

Academic Program Review Self Study 2008-2013

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***Andrea Adams, Sarah Brett, Mikki Butcher, Ashley Caudill,
Paula Kiser, Jenne Klotz, Grover Saunders,
Brian Simmons, Stefanie Warlick***



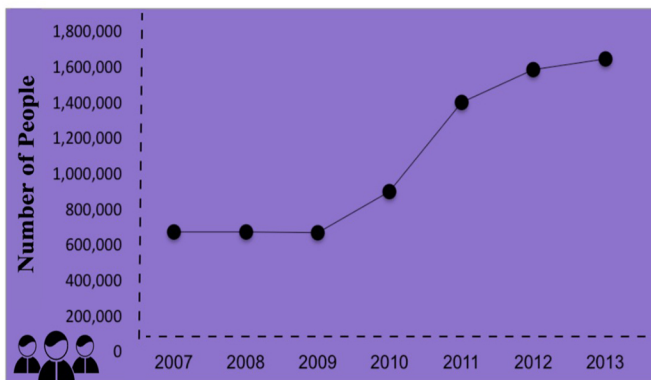
L&ET SNAPSHOT

Contact Us:

Carrier Library (540) 568-6150
Rose Library (540) 568-2731
Music Library (540) 568-6041
CIT (540) 568-7061

BUILDING USE

Number of people through the doors, all library locations combined.



james madison university libraries

CARRIER LIBRARY

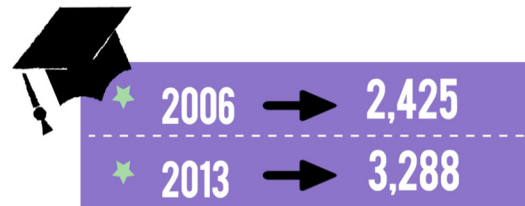
ROSE LIBRARY

MUSIC LIBRARY

L&ET ACADEMIC PROGRAM REVIEW

CIT INSTRUCTIONAL HOURS

Workshops, housecalls, and institutes hosted by the Center for Instructional Technology.



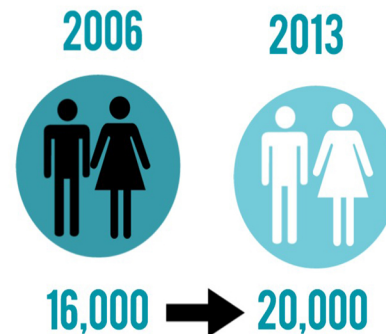
FULL-TEXT ARTICLE DOWNLOADS

Electronic journal articles downloaded from library collections.



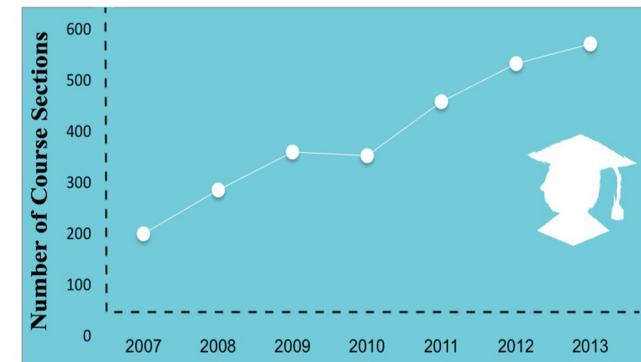
STUDENT POPULATION

The totality of students enrolled in JMU.



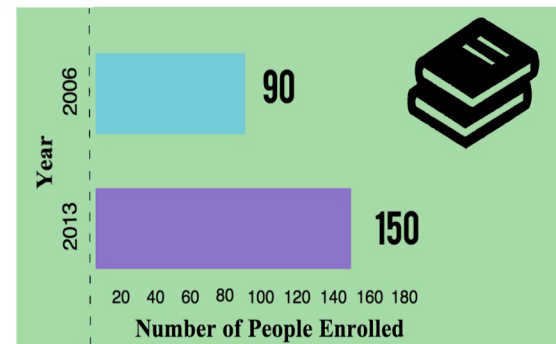
ONLINE COURSE SECTIONS

Number of course sections offered online per year.



L&ET STAFF

Number of L&ET faculty, staff and wage employees.



CLASSROOM TECHNOLOGY SATURATION

General classrooms and classroom labs on campus with projector capabilities, managed by Classroom Technology Services.



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1-Executive Summary

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Introduction

James Madison University (JMU) uses the process of the Academic Program Review (APR) to demonstrate the effectiveness of programs and their responsiveness to the existing and emerging needs of the University. Each area within the Division of Academic Affairs conducts an APR on a five to eight year cycle, depending on the type of program. The last APR for Libraries & Educational Technologies (L&ET) occurred in 2007. JMU's consideration of L&ET as an Academic Administrative Area for purposes of the APR and the unique nature of the services and resources L&ET provides are reflected in the outline of this self-study.

Since the last APR, L&ET has seen significant changes, many of which were recommended in the 2007 external review team report. The highest impact change was the opening of Rose Library in August 2008. While planning, construction, and preparations were under way for many years, the effect of opening a new full services library, doubling the staffing and services of the Center for Instructional Technology (CIT) and the Library, and guiding the JMU community through the changes that the new facility brought about cannot be understated. In addition to the new facility, L&ET expanded many existing services to accommodate user needs, renovated existing spaces, explored and adopted new technologies, and collected resources of all types to meet the teaching, learning, and scholarship needs of the growing JMU community. Since 2008 the JMU student population has grown from just over 16,000 students to nearly 20,000 in 2013. The pace of growth for instructional faculty has been slower, from 1,252 full-time and part-time faculty in 2008 to 1,439 full-time and part-time faculty in 2013.

As we take this opportunity through this self-study to reflect on our accomplishments and challenges over the last six years, we must note and acknowledge external factors. 2008 was the beginning of a global financial crisis that had far-reaching implications for higher education. Stagnant budgets resulted in minimal to no increases in materials allocation and no salary increases for any employee for five years, as the costs of library resources, software licenses, and equipment continued to rise along with student enrollment and related demands on spaces and services. When the State of

Virginia recognized the need to increase educational opportunities for the STEM disciplines, JMU developed an Engineering program in 2008. To respond to shortages in the Nursing profession, the program at JMU grew in size and scope to offer bridge programs and bachelor's degrees to a doctorate in nursing practice. As part of the JMU community, L&ET shares the commitment to preparing students to lead productive and meaningful lives.

Methodology

Andrea Adams, the Director for Faculty Development and eLearning Programs in the CIT, and Jenne Klotz, the Director of Library Instruction, volunteered to co-chair the self-study and coordinate the APR. Shortly thereafter, they put out a call for volunteers and interested staff completed an online survey indicating their interest. The co-chairs assembled the following team of volunteers:

- Sarah Brett, E-Resources Manager, Technical Services, Library
- Mikki Butcher, Interlibrary Loan Manager, Library
- Ashley Caudill, Media Specialist, Media Production Services, CIT
- Paula Kiser, Reference Assistant, Public Services, Library
- Grover Saunders, Web Media Design Engineer, CIT
- Brian Simmons, Media Desk Manager, Media Resources, Library
- Stefanie Warlick, Assistant Director, Rose Library, Library

The team created an outline which Management Council approved on March 21, 2013. The Provost's office subsequently approved the outline. Team members took responsibility for gathering data; writing; developing tables, graphs, and charts; and editing the final report.

In addition to conversations with key stakeholders including directors and deans at JMU the team consulted survey data including the Technology Satisfaction Survey (TSS), Continuing Student Survey (CSS), LibQUAL+, and Work Life Satisfaction Survey (WLSS). The 2013 Horizon Report, ACRL guidelines, and ARL reports like the recent report "New Roles for New Times: Transforming Liaison Roles in Research Libraries" all provided important environmental insights.

Within L&ET, the team met with Dean's Council and regularly informed the Management Council about the progress of the APR, including their input during the process. The APR committee held several open forums to give L&ET faculty and staff additional opportunities to get information, ask questions, and provide input.

Based on the self-examination and environmental scan the overarching questions facing L&ET are:

- Are we organized in the most effective way to respond to changing teaching and learning environments? Does our internal organization enable us to use the talents and skills among our staff to deliver services that meet the ever-changing needs of our users?
- How can L&ET lead the JMU community in the coordination and development of online learning?
- What assessment strategies should L&ET pursue?

Moving forward, answering these and many related questions will ensure that L&ET is able to engage with its communities to continue to provide the highest quality services, collections, and support for scholarship in the 21st century.

2-Unit History & Mission

Mission, Vision & Values

L&ET revised the mission, vision and values statements as part of the 2007 Strategic Planning process. The External Review Team endorsed three statements in April 2007, noting that the new mission statement represented the comprehensive nature of the L&ET organization and mission.

L&ET Mission: Enriching our communities by building learning and information environments where people connect with ideas and each other to discover, create and share knowledge.

L&ET Vision statement: The communities we serve will recognize L&ET as a knowledge organization that is responsive, agile, innovative, focused on quality, and deeply committed to learning and scholarship.

L&ET Values statement: We value the right of every person to engage in the lifelong pursuit of knowledge. To this end we consider the following to be essential: integrity, service, the open exchange of ideas, innovation, intellectual freedom, diversity and equitable access to information.

In addition to these mission statements, CIT and several work units within the library have their own mission statements, which serve to describe the work of the unit and its relationship to the mission of L&ET. For examples see appendix 2.

Organizational Chart

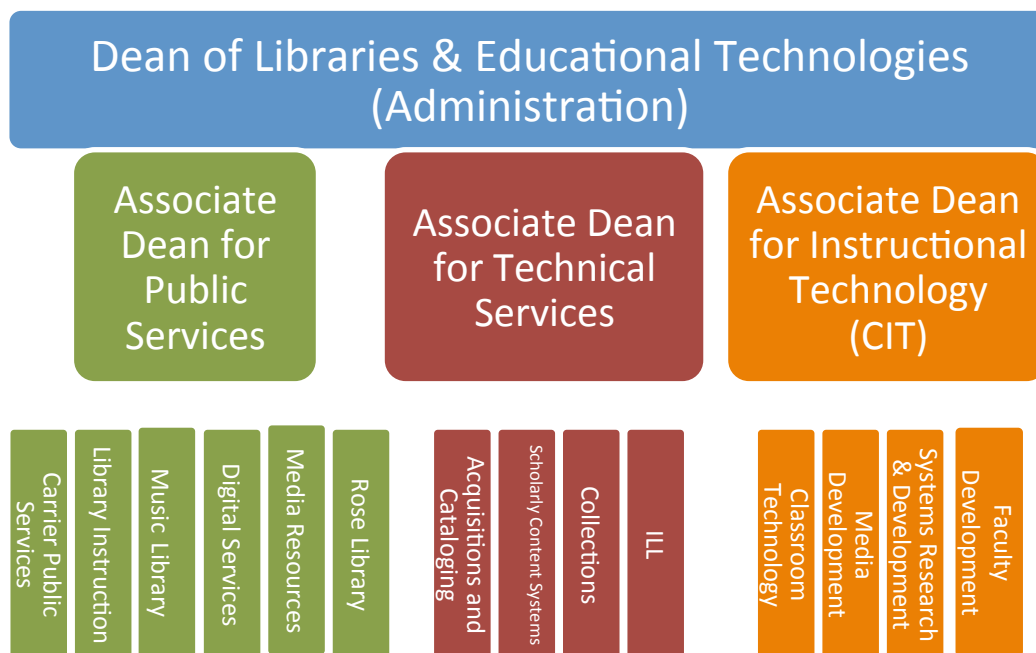


Figure 1: L&ET Organizational chart

The 2013 organizational chart displays the primary divisions within L&ET: Administration, Public Services, Technical Services and CIT. The Dean of L&ET leads the entire organization and reports to the University Provost in Academic Affairs. Three associate deans lead one or more of the primary units and report to the Dean. Please see appendix 1 for more detailed organizational charts.

In response to the last APR in 2007 the Dean established two new administrative groups, the Management Council and the Dean's Executive Council. Management Council is comprised of directors from both the library and CIT, and two at-large members representing L&ET faculty and classified staff. This group is responsible for: coordinating the development and execution of strategic

initiatives among units; recommending strategic priorities; communicating with Dean's Executive Council, unit head management, and L&ET faculty and staff; and ensuring that strategic planning is a mission critical process that engages all members of L&ET. The Dean's Executive Council, the senior executive planning and decision-making body within L&ET, advises the Dean on matters of policy, strategic direction, and organization-wide priorities, and makes high level recommendations on allocation of fiscal and human resources.

Significant Changes

Staffing

Since 2007 L&ET has experienced turnover due to retirements, new positions, and reorganizations. As of the last APR, eight classified staff, six librarians, and one AP faculty member retired. Beginning with the recruitment in 2008 to open and staff Rose library the L&ET workforce has evolved. Most recently, in 2013, eight faculty librarians, two new instructional technologists, and several new professional staff were recruited.

The challenges and opportunities presented by turnover are significant. The new talents that replacements bring to the organization counterbalance the obvious loss of institutional memory that occurs when a librarian or staff member departs. New faculty and staff bring new skills and perspectives that contribute to the library's overall effectiveness. Keeping pace with changes in technology, user expectations, and the JMU community is an endeavor that requires attention and resources to devote to the development of new skills.

Facilities

The most dramatic change to the physical facilities was the opening of the Rose Library in 2008. This required significant human and financial resources and adapting to the changes has required constant flexibility, innovation, and creativity. Coupled with increased demands on our physical spaces, L&ET has experienced increased demands for virtual spaces for teaching, learning, and scholarship.

L&ET delivers its services in many places throughout campus, including two main libraries—Carrier Library on the west side of campus and Rose Library on the east—the Music Library in the Music Building, and the Educational Technology & Media Center (ETMC) in Memorial Hall. The CIT has offices in both main libraries and manages all of the technology classrooms on campus. Both CIT locations offer walk-in areas for unscheduled assistance, computer labs for workshops and institutes, as well as custom spaces for specific purposes like recording audio, and creating and editing video.

L&ET offers a variety of study spaces to accommodate student needs with a total of 1,927 seats and 175,000 usable square feet. From quiet solitary spaces to social group spaces and coffee shops, library space decisions are made to meet the myriad needs of library users. Each library also offers space for staff offices, along with collections and equipment.

The opening of the new library on the east campus in 2008 provided some relief to overcrowding, but Carrier Library remains in dire need of expansion and renovations. Increases in student enrollment and student study behaviors have all resulted in increased demand for group study space, quiet study space, and electricity, all of which are severely limited in Carrier Library. Every effort has been made to accommodate students, but often these efforts have resulted in the displacement of collections and library staff to inconvenient and undesirable locations. While there have been incremental small-scale renovations over the past six years, including the installation of security cameras, renovation of several spaces in the basement, renovation of the administrative suite, and a renovation of the Special Collections reading room, the fact remains that Carrier Library spaces are inadequate to meet the mission of the library, educational technologies, and the university. Much needed expansion and renovations to Carrier Library was put on JMU's six-year capital projects list in

2013 and L&ET adopted a major strategic initiative to plan for additions and renovations of the building.

Milestones

Responding to the user is the ultimate priority of L&ET. Each unit within the library and CIT achieved significant milestones that were directly influenced by stated and emerging user needs.

- Installation of Elluminate for synchronous online instruction in 2007.
- Release of MDID 2 in 2007 and MDID 3 in 2011 to manage digital media collections.
- Expansion of the material delivery service to serve the entire campus in 2008.
- Establishment of user-identified benchmarks for the library website in 2009.
- Installation of many dual-projection classrooms in 2012.
- Implementation of Blue course evaluation in 2013.
- 98% of general classrooms have computer projection capabilities as of 2010.
- Establishment of a student advisory board in 2010.
- Development of a chat service for directional and reference questions in 2010.
- Adoption by CIT of SafeAssign plagiarism detection software in 2011 and Turnitin in 2013.
- Implementation of WordPress by CIT in 2013.
- Creation of two new user experience positions in the Library in 2011.
- Selection of Canvas to replace Blackboard as the campus-wide learning management system in 2013.
- Installation of a remote monitoring system in the classrooms, decreasing the response time for technology problems, in 2013.
- Selection of LibGuides as a subject guide platform in 2013.
- Retirement of the first-year information literacy tutorial Go for the Gold and replacement with the Madison Research Essentials Toolkit in 2013.
- Implementation of Logins for public workstations in the library in 2013.
- Launching of a lunch series by Special Collections, highlighting faculty work with Special Collections in 2013.

Assessment, long a part of the Library Instruction program, has grown.

- In 2011 L&ET sponsored three graduate students from CARS and sponsorship continues to improve L&ET assessment projects.
- L&ET faculty completed assessment fellowships in 2011, 2012 and 2013. In 2011 CIT developed a model to assess the CIT's Institutes for Online Course Development. The Library redesigned the Madison Research Essentials Skills Test (replacement for the Information Seeking Skills Test) in 2012 and the online student orientation was revised in 2013.
- In 2011 the Balanced Scorecard (BSC) was introduced as a framework to guide planning and assessment, and implementation continues to date.

Partnerships with campus entities also expanded substantially in the past six years.

