered and has begun influencing business decisions. The data collected from LabStats this year somewhat mirrors past years in terms of lab usage, but because of the added specificity in counting lab visitors and software usage, it has improved accuracy and provided real-time results. With an inaugural year completed, further data collection will allow the CS team to review exactly which software is being employed and when, identify if budgets for software packages are being spent efficiently based on use and function, and determine what spaces are being utilized across Mason's campuses.

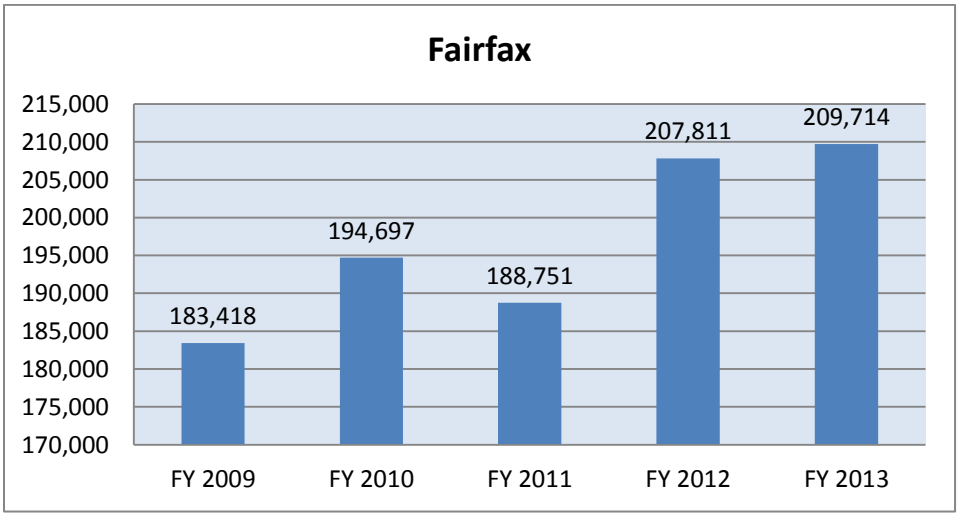
For the fall 2012 semester, CS rolled out an application within LabStats, LabMaps, which aimed at improving the computer lab experience for the Mason community. This tool gives students an easy and convenient way to check availability of computer stations within the four DoIT supported computer labs via their computers or mobile devices before going there. Information is not fully available to determine how students are using this feature, but efforts to add the Learning Support Services labs (CLUB and STAR) to the site and ramp up promotions are planned for the next fiscal year.

