Reimagining the Academic Library:

A Case for the Carrier Library Renovation & Expansion

JAMES MADISON UNIVERSITY

LIBRARIES & EDUCATIONAL TECHNOLOGIES

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Executive Summary

The library is in many ways the heart of learning on a university campus – a connecting axis where the intellectual and social endeavors of a university community meet. It is a safe space for tough questions. It is a space that encourages experimentation and play. It is a place for students to engage with the world around them in self-directed ways. At the same time, the needs of students, faculty, and researchers are rapidly changing. In an increasingly competitive higher education climate, library spaces must be comfortable and inspiring, and they must keep pace with today's ever-evolving scholarship and technology.

Unfortunately, James Madison University's current Carrier Library does not meet these demands. It is falling short of national standards, and student and faculty expectations. For a university that seeks to be the national model for the engaged university, this requires change.

The needs of our 21st century learners are vastly different from their 20th century contemporaries. In a short decade and a half, higher education has seen the scholarly record grow to encompass shifting digital formats. The way students engage with the curriculum, their community, and the world is expanding as well. Space, study, and collection needs vary across disciplines, students, and faculty. Techno logically rich spaces for experimentation and collaboration, staffed with expert assistance, are as import ant to today's student as are quiet, contemplative spaces and traditional materials.

Meeting these needs requires a major transformation in how JMU envisions what its libraries can do, although the core remains the same. Students, faculty, and researchers all require specialized spaces that support researching, teaching, and learning. Building a holistic collection that reflects the curriculum, celebrates locally created scholarship, and allows for growth and format evolution is a paramount challenge for any academic library, and requires us to be both flexible and adaptable. Finally, the campus community wants library spaces to be comfortable; they need spaces that make it easy to collaborate and to contemplate; and they deserve spaces that are inspiring. JMU Libraries & Educational Technologies (L&ET) seeks to create these spaces by renovating and expanding Carrier Library. **The goal: to provide the JMU community with the services, tools, and spaces needed to truly embody the model of the engaged university.**

To meet this goal the building task force recommends: the university hire an architectural firm and conduct a design charrette process; L&ET continue stakeholder engagement through participatory design; and L&ET evaluate and reconfigure service models in concert with the renovation and expansion.

History

L&ET, comprised of JMU Libraries and the Center for Instructional Technology (CIT), is housed in two main buildings, Carrier and Rose libraries, as well as three satellite locations: Music, Educational Technology & Media Center (ETMC), and Off-site Storage. These spaces total 231,889 square feet across all five physical locations. L&ET employees with some non-L&ET occupants, or building partners, such as the Center for Faculty Innovation (CFI), Accessibility Services Labs, and Starbucks manage and staff Carrier and Rose libraries. L&ET staffs the Music library, which resides within the

Sepia photograph of Robinson architectural drawing, circa 1908, JMU Special Collections

School of Music. The libraries' Juvenile/K-12 collection is neither housed nor staffed by L&ET, but rather from within the School of Education in Memorial Hall. The off-site storage is a 5,000 square foot unit used primarily for print journal storage. The first four spaces are university owned, while the last is a leased property south of the main campus.

Madison Memorial Library, circa 1944, JMU Special Collections

Carrier (formerly Madison Memorial) Library was built adjacent to the main quadrangle, in 1939, as the first stand-alone library building on campus. The structure was designed to hold 80,000 volumes and seat 350 people. Increased enrollment prompted additions in 1971, 1982, and again in 1994 when a 3rd floor was added. Rose Library, with 93, 192 square feet, was built in 2008 to relieve overcrowding in Carrier, and better serve the disciplines on East Campus. The Music Building was completed in 1989 with a small library area relegated to the basement. This 1,000 square foot space has seating for 40 people, but serves 580 Music students and faculty, in addition to the demands of the General Education classes. The 1967 addition of Memorial Hall houses ETMC, which opened in 1920 and was expanded and renovated in 1951, 1967 and 1994.

Building Task Force background

In the spring of 2014, in recognition that the library building infrastructures were no longer adequate to meet the mission of the libraries, educational technologies, or the university, a joint building task force (BTF) was charged. The task force evaluated all L&ET spaces, both physical and virtual, in a pre-planning process, to identify and articulate the kinds of future spaces that would best meet the needs of the JMU community. The task force specifically focused on the potential for meeting user needs through an expansion and renovation of Carrier Library.

In order to make sure multiple perspectives were gathered, key stakeholders were identified (including students, faculty, L&ET staff, L&ET administration, library building and community partners, and university administration). The task force divided into several subgroups in order to develop a statement of needs and a vision for renovation . The following subgroups structured the work of the task force in developing a vision: Stakeholder Perspective, Facility Assessment, Technology Visioning, Space Utilization Analysis, and Trends in Higher Education. This division allowed the group to engage stakeholders in a meaningful way within a relatively limited time frame. A final report from each subgroup can be found here: http://www.lib.jmu.edu/about_us/buildings.

Throughout