- In 2007 CIT began a formal partnership focused on programming with the Center for Faculty Innovation (CFI).
- Work with the Office of Outreach and Engagement began in 2008, followed by collaboration with the Office of Disability Services in 2013.
- The CIT worked with its first faculty associate in 2010 and expanded into officially hiring two faculty associates in 2013.

- In 2011 the library partnered with the Learning Resource Centers to offer space for programming in both libraries for the Writing Center and the Science & Math Learning Center.
- Partnerships with a variety of offices and faculty on campus resulted in the creation of JMU Café in 2011.
- In 2012 an “Ask-a-Nurse” program began in the library.
- In 2013 CIT began working with 4-VA on faculty development and research initiatives, a project whose scope and scale remain to be seen.
- Communication Underground and Career and Academic Planning programming began in the libraries in 2013.

The **web presence** for the library and CIT evolved in response to changing user expectations about web sites and search tools.

- In 2009 CIT redesigned its public website and the library redesigned the website for each service point.
- In 2010 the Library redesigned the color and style of the library website, and the Carrier and East Campus Library (ECL)/Rose library websites were merged into one.
- In 2011 the library adopted a discovery layer for searching many collections concurrently.
- In 2012 the Library clarified and redesigned the research paths for background information, books, articles, and media and completely overhauled the library catalog interface.

Mobile technologies began to demand consideration in the last several years.

- CIT acquired iPads for all staff in 2010.
- The Library began offering support for mobile devices and access to database interfaces in 2011.
- In 2012 the Library introduced a mobile library website.
- In 2012 Library faculty and staff initiated an iPad sandbox.

Online and blended learning experienced significant growth in recent years.

- In 2009 CIT selected Camtasia Relay for lecture capture.
- CIT increased their support for blended learning by expanding to support blended course development in 2010.
- In 2011 Institutes for Online Course Development expanded to include a “Maymester” institute for faculty teaching online during the first summer session.
- Driven by best practices for online learning, CIT began offering a refresher workshop in 2012 for past institute participants.
- In 2013 CIT facilitated nine Institutes for Online and Blended Course Development.
- In 2013 Classroom Technology Services connected 10 endpoints to video conferencing.
- In recognition of the growth in online course offerings, the L&ET created and recruited an Instructional Design and Online Education Librarian position in 2013.

Library collections experienced continuous evolution.

- In 2007 JMU participated in a VIVA streaming video project and provided original and collaborative cataloging for a collection of PBS online videos.
- The Library funded a patron-select e-book project in 2010.
- In 2010 the Library began accepting electronic theses and dissertations for the collection.
- In 2011 the Library adopted a shelf-ready service for monographs, decreasing the time from order to availability while freeing staff time for other work.

- In 2011 the library participated in an OCLC reclamation project that accurately reflected library holdings, modified the government documents profile, and implemented the MARCIVE “Docs Without Shelves” program.

Work in **digital humanities** created a natural intersection between collections and technology, with many projects involving the Libraries and CIT.

- In 2007 Special Collections collaborated with CIT to digitize the JMU Founding Documents.
- In 2008 L&ET released a Shenandoah Valley Oral History collection online.
- In 2011 L&ET introduced digital storytelling work sessions and support.
- Coinciding with the WordPress implementation in 2012, L&ET digitized the JMU student newspaper *The Breeze* and the JMU Yearbook collections.
- In 2013 L&ET introduced the Madison Parlor, a WordPress site designed to foster creativity, innovation, scholarship and collaboration for undergraduate research.

Library spaces defied predictions of declining use and saw expansion and increases in use by students, faculty, and community members.

- Starting with the opening of ECL in 2008 (renamed Rose Library in 2012) gate counts rose, and have continued to rise steadily, hitting the million visitor mark in 2011 in Carrier Library. Rose Library also offered expanded space for the CIT, including a state of the art recording studio, as well as a coffee shop.
- In 2009 the Library renovated the first floor of Carrier Library, including the opening of a coffee shop.
- In 2012 the Special Collections renovated the Reading Room.
- L&ET renovated previously underutilized space in Carrier in 2013 that resulted in expanded space for Classroom Technology Services’ offices and equipment and the unification of the Digital Services department on one floor.

Much of L&ET’s work is forward-facing, yet substantial **behind the scenes** work has taken place.

- In 2008 CIT replaced the streaming server with JMUtube and released CRASS (Classroom Recording and Streaming System).
- In 2010 the Library installed the storage area network (SAN) and virtual servers.
- In 2012 L&ET began to implement of SharePoint to replace several discrete StaffWeb work areas and tools. Implementation continues to date.

L&ET has received several **grants and awards** over the past six years.

- In 2007 CIT received an IMLS grant to develop interoperability APIs for the MDID.
- In 2008 Special Collections received a \$5,000 National Endowment for the Humanities grant to fund archival rehousing of materials in Special Collections.
- In 2011 the MDID received the nTelos Innovation in Higher Education award.

None of the milestones met occurred without **continuous organizational evolution**. Beginning with a large-scale faculty and staff recruitment effort in 2008 to staff the new library, define the tiered service model, and establish core competencies, staffing and administration of L&ET has required flexibility along with constant professional development.

- Rose Library opened in 2008.
- Technical Services reorganized in 2008 and again in 2010.

- The CIT established distinct work units in 2008: media production services, faculty development, and systems research and development.
- In 2010 Classroom Technology Services was folded into CIT operations.
- In 2010 the Director of the CIT became an Associate Dean, providing increased visibility of CIT services and access to discussions and decisions related to online learning.
- The Library formed the Access Services Group for all library locations in 2010.
- In 2011 the Library identified core competencies for public service staff, followed by joint staff and student employee training.

Key Findings, Questions and Recommendations

Findings

- L&ET is a highly productive, highly valued entity on campus.
- L&ET has experienced unprecedented growth in spaces, staffing, and programs in the last six years.
- LibQUAL+, the Continuing Student Survey, and daily experience all show that physical spaces in Carrier Library are inadequate to meet the mission of L&ET and the University.
- The collections we manage and services we provide are more complex and diverse than six years ago.

Questions

- How can we integrate all of the new and existing people and positions into our organization in a way that allows them to achieve their goals, inculcates them to our culture, and capitalizes on their fresh talent and ideas?
- Is the L&ET mission/vision/values aligned closely enough with those of JMU and if not, how can we achieve better alignment?

Recommendations

- Expand and renovate Carrier Library to support the teaching, learning, and scholarship needs of the JMU community.
- Identify ways to provide leadership, support, and coordination for online learning at JMU.

3-Program Goals & Objectives

L&ET strives to align strategic planning with university requirements, state processes, and various deadlines. Management Council uses the Balanced Scorecard (BSC) framework to guide organizational planning. Based on the BSC objectives and initiatives, individuals and work units set annual goals.

Balanced Scorecard

Balanced Scorecard is an internal strategic planning framework that L&ET adopted in 2010. It is described in greater detail in section seven. It requires the identification of top-level strategic initiatives to help organizations plan for change. In 2013 L&ET identified top-level initiatives describing work related to known and emerging user needs as expressed by the divisions within L&ET. Initiatives include planning for Carrier Library expansion, increasing collaboration between CIT and Media Resources, and to developing a program of professionalism to assure that L&ET employees have the training and skills they need to perform at the highest levels.

Unit Level Goals

Each work unit within L&ET regularly engages in planning and goal setting exercises which are reported out in unit annual reports. Unit planning includes top-level strategic initiatives reflected within the (BSC) framework as well as projects and goals that are not explicitly included within the BSC documentation but are nonetheless essential to the operation of L&ET. For additional information on unit level activities, please see the most recent annual reports in appendix 15.

Unit level goals reflect the priorities of the individual units and are shared with the associate deans for each division. In addition, individual faculty and staff goals reflect a connection to the unit level goals.

State Council of Higher Education for Virginia (SCHEV) and Enrollment Projections

While JMU growth is projected to be relatively slow for the next several years, the Director of Admissions at JMU predicts that JMU may see an increase in non-traditional, non-residential students including veterans, first generation students, adult learners, and international students. The 6-year plan for JMU will be approved in January 2014 finalizing these projections. SCHEV (State Council for Higher Education in Virginia) also provides enrollment projections for each university in the state. Please see appendix 3 for more detail.

University Planning

Departments across JMU used the JMU planning database to track all unit and department goals on campus. With the retirement of President Rose, and under the new strategic leadership of President Alger, the planning database will be phased out in 2014. JMU's administration charged the Madison Future Commission (MFC) with laying the groundwork for the university's 2014-2020 strategic plan. The group submitted their initial reports and planning framework in early October, which will impact future planning for L&ET. L&ET strives to align its goals with the University's strategic themes and defining characteristics while using BSC to structure internal strategic planning activities. For the most recent planning database report please see appendix 4.

Key Findings, Questions and Recommendations

Findings

- L&ET has identified Balanced Scorecard as its planning framework.
- L&ET has multiple planning and reporting obligations.

Questions

- How can we assure that our BSC efforts align with university planning and known and emerging campus needs?

Recommendations

- L&ET must reaffirm its commitment to Balanced Scorecard as a strategic planning framework and communicate consistently and transparently about it to the entire organization.

4-Program Structure

Role of Faculty and Staff

The faculty, staff, and student employees in L&ET are dedicated and highly educated. The skills needed to run an academic library range from the highly technical skills required to manage servers, manipulate metadata, and conduct usability studies to the equally important abilities to provide research support to students and faculty, to consult on pedagogy, course design, and scholarly communication. And while JMU is a primarily residential undergraduate institution, the areas that distinguish it from its peers, like an emphasis on undergraduate research and several graduate programs of distinction, require support that is on par with larger, more research intensive universities. Thus L&ET invests heavily in its people, intentionally providing support for collaboration within the organization, while simultaneously cultivating key connections throughout the university and the many professions represented.

This self-study comes at a time when L&ET has added many new employees, restructured and created new work units to respond to demands, and marked the 5 year anniversary of the “new” Rose library on the east campus. The JMU student body has grown, and with it so have demands on staff time and services. At the same time, JMU has a new president who has begun long-term strategic planning through the MFC. Core qualities identified by the commission include the support of meaningful research activities and the extension of learning opportunities through face-to-face and current and emerging technologies. L&ET must assure that the talents among all staff continue to further the educational mission of the university.

Status

As the end of FY 2013, L&ET employed 107 full-time and 43 part-time employees as well as student employees. Among all full-time L&ET positions, 61 are full-time classified staff, 30 are librarian faculty, and 16 are Administrative and Professional (A/P) Faculty. It should be noted that eight full-time tenure-track librarian positions were filled in the summer of 2013, with most starting in fiscal 2014.

Library Faculty

All of the full-time librarians at JMU are tenure-track. Like other instructional faculty, librarians must complete core responsibilities, academic scholarship, and service in order to receive promotion and tenure. Details about the promotion and tenure requirements are outlined in the librarians promotion and tenure document found in appendix 5.

As of November 2014, with the recent addition of eight full-time librarians, there are 21 librarians who are liaisons and seven librarians who do not have a liaison assignment. The liaison program is designed to assure that academic departments have a point of contact with the library for issues related to instruction, collections, and research and scholarship support. The program is described in greater detail in section four.

Administrative/Professional Faculty

L&ET currently employs 16 A/P faculty positions, 11 of which are in CIT, three in Digital Services, one in Library Administration, and one in Technical Services. Per JMU policy, professional faculty members are required to have “advanced learning and experience acquired by prolonged formal instruction and/or specialized work experience.” In CIT two new instructional technologist positions were approved and filled in the fall of 2013.

Classified Staff

Nine different classified staff roles are represented within L&ET: Administrative and Office Specialist II & III, Library Specialist I, II, & III, Financial Services Specialist I, Information Technology Specialist I & II, and Trainer and Instructor II & III. Education levels among classified staff range up to staff members with advanced subject and professional degrees.

Wages Employees

L&ET has 43 individuals in wage positions who are “limited to working no more than 1,500 hours per 365-consecutive day period” and no more than 29 hours per week. These part-time employees receive no benefits.

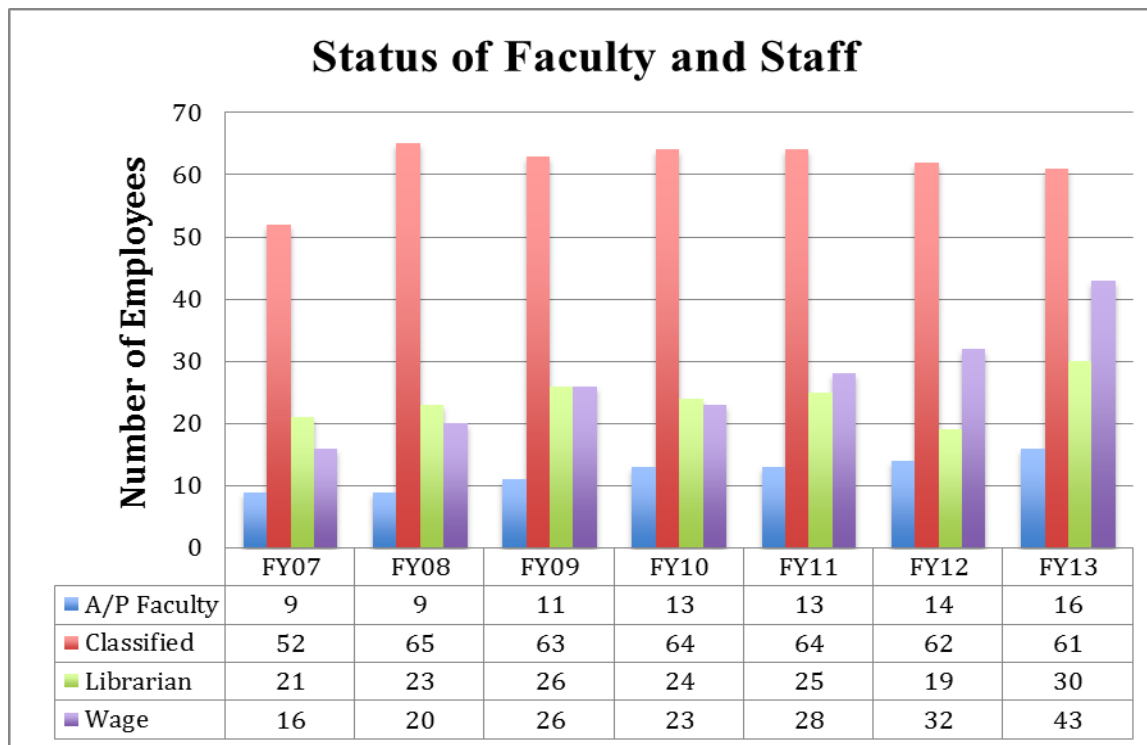


Figure 2: L&ET Faculty & Staff

Student Employees

As of April 2013, L&ET has 115 student employees: 79 are institutional employment positions, and 36 are federal work study positions. L&ET works with students in a variety of ways. While the type of work that students contribute to the organization varies, the departmental commitment to their student employees does not. Each department that employs students aims to use their learning environment to provide them with valuable work experience while leveraging the talent the students possess. Employing students and allowing them to use their talents, experiences, and perspectives serves the dual purpose of keeping L&ET running while contributing to the students' primary educational mission.

Special Collections also relies on the work of student interns to provide public services in the reading room and for processing, preserving, digitizing, and describing the collections.

Graduate Assistants (GAs)

L&ET has Graduate Assistant (GA) positions that provide additional support in the organization. In 2013, L&ET supported one GA position in CIT and partnered with the Center for Assessment and Research Studies (CARS) to support 3 GA positions that helped with L&ET assessment projects.

Special Collections is supported by the History Department's Public History Graduate Assistantship and the Music Library has one GA.

Faculty Associates

CIT has two faculty associate positions that support programming efforts. The associate's department receives a course buy-out or the associate works for the CIT on top of their course load and receives a stipend.

Contributions

JMU service

L&ET faculty and staff are well integrated into the JMU community through service on a variety of university committees. A survey of L&ET faculty and staff in 2012 revealed representation on the following JMU committees: GenEd council, Assessment Advisory Council, Impact3 coaching, Intellectual Property Committee, A-team, Institutional Review Board, Visiting Scholars Committee, Diversity Chairs Committee, Faculty Handbook Committee, Judicial Affairs mentor, Employee Giving Committee, Committee on Academic Programs, Madison Futures Commission, Faculty Research Council, Graduate Council, Madison Collaborative, Faculty Senate, Institute for Stewardship of the Natural World Awareness Committee, and the Madison Society. Committee service contributes to individual effectiveness and work goals as well as raising the profile of L&ET services on campus.

Professional service

All L&ET faculty have the opportunity to provide service to their professions via participation in associations and other means. For details please see appendix 6 which includes all CVs of the faculty in L&ET.

Administrative Structure of L&ET

In addition to the Dean's Executive Council and Management Council, L&ET currently has a number of active standing committees with at least one on temporary hiatus and several committees pending. Standing committees include Collection Development, Diversity, Environmental Stewardship, Master Space Plan Steering, Preservation, Staff Association, Work Life Satisfaction Survey, and Library Travel. Of these, five have representation from both the Libraries and CIT. Each permanent committee must complete a formal template outlining the composition, charge, and source of authority. Informal and ad hoc committees are not required to do so at present, however as SharePoint is adopted they will also be required to share the group name, composition, membership information and communication through SharePoint. Annually, the Dean sends out an organization-wide call for participation on committees. Ad hoc committees emerge on a less formal schedule and normally assemble around a short term project.