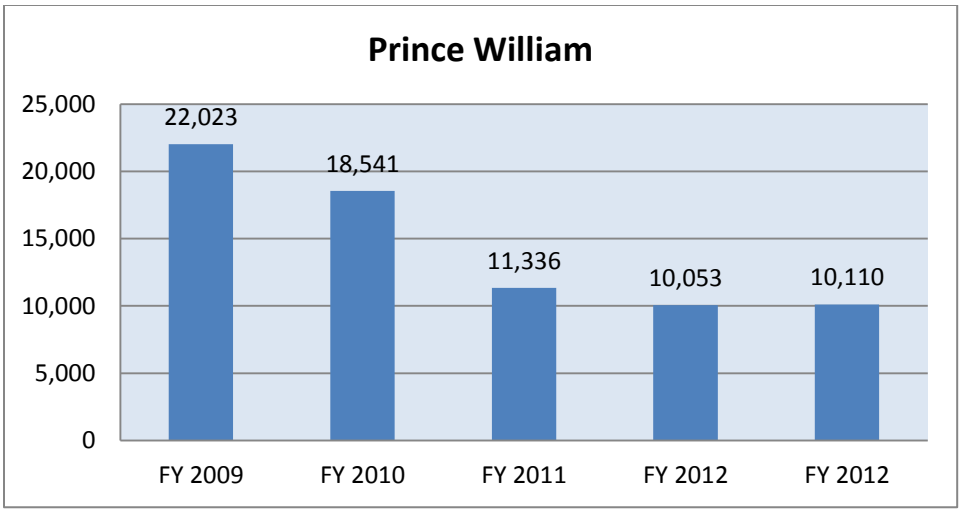
Increased Utilization of Computer Labs

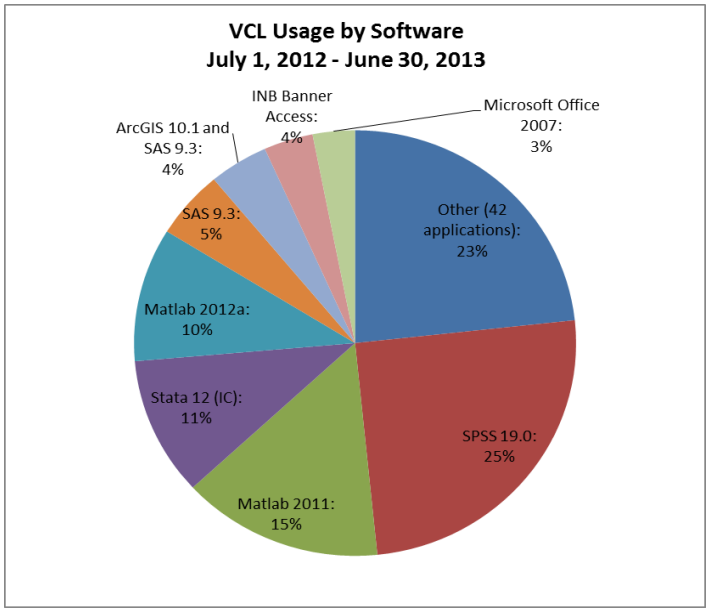
The total number of visits to open computer labs, this fiscal year, was 231,327 – a decrease of 1%. However, the Fairfax and Prince William labs both experienced increases in utilization. It is important to note that this decrease may be due in part to the new method used by the Computing Services team to track lab and software usage. Following the rollout of the software, LabStats, in 2011 that captures computer usage based on user logins, data are now more accurate and reliable. With LabStats, variables are easier to control (i.e. double counting individuals who may enter and exit several times while logged onto a lab computer or counting individuals who may be in the lab, but not using a computer) and result in a more accurate tally of actual computer users. Mason's Virtual Computing Lab (VCL) saw a total of 33,135 reservations this fiscal year, an increase of 149% from the previous year (13,314 reservations). This number accounted for 3,513 unique users (a 112% increase) who used the VCL for 55,516 hours (a 213% increase), up from 1,657 users in FY 12 who used the VCL for 17,759 hours. Users visited the VCL to access several software programs including the following that saw the highest volume of reservations: ArcGIS 10.1, Matlab 2011 and 2012a, Stata 12, SAS 9.3, SPSS 19.0 and Microsoft Office 2007. Increased VCL usage data could indicate a shift by students to utilizing online software rather than visiting a computer lab on campus.

Computer Lab Utilization – All Campuses					
Campus	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**
Arlington	20,150	20,310	11,740	13,463	8,721
Fairfax	183,418	194,697	188,751	207,811	209,883
Prince William	22,023	18,372	11,336	10,053	10,110
All Campuses	225,591	233,379	211,827	231,327	228,714









Communication and Planning

Communication and Planning (CaP) supports the university by providing timely, targeted information about technology services that support teaching and learning. CaP engages the university community in two-way communication to articulate priorities and ensure academic technology needs are met. The unit also administers and maintains the Division of Instructional Technology's (DoIT) web presence and provides direction and support for DoIT's long-range strategic planning and assessment activities. CaP is also charged with annual reporting needs and increasing communication through in-person, print, electronic and web communications.

CaP serves the institution through these primary functions:

- maintaining the DoIT web site and relevant sections of the IT Services web site

- writing, editing, and proofing communication materials
- producing semi-annual newsletters
- creating communication and marketing materials for service and/or technology changes
- responding to annual surveys and developing annual reports
- meeting regularly with faculty to ensure that academic technology needs are being met
- soliciting feedback through surveys or other instruments for assessment purposes
- providing and/or assisting with staff development activities

Ongoing Web site Maintenance and Support

The Communication and Planning team continued working closely with the DoIT units to update and maintain web site content on a regular basis. A concerted effort was made to provide quick turnaround and careful review for factually and grammatically correct content as the units requested. Specifically, CaP worked with both units in EdMS- Collaborative Video Technologies and GMU-TV- to incorporate their full menu of services into the organization's web site. This involved migrating content from external web sites so that the DoIT site now serves as a one-stop shop for all information regarding the services offered by these units and necessary instructions for utilizing them.

CaP also worked with the Computing Services team to update the pages on the web site dedicated to Mason's Virtual Computing Lab. After a series of brainstorming sessions, creation of user manuals, and several rounds of content review, the new pages went live on the DoIT web site in the beginning of the 2013 fiscal year.

Development of Marketing Materials for DoIT Unit and Services

This fiscal year, the CaP team was tasked with an increased number of marketing requests. Over the last several months, units within DoIT have seen a growing need for materials to distribute to existing and potential customers in their offices as well as during campus events. Materials included brochures, posters, and other informational handouts.

Brochures were created for the Training and Certification office, the CLUB, and the STAR Lab. Using the DoIT web site as a starting point for pulling content, the CaP team worked with these units to create marketing brochures that showcased their services and could be easily duplicated and updated on an as needed basis. In a concentrated effort to begin promoting the VCL, the CaP team worked with Computing Services to create posters for display in the computer labs across campus. CaP also worked with Collaborative Video Technologies to proofread many of their marketing materials before distribution. This was in addition to the ongoing development and design of the DoIT newsletter which is distributed twice a year during the fall and spring semesters.

To help support ongoing writing needs, a member of the CaP team took a week-long workshop focused on business grammar. Following her certification through the American Management Association, more emphasis has been placed on careful editing and adhering to traditional writing guidelines as well as those instituted by the university.

Planning and Implementation of Campuswide Announcements

CaP supported external communication and marketing efforts focused on technology changes and updates. These communications and efforts included the Microsoft Office 2010 upgrade, the Virtual Computing Lab, and ongoing

campuswide announcements (e.g., *Technology Changes that Impact Teaching and Learning*). CaP also remained DoIT's point of contact for all data and survey requests as well as annual material review for all campuswide documents regarding DoIT's resources and services.

The CaP Director and the Executive Director of DoIT continued to initiate and attend regular meetings with academic deans to discuss instructional technology needs.

Educational Media Services

Educational Media Services (EdMS) supports the Mason community by providing the infrastructure for video communications and by creating media content for teaching, learning, and research. Included under the EdMS umbrella is George Mason University Television (GMU-TV) and Collaborative Video Technologies (CVT).

- GMU-TV's mission is to advance the strategic goals of the Division of Instructional Technology, the Information Technology Unit, and the university. GMU-TV meets this mission by developing media rich teaching and learning tools, research communications, and public relations programming that promotes positive messages about the university. GMU-TV enables media distribution in a variety of broadcast and online formats. Content reaches a global audience by way of cable broadcast, satellite, live webcast and video streaming, and on-demand video streaming. In conjunction with academic departments, GMU-TV provides professional training for Mason students through internships and experiential learning in the media industry, which has a concentrated presence in Northern Virginia. GMU-TV is recognized as an award-winning leader in educational, informational, and public interest programming. In conjunction with academic departments, GMU-TV provides professional training for Mason students through internships and experiential learning in the media industry, which has a concentrated presence in Northern Virginia. GMU-TV is recognized as an award-winning leader in educational, informational, and public interest programming.
- Collaborative Video Technologies (CVT) is responsible for providing, promoting, and advancing high-quality, effective telepresence, videoconferencing, and related real-time media technologies to George Mason University for both academic and administrative purposes. Key functions of CVT include enabling faculty and students to gather from disparate locations for course discussion, review of course materials, or participation in academic consortia; enabling students to take courses offered by consortia to which the university belongs, such as the Commonwealth Graduate Engineering Program and 4-VA; and providing the collaboration tools and services necessary for efficient communication, professional development and training, seminar discussion, and sponsored events.

EdMS's FY2013 accomplishments include:

- Launched The Knowledge Network for information sharing and research accessibility
- Increased participation of educational institutions and research-based organizations in The Knowledge Network
- Developed video content George Mason University's first MOOC
- Expanded conferencing resources and upgraded technology within videoconferencing spaces

- Increased use of conferencing services across Mason campus for teaching and business purposes
- Awarded Mason's Team Excellence Award for CVT's commitment to collaboration and excellent customer service

Launch of The Knowledge Network

In the fall of this fiscal year, GMU-TV helped successfully launch The Knowledge Network. This channel was conceptualized following the dismemberment of the Research Channel during the 2010-2011 academic year. Although funds for the Research Channel were exhausted, the need for a means to distribute content as well as provide access to research-based information remained for George Mason University and other universities. The National Science Foundation recognized the need for innovative research to be available for consumption across the country by larger audiences in classrooms, laboratories, libraries, and even living rooms, and, along with Mason, lead the charge to develop a similar outlet.

The Knowledge Network provides research-based STEM (science, technology, engineering, and mathematics) programming to participating members and opens the doors to work of researchers that may otherwise not be accessible. Mason was the first institution to broadcast on the channel which, since inception, has grown to include more than 30 academic, government, and research entities.

The Knowledge Network functions by feeding broadcast-quality video content to educational institutions via Internet2. Contributing institutions submit content to a cloud-based broadcast content management system which automatically converts it into the required format and places it into a central archive server. Campus television facilities then have several options for how and when they broadcast content.

GMU-TV, as a content distributor, has spent the last several months developing programming with The Knowledge Network in mind including *The Vision Series* and the *Forum on Higher Education*. Schools and colleges within Mason have approached GMU-TV specifically regarding The Knowledge Network due to it being an ideal platform for sharing subject matter of the colleges' fields of study. For example, the College of Visual and Performing Arts (CVPA) reached out to GMU-TV after receiving a grant from Boeing with the charge to expose engineering students to art education and encourage them to think both creatively and analytically. CVPA has begun hosting roundtable discussions, in which GMU-TV has and will continue to participate in, with the ultimate goal of developing programs with a STEAM (science, technology, engineering, art, and math) focus and foster conversations among faculty within sciences and the arts.

Next steps are on the horizon for The Knowledge Network which include expanding the channel's reach in terms of participating universities, programming, and audiences, developing new ways for research to be delivered, and instituting a governance to keep the operation running smoothly. The fact that the consortium exists is an accomplishment on its own, but that information is already being broadcasted, and the network continues to grow is truly noteworthy.

Supported Launch of George Mason University's first MOOC (Massive Open Online Courses)

George Mason University understands that today's students will face pressing global challenges in the future and that it is the responsibility of higher ed institutions to prepare them. In response to this, Mason invited a select group of prestigious international institutions to join a new Global Problem Solving Consortium in 2012. The Consortium's objective is to offer focused programs that bring their students and faculty members together to improve both their knowledge of global issues and their awareness of how other major societies approach these issues. In addition to George Mason University, there are seven institutions from Brazil, China, India, Kenya, Korea, Russia, and Turkey currently committed to participation in the Consortium.

The Consortium planned its first summer workshop for July 2013, and in preparation GMU-TV was called upon to produce video content for the university's first MOOC. Since early planning stages, GMU-TV was involved and worked directly with the Provost Office to develop video components. GMU-TV recorded and edited the lectures of President Cabrera and the instructors involved in the MOOC and ensured the files were in the proper formats so they could be distributed and viewed across the globe. Additionally, GMU-TV designed and developed the graphics used in the series and acquired the necessary copyright permissions for all the visuals used.