Advisory Councils

The Assistant Directors in Carrier Library and Rose Library established a student advisory group in 2010. This group, consisting of a rotating group of students, meets regularly to provide insight into the student experience and assist with decision making. In 2013 the library began to work directly with representatives from the Student Government Association (SGA) towards the same end.

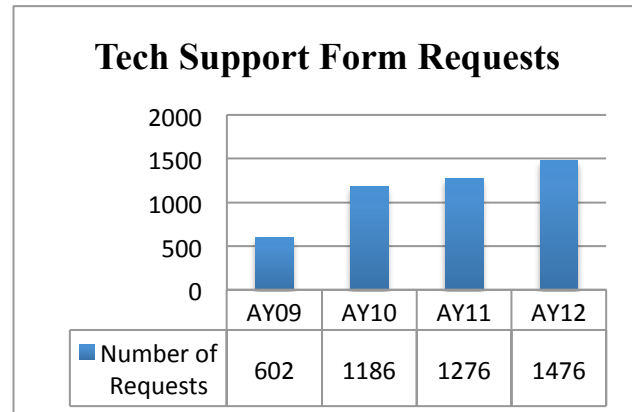
CIT formed a Distance and Blended Learning Work Group in 2009 to encourage and support the growth and development of distance and blended learning initiatives at JMU. Membership of the work group included CIT faculty and instructional faculty members. The work group met regularly through

2012. During 2012-13, CIT began organizing and meeting with a larger group of JMU stakeholders to promote communication and collaboration for online and blended learning at JMU.

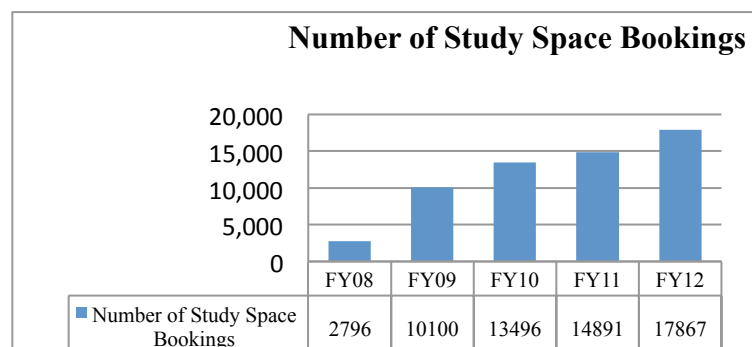
Internal Communication Structure

As L&ET added new employees, it built upon resources from the past while introducing new tools and structures to help the organization communicate effectively. In response to the challenges of adapting to a more complex workplace, L&ET has implemented many strategies to improve internal communication. Examples include:

- **L&ET News Digest:** A weekly email newsletter containing updates, announcements, and accomplishments that are archived and searchable.
- **L&ET joint meetings:** Emerging from a recommendation from the 2007 external team report, L&ET faculty and staff meetings take place quarterly. The focus is to foster learning, professional development, and collaboration.
- **Incident report form:** Digital Services developed the Incident Report Form in July 2010 to support communication across campus about incidents such as disturbances, violations of policy, and accidents involving patrons. This is a secure, restricted access database.
- **Photo staff directory:** Maintained by staff in Media Resources and Rose Library, the Photo Staff Directory is restricted to L&ET employees and is a popular tool for recognizing colleagues. In FY 2012, employees visited the directory 690 times.
- **Lync:** Adopted in 2011, Lync is a tool for instant messaging and video conferencing. It is widely used in addition to email, shared Outlook calendars, and traditional means of communication, to facilitate collaboration among staff. The Intranet Governance Committee advised that all L&ET employees should have Lync installed and should be able to use it.
- **Technical Support form:** In 2008 Digital Services developed an online form to facilitate technical support and software and hardware requests for the campus-wide L&ET workforce. As of May 2013, 27 staff members throughout Public Services and Technical Services responded to requests submitted by their colleagues in 16 categories. Since its inception in August 2008, to May 2013, 189 unique L&ET employees submitted 5,064 requests, an average of 1,135 per year.



- **Hardware/Software requests:** CIT uses a separate web-based form to facilitate communication and approval for ordering hardware, software, and other resources.
- **Room Scheduler:** Digital Services expanded room reservation functionality with a new room scheduling application in 2008 to support the scheduling needs across all L&ET buildings. The application also includes a public interface to support 17



student study spaces in Carrier and Rose for the Book a Group Study service. In 2013 Book a Group Study will also be available for mobile devices. Both services are actively used as seen in the following graph.

In 2013 Digital Services compared Room Scheduler to commercial solutions, and found that Room Scheduler is the most economical solution.

L&ET Hub

The Libraries have an intranet (StaffWeb), but maintenance issues combined with the use of disparate tools by other units within L&ET prompted the creation of an Intranet Needs Assessment Task Force in early 2010 to identify a single tool. The task force recommended Microsoft SharePoint, Microsoft Lync, Microsoft Office, network fileshares and a program of governance and training in 2011 as a replacement. Beginning in 2012 and continuing to date, Digital Services, in collaboration with representatives throughout L&ET, began the implementation of two Microsoft tools, SharePoint, which is referred to as the L&ET Hub, and Lync. Work continues towards full implementation of the L&ET Hub.

Key Findings, Questions, and Recommendations

Findings

- The majority of JMU students are 18-22 residential students with a slow increase in other non-traditional student demographics predicted.
- L&ET has invested heavily in internal communication based on recommendations from the last APR yet WLSS data indicate that this is still an area of concern for many employees.
- L&ET relies heavily on wage employees.
- Classified staff in L&ET often have levels of education that exceed the minimum requirements.

Questions

- Are we optimally leveraging our unique organization (i.e. the close alignment of libraries and educational technologies)?
- Are we organized effectively to respond to a changing environment?
- Are our programs structured in a way that makes sense to our users and meets their needs and expectations?
- Is there a relationship with alumni that should be intentionally cultivated?
- Are we meeting the needs of our international students, first-generation students, and adult learners?
- Do we have the right advisory councils?

Recommendations

- Review overlap of responsibilities within the organization to determine if we are optimally leveraging our talents.
- Continue to invest resources to assure that SharePoint is meeting the organizational needs for communication and collaboration.

5-Program Viability

L&ET engages with our communities by delivering the highest quality services while looking to the future. Gate counts, online courses and enrollment, and community partnerships and programming have all grown in the past few years, while traditional services like circulation, website visits, and full-text downloads have seen steady to moderately declining use. New services like chat-reference and WordPress site support are beginning to show increases. Likewise, Library collections constantly evolve to meet user needs, from efforts to locate physical and virtual materials as close to the users as possible, to the emerging vision of providing *every* scholar on campus the opportunity to engage with ideas by publishing and sharing their best work on open platforms.

The library liaison program is a strong connection between library services and collections and the curriculum. However, emerging trends in scholarly communication, online learning, and a new vision for information literacy skills all indicate that a team-based approach might help address issues of scale and skill in this program.

The libraries and CIT work together to enhance creation, storage, and access to born-digital resources like videos in JMUtube, images and image collections in MDID, and electronic theses and dissertations. Work is under way to create and manage an institutional repository, a project that will require a wide variety of library and instructional technology skills.

CIT offers direct user support and professional development opportunities to help faculty effectively integrate instructional technologies into the teaching and learning process. Since 2007 the support needs in the areas of online learning, video production, digital literacy, and classroom technology infrastructure have grown. In collaboration with Libraries and other JMU departments, CIT has responded to these needs with institutes, production services, one-on-one help, after-hours support, in-class instruction, new technology infrastructures and various other services.

In addition, CIT provides significant resources to support online learning at JMU in response to the increasing number of support requests, online course sections, and enrollments. L&ET needs to determine where the organization fits into JMU's planning for online learning and identify the best ways to provide strategic leadership in this area. Currently, CIT's role includes preparing faculty to teach online and develop quality courses, coordinating with campus stakeholders, supporting technology infrastructures, and orienting students to be successful online learners.

Collections (includes physical and electronic resources)

The Libraries work closely with academic departments to develop balanced collections across disciplines that reflect and support the mission and goals of the University. Collections are comprised of academic-level scholarly resources which match current curricular needs and reflect diverse viewpoints and areas of scholarship.

L&ET's collections are located in virtual and physical spaces in an attempt to anticipate the needs of specific user groups. The Carrier Library physical collections consist of books, journals, government documents, and media resources that support study and scholarship primarily in the arts, humanities, and social sciences. Rose Library's physical collections include, books, journals, videos, and devices that support study and scholarship primarily in the sciences, health sciences, and technology. The Music Library provides scores, sound recordings, software titles, journals, and several special collections, in support of the Music department. (Music monographs are located at Carrier Library.) The Libraries also maintains a children and young adult collection, housed in the Educational Technology and Media Center (ETMC) in Memorial Hall.

Carrier Library also houses Special Collections. The collections and services in Special Collections enhance teaching and learning at JMU by making rare, irreplaceable, and singular materials available to the JMU community and visiting researchers. Collections include materials that document and pertain to JMU-affiliated organizations and individuals; manuscript collections related to JMU and

the Shenandoah Valley; rare books and photographs documenting the history of JMU and the surrounding area; and oral histories and rare materials related to Central Shenandoah Valley, the curriculum at JMU, and the history of JMU.

Although located at various libraries, the collections are developed holistically, and act as a single collection. The needs of academic programs vary, with some programs relying more on books and media items, while others depend more on journals, research databases, and non-textual information. Collections reflect the diversity of needs within the JMU community and individual departments.

Each fiscal year, the Libraries' collections budget is allocated for one-time purchases in support of the University's academic curriculum. Individual liaison librarians, with the assistance of the Collections and Acquisitions departments, manage these monies in close consultation with departments. These allocations are used for single purchases, such as books and media, rather than for ongoing expenses such as journal subscriptions and database licenses. In addition to one-time purchases, the Libraries dedicate the majority of its funds to supporting ongoing commitments such as journal subscriptions and major one-time purchases of scholarly resources, including media collections, e-books (both leased and owned), primary source collections, datasets, image collections, archival materials, rare books, software, video and audio collections, digitization of materials, journal backfiles, and new research databases.

Additionally, JMU benefits from its strong relationship with VIVA (the Virtual Library of Virginia), the statewide library consortium supporting users at all the Virginia public universities. VIVA provides access to many core resources at JMU, from e-books, to journals, to research databases.

As scholarly practices evolve, so have collection needs. Since 2006, the library's collecting practices have shifted to meet new demands, and to provide users access to resources, in both virtual and physical spaces. One example of this shift is seen in the increased use of electronic monographs. Another example includes just-in-time or demand-driven acquisitions. In FY 2011, the library instituted a purchase-on-demand e-book program with MyiLibrary through Coutts Information Systems. User access and subsequent purchase of titles continued in this program until the original allotment of funds expired in January 2012. Additionally, through VIVA, L&ET participates in a purchase-on-demand program where e-book titles are available to all VIVA users. When a title reaches the agreed upon high-use threshold perpetual rights are purchased for the consortium. The library also pursues demand-driven purchase of scholarly resources triggered by events such as interlibrary loan requests and requests originating from our online catalog.

In 1997, L&ET's journal collection began shifting towards electronic access. Currently, 95% of all journal holdings are electronic. In order to ensure long-term access to electronic journals, L&ET participates in the LOCKSS (Lots of Copies Keeps Stuff Safe) program for e-journal preservation. Through LOCKSS, libraries keep an electronic archival copy of subscribed content in a local "LOCKSS box" server, which is networked with other participating libraries. If a publisher disbands or their site is unavailable, LOCKSS is able to automatically serve up archived content to patrons.

Another example of evolving practices includes a move to stream as much of the video and audio resources the Libraries owns and subscribes to, increasing use and availability.

In 2012, L&ET expanded its government documents with a subscription to the "Docs Without Shelves" service through MARCIVE, which provides access to a wider range of e-government documents. L&ET also narrowed its print profile for government documents to allow for receipt of materials that are most relevant to JMU curriculum and collections.

In 2011, the Monographic Services unit implemented a Shelf Ready program that increased purchasing efficiency and reduced the amount of time between order and availability for books. Further, a Rush for Reserves plan triggers faculty book requests to be automatically rushed and placed on reserve.

In order to better support research and scholarship at JMU, digitization and dissemination of locally created, unique content, has increased dramatically since 2006. Highlights include the digitization of *The Breeze* and JMU Historical photographs.

Libraries Collections (owned and leased) and Content			
	FY 11	FY 12	FY 13
Books (vols.)	493,369	521,697	494,180
eBooks (titles)	306,474	314,360	165, 436
eJournals (titles)	n/a	111,450	110,474
Audiovisual (vols.)	44,707	45,809	43,141
Streaming Audiovisuals (titles)	34,160	44,817	83,109
Scores (vols.)	22,785	23,723	24,316
Manuscripts and Archives (collection count)	142	289	317
JMUTube videos	15,139	21,193	25,997

Access to Collections and Content

In addition to the physical spaces that house the various kinds of materials, the Libraries provide several systems for access to collections, including JMU Library Catalog, Quick Search, Research Databases and Resources (R2), Periodical Locator, and Check for Full Text (CFFT). The library spends significant time conducting usability testing and technical testing to connect, configure, and customize these systems and their interfaces in response to user needs and expectations.

Library Catalog

In 2007 the catalog served as the primary search tool that L&ET offered to explore library materials. It offers keyword, title, author, call number, and subject heading searching. The online catalog also facilitates requesting items for pick-up across multiple locations on campus as well as delivery to faculty mailboxes.

The online catalog provides an interface to both print and online materials; access to online materials was enhanced with the implementation of Innovative Interfaces' Electronic Resource Management (ERM) system in 2006.

The catalog is integrated with other library systems. Records for books and book chapters within third-party databases use the link resolver to link into the catalog. It provides new title information on the library website. In 2010 Technical Services began importing catalog data into Quick Search, which now serves as the primary search tool for library collections.

In addition to end-user searching, librarians use the library catalog as a teaching tool to showcase the library's collections in specific subject areas that demonstrate features such as Library of Congress subject headings. The library catalog also supports browsing and access to Course Reserves materials.

In the summer of 2012, L&ET redesigned the online catalog interface with a new navigation and arrangement of links to provide accessibility to users. L&ET made the final system changes and released the interface during the fall of 2012

Quick Search

For many years, JMU, like other libraries, sought a way for users to search across many library databases simultaneously to increase efficiency while reducing the cognitive load on the end user. New software called "discovery tools," combine journal article databases and the catalog into one modern search interface.

L&ET implemented EBSCO Discovery Service (EDS), locally known as Quick Search, in fall 2010. Both the Research Roadmap Task Force and the Discovery Service Evaluation Team reviewed and recommended the use of EDS. QuickSearch provides the most global search of the library's collections, and now serves as the primary search tool on the library website. The adoption of Quick Search has changed how library users access the collections and how public services staff teach and provide reference services.

Special Collections

Special Collections materials are included in the library catalog, as well as on finding aids on the Special Collections website. These historical, rare, and fragile materials are available for use in the Special Collections reading room during limited hours. Special Collections also digitizes some content and makes it available through the MDID, the Digital Commons, and other online means.

Research Databases and Resources (R2)

In 2008 Digital Services developed R2, a database of electronic resources leased or owned by the library or provided by VIVA. R2 allows liaisons to group resources by subject, and users to search by title and description fields to find resources. R2 also provides an important check for off-campus access, preventing unauthorized use of our subscription resources. Other key features of R2 are: the ability to easily update database URLs across library webpages; to notify users system-wide of resource maintenance, downtime, and platform changes; and to provide hit counts to track usage of the electronic resources within the database.

Periodical Locator and "Check For Full Text" (CFFT)

Check for Full Text links users from citation-only web sites, such as Google Scholar and index databases, to JMU-subscribed full text. Periodical Locator is the primary access point for journals. It is the public portion of the link resolver system supported by Serials Solutions. Periodical Locator provides L&ET's A-Z list of journal titles and OpenURL linking among resources that include citations found through Google Scholar. In 2009 L&ET added the e-books module to the Serials Solutions package, which enables e-books to be OpenURL and CFFT compatible.

Electronic Theses & Dissertations

In fall 2009 the library started receiving, cataloging, and providing access to electronic undergraduate honors and graduate theses and dissertations (ETDs). Special Collections and E-Resources collaborated on this service with the cooperation of the Honors Program, Graduate School, Cataloging, and Digital Services. Beginning with the 2012-2013 academic year, one and two year embargo options offered protection for data included in the ETDs.

Institutional Repository

L&ET provides a hosted repository service for the JMU community in response to the needs of scholars and faculty on campus. L&ET is beginning to implement and pilot the different features available through BePress' Digital Commons. Some immediate projects include migrating the ETDs, moving select digital special collections, and promoting and preserving faculty scholarships. L&ET will launch phased and scoped pilot projects to ensure success and to create efficient workflows.