Expanded Conferencing Services and Spaces

Collaborative Video Technologies (CVT) continued to expand and update its services and spaces and offer high-quality conferencing services to the Mason community this fiscal year.

Leading up to the fall 2012 semester, CVT upgraded an existing videoconferencing room (Research Hall, Room 163) and added new capabilities in Mason Hall, Meese Room. Following the upgrade, both rooms now support HD videoconferencing which means faster data transmission and better picture quality. The Meese Room, also known as the Board of Visitors space, was outfitted with multiple monitors throughout the room to allow all audience members a clear and unobstructed view of offsite participants and content (i.e. PowerPoint presentations, web sites, etc.). Seating up to 120 people, the room boasts two 70 inch LCD monitors in the front of the room for large

events and sound reinforcement and privacy curtains for confidential meetings. It is also the only room at Mason to include a camera that follows the person speaking. Research 163 seats up to 100 people and, following a complete overhaul, is equipped with new screens, lighting, projectors, microphones, and podium.

CVT incorporated the Jabber software download for PC and Mac computers into its standards-based videoconferencing and telepresence, making it interoperable with other equipment this fiscal year. Users are able to download Jabber onto their devices to conference in from home or another location to work and teach. For example, this technology was used by a Tokyo-based professor to teach a sustainability course this year. The renowned actor, Stacy Keach, also used Jabber to teach a theater course via his Mac domestically and abroad.

Jabber has proven to be a very beneficial resource for the Mason community particularly for students if they are unable to attend class in person due to work constrictions, or in some cases, deployment. For example, Jabber logins were given for certain students in the Transportation Master's Program at the Arlington Campus, who were unable to attend class in person due to their job responsibilities. It has also been extremely helpful in the case of outside speakers and opens the door to allowing students to connect with experts who otherwise, due to distance or schedules, would not be able to travel to Mason's campus. For both purposes, the CVT team helped coordinate all logistics for several classes to make sure necessary space was provided to support videoconference. Additionally, Jabber increased efficiency among Mason staff by allowing more option for communication among university offices and conducting day-to-day business. It helped resolve issues that previously arose due to constraints with schedules and location (i.e. staff that work out-of-state, are stationed elsewhere for projects, or traveling) as well as served as a viable tool for recruitment purposes, hosting meetings, and university development.

Working collaboratively this year both internally (i.e. CaLT and DoIT Ops) and externally with offices across Mason's campuses, such as TSD, Events Production, and Facilities, CVT's mission remained focused on helping resolve communication limitations and providing easy-to-use resources. It is because of their commitment to top-notch service and collaboration that earned the CVT team the George Mason University 2012 Team Excellence Award. This is a prestigious campuswide award given to one team that demonstrates positive results in categories including teamwork and collaboration with other groups and departments, cost and time effectiveness, and exceptional customer-oriented service. Winners are chosen following a nomination process and departments and individuals across the university submitted on behalf of CVT with many marking that their success is due to their ability to work as a team.

Learning Support Services

Learning Support Services (LSS) promotes faculty, staff and student development of information technology skills to enhance the learning environment of the university. LSS supports a broad array of web productivity and multimedia tools, including the university's portal and learning management systems. The unit offers consultations, equipment checkouts, free workshops, and extensive resources related to learning online. LSS is home to Training & Certification, Online Learning Resources, Instructional Design, two Collaborative Learning Hub (CLUB) facilities, and the Student Technology Assistance & Resource (STAR) Lab.

- Training & Certification provides training and certification for faculty, staff, and students to develop computing skills in an instructor-led classroom setting. Instruction is offered in Adobe and Microsoft Office products, e-mail and calendaring systems, and other emerging technologies. Training & Certification also supports Mason's online learning tool, SkillPort.
- Online Learning Resources (OLR) helps advance instructional initiatives by providing support, administration, and training for the off-site hosted learning management system (LMS), Blackboard Learn 9.1, Organizations, and the university portal (myMason). OLR also provides strategies and best practices for fostering student engagement and interaction using the LMS and other instructional technologies including Blackboard Collaborate, PB Works, and iTunes U.
- Instructional Design provides a variety of services and expertise to faculty and offers consultations to discuss strategies and best practices for incorporating technology into their instruction. The team supports faculty teaching face-to-face courses, technology-enhanced face-to-face courses, hybrid courses, and online courses. Instructional designers also provide and direct faculty to other instructional technology resources supported by DoIT.
- The Collaborative Learning Hub (CLUB) is a space designed to support collaborative work of students, faculty, and staff. The CLUB has a variety of services including a conference room (with videoconferencing capabilities), open lab space with PC and Mac machines, Mac laptops for in-CLUB use, modular group collaboration areas (two collaborative tables and the learning pod study area), presentation practice space, and a sound recording room. Students, faculty, and staff are welcome to use the CLUB on individual or collaborative projects. The staff in the CLUB offer walk-in and scheduled consultations, in addition to over the phone, support. The CLUB staff also work with faculty for effective use of the electronic teaching environments, for support of course management tools, to provide technology assistance, and develop resources to learn how to use technology.
- Student Technology Assistance & Resource Lab (STAR) provides opportunities for faculty and students to develop their information technology skills, including multimedia, Internet connectivity, video (digital and analog), desktop publishing, presentation, office applications, and web authoring. STAR brings together training, equipment, software, and experienced students to create a one-stop shop for faculty and students interested in learning about technology.

LSS' FY2013 accomplishments include:

- Redesigned the STAR Lab multimedia section for increased efficiency
- Unveiled the Gaming Design Lab which experienced high student volume during inaugural months
- Supported an increased number of online classes and introduced innovative uses of technology for integration into e-Learning
- Developed new strategies and protocols for meeting demands and moving full programs online
- Upgraded Mason's LMS and streamlined Blackboard support
- Fully integrated Blackboard Collaborate for all mobile devices
- Supported the campuswide transition to Office 365 by providing specific training to users

Student Technology Assistance and Resource Laboratory (STAR) Redesign

The Student Technology Assistance and Resource (STAR) Lab is a multimedia computer facility that provides Mason students, faculty, and staff with space and resources to complete multimedia based projects. Student mentors, with specialized knowledge of operating systems and applications, are on hand to assist with video post-production, audio production, graphic design, digital photography, desktop publishing, web design and authoring.

The STAR Lab continued to see a steady stream of visitors with over 12,700 visits this fiscal year. This equated to a monthly average of approximately 1,062 student visits per month. The lab also checked out over 1,660 pieces of equipment and monitored over 6,880 hours of video editing. To increase efficiency, the multimedia section of the lab underwent a major redesign during the last two months of the fiscal year. The 12 multimedia workstations, which were previously sectioned off as cubicles, provided privacy but no room for collaboration. The remodeled collaborative workstations, equipped with moveable furniture, opened up the space to encourage interaction and group work. The space was made ADA compliant and flexibility also exists for more stations to be added in the future if needed. The redesign was a joint effort between LSS, the ITU Technology Service Division, and DoIT Operations.

Grand Opening of Game Design Lab within STAR

This fiscal year brought with it the grand opening of the Game Design Lab within the STAR Lab. An innovative and unique space for any university to provide, Mason's Game Design Lab is equipped with three powerful PC and two Mac stations with specialized game design software. Also included in the lab are gaming consoles, flat screen monitors, and white board walls to allow students to storyboard, design, and test their projects. Due to its popularity, the space is limited to game design students and requires a reservation, but continues to be highly utilized.

The STAR Lab was able to recruit Lab mentors from academic departments including CVPA, who are on hand to assist users with hardware and software questions. In fact, one student who was a regular patron of the lab was hired to help mentor other students using the space. Feedback has been very positive, and communication with staff has been steady regarding suggestions for additional software and equipment indicating that students are invested in the space.

Increased Instructional Design Support for Distance Education Offerings

This fiscal year, the Instructional Design team continued to provide high-level instructional design support to Mason faculty engineering and collaborating with other organizations to meet the growing demand for online course development support. Nearly 100 courses in the development and piloting phases of course development and delivery were supported in 2012-2013. Additional highlights from this fiscal year that supported distance education included:

- *Additional Staff Resources*- Two new instructional designers were added to the staff (one specializing in hybrid & blended course development).
- *Cohort Model for Fully Online Program Development*- The ID team created a production model to support the development of courses part of fully online programs. In this model, cohorts of faculty participate in the course development process, allowing for greater collaboration and sharing of resources. This model allowed the ID team to increase the number of faculty and courses they could support.
- *Participating in Course Readiness Reviews*- In collaboration with the Office of Distance Education, the ID team assisted with a review of the online course which is conducted six weeks prior to the semester it will be offered. This review is done primarily to help faculty identify areas in the course that might benefit from revisions before the course is made available to students.
- *Completion of Sloan- Consortium Online Teaching Certification* - Four members of the ID team successfully completed the SLOAN Consortiums Online Teaching Certification for online teaching. The designers took several workshops, worked one-on-one with mentors, and built an online course in order to meet the requirements for the certificates. This experience was not only a great accomplishment, but the certifications will enrich the instructional design experience for faculty and increase the quality and depth of online courses and programs produced.
- *Supporting Innovative Uses of Technology to Enhance the Learning Process***-** The instructional design team continued to serve as a resource to faculty who are interested in using technology to improve teaching and learning and/or engage students in new and exciting ways. Below are two examples of how they collaborated with faculty in this way.

    - Dr. Ted Hoch (Applied Behavior Analysis: Principles, Procedures, and Philosophy)- Dr. Hoch wanted to find ways to increase student engagement in online lectures and make students accountable for learning the content in the course. To do this, using the SCROM tool in the Blackboard LMS, Dr. Hoch embedded quizzes throughout and/or at the end of each Camtasia presentation and recorded student progress directly to the Blackboard Grade Center. This not only helped test the students' knowledge retention, but allowed Dr. Hoch to keep a thorough record of class participation.
    - Dr. Lesley Smith (Senior Capstone Experience)- Dr. Smith used simple technologies to establish her presence in her online course. By creating personalized video feedback responses for certain course activities, Dr. Smith increased her teaching presence while providing valuable, effective feedback to her distance students. Similarly using, Voki, an animated text-to-speech tool, she created introductions course modules or wrap-ups using an avatar.