Off Campus Authentication

The library ensures that only authenticated users are accessing subscription resources. For many years, the proxy server was the primary means of authenticating library users to subscription resources. After using a downloadable VPN client for several years, JMU IT adopted a web version of the VPN software, SSLVPN, in 2012. Mobile access using the Junos Pulse app to connect to the Web VPN was added in spring 2013. Scholarly Content Systems (SCS) continues to actively monitor developments in authentication possibilities, including Shibboleth and other proxy server solutions.

Mobile resources/web

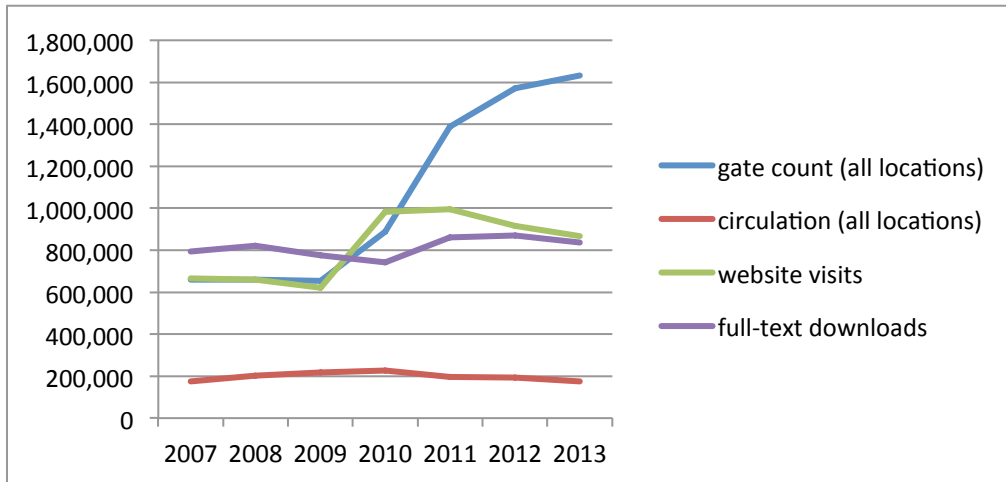
The Collections unit created the first Mobile Interfaces page in 2010 and redesigned it in 2013, with support from Digital Services. The Collections unit added new mobile applications (apps) or sites to subscription resources as the vendors made them available. The page received 2,150 page views in 2012 and is currently maintained by staff in the E-Resources unit. Despite outreach about mobile interfaces, interest in using mobile apps and sites for research is lower than expected.

Madison Digital Image Database (MDID)

CIT developed the first version of MDID in 1997. It is a digital media management system with sophisticated tools for discovering, aggregating and presenting digital media in a wide variety of learning spaces. JMU released the second version of MDID to the public under an open source license in 2004. More than 100 schools, universities and galleries have downloaded and used MDID2. Institutes who are using or have used MDID include many prestigious institutions such as Duke University, Temple University, George Washington University, and the School of the Art Institute of Chicago. CIT established a listserv and website to support MDID installation and use beyond JMU. CIT began development of a third version of MDID in 2007. JMU and several other institutions are currently using MDID3. MDID3 at JMU hosts dozens of collections consisting of close to 200,000 images. These collections support several academic disciplines. MDID is a core teaching and learning system for almost all JMU Art History General Education courses and several other courses taught within the Art History Department. Five years ago, CIT built JMUtube, a custom video management and delivery solution, on top of MDID in order to support video needs across JMU. JMUtube currently holds almost 30,000 videos occupying over four terabytes of storage space. See appendix 9 for a complete list of collections and custom interfaces.

Access Services

Circulation



Circulation of tangible library materials has dropped since 2007, despite increases in both gate counts and the student population and new services. This drop may be explained by changes in the curriculum, scholarly communication, or other factors. While users indicate satisfaction with the collections, the drop in circulation is unexamined.

Physical Delivery Service

Over the past six years, the Libraries have implemented a multi-phase delivery service. Users can request circulating items to be delivered to another library location (or faculty mail boxes), and can return items to any location. This service also includes an article delivery service.

In March 2012, the Libraries moved all pre-1980 periodical issues to the Off-Site storage facility. Interlibrary Loan (ILL) staff are responsible for pulling and re-shelving these materials. In April 2013, the Libraries installed a scanning station at the facility to process items on site. Since then, ILL Article Delivery received 243 requests for holdings at off-site storage and successfully filled 214 transactions.

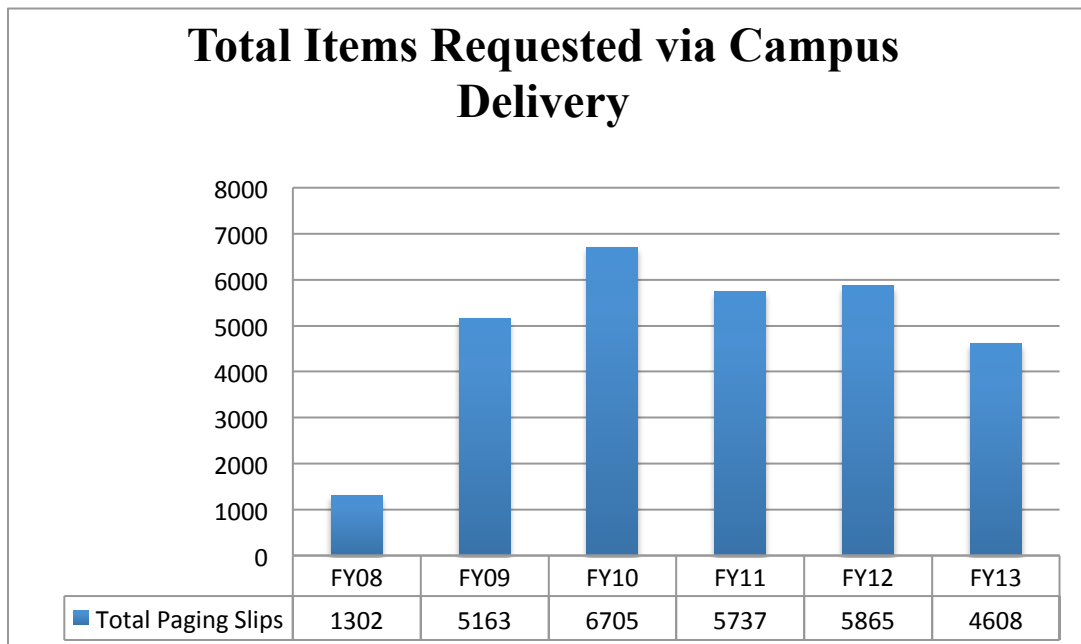


Figure 3: Campus Delivery; Source: Millenium *

*ETMC only began tracking statistics in 2010.

Total delivery requests tend to average between 480-500 items each month, not including the items that are delivered without requests such as returns, ILL items, and new books. Departmental mailbox delivery has been utilized by over 800 unique faculty and staff members since its inception or over one-third of JMU's total faculty and staff. The Delivery Coordinator is investigating whether the service can support delivery of equipment to departmental offices.

Physical Spaces

Carrier Library, Rose Library and the Music Library have a combined 175,017 usable square feet and approximately 1,927 seats.

Educational Technology Media Center (ETMC)

The ETMC is not an official part of L&ET, but the library does work with the College of Education to provide access, assistance, and maintenance to a specialized collection. The ETMC, located in Memorial Hall, houses a juvenile collection that is cataloged in the library ILS, and the library pays for one staff member to maintain the stacks. In addition, the Education Librarian acquires reference and curriculum related materials housed in the ETMC, and physical course reserves are available. The ETMC also serves as a convenient pick-up and drop-off location for all library materials, which are retrieved through the library delivery service.

Reserves

The Libraries maintain circulating reserve collections at each service point. Carrier Library Public Services also supports a central Electronic Reserves service. An accurate depiction of statistics related to Reserves services is difficult to provide due to current system limitations and inconsistencies in data collection between service points.

Library Website

The Library website provides essential information about library services, collections, and events. In addition to database links, the library catalog and the discovery tool, a calendar of events and other programming is highlighted. A chat service for immediate help is provided for any user. Self-service features include links to room reservations, renewal of material, and how to connect from off-campus. Website visits are recorded and reported out each year. In 2013 the library website received 868,788 visits, down slightly from 2012 with 967,519 visits. Possible explanations for this trend include the implementation of LibGuides as a hosted service in 2013 and direct linking to resources that bypasses the main website.

CIT Website

CIT's website provides information about services including video production, media creation, workshops, classroom technologies, and online learning. Requests for support and registration for workshops and events is completed through the website. The site includes access to support resources and links to CIT systems, which include Blackboard, Canvas, JMUtube, and MDID. In addition, the "High Five!" section of the home page highlights innovative uses of technology in teaching and learning at JMU.

Interlibrary Loan

ILL remains a robust and highly valued service within the JMU community. Satisfaction surveys and discussions with students and faculty at JMU praise the efficiency and effectiveness of ILL.

Since 2007, ILL has provided an average of 7,795 books borrowed from other libraries for JMU users per year and an average of 7,277 journal articles per year. ILL also provides a valuable lending service to library users at other universities. ILL filled an average of 7,413 requests per year since 2007 for books in our collection. Article requests from other institutions have increased steadily since 2008, to a peak of 10,407 in 2013.

ILL also manages the document delivery service for JMU, which provides electronic delivery of periodical articles from the library holdings to email boxes. Available since 2008, this service scans print journal articles from both library locations as well as off-site storage, and delivers them within a reliable 48-hour turnaround. In 2013, a total of 1,395 requests were successfully filled with a 99% fill rate.

Both ILL borrowing and document delivery are popular services, especially among specific academic departments. English is the leading academic department for both services, followed by History and Psychology. For additional details on ILL please see the 2013 annual report in appendix 15.

Streaming Services

Online Video Collection (OVC)

JMU Libraries provides an OVC of licensed titles that are searchable and browsable in the online catalog. In the past, L&ET would outsource some batches to facilitate transcoding production, but now subscriptions to streaming video databases such as Films on Demand have slowed the acquisition of individual video licenses. Occasional additions to the collection are handled internally. Technical Services manages licenses in coordination with the Media Resources Director.

Online Video Collection (OVC)			
OVC	Total Titles	Total Hits	
2006-07	Over 1,600*	6,185	<i>*Inexact number reported due to changing collections</i>
2007-08	Unavailable		
2008-09	1,748	17,062	
2009-10	2,724	49,772	
2010-11	Unavailable	N/A*	<i>Reported in a different format</i>
2011-12	2,678	60,052	
2012-13	2,850	N/A	<i>Unavailable</i>

Learning Management System (LMS) Streaming

As of 2009, L&ET's DVDs and VHS tapes can be streamed on the LMS for individual course viewing. If available elsewhere, L&ET defers to outside resources such as Netflix and Amazon Instant. LMS Streaming Service continues to evolve and remains popular with positive feedback from faculty. L&ET continues to evaluate the stability and performance of these products as the Libraries move more consistently toward providing online content to library users.

Blackboard Streaming Videos		
<i>(Service formalized in 2009)</i>	<i>Total Requests Approved and Streamed</i>	<i>Total Requests Denied</i>
FY 10	116	Unavailable
FY 11	262	23
FY 12	148	58
FY 13	160	36

CIT's JMUtube information

CIT developed JMUtube in FY 2009. The tool was designed to allow JMU faculty and staff to store and deliver videos and presentations through a linked or embedded video player.

JMUtube and CRASS Statistics			
Service	FY 11	FY 12	FY 13
JMUtube			
JMUtube videos to date	15139	21193	25997
Distinct JMUtube users to date	414	525	633
CRASS			
CRASS videos to date	6268	10532	14218
Distinct CRASS users to date	40	48	55

Media Equipment Services

Libraries

In 2007 the Equipment Loans office moved from Spotswood Hall into the Media Resources Center, allowing for the creation of the video-editing lab. Media Resources discontinued the equipment delivery service, culled analog equipment, and cataloged portable digital equipment as collection items for checkout at the media desk, expanding the collection and user support related to equipment items. The Library successfully implemented an online equipment request form in FY 2012.

The collection focuses on media creation equipment such as camcorders, audio recorders, and still cameras, increasing by approximately 25% each year at a current total of over 200 pieces of equipment. Accessories are popular circulating items and faculty and staff may also check out laptops and projectors. Media Resources has identified a need for more user consultation and has begun to collaborate with CIT.

Carrier Library and Rose Library offer similar equipment services. Both locations provide scanners for public workstations. The Rose Library Information Desk circulates laptops, laptop adapters, headphones, and other accessories. New circulating laptops will not be added at either location beginning in 2013. While laptop circulation is a popular service, maintenance of circulating laptops requires significant time and money, and data show that most entering students bring their own laptops to campus.

The Music Library's media and computer lab supports faculty and students in the School of Music. In 2008, the Music Library integrated listening and computing stations, and renamed the area to MusiCommons. MusiCommons comprises of 20 workstations each with a Mac computer and receiver,

and allows for music creation and manipulation. Circulating equipment includes portable piano keyboards, high-end headphones, headphone splitters, and two high-end portable recording units with accompanying microphone stands. The Music Library recently completed the transfer of approximately 1,500 historical JMU Theater and Dance performance recordings to CD and is currently transferring reel-to-reel performance recordings onto CD. The Music Library would benefit from a space with workstations and media equipment to support both quiet study and collaboration areas.

CIT

CIT provides short-term loans for instructional technology not available through Media Resources. Faculty and staff can check out iPod Touches, iPads, clicker sets (classroom response units), and microphones to support teaching, learning and research, while also providing an opportunity to evaluate the technology. Faculty who have long-term technology needs may request two \$300 CIT Seed Grants per year to purchase hardware, software, or instructional technology resources.

Online Learning Platforms

CIT manages a number of online systems for on-campus and distance teaching and learning, some in partnership with IT or other departments on campus. The LMS is heavily used as an instructional tool. Data collected annually from summer 2011 through spring 2012 indicates an increase in the number of active courses, courses with moderate activity, and courses with high activity for each semester. Instructure's Canvas is the university's new LMS; however, CIT is temporarily supporting two LMS as the campus transitions from Blackboard to Canvas. The yearlong transition to Canvas will be complete by summer 2014. Blackboard and Canvas also include Blackboard Collaborate, an online, synchronous learning tool that faculty and students use to meet online in real time. Additional systems managed and supported include WordPress, JMUtube, MDID, and the OVC.

Video Conferencing

CIT's Classroom Technology Services in partnership with IT and the 4-VA initiative supports seven classroom-installed video conference endpoints, two Cisco Telepresence installations, two mobile video conference endpoints, and two video conference endpoints installed off-campus (Hopewell House and Roanoke Higher Education Center).

Typical uses for video conferencing include high-level meetings, shared courses with other 4-VA institutions, guest lecturers, and panel discussions.

Educational Services

Liaison program

A liaison librarian is assigned to each academic program to ensure that the library meets the research and curricular needs of the students and faculty in that program. Liaison librarian responsibilities include collection development, library instruction, reference and research support, and outreach to the program. Liaison librarians are expected to engage as academic partners with their assigned programs and to develop a deep understanding of the research, teaching, and learning landscape in the discipline. Currently twenty-one librarians have a liaison assignment; half of those liaison librarians also have other significant functional or administrative responsibilities within L&ET.

In recent years the liaison librarian role has been evolving in response to changes in the library and higher education environment. Librarians are serving fewer hours on general reference and spending more time directly engaged with faculty and students in their liaison areas. They are

collaborating with faculty to integrate information literacy into the curriculum, developing assignments and assessments, creating subject guides, and developing instructional materials like videos and games that can be integrated into courses. Librarians are helping faculty and students understand and navigate the increasingly complex resource environment that includes digital texts and media as well as traditional print. Liaison librarians are also stepping up to collaborate with campus partners to tackle issues like academic integrity, copyright and intellectual property, data management, distance learning, digital humanities, and media literacy. The library liaison program provides a visible, successful model for supporting academic programs, but there are challenges with scaling as enrollment and program diversity increases.

The Association of College and Research Libraries provides guidelines for library services to undergraduates, although they do not make specific recommendations for librarian to student ratios. However, it should be noted that this ratio for JMU continues to be among the lowest in the state, as evident in the table below. As reported in the 2007 self-study, librarians and other professional staff per 1,000 FTE students and the total staff per 1,000 FTE students were 1.39 and 4.43, respectively. Figure 4 is from 2012 data and does not reflect the most recent hires.

However, it must be noted that L&ET received funds in FY 2014 based on budget initiatives submitted to the university. The priorities for the funds were new positions: two librarians, conversion of two wage positions to full-time classified staff, one classroom technology specialist, and one instructional technologist.