Collaboration continued to play a significant part in making courses successful and, as with previous years, the ID team worked closely with other organizations that support teaching and learning, including LSS' Online Learning Resources group, GMU-TV, as well as the University Libraries, the Office of Disability Services, and the Copyright Resources Office.

Blackboard/myMason Upgrades

As with previous years, the Online Learning Resources (OLR) team focused efforts this fiscal year on continually looking for new features to offer faculty and students in Blackboard. In May, an upgrade to the system updated

the look and feel of the LMS, Organizations and myMason portal environments. New and improved features included the addition of a modern integrated calendar, new myMason user profiles with photos, a new content/math equation editor, redesigned discussion thread pages, additional testing features, and new tools for customizing courses.

Faculty have provided particularly positive feedback for two features that were released, in-line assignment grading and the Retention Center. The in-line assignment grading tool streamlines the grading process for papers and tests, allowing professors to mark up and make notes on submissions from within Blackboard. The retention center provides faculty with a dashboard which shows students' progress (i.e. how they participate, compared with other students, how often they check in, etc.) and allows them to contact students directly if a student appears to be struggling or is not performing as well in a particular area.

Improved User Support for Blackboard

Results from a Blackboard Satisfaction Survey issued to faculty this fiscal year by DoIT, indicated a high faculty satisfaction rating in the area of Blackboard support, but expressed a need for additional web-based, self-paced training opportunities. With this feedback in mind, OLR used the 2013 summer to build an extensive online training course. Faculty can self-register at any time and pick topics they are interested in learning more about. Also, OLR began using an internal ticketing system to help improve service and answer support questions in a timely and efficient manner. This system is also being used to build data to help identify trends and needs for additional support opportunities.

Full Integration of Blackboard Collaborate with Mobile Devices

The university's enterprise synchronous learning system solution, Blackboard Collaborate, had an extremely successful year. Growth continued in academic uses with live classes, but also recorded lectures. New this fiscal year, Collaborate became compatible with iOS mobile devices in line with OLR's goal to make this feature available on as many devices as possible. This year on average 709 Collaborate sessions were created each month, and approximately 280 sessions were recorded.

Training & Certification

In 2012-2013, Training & Certification (T & C) facilitated 301 Microsoft Office related workshops to 1,445 users and 194 multimedia workshops to 495 users. In addition to workshops, T&C proctored 308 certification exams including Microsoft Office, Adobe, QuickBooks, Autodesk, etc. Moreover, several T & C instructors acquired additional application certifications for teaching purposes.

This fiscal year, the university introduced the new Office 365 e-mail system to faculty and Staff. T & C was tasked with providing training opportunities for faculty and staff impacted by the transition. Working with a local training company, specializing in Office 365, and its facilitators, T & C coordinated more than 35 hands-on Office 365 e-mail workshops to nearly 500 faculty and staff during the weeks leading up to the official campuswide switch in April. In addition, T & C created, and continues to maintain, an extensive library of resources and instructional guides available on the university's Office 365 web site.

Dissertation training continued to be a very successful partnership for the T & C group and the University Libraries. As a requirement for students approaching the dissertation phase of their doctoral programs, T & C

collaborated with the library to offer a variety of thesis and dissertation workshops to help students understand the dos and don'ts of thesis writing. In total, 217 dissertation students attended 21 sessions which were offered 1-2 times a month on the Fairfax Campus in addition to many offered on satellite campuses.

DoIT Operations Accomplishments

Operations (Ops) provides administrative support to the Division of Instructional Technology and handles functions that require central coordination and oversight. DoIT Ops serves the institution through these primary functions:

- Creation and administration of SharePoint sites
- Innovation Hall building management and security access
- Coordination of office moves
- Oversee work orders, maintenance requests, and office inventory
- Organization and coordination of DoIT events auxiliary
- Event support in DoIT supported spaces

This year, through combined efforts of CaLT and DoIT Ops, a significant upgrade took place to switch the organization from SharePoint 2007 to the latest version, SharePoint 2010. DoIT's Business Administrator completed various trainings and certifications in order to carry out the upgrade project and remain on top of SharePoint's features and processes. Several units within DoIT continued to rely on SharePoint for efficiency and security,and DoIT Ops worked diligently to ensure all existing sites were transitioned properly and quickly. This fiscal year, new sites, including one for the organization's annual inventory and a budget tracking form were created, and existing features such as the timecard application and search function were improved. Additionally, the production server was moved over and configured for secure space, exactly replicating the live environment.

In regards to operational and event support, DoIT Ops coordinated and organized both the DoIT Summer Picnic and Student Award Ceremony this year. DoIT Ops coordinated the organization's annual inventory effort and assisted with relocating equipment. The unit also coordinated and collected data for DoIT professional development expenditures.

DoIT Ops processed 761 events including three large events for outside groups— Summer Forensics, Model UN, and the School of Management Capstone Conference. Considerable support was also provided for the New Student Orientation and the Blackboard User's Group meeting. As a result of event support, over $48,000 was recovered in costs. Recovered costs were circulated back to the organization and used toward various projects such as the installation of more than a dozen new remotely programmable locks. The Ops team focused on refining event support processes and in doing so streamlined the recharge reconciliation process allowing for real-time accounting and prompt processing.

Lastly, DoIT Ops placed 423 work orders and maintenance requests for the organization and coordinated multiple office moves including the interim CIO move as the fiscal year closed.

Division of Instructional Technology

Accolades & Scholarship

The references that follow detail DoIT affiliations, honors, presentations, publications and courses taught.

Statewide, Regional, National and International Affiliations

The Electronic Campus of Virginia (ECVA) is a cooperative instructional technology initiative among the state's public and private colleges and universities. http://www.vacec.bev.net/

The EDUCAUSE Learning Initiative (ELI) is a community of institutions, organizations, and corporations committed to advancing learning through IT innovation. ELI achieves this mission through a strategic focus on learners, learning principles and practices, and learning technologies. George Mason University is a member. http://www.educause.edu/eli

The EDUCAUSE Center for Applied Research (ECAR) provides subscribers with timely research and analysis to help higher education leaders make better decisions about IT. George Mason University is a subscriber. http://www.educause.edu/ecar

The IBM Cloud Academy is finding new and innovative ways to implement cloud computing within schools and universities globally. Cloud computing efforts at George Mason can be repeated on the campuses of other institutions. Through its membership in the IBM Cloud Academy, the Mason community connects with educational leaders who are also implementing cloud solutions, leading to best practices that benefit the broader educational community. http://www.ibm.com/solutions/education/cloudacademy/us/en/

The Science 360 Knowledge Network, sponsored by the National Science Foundation, information about breaking science news around the world. In 2011, the National Science Foundation and a pilot group of universities founded the Knowledge Network channel, a media consortium whose mission was to broadly communicate science and research. Member institutions are involved in developing a multi-university communication network distributed over IPTV and Internet2. http://science360.gov/files/

Advanced Certifications

Campbell, Susan. SLOAN-C Online Teaching Certificate.

DiPietro, Joseph. SLOAN-C Online Teaching Certificate specializing in Administration.

Joseph, Katrina. SLOAN-C Online Teaching Certificate specializing in Science, Technology, Engineering, and Math (STEM).

Phipps, Zane. ITIL Foundation Certificate.

Reo, Rick. Award of Completion (Sloan-C), Introduction to Mobile App/Game Development workshop.

Reo, Rick. Certificate of Achievement (Online Expert), Adobe Dreamweaver CS5.

Reo, Rick. Sloan-C Online Teaching Certificate.

Awards and Honors

GMU-TV, Rick Davis, Cynthia Lont. Studio A: Eduardo Sanchez, Bronze Telly Award, 2013.

GMU-TV, Rick Davis, Cynthia Lont. Studio A: Eduardo Sanchez, Communicator Award of Distinction, 2013.

Olesova, Larisa. *Asynchronous Embedded Audio Feedback for Online Learners* by the Division of Distance Learning of the Association for Educational Technology and Communications. Information Age Publisher (IAP) Distance Education Best Practice Award, 2012.

Councils and Committees

Kehoe, Susan. Executive Board Member, Communications Media Management Association.

Kehoe, Susan. Judge, Alliance for Women in Media Gracie Awards.

Kehoe, Susan. Judge, International Academy of Visual Arts Communicator Awards.

Olesova, Larisa. Coordinator for Electronic Village Online Session "Becoming a Webhead," Teachers of English to Speakers of Other Languages (TESOL).

Olesova, Larisa. Manuscript reviewer, Language Learning and Technology (Peer-Reviewed Journal).

Olesova, Larisa. Member, Affiliates Leadership Council (ALC), Teachers of English to Speakers of Other Languages (TESOL).

Olesova, Larisa. Member, American Education Research Association (AERA).

Olesova, Larisa. Member, Association for Educational Communications and Technology (AECT).

Olesova, Larisa. Member, Division of Distance Learning Award Committee, Association for Educational Communications and Technology (AECT).

Olesova, Larisa. Member, International Association for Language Learning Technology (IALLT).

Olesova, Larisa. Member, National Association of Teachers of English in Russia (NATE).

Olesova, Larisa. Member, South-Central Association for Language Learning Technology (SOCALLT).

Olesova, Larisa. Proposal Reviewer, Association for Educational Communications and Technology (AECT).

Silverman, Matt. Member, Performance Standard Steering Committee, InfoComm International.

Silverman, Matt. Member, Professional Development Committee, Consortium of College and University Media Centers.

Silverman, Matt. Member, Technology Managers Council, InfoComm International.

Silverman, Matt. Moderator, AV Systems Performance Verification Task Group, InfoComm International.

Pitt, Sharon. Information Technology Committee, Southeastern Universities Research Association (SURA).

Pitt, Sharon. Program Chair, International IBM Cloud Academy Conference.

Pitt, Sharon. Program Chair, Virginia Software Summit.

Pitt, Sharon. Program Committee, EDUCAUSE 2013.

Pitt, Sharon. Technology Strategy Committee, Educational and Institutional Cooperative Purchasing.

Presentations

Donohue, John. Association of Collegiate Computing Services Presentation: "The Benefits of Creating and Managing A/V Programs Internally." March 2013.

Kehoe, Susan and Richard Wood. Association of Higher Education Campus Television Administrators (AHECTA) Conference Presentation: Full STEAM Ahead: The Knowledge Network, a reflection of the first year of operation of the National Science Foundation's Knowledge Network." June 2013.