State of Virginia Librarian to Student Ratios

Library Name	Total FTE 12-Month Enrollment	Librarians & Other Professional Staff	Librarians & Other Professional Staff per 1,000 FTE Students	Total Staff	Total Staff per 1,000 FTE Student
Virginia Polytechnic Institute and State University, VA	29,045	143	4.92	165	5.68
University of Virginia-Main Campus, VA	22,199	102	4.59	344	15.5
Virginia Military Institute, VA	1,605	7	4.36	17.94	11.18
George Mason University, VA	25,126	70	2.79	197	7.84
University of Mary Washington, VA	4,443	12	2.7	32.25	7.26
Virginia Commonwealth University, VA	27,420	57	2.08	177	6.46
Virginia State University, VA	5,505	10	1.82	17.44	3.17
Radford University, VA	8,870	16	1.8	55	6.2
Christopher Newport University, VA	4,872	8	1.64	23.54	4.83
Norfolk State University, VA	6,112	10	1.64	35.88	5.87
Longwood University, VA	4,415	7	1.59	29	6.57
James Madison University, VA	18,763	27	1.44	85.6	4.56
Old Dominion University, VA	19,753	25.5	1.29	80.6	4.08

Figure 4: Librarian and staff ratios for Virginia Public Universities; Source: National Center for Education Statistics

Information Literacy and Library Instruction

The Information Literacy program is designed to provide students with the essential skills they need to move through their college education, and to maximize support that library staff and liaison librarians can offer students. In the lower levels, the primary means of delivering library instruction is web-based and asynchronous, while liaison librarians with subject expertise, provide extensive instruction and research support in the upper levels. The Libraries do not provide a traditional library orientation for first-year students as staffing levels could not support it, however online resources do exist to fill this need. Librarians and library staff participate in orientation and recruitment events, and library content is included in the orientation booklet distributed to admitted students. A program of extra-curricular instruction offered on a drop-in basis each semester also exists.

Subject guides

The Libraries maintain an electronic collection of subject guides designed for students, teaching faculty, librarians, and library staff. The purpose of subject guides is to highlight relevant library resources for specific disciplines, courses, and academic programs; provide opportunities for user interaction with liaison librarians; and integrate learning objects or other means of instruction at the point of need. Liaison librarians create and maintain the subject guides. In 2012, the library adopted the LibGuides platform for their subject guides, allowing for greater flexibility and interactivity. LibGuides is the industry leader and offers interconnectivity with other tools that manage chat service, electronic reserves, calendaring, and data gathering. The LibGuides tool is popular among liaisons and students. The current collection of guides is over 220 and users accessed them over 102,000 times since their inception. For a complete list of guides please see appendix 10.

Online tutorials

Librarians and staff use a variety of tools to create online tutorials and other asynchronous learning objects. These tutorials are included on the subject guides and the library website. Adobe Captivate, Jing, Camtasia Relay, and Camtasia Studio are among the most popular tools used to create tutorials. Librarians and library staff who create tutorials are encouraged to employ best practices and to reach out to staff in CIT for guidance and assistance.

Research Essentials & Research Toolkit

The library has maintained an online library use tutorial, formerly known as Go for the Gold, for over 17 years. Cluster One of GenEd assigned Go for the Gold to first-year students enrolled in the GCOM course. Students completed the tutorial and associated quizzes as part of their course work in preparation for the Information Seeking Skills Test (ISST). A passing score on the ISST was required for students to register for second-year courses. L&ET has since developed the Madison Research Essentials, dynamic, video-based course that includes brief chunks of information along with interactive assessments which can be placed in the university's LMS, to replace Go for the Gold. Madison Research Essentials includes content mapped directly to the information literacy objectives of Cluster One and brief assessments. The Research Toolkit has replaced Go for the Gold on the library's webpage. This toolkit contains all of the same content as Madison Research Essentials, along with additional tutorials and learning objects created by liaison librarians and library staff. Each object within the toolkit can be added to individual courses and subject guides or viewed alone.

The Madison Research Essentials Skills Test (MREST) replaced the ISST and is now the prerequisite test to register for second-year classes. The changes to the first-year intervention are in response to the changing nature of research, the GenEd curriculum, and first-year student preferences and study habits.

In-class instruction

Liaison librarians provide in-class instruction at the request of the department(s) with which they work. In-class instruction builds on the foundation of Madison Research Essentials. Working within the framework of the ACRL Information Literacy Competency Standards, liaison librarians collaborate with instructional faculty to identify the objectives and outcomes of the in-class instruction. Much of the instruction takes place in the designated library instruction rooms in both libraries, but recent trends have shown that up to 40% of it occurs in the academic classrooms.

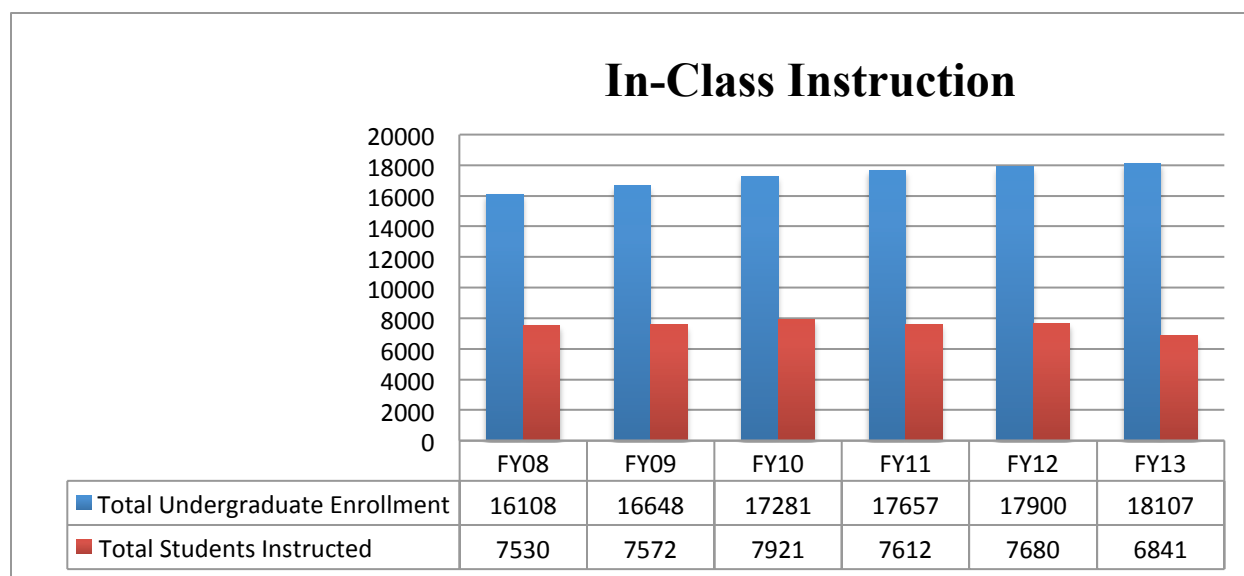


Figure 5: In-class library instruction; Source: Room Scheduler

Extra- curricular instruction

Library faculty and staff also offer extra-curricular instruction each semester. These sessions include general research skills, and specific productivity tools and databases. Some of this instruction is part of the Passport program, a component of GenEd's Cluster Five, which requires students to attend events and enrichment workshops. Other instruction is offered on an as-needed basis to any interested student or faculty member.

Media Literacy for Students

Media literacy is "the ability to access, analyze, evaluate and create messages across a variety of multimedia contexts." Media Resources helps students build media literacy skills by offering current video production technology, from high quality equipment for check out to editing software in the ten workstation lab. Print tutorials, one-on-one support in the lab, and classroom instruction including best practices and hands-on exercises are provided. Since 2010 Media Resources staff provided in-class instruction for students in a variety of programs. Studies show faculty regard media literacy as important, yet few teach it in their courses. Media Resources provides tools and support to assist students in creating content for web, mobile devices, plays, presentations, and scholarly and community events. CIT also collaborates with Media Resources to support faculty and students from the development to the completion of digital assignments.

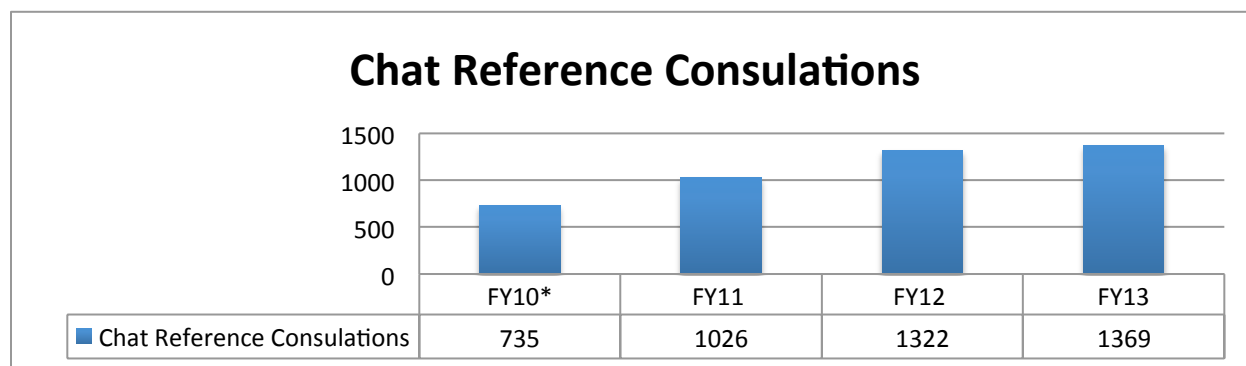
Copyright

L&ET has a Copyright Coordinator who coordinates copyright education efforts for faculty and students to minimize risks to individuals and JMU. These activities include: providing best practice

tools, empowering faculty and students to make responsible copyright decisions, delivering instruction, assisting students and faculty in asserting their copyrights, and answering specific questions related to copyright and fair use. In addition to face-to-face, on-demand programming, the Copyright Coordinator maintains a resource website that includes current awareness and decision support tools.

Ask a Librarian Services

The Libraries support a suite of Ask a Librarian Services. These services include Chat and Email Reference, Librarian Consultations, the Ask Desk in the Carrier Library Learning Commons, and a tiered Reference Model at the Rose Information Desk. In Carrier Library the Ask a Librarian desk is staffed 45 hours per week with faculty librarians and two library specialists. In Rose Library, library specialists and desk supervisors provide the first level of service with referrals being made to librarians and staff with more training as needed.



Learning Commons and Partnerships

The Learning Commons in JMU Libraries collaborate with University departments seeking to expand or enhance student learning opportunities on campus. Partner programs are compatible with the libraries' goals of supporting academic and life-long learning and offer possibilities for collaborative problem-solving, skills-building and information sharing to enhance student success and learning in a library environment. Partnerships are mutually beneficial and offer opportunities for exploration and growth.

Rose Library and Carrier Public Services value the partner programs. Visit counts for Carrier and Rose Learning Commons Partners are below.

Visit Counts for Learning Commons Partners			
	2010-11	2011-12	2012-13
WriteNights	361	751	717
SMLC	N/A	887	680
Ask-a-Nurse	N/A	431	432
Learning Strategies	N/A	57	Not yet reported
Madison Advising	N/A	'10	N/A
Ask-a-Career Coach (CAP)	N/A	N/A	30 (April only)

Programming

In addition to providing space for partners to offer their services, the Libraries sponsor programming that engages the larger community. The JMU Libraries established JMuse Café in the fall of 2011, to provide an informal and lively forum for students, faculty, staff and the Harrisonburg Community to explore topics of public interest. Themes have included environmental sustainability and remembering places. Programming continues to date and collaborators include JMU faculty, staff, and members of the Harrisonburg City and Rockingham County communities. The Libraries also make spaces available periodically for poetry readings, receptions, and development events.

CIT Professional Development and Support Services

A key way that CIT carries out its mission is by providing direct user support and professional development opportunities, which include workshops, housecalls and consultations, institutes, sandboxes, and conferences, to help faculty effectively use instructional technologies and incorporate media services. Overall, trends indicate that faculty participate in more immersive opportunities and individual consultations than workshops.

CIT Support- The CIT Support team provides direct user support to faculty, staff and students via phone or email for JMU's supported instructional technologies. CIT hired an additional support position and extended evening and weekend hours to match those of the JMU HelpDesk. The CIT Support group handled 5,446 calls in FY 2012. The support team also maintains a website to centralize resource guides, tutorials and FAQs. In 2011, Supported learning technologies include: Canvas, Blackboard, Collaborate, SafeAssign, Turnitin, Respondus, Respondus Lockdown Browser, WordPress and TurningPoint clickers.

Workshops- CIT's Faculty Development Services include hands-on workshops and workshop series that are regularly scheduled in fall, spring, and summer semesters. CIT designs workshops to develop software and hardware skills while modeling effective use of applications in instruction. Customized workshops are also developed to meet a group's unique needs.

Housecalls and Consultations- A CIT staff member will meet with faculty or staff individually to apply concepts learned in workshops and other professional development events. CIT Instructional Technologists are available for in-depth consultation on course redesign and technology integration.

Immersive Opportunities and Sandboxes- Extended learning opportunities offered by CIT provide an opportunity for instructional faculty to meet with their colleagues for multiple sessions to effectively integrate technology into their courses. CIT's Sandboxes are exploratory projects in which selected faculty and CIT work and learn together, generate ideas, and reflect on discoveries. Examples include the Google Earth Sandbox, Classroom Technology Sandbox and eBook Sandbox. CIT also offers other immersion events, such as Digital Storytelling Mobile, that step faculty through the process of learning how to effectively use technologies, create an assignment in alignment with course objectives, provide support to students, and assess the final product.

Teaching and Learning with Technology Conference- CIT coordinates and hosts the Teaching and Learning with Technology Conference, a free annual event held on the JMU campus which brings together educators to share best practices and make technology use a positive educational experience.

Digital Scholarship and Assignments- In the Spring of 2010, CIT recruited 13 faculty from multiple disciplines to participate in a WordPress pilot. Since then, over 6,600 unique users have logged into over 275 sites. To maintain support, CIT has installed over 500 plugins and themes, integrated WordPress authentication with JMU's central user directory, and written a script to synchronize WordPress site membership with course enrollment feeds coming from JMU's Student Administration system. JMU faculty are using WordPress as a platform for building innovative and imaginative web spaces to enhance teaching and scholarship that includes podcasting, video sharing, digital humanities, digital storytelling, online exhibits, Social Networking, Google maps, mobile-friendly themes, content upload from mobile devices, student journals and fanzines, the flipped blog, co-authoring, peer review, and more.

CIT Walk-in Services

CIT provides walk-in services to JMU faculty and staff, which include scanning, graphic design assistance, narration tools, technology support, and course development consultations. Each location includes PC and Mac computer workstations, video edit suites, and a video/audio recording studio. With the additional office location in Rose Library and expanded video services offered, it was originally projected to have an increase in walk-ins, but reported walk-ins have decreased by 46% since 2008.

In of January 2013, CIT Media Production Services staff relocated from the walk-in area in Carrier Library to Rose Library. The space is now managed by the Faculty Development unit in response to increasing faculty need. The Media Production Services students in Rose Library provide video and audio support for the Media Services Production unit, while the Instructional Technology Consultants in Carrier Library provide house calls and support to faculty using instructional technologies. CIT Faculty Development and Media Production Services units collaborate with Media Resources to streamline the process for faculty to borrow video equipment and create a final product.

CIT Professional Development Attendance							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Workshops	586	513	807	737	721	500	446
Institutes	19	28	31	56	34	39	63
Immersive/Sandboxes		19	20	0	15	30	6
Unique Attendees *also includes conference						477*	446*
Housecalls	176	148	210	218	223	235	337
BL/DL Consults					103	95	98
Unique Faculty						205	196

Media Production Services

CIT's Media Production Services unit uses professional-grade equipment and facilities to assist faculty and staff in producing instructional video content for online delivery. CIT offers audio and video recording services in both Carrier and Rose Libraries. Faculty and staff use the Carrier studio to: create presentations using Captivate, Camtasia Relay, or Presenter; record straight video or audio; or narrate a PowerPoint file. The space is designed for one person but could accommodate up to three users for audio recording. In 2008 L&ET added a video production studio in the new Rose Library along with three full-time professional staff to assist faculty with media creation and manipulation. From July 2009 through June 2013, CIT's Media Production Services staff have assisted

faculty in the creation of 917 original local content videos in support of instruction and JMU's overall mission. It has also converted 760 commercial video segments into digital formats for sharing online.

Technology Classroom Management and Support

Classroom Technology Services (CTS) provides educational technology equipment and display devices, training, and support to those teaching at JMU. They are responsible for the installation and operational integrity of the technology permanently installed in classrooms. Almost all (98%) of the general purpose classrooms scheduled by the Office of the Registrar have permanently installed technology. CTS collaborates with facilities planning, academic affairs, architects, contractors, consultants, and end users to provide innovative teaching spaces such as dual projection classrooms, interactive white boards and LCD displays in classrooms, collaborative learning spaces, video conference capable spaces, and easy to use educational technologies. CTS also supports educational and presentation technologies in conference rooms, board rooms, and presentation spaces throughout the campus.

CTS responded to over 400 requests for assistance during FY 2012-13, and responded to calls for immediate classroom assistance within ten minutes or less.

Online Learning Support

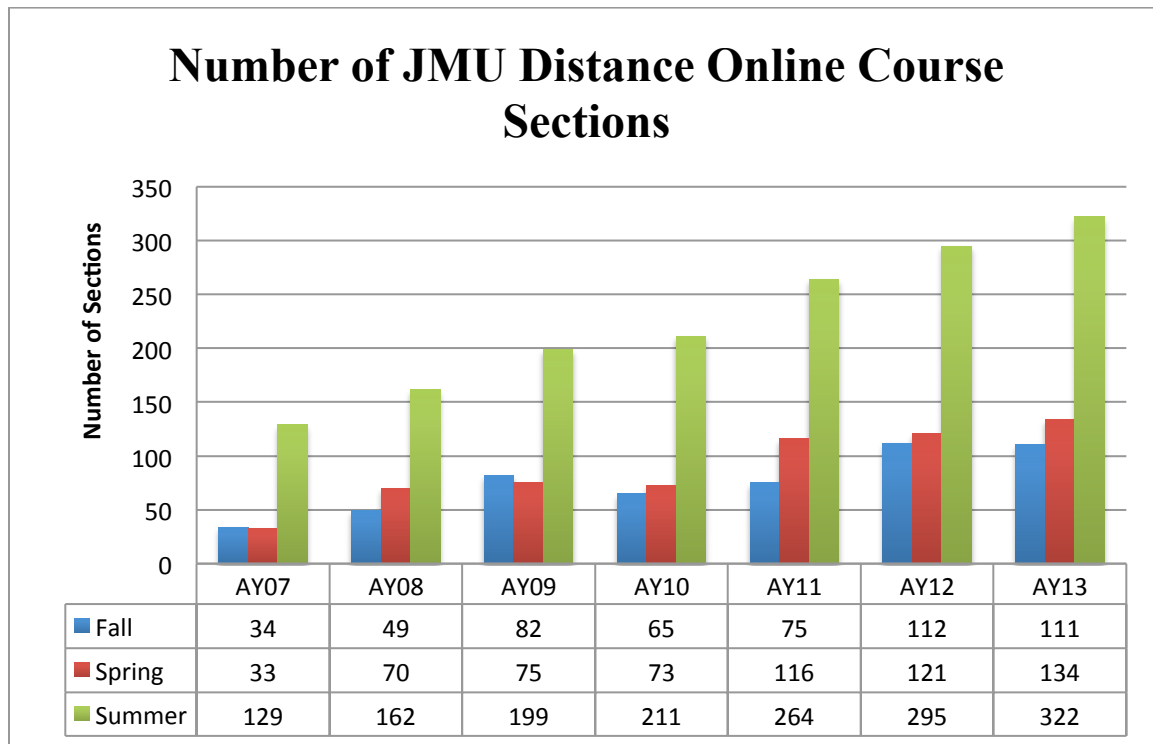
CIT takes primary responsibility for leading and supporting online and distance learning efforts at JMU. Annual data indicates that the number of sections and enrollments for online courses continue to increase, following an overall upward trend since 2001. Based on this increase, CIT has worked on many distance learning projects as well as coordinated campus efforts to support online learning. Projects include: a web-based resource; communication with University leadership; the coordination and facilitation of institutes and workshops; the integration of the Quality Matters (QM) Rubric into Institutes for Online Course Development; student orientations for successful online learners; and the 4-VA Initiative.

Website and Campus Communication- CIT's website includes an Online Learning section with: general guidelines for developing and implementing programs; information on campus resources for course design and development; distance and online teaching and learning methodology, research, and technological support; and a description of CIT's customized institute models for program and course development. In addition, CIT presents its services to the academic unit heads and administrators to share information about distance and blended learning at JMU, such as the workshop in fall 2012 for Academic Unit Heads about key aspects of online learning.

Institutes for Online and Blended Course Development- CIT's Faculty Development team offers institutes for course design and redesign for blended and online learning such as immersive institutes, individual consultations, and refresher workshops for past online and blended institute participants. CIT's approach to course design and redesign is evidence-based from research/literature, while customizable based on the course objectives, faculty teaching needs, and student learning needs. The approach is sustainable and provides ongoing support to faculty, including consultation and content production. The institutes, which are approximately 20 hours in length, use the QM Rubric to support faculty in the development of quality courses that engage students in the learning process. The institutes include a Faculty Mentor program, which assigns a faculty mentor who has experience and expertise teaching in an online or blended format to each faculty institute participant. Librarians collaborate with CIT staff to

integrate library resources into online and blended courses and the Copyright Coordinator provides information on fair use and copyright issues related to online learning.

Student Orientation- CIT also provides a Student Orientation for Successful Online Learners for students who are planning to take an online course, providing students with information, tools, and resources to help them be successful.



Grants

CIT Seed Grants are small grants of up to \$300 to purchase technology-related hardware and software to enhance or develop a course-related instructional project. These grants are not intended for administrative purposes. An applicant can receive two grants per academic year. The CIT has awarded \$41,400 in seed grants since FY 2008.

Open Resource Grants (ORG) support faculty in their instruction through the use of open source software. CIT commits staff time, expertise, and server space for deploying either open source software or developing small applications using open source tools. ORG-sponsored projects are shared with the public under an open source license. The CIT has awarded \$14,000 in ORG grants since 2008.

Key Findings, Questions and Recommendations

Findings

- The information and learning landscape in higher education is changing rapidly and L&ET has implemented innovative strategies to address trends in learning and scholarly communication.
- Carrier Library and Music Library spaces and seating are inadequate for the student population.
- Information Literacy is embedded into the General Education curriculum through the Madison Research Essentials and the Madison Research Essentials Skills Test.

- The librarian and professional staff ratios are among the lowest in the state and among JMU peers.
- L&ET services are highly valued by users at all levels.
- Students and faculty have varied and inconsistent perceptions of the definition and value of online learning.
- L&ET is in the early stages of implementing an online repository and publishing platform for unique local digital content.
- Advanced skills in technology, pedagogy, and customer service are required to deliver library and educational technology services.
- The Library places physical and virtual collections as close to the point of need as possible.
- L&ET has evolved significantly in how we deliver content, provide instruction, partner with other services on campus, and support media use and production.
- Evidence shows that L&ET has actively experimented with innovative strategies to address changes in learning, teaching, and scholarly communication.
- L&ET values face-to-face interaction as a way of delivering services, while embracing technology enhancements to keep pace with developments in distance and blended learning.
- The Library liaison program provides a highly visible, successful model for supporting programs, but there are challenges of scale and integrating new services to address emerging needs.
- L&ET is a leader in providing options for media to support teaching and learning.
- Because of the scope of services offered, wayfinding to appropriate resources, physical, virtual, and human, is a challenge.
- Many users access our services from outside of our areas of direct control.
- The Library and CIT have increased collaboration in successful, high impact ways.
- L&ET will be increasingly called upon to engage in the creation and development of all kinds of scholarly work.

Questions

- Where does L&ET fit into JMU's planning for online learning?
- Is the current liaison program meeting the needs of our students and faculty?
- What is the best model for partnerships with student services and learning support services? How can the mutual benefit be retained when the new student success center opens?
- Are we doing enough to support the development of digital literacy skills among faculty and students?
- Do we have the right mix of content, resources and services as we go into the future?
- Will we need to change our services to meet the needs of the increasing non-traditional student population?
- Are we adequately supporting the burgeoning growth in mobile device use for academic uses?
- Are we building digital literacy skills in-house in order to keep pace with user support needs?

Recommendations

- The Library should do a formal study of the liaison program to determine the best structure.
- L&ET should identify the best ways to provide strategic leadership for online learning.
- The Library should review its subscription models, including "big deals", in order to ensure collections monies are leveraged effectively in a rapidly shifting scholarly publications environment.

- L&ET should infuse the liaison program with a more inclusive, team-based approach to leverage strengths, address scalability and increase engagement with the curriculum.
- L&ET should build on its media strengths to provide more robust support for student media literacy that is tied to the curriculum.
- L&ET should define the reference service in a way that meets the needs of students and faculty and develop a clear assessment strategy for it.
- L&ET needs to address findability and discoverability of services and collections from outside.
- L&ET should identify the best ways to support content creation that aligns with curricular needs.

6- Resource Use

Like many libraries, personnel and collections account for the majority of the budget. The remaining portion of the budget covers areas such as; computer hardware and software, travel expenses for professional development and recruitment, shipping, and office supplies, to name a few. A great concern for budget planning is the cost of software, since demand outpaces allocations, and licensing can represent a long-term commitment rather than a one-time purchase. While there has been an increase in reliance on hosted systems, these shift the cost from hardware and software for applications and servers to professional development for staff to customize and maintain them.

L&ET Budget

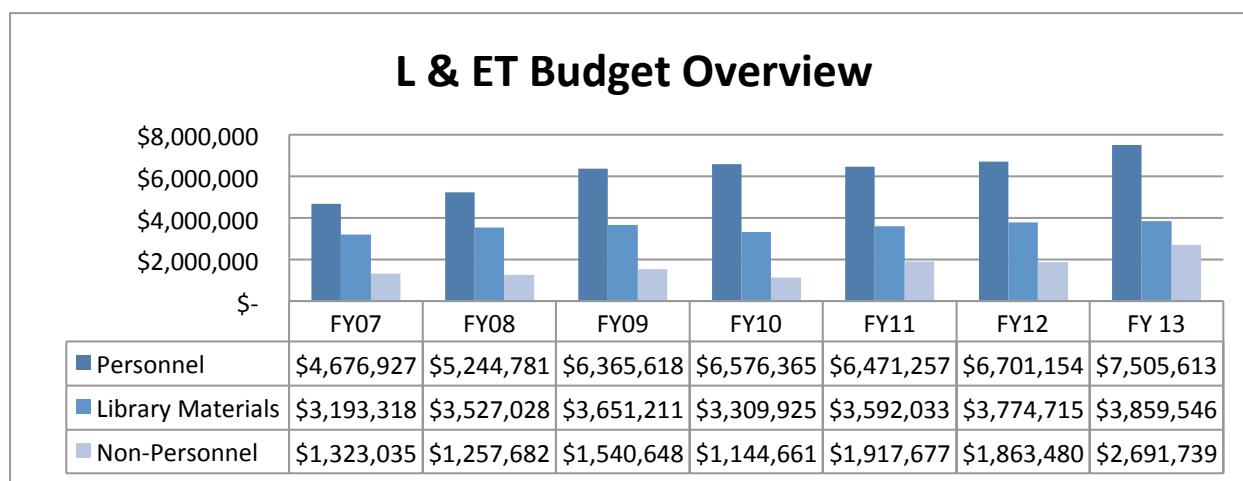


Figure 5: L&ET Total Budget Overview

For additional budget graphs and information please see appendix 12.

Systems

L&ET pays annually for systems to support the critical functions and services.

Innovative's Millennium has served as L&ET's ILS since 2004. L&ET pays annually for Millennium maintenance, and in FY 2012, this charge was \$72,768. Since ILSs have developed dramatically in recent years, L&ET is currently in an RFP process for a next generation library system.

L&ET implemented EDS in 2010 as its first discovery tool. EDS allows searching across all resources from a single search box and includes article-level results. In FY 2012, L&ET paid \$27,000 for EDS.

Serials Solutions is the knowledgebase that facilitates Periodical Locator. Serials Solutions manages L&ET's A-Z journal title list, as well as enables OpenURL linking for journal and e-book content. In FY 2012, L&ET paid \$16,518 for Serials Solutions.

LOCKSS or "Lots of Copies Keeps Stuff Safe" is L&ET's chosen preservation method for electronic journal content. Perpetual access e-journals will still be available through LOCKSS if a publisher or platform dissolves. In FY 2012, L&ET paid \$5,200 for LOCKSS.

The ILL office uses ILLiad, a Resource Sharing Management Software, which automates routine Interlibrary loan functions, increases productivity, and dramatically reduces paperwork. The ILLiad system smoothly integrates with OCLC WorldCat Resource Sharing, allowing access to the world's largest collection of shared resources. The annual maintenance contract with Atlas Systems costs \$2,400.

OCLC is L&ET's bibliographic utility, used to acquire and create MARC records for the catalog. L&ET also maintains its holdings in OCLC to facilitate more effective ILL services and to show other libraries what JMU owns. In FY 2012 L&ET paid \$101,163 for OCLC services, which includes ILL fee management.

Academic Software Licensing

L&ET supports campus licensing for many academic software programs and systems. As noted in Appendix 8 these licensing costs have dramatically escalated over the past few years. The total spent in FY 2013, which temporarily includes the cost of two LMS, was \$565,685.

In addition, CIT provides server and application administration for locally installed and hosted learning technologies; including the LMS, WordPress, the course evaluation software, the plagiarism detection software, and the classroom response solution. CIT also configures and customizes these technologies. Furthermore, CIT collaborates with other departments on campus to integrate these technologies with other systems on campus, such as the central user directory and the student administration system. CIT works with vendors to report and resolve application issues as well as perform maintenance, upgrades, and patching for the self-hosted technologies.

Collections and Content

For the past several years, the trends in collecting have shifted to electronic resources. However, print remains the preferred method of accessibility for some subject areas and information types. For the past five years, L&ET saw an increased percentage of the materials budget spent on e-resources. The entire materials budget increased roughly 6% in the last five years. Library materials base budget needs to increase in response to inflation of material costs (now estimated to be 6%) and growth in both enrollment and programs. Annual increases of 3% would sustain the current collection; however, the library would be limited in its ability to respond to new resources needed by JMU users.

Materials Budget						
	<i>FY 08</i>	<i>FY 09</i>	<i>FY 10</i>	<i>FY 11</i>	<i>FY 12</i>	<i>FY 13</i>
Total Materials Budget	\$3,524,649	\$3,636,336	\$3,274,676	\$3,592,033	\$3,774,715	\$3,859,546
Electronic Resources	\$2,232,583	\$2,541,570	\$2,352,684	\$2,704,240	\$2,872,558	\$2,997,032
Percent Electronic	63%	70%	72%	75%	76%	78%

Hardware and Software Costs

Five L&ET departments across the organization manage, maintain, and support more than 700 computing devices for L&ET staff and users (See appendix 9.) These systems include servers, desktop

computers, laptops, and technology classroom systems, and are used for communication, instruction, research, content development, content delivery, and storage. With few exceptions, L&ET provides technology support with internal staff rather than relying on the central JMU IT Department. IT manages 51 desktop computers in the L&ET public labs.

System administrators estimate that the number of computers they manage has had only a modest increase over the last five years. Due to limited physical space and increased availability of wireless network access to students, computer hardware growth has leveled off. The need for constant maintenance and replacement of existing computers continues to require significant investment of staff time and funds. In addition, Digital Services has noticed several developing trends that increase and decrease the general growth in our amount of hardware inventory. These trends are:

- Increased use of virtual server environments (VMWare) which substantially reduces the need for physical server infrastructure
- Increased use of Network Attached Storage which limits the number of physical devices to purchase and update. Although it should be noted, keeping this environment up to date requires substantial financial resources.
- Increased use of wireless networks by students entering Library facilities with their own personal devices. Almost all students now carry a laptop and a smartphone. This will prompt the possible decrease in the quantity of physical desktops computer needed to provide and plans are already in place to eliminate the laptop checkout service.
- Increased trend of mobile and tablet-based computing devices among L&ET staff. This increases staff computing budgets as more and more staff are being assigned more than one device.
- Increased trend toward L&ET staff switching to Apple Mac desktops, laptops, and iPads. This does not necessarily grow the inventory, but it does make acquisition and replacement costs much more expensive.

Replacement Plan

Computer hardware replacement plans vary across departments and types of systems. Generally, staff and public computers, technology classroom systems, and classroom workstations are replaced every three years, shortly before or after the three-year warranty expires. Other machines used by student assistants and for more generic functions have longer replacement cycles, often stretching to five years or more. Servers are under a four-to-five year warranty and therefore also have a longer replacement cycle. It should be noted that when Rose Library came online in 2008, the physical workstation inventory nearly doubled. Yet, budgets have remained the same and now the infrastructure bought with the building is on a permanent replacement cycle. Digital Services notes that it is becoming increasingly difficult, and sometimes impossible, to replace all workstations prior to warranty expiration.

Virtual Computing

L&ET has two separate virtual server solutions, one is managed by Digital Services and the other is managed by the CIT. Both solutions are two member hosts configured to serve as a single host to provide redundancy.

Storage

L&ET has a three member Storage Area Network (SAN) and a number of direct attached storage hosts. The SAN consists of one 24 terabyte (TB) host and two 12 TB replication partner hosts. This configuration provides 24 TB's of redundant production storage. The direct attached devices are not

capable of replication so they are used for less critical data. Total direct attached storage is approximately 75 TB.

Hosted Solutions

L&ET subscribes to a number of hosted systems tied to and including the LMS. JMU is migrating from a local installation of Blackboard to Canvas, a cloud-based LMS provided by Instructure. The hosted systems integrated into Canvas include Blue, TurningPoint and Turnitin. While these subscriptions are expensive, L&ET recuperates some of the costs through infrastructure and personnel savings. For example, our local installation of Blackboard runs on a large cluster of Microsoft Windows servers. JMU will no longer have to purchase and manage hardware to support the LMS.

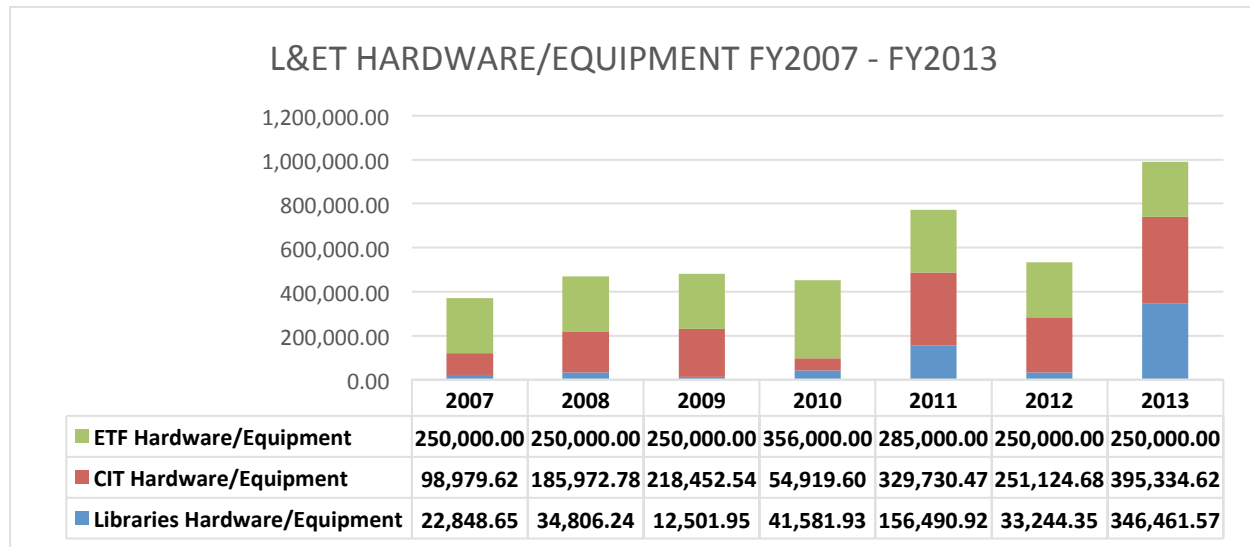


Figure 6: Hardware Spending

Software

The cost of software is also increasing. L&ET spent over one million dollars in FY 2013. See Figure 7.

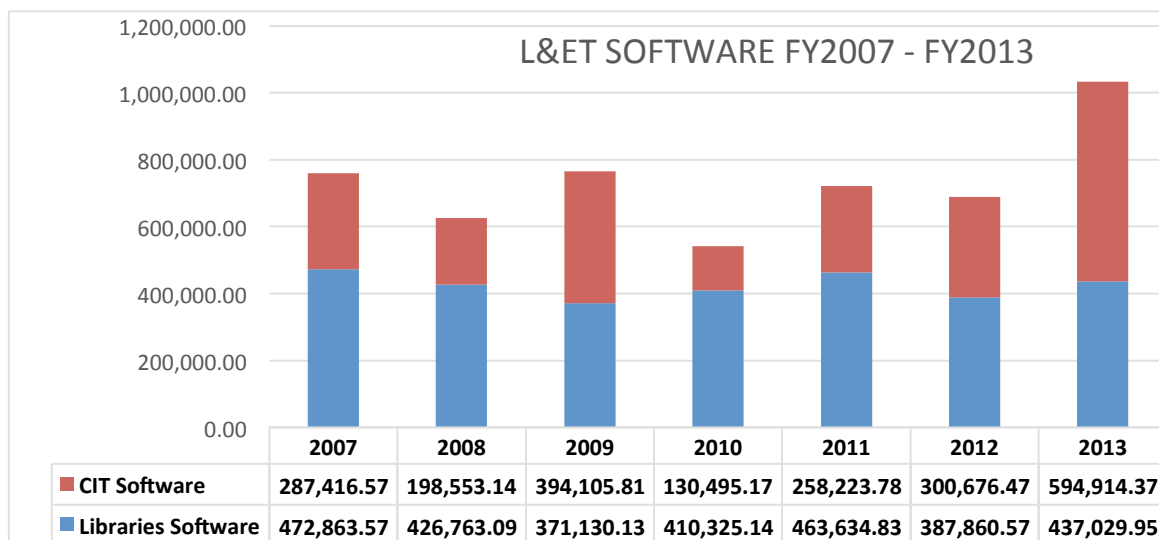


Figure 7: Software Spending

Physical Spaces

In October 2011 the L&ET Master Space Plan Committee issued a report reviewing the existing L&ET spaces, identifying space issues and future needs, and making recommendations for short-term, mid-term, and long-term priorities. Progress has been made on accomplishing short-term recommendations to improve the existing spaces. However, improvements to the current facilities can only accomplish so much and the bottom line is that both Carrier Library and the Music Library spaces are seriously inadequate to meet the needs of students and faculty. The long term focus continues to be on advocating for and planning for a Carrier Library addition and renovation project. In April 2013 the Carrier Library addition was officially added to the JMU 6-Year Capital Project list. L&ET recently adopted “Planning for the Carrier Library Addition and Renovation” as a major strategic initiative and this year will establish a task force to develop a statement of needs and gather information for the pre-design planning phase in order to prepare for the approval of official planning funding.

Key Findings, Questions and Recommendations

Findings

- New resource types and modes of access require new personnel and skills.
- The cost of academic software and systems is escalating dramatically and is unsustainable.
- L&ET has begun to rely more heavily on hosted solutions as platforms for content and services.

Questions

- How can new initiatives (e.g. video repository) and innovation be funded and cultivated in lean budgetary times?
- What is the best model for licensing and providing academic software to the JMU community?
- How will L&ET keep up with growth in online and blended courses, including the 4-VA Initiative, as our virtual systems as enrollment grows?
- Are we resourced at the right level with budget, space, and personnel moving into the future?
- Is L&ET prepared to handle the risks and challenges associated with hosted computing?
- Are we prepared for the cost-shifting model that open content and open source suggests?

Recommendations

- Establish fund raising priorities and set goals to diversify the revenue stream.
- Define software funding priorities and establish a policy for acquiring and canceling software.
- Carrier Library should be renovated and expanded.
- Increase Library materials budget in response to inflation and enrollment growth.

7-Assessment

Assessment efforts in L&ET cover everything from satisfaction to learning outcomes. L&ET engages in a variety of assessment activities to make planning decisions including BSC, Work Life Satisfaction Survey, LibQUAL+, Technology Satisfaction Survey, collection assessment, program assessment, usability testing, and web analytics. Overall data indicate a high level of satisfaction with the library collections and services. In addition, the Library in collaboration with General Education assesses, information literacy of all freshmen and incoming transfer students using the Madison Research Essentials Skills Test.

Balanced Scorecard (BSC)

BSC is a framework used to guide and manage strategic planning. L&ET participated in the second cohort of the Association of Research Libraries (ARL) BSC offered through the Association of College and Research Libraries (ACRL). Three representatives from L&ET worked with the L&ET Dean's Council and Management Council to develop a strategy map with 14 objectives.

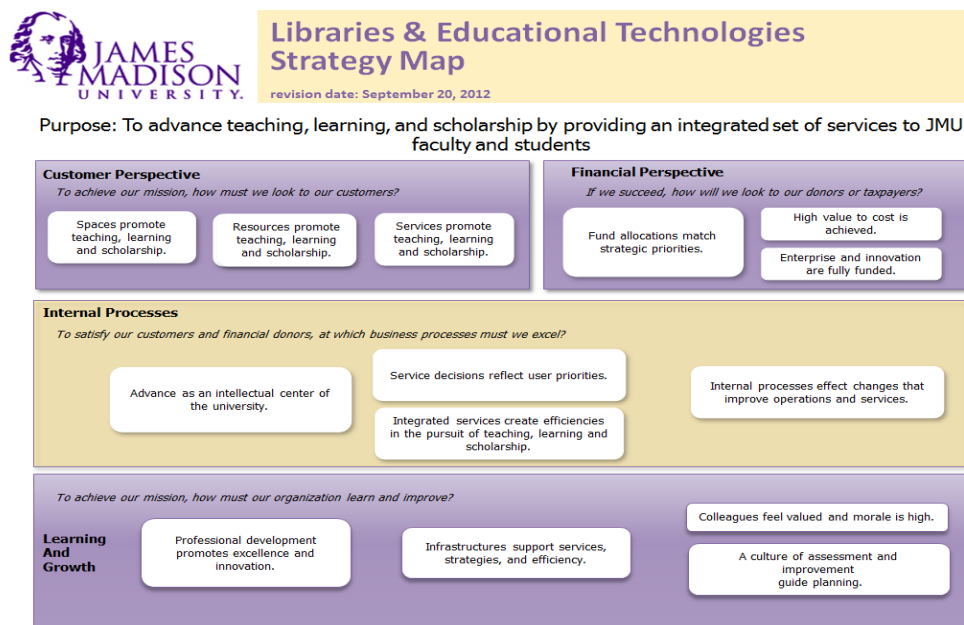


Figure 8: L&ET Strategy Map

In spring 2012, the Management Council identified selected measures and targets for 2012-2013, including two items from the LibQUAL+ survey for the Customer Perspective and the Work Life Satisfaction Survey (WLSS) for the Learning and Growth perspective. L&ET Management Council identified measures and targets for all objectives to fully implement the BSC in 2013-2014. They also approved top level strategic initiatives for FY 2014.

For additional detail about BSC please see appendix 3.

Work Life Satisfaction Survey (WLSS)

The WLSS is a measure for the Learning and Growth perspective in L&ET's BSC. The Work Life Satisfaction Survey Committee (WLSSC) manages the survey and is composed of volunteer representation from across the organization. The survey measures the strategic objective that "colleagues feel valued and morale is high." It is administered online each fall semester and consists of 144 Likert-scale questions, nine multiple choice responses, and three open-ended text questions. The second instance of the survey was distributed to L&ET in the fall of 2013.

In fall 2012 the survey link was sent to 126 library faculty and staff. Ninety faculty and staff responded, representing a 71% response rate. Based on the survey results, the sections "Supervisor Relations" and "Health and Personal Safety" received the highest average scores, and "Organizational Effectiveness" and "Administration Relations" received the lowest average scores. In order to address the survey results, the L&ET Management Council developed initiatives to improve the areas with the lowest scores.

Center for Assessment and Research Studies (CARS) Assessment Fellows

L&ET has participated in the CARS Assessment Fellowship program for the past three years. The Assessment Fellows program is an opportunity for JMU faculty and staff to work with CARS on an assessment project for their department. Fellows agree to be in residence at CARS during the second summer session to work with CARS faculty and Graduate Assistants (GAs) on a project to be decided in conjunction with their home departments and deans. The Assessment Fellowship opportunity has encouraged meaningful assessment processes that include well-developed objectives, selection or design of valid and reliable instruments, and use of analyzed data to make decisions.

- 2011- Andrea Adams (CIT): Institutes for Online Course Development Assessment Project
- 2012- Kathy Clarke (Library): Madison Research Essential Skills Test
- 2013- Juhong “Christie” Liu (CIT): Student Orientation to be Successful Online Learners

Based on our partnership with CARS and the Assessment Fellowship program, L&ET supports three GAs each year. The CARS GAs help L&ET faculty work on their assessment projects, in addition to working on other assessment projects within L&ET.

Information Seeking Skills Test (ISST)/Madison Research Essentials Skills Test (MREST)

As an integral part of Cluster One of General Education (GenEd), all freshmen and most incoming transfer students were required to pass the ISST by the end of their first year. Exceptions to this policy include students who entered prior to 1999 and students who enter with an Associate’s degree from a Virginia Community College. Students could take the ISST as many times as they needed to in order to achieve a passing score of 513-594. Students who did not pass have several remediation options, including one-on-one assistance with a librarian and workshop attendance. Historically a majority of students passed the ISST on their first attempt, with 71% to 81% of students passing it on their first attempt in the years 2008-2013.

In 2013 Go for the Gold, an online information literacy instruction program, was retired and replaced with the Madison Research Essentials. In AY 2013-14, the Madison Research Essential Skills Test (MREST), an updated information literacy test replaced the ISST. Like the ISST, this new test is mapped to the existing cluster one information literacy objectives. Librarians and Cluster One instructional faculty participated in bookmarking to establish the passing score during the summer of 2013. In addition to this work for Cluster One, several departments have worked with CARS and their liaison librarian to develop subject-specific information literacy tests. To date librarians have helped develop assessment tests for Social Work, Health Studies, Chemistry and Biotechnology.

Instruction Assessment

In addition to the formal test-based assessment done in conjunction with GenEd, liaison librarians use a variety of approaches to assess the effectiveness of their in-class instruction. Librarians use techniques such as the minute paper (a means of gathering student feedback) and online evaluations at their discretion.

Collections Assessment

Collections assessment is ongoing, and takes variety of forms throughout the year. In order to facilitate liaison librarian evaluation and assessment of subject specific collecting areas, and to complete year-end statistics for a variety of reporting agencies, the Collections Unit regularly gathers and visualizes data about collection use, size, format, and pricing. Database overlap analysis is regularly

requested, use metrics are tracked on circulating and non-circulating items, and several database and journal reviews have been coordinated through the Collection Development Committee since 2006.

L&ET has also regularly contracted with Sustainable Collection Services to do large-scale data-driven de-selection projects of its collections. This service allows us to analyze our collections use, age, and scope; to carefully drawdown low-use print collections; and to identify rare items within the collection, while ensuring that print archiving exists for titles, as well as regional and local availability for users.

Assessment of the composition, use, and access, of the collections across formats helps us to prioritize and build balanced, user-focused collections. It also helps L&ET communicate our collection management strategies to external and internal parties.

Institutes for Online Course Development Assessment

Based on best practices and sound pedagogy, the CIT Faculty Development unit coordinates and facilitates Institutes for Online Course Development. These institutes provide faculty with support, knowledge, and skills to develop and teach an online course. During the summer of 2011 CIT developed a sustainable assessment model to assess learning outcomes of faculty participants based on the QM rubric. Annual assessment will promote continual improvement and provide data-based evidence to justify related cost and resource allocation. In addition, assessing faculty learning outcomes will help ensure that quality online courses are developed and taught at JMU.

CIT Professional Development Opportunities

CIT solicits feedback about workshops, conferences, institutes, and other events through surveys. Most survey questions assess satisfaction, however some questions and the Institute for Online Course Development assessment project aim to assess the impact and learning outcomes from CIT professional development opportunities.

LibQUAL+

The library has participated in the LibQUAL+ survey every other year since 2002. A product of ARL, the survey instrument measures library users' minimum, perceived, and desired levels of service quality across the dimensions of library as place, effect of service, and information control (collections and access). Survey data are distributed for internal planning use and also used to make peer comparisons between universities.

L&ET distributed LibQUAL+ to the JMU community in 2009, 2011, and 2013. The standard notebook used to report the results is shared widely among the library. In 2013 the LibQUAL Lite version was used. This method distributes a sample of the questions to the same population rather than the entire survey to make it shorter.

LibQUAL+ results are identified as measures used in the BSC strategic planning framework. For example, data reflecting undergraduates' perceived satisfaction with study space in either library is a measure of how successfully the library provided spaces that promote teaching, learning, and scholarship and could have implications for long range space planning.

For the most recent LibQUAL+ report see appendix 14.

Technology Satisfaction Survey (TSS)

The TSS, a survey given to both faculty and staff by IT and L&ET, gauges the level of satisfaction faculty and staff have towards technology used at JMU. The survey also monitors the changes in attitudes towards new technologies. The information gathered from this survey helps inform

L&ET of the impact of current technological trends at JMU and also provides measures and targets for the BSC. Data from the TSS helped informed the decision to change LMS.

Continuing Student Survey (CSS)

The CSS measures the perceptions of and the degree of satisfaction that JMU students have towards their experience at the university. The Division of Student Affairs and University Planning & Analysis distribute this survey to about 20% of returning students. Some of the questions directly address student satisfaction in L&ET services and the responses can help inform L&ET about services with which students feel satisfied and services that student believe could be improved. See appendix 16 for the results of the most recent Continuing Student Survey.

Usability Testing and Website Analytics

Digital Services manages usability testing for annual benchmarking testing such things as users' ability to find books, journals, articles, reserve materials and library services. Urchin and Google Analytics are used to monitor and analyze web traffic to determine where users come from, what they click on, and how much time they spend on the website. Data gathered from these tools are used to inform website design and navigation decisions. Usage data provided by library database vendors are used to evaluate resources and inform renewal and cancelation decisions.

Key Findings, Questions and Recommendations

Findings

- CSS and LibQUAL+ data indicate high satisfaction with library collections and services.
- L&ET has a close partnership with CARS.
- Information Literacy is embedded in the General Education curriculum as a high-stakes endeavor.
- L&ET is committed to providing services and collections that are user-centered.
- WLSS data show that L&ET staff do not see improvement from our assessment efforts or use of the data.

Questions

- How should L&ET intentionally gather and use assessment data for program improvement?
- Are there good ways to assess student learning (including faculty-as-students in workshops) as it relates to our services and collections?
- Does our data collection and use demonstrate our value to the University?

Recommendations

- Provide more formal structure for the variety of assessment activities within L&ET.
- Identify more assessment tools related to technology, teaching and learning that indicates impact, not just satisfaction.
- Study the impact of the CARS GA's on the work of L&ET and determine the best model for sustainability.
- Create a strategy for gathering, managing, and storing data so that it is accessible and useful to planning.

8-Academic Support

L&ET has collaborative relationships with many offices, units, and organizations within JMU, as well as the state of Virginia, the nation, and international locations. These relationships serve to support the work of L&ET and develop the skills and relationships necessary to fulfill its mission. Locally, staff are deeply woven into the fabric of the JMU community, serving on many external committees and participating in decision-making at every level. The nature of research and scholarship demands robust access to library collections and services at any time from any place. Providing this kind of access is only possible by collaborating with IT, and data show that user expectations are not being met in this area.

Professional Development

The rapidly changing nature of technology and higher education requires that faculty and staff continuously improve their skills and learn new ones. Tenure-track librarians have an additional obligation to pursue research and scholarship in addition to their jobs and service. Professional development is supported through a variety of means, from L&ET, from JMU, and from external sources.

Support

L&ET supports faculty and staff in their travel and conference needs that are related to job performance, scholarship, and service. Each year L&ET allocates money for travel and other professional development. Examples of supported professional development include conference, leadership seminars, webinars, and networking opportunities.

For additional detail on travel and professional development funding please see appendix 12.

Research Leave

Librarians are eligible for summer research leave. The intent of summer leave is to provide opportunities for professional development for both tenured and untenured librarians. Three slots are available each summer for tenure-track librarian faculty members. To be eligible, librarians must have completed a minimum of two full years of service as a tenure-track faculty member by the award date. Applications for leave are submitted to the Dean who then distributes them to a panel of the previous two years’ recipients for evaluation and award recommendation. Librarians receiving research leave have executed a wide variety of projects from the creation of tutorials, exploration of new technologies, and examination of other libraries. Results are shared in the following year.

Continuing Education

Many L&ET faculty and staff have received tuition waivers for coursework at JMU. Coursework can be job-related, for personal interest, or to complete a degree.

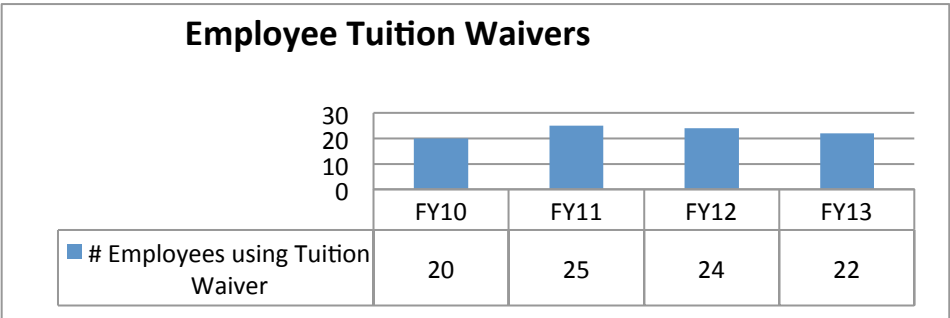


Figure 9: Tuition Waivers

JMU Professional Training & Development

Since FY 2008 L&ET faculty and staff have attended 2,751 workshops provided through HR, IT, the CFI, and CIT (see table below for yearly breakdowns). These workshops include various topics such as: computer applications and software, library databases, general computing, supervisory skills, personal finance, and professional certification. L&ET has worked with HR Training and Development to pursue tailored training support that address specific development needs within the organization, examples include: Meetings that Matter, Meyers-Briggs Type Indicator (MBTI), a mission-vision-values workshop, DiSC, Strength Deployment Inventory (SDI), and other customized sessions delivered to meet our specific needs. L&ET also provided internal training including an iPad Sandbox to increase organizational understanding of educational and organizational uses of mobile devices and Personal Tech Brown Bags which enabled L&ET colleagues to get to know each and learn about practical technologies.

HR Training and Development Workshops and Attendance							
	<i>FY 07</i>	<i>FY 08</i>	<i>FY 09</i>	<i>FY 10</i>	<i>FY 11</i>	<i>FY 12</i>	<i>FY 13</i>
CIT Courses							
Courses	58	79	136	111	185	113	41
Attendees	29	35	51	46	43	50	30
HR Courses							
Courses	No Data	14*	314	223	316	372	181
Attendees	No Data	11*	73	66	90	89	62
IT Courses							
Courses	95	133	53	127	111	40	49
Attendees	38	60	25	59	55	24	35
Totals							
Courses	153	226	503	461	612	525	271
Attendees	67	106	149	171	188	163	127

*Data only for 1/1/2008 through 6/30/2009

International Network of Universities (INU)

JMU is the sole American member of the INU, a group of ten universities whose mission is “to advance the internationalization of INU member institutions through co-operation in university management, research collaboration and student and staff mobility.” Librarians from several INU member institutions have shadowed JMU librarians and several JMU librarians have participated in exchange programs. As with other professional development, librarians and staff are expected to share their experiences with the organization. To date, librarians have visited libraries in Sweden and England, and the library has hosted visitors from Sweden, England, Japan, and Australia.

JMU Support

IT

L&ET has a long history of collaborative partnership with JMU's IT department. IT provides a core information infrastructure that includes the campus network and storage system and a campus identity management system. Regular meetings between the Dean of L&ET and the Assistant Vice President for IT help the two units work successfully together. L&ET has a talented cadre of programmers in Digital Services and in CIT, who are capable of creating applications and managing the LMS and other applications. IT requires the use of a Project Initiation Questionnaire (PIQ) prior to soliciting acquisitions or development of technology not considered end-user computing. Many library and CIT projects require the submission of a PIQ.

IT manages and supports two full service computing labs within L&ET, one in Carrier Library and one 24-hour lab in Rose Library, as well as three data centers with redundant air-handling systems and room-level uninterruptible power supplies. In addition to lab spaces, IT also provides 24/7 server support for Blackboard, the only L&ET system that is mission critical. Staff in IT have also worked closely with L&ET on projects such as the Intranet Tool Evaluation and subsequent SharePoint adoption. Library resources are available to off-campus users via the IT managed application Juniper Networks SSLVPN. IT assists with some staff training for L&ET and includes the appropriate staff on their internal training and development events. Since IT also provides all of the requisite support for JMU Administration and Finance, collaboration can be challenging due to multiple demands for resources.

While the programmers and web developers within L&ET complement services and resources provided by IT, a working understanding of pedagogy and user experience distinguishes L&ET. Instructional technologists, librarians, web designers, and faculty development experts all work to understand the needs of students and faculty, and use the best technology to help them achieve their teaching, learning, and scholarship goals. In addition, IT and L&ET participate in a cost-sharing model to support campus use of some applications and subscriptions. Higher education demands both security of information and access to information. The close working relationship between L&ET and IT allows both units to meet their respective goals.

Procurement

JMU Procurement provides valuable support for L&ET and VIVA. Procurement handles all contracts and license negotiations, and serves as an invoicing facility for VIVA's central office. For JMU resources, Procurement is the signatory on licenses, maintaining a copy of all resource and software contracts. Procurement works as a liaison between L&ET and the Assistant Vice President of Finance to ensure licenses are in the best interest of the state. Procurement also assists with RFP processes such as the recent ILS RFP, LMS RFP, and the VIVA e-book DDA RFP.

Key Findings, Questions, Recommendations

Findings

- L&ET is generous with professional development and support and WLSS data confirms the value of professional development.
- L&ET is committed to cultivating leadership skills and scholarship among its faculty and staff.
- LibQUAL+ and TSS data find growing dissatisfaction with off-campus access to resources.

Questions

- How can we capitalize on our relationship with IT to increase satisfaction with off-campus access?
- How can we capitalize on our partnerships with IT and the 4-VA Initiative to increase L&ET involvement with other state institutions?

Recommendations

- Establish top level professional development priorities on an annual basis and designate a group (broader scope than Library Travel Committee) to make recommendations on coordination of internal training and annual allocation of resources to support external training and development activities
- Add skills audit of L&ET workforce.

Conclusion

L&ET will continue to grow and offer services and resources to meet the teaching, learning, and scholarship needs of the JMU community. Many significant changes based on the last APR were implemented and this APR also holds promises for innovation and improvement as L&ET moves into the future. As summarized in section one, L&ET has prioritized the following key questions for the External Review Team to consider:

- Are we organized in the most effective way to respond to changing teaching and learning environments? Does our internal organization enable us to use the talents and skills among our staff to deliver services that meet the ever-changing needs of our users?
- How can L&ET lead the JMU community in the coordination and development of online learning?
- What assessment strategies should L&ET pursue?

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1. Organizational Charts
2. Mission Statements
3. SCHEV Enrollment Projections for JMU
4. 2013 Planning Database Report
5. Librarian Promotion & Tenure Document
6. L&ET Faculty CVs
7. Cumulative Collection Count
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13. Balanced Scorecard Objectives and Initiatives
14. LibQUAL+ 2013 Report
15. L&ET Annual Reports
16. Continuing Student Survey Data

Glossary to Terms and Acronyms

| A |

ACRL – see Association of College and Research Libraries

APR – see Academic Program Review

ARL – see Association of Research Libraries

AY – see Academic Year

Academic Program Review (APR)

Academic program review (APR) within the Division of Academic Affairs is common practice in most colleges and universities and is an essential component of institutional and program accreditation processes. Each area within the Division of Academic Affairs conducts an APR.

Academic Year (AY)

The period between when Fall courses begin and Spring courses end (August through May). This does not traditionally include Summer courses.

ARTstor

A subscription database of images.

Association of College and Research Libraries (ACRL)

A division of the American Library Association since 1889, ACRL has a membership of academic and research librarians committed to improving the quality of service in academic libraries, promoting the career and professional development of academic and research librarians, and supporting the programs of academic and research libraries.

Association of Research Libraries (ARL)

The Association of Research Libraries is a nonprofit organization of 125 research libraries at comprehensive, research-extensive institutions in the US and Canada that share similar research missions, aspirations, and achievements.

| B |

BSC – see Balanced Scorecard

Balanced Scorecard (BSC)

Created by Harvard Professors Robert S. Kaplan and David P. Norton, BSC is a framework used to guide and manage strategic planning.

| C |

CAMIO – see Catalog of Art Museum Images Online

CARS – see Center for Assessment and Research Studies

CIT – see Center for Instructional Technology

CRASS – see Classroom Recording and Streaming System

CSS - see Continuing Student Survey

Center for Assessment and Research Studies (CARS)

A JMU department that provides quality assessment services to the university, to provide applied graduate training in both assessment and measurement, to increase the use of innovative technology in assessment practice, to increase the rigor of measurement and statistical techniques used in assessment practice, and to produce quality scholarship in assessment and measurement.

Center for Instructional Technology (CIT)

A center that leads, supports and advocates for the meaningful integration of appropriate technologies into the academic experience. CIT helps develop the instructional faculty's skills in the mechanics and pedagogically-sound methods of using technology in instruction and provides resources, people, equipment, money and space to help faculty create and integrate digital content into their course materials and scholarly work while engaging in research and development to create new instructional technologies, and manage and support or coordinate the management and support of our instructional technology delivery systems.

Classroom Recording and Streaming System (CRASS)

A system developed by L&ET to automate the process of video recording student presentations primarily used by the School of Communication Studies. Tightly integrated with JMUtube.

Cluster One

A set of three courses that comprise the first-year experience of General Education.

Continuing Student Survey (CSS)

A survey that measures the perceptions of and the degree of satisfaction that JMU students have towards their experience at the university.

| D |

DDA - see Demand Driven Acquisitions

Dean's Executive Council

The Dean's Executive Council, the senior executive planning and decision-making body within L&ET.

Demand Driven Acquisitions (DDA)

A consortial level e-book acquisition program. E-books are purchased after several uses.

| E |

EDS - see EBSCO Discovery Service

ETMC – see Education Technology and Media Center

E-Reserve

Electronic Reserve.

ERM - see Electronic Resource Management

EBSCO

L&ET's subscriptions agent.

EBSCO Discovery Service

L&ET's discovery tool.

Education Technology and Media Center (ETMC)

The Educational Technology & Media Center (ETMC) is committed to preparing all students in the College of Education and Professional Education Unit to be knowledgeable users of educational technology. Serving the College of Education and the Professional Education Unit, the ETMC promotes the use of emerging technologies for learning and is responsive to educational technology needs of faculty and students in these programs.

Electronic Resource Management

The practices and software systems used by libraries to keep track of important information about electronic information resources, especially internet-based resources such as electronic journals, databases, and electronic books.

| G |**General Education (GenEd)**

Liberal Arts foundation for all undergraduate students.

GVE

Remote technology that monitors technology in JMU's campus classrooms.

Go for the Gold

L&ET's former information literacy asynchronous, online instruction.

| I |

ILL – see InterLibrary Loan

ILS - see Integrated Library System

INU - see International Network of Universities

ISST - see Information Seeking Skills Test

IT – see Information Technology

Information Seeking Skills Test (ISST)

A test "helps to ensure that all students develop the necessary knowledge and skills early in their university career. All students enrolled in General Education Cluster One are required to pass the Information-Seeking Skills Test (ISST) during the freshman year" (http://www.jmu.edu/gened/info_lit_general.html).

Information Technology (IT)

Information Technology's mission is to create and sustain an intuitive, personalized, seamless and secure environment that provides positive identification, continuous mobility, and is "always on" to enable innovation and superior customer service.

Integrated Library System (ILS)

The system that manages acquisitions and circulation. It serves as the database for the library catalog.

InterLibrary Loan (ILL)

A service for borrowing materials from other libraries.

International Network of Universities (INU)

A federation of international universities that sponsors job shadowing and exchanges.

| J |

JMUTube

A system developed by L&ET primarily to allow faculty to host and deliver instructional video, audio, and web presentations as part of their courses.

| L |

LDAP – see Lightweight Directory Access Protocol

LMS – see Learning Management System

L&ET

Libraries and Educational Technology.

Learning Management System (LMS)

A system that provides online tools that support teaching and learning.

Liaison

Librarians who are assigned one or more academic departments for which they serve as intermediary between the teaching faculty and the library. Liaison responsibilities may include bibliographic instruction, collection development (including reference and electronic resources), current awareness, and faculty training in the use of library resources.

L&ET Hub

L&ET's intranet that is hosted in SharePoint.

LibQUAL+

LibQUAL+ includes a rigorously tested Web-based survey bundled with training to help libraries assess and improve library services, change organizational culture, and market the library.

Lightweight Directory Access Protocol (LDAP)

The server that manages the identity of all JMU users with e-ids.

| M |

MDID - see Madison Digital Image Database

MREST - see Madison Research Essential Skills Test

Madison Digital Image Database (MDID)

A database developed by L&ET to store collections of digital images primarily for the teaching and study of art and art history.

Management Council

Management Council is comprised of unit heads and directors from both the library and the CIT. This group is responsible for: coordinating the development and execution of strategic initiatives among units, recommending strategic priorities to the Dean's Executive Council, communicating with Dean's Executive Council, unit head management, and L&ET faculty and staff, and ensuring that strategic planning is a mission critical process that engages all members of L&ET.

Madison Research Essential Skills Test (MREST)

The first year information literacy test, which replaced the ISST in 2013.

Madison Future Commission

A group of 160 faculty, staff, students, alumni, former Board of Visitors members and representatives from our local community who have been charged with laying the groundwork for the university's 2014-2020 strategic plan.

Millennium

L&ET's integrated library system, which is licensed from Innovative Interfaces.

| O |

ORG – see Open Resource Grants

Open Resource Grants (ORG)

Grants that are designed to support faculty in their instruction through the use of open source software.

| P |

PIQ – see Project Initiation Questionnaire

Project Initiation Questionnaire (PIQ)

IT's request procedure for all menu changes to existing permission lists or roles, creating new permission lists or roles, or correction mode access, etc.

| Q |

QM Rubric - see Quality Matters Rubric

Quality Matters Rubric (QM)

A rubric used to rate the quality of online courses.

| R |

R2- see Research Databases and Resources

RFP - see Request for Proposal

RSC – see Resource Sharing Committee

Research Databases and Resources (R2)

L&ET's searchable list of research databases and resources.

Request for Proposal (RFP)

A state mandate to get bids from competing vendors to provide a service.

| S |

SCHEV- see State Council of Higher Education for Virginia

SCS - see Scholarly Content Systems

SDI – see Strength Deployment Inventory

SGA – see Student Government Association

Student Government Association (SGA)

A self-selected group of students who serve as representatives of the student body to the library.

Sharepoint

Microsoft Office product that hosts L&ET's intranet, the Hub.

StaffWeb

L&ET's former intranet.

State Council of Higher Education for Virginia (SHEV)

An advisory group providing strategic planning for state-wide educational technologies initiatives.

STEM-H

The disciplines of Science, Technology, Engineering, Mathematics, and Health.

| T |

TSS - see Technology Satisfaction Survey

TS Wiki

Technical Services' former intranet.

Technology Satisfaction Survey (TSS)

A survey given to both faculty and staff by IT and L&ET, gauges the level of satisfaction faculty and staff have towards technology used at JMU.

| V |

VIVA- see Virtual Library of Virginia

Virtual Library of Virginia (VIVA)

A consortium of the nonprofit academic libraries within the Commonwealth of Virginia.

| W |

WLSC - see Work Life Satisfaction Committee

WLSS – see Work Life Satisfaction Survey

Work Life Satisfaction Committee (WLSC)

The group that administers the Work Life Satisfaction Survey.

Work Life Satisfaction Survey (WLSS)

A survey that measures L&ET's faculty and staff morale.