Nodine, Steve and Rick Reo. George Mason University Innovations in Teaching and Learning Conference Presentation: "Rapid Instructional Design Strategies for Developing Online Courses." September 2012.

Olesova, Larisa. Yakut TESOL Annual Convention Moderated and Facilitated Online Session: "Technologies for Communicative Purposes." November 2012.

Olesova, Larisa. Teachers of English to Speakers of Other Languages (TESOL) Annual Convention Presentation: "Using embedded audio feedback in asynchronous online courses." March 2013

Olesova, Larisa. Yakut TESOL Annual Convention Moderated and Facilitated Online Session: "Websites and Tools for Language Practice and Collaboration." November 2012.

Olesova, Larisa. Community of Distance Educator (CODE) Academy Presentation: "Instructional Strategies for Students' Engagement in Online Discussions." 2012.

Olesova, Larisa. Yakut TESOL Annual Conference Presentation: "Technology integration in geographically remote places: Yakut TESOL contribution to the field of distance education." November 2012.

Olesova, Larisa. Yakut TESOL Annual Conference Presentation: "Yakut TESOL presentation 2002-2012." November 2012.

Olesova, Larisa. Association for Educational Communications and Technology International Convention Presentation: “The relationship of social presence and students use of Hotseat in blended learning environments.” November 2012.

Olesova, Larisa. Association for Educational Communications and Technology International Convention Presentation: “Role playing and cognitive presence in online discussions.” November 2012.

Pitt, Sharon. Campus Televideo Technology Seminar Presentation: “The Knowledge Network.” November 2012.

Pitt, Sharon. EDUCAUSE Annual Conference Presentation: “Women in Technology: Strategies and Best Practices to Attract Young Women into IT Programs and Careers.” November 2012.

Pitt, Sharon, Susan Kehoe, and Richard Wood. EDUCAUSE Annual Conference Presentation: “Building an IPTV Network from the Ground Up: A Consortium Approach.” November 2012.

Pitt, Sharon and Tim Murphy. EDUCAUSE Mid-Atlantic Regional Conference Presentation: “New Standards and Designs for Technology Classrooms: Moving from Analog to Digital.” January 2013.

Reo, Rick. Association of College Computing Presentation: “Facilitating Student Engagement in the Synchronous Learning Environment.” 2012.

Silverman, Matt. Consortium of College and University Media Centers Conference Presentation: “A Technology Manager’s Modern Day Survival Guide.” October 2012.

Silverman, Matt. Consortium of College and University Media Centers Conference Presentation: “Enterprise Audiovisual: Moving Past Project-by-Project Thinking.” October 2012.

Silverman, Matt. InfoComm 2013 Conference Presentation: “A Technology Manager’s Modern Day Survival Guide.” June 2013.

Silverman, Matt. InfoComm 2013 Conference Presentation: “Enterprise Audiovisual – Moving Past Project by Project Thinking.” June 2013

Silverman, Matt. InfoComm 2013 Conference Presentation: “Audiovisual Systems Performance Verification.” June 2013

Silverman, Matt. InfoComm: Power of AV for Education Presentation: “Scaling from 40 to 170 Classrooms: George Mason University AV Standard.” April 2013.

Publications

DiPietro, Joseph. "Visual Literacy." In M. Wolf (Ed.), *Encyclopedia of video games: The culture, technology, and art of gaming*. Westport, CT: ABC-CLIO/Greenwood Press, 2012.

DiPietro, Joseph and R. Ferdig. "Web-based Games." In M. Wolf (Ed.), *Encyclopedia of video games: The culture, technology, and art of gaming*. Westport, CT: ABC-CLIO/Greenwood Press, 2012.

DiPietro, Joseph and R. Ferdig. Entry on "Will Wright." In M. Wolf (Ed.), *Encyclopedia of video games: The culture, technology, and art of gaming*. Westport, CT: ABC-CLIO/Greenwood Press, 2012.

Olesova, Larisa. *Feedback in Online Course for Non-Native-English-Speaking Students.* Newcastle upon Tyne: Cambridge Scholars Publishing, 2013.

Olesova, Larisa, de Oliveira L., and A. Gilmetdinova. "Student-Led online discussions in TESOL." *TESOL Connections*, (2012).

Silverman, Matt. "The Changing Face of Audiovisual Control Systems." *AV Technology,* 2013.

Teaching

Kraus**,** Amanda. Communications Department, College of Humanities and Social Science, *COMM 360*: Video II: Video Editing. Fall 2012.

Kraus, Amanda. Communications Department, College of Humanities and Social Science, *COMM 360*: Video II: Video Editing. Spring 2013.

Kraus, Amanda. Film and Video Studies Department, College of Visual and Performing Arts. *FAVS 460*: Advanced Editing. Fall 2012.

Kehoe, Susan. Film and Video Studies Department, College of Visual and Performing Arts. *FAVS 399*: Career Seminar. Fall 2012.

Kehoe, Susan. Film and Video Studies Department, College of Visual and Performing Arts*. FAVS 499*: Senior Project. Spring 2013.

Wood, Richard. Film and Video Studies Department, College of Visual and Performing Arts. *FAVS 335:* Sound and Lighting Film/Video. Spring 2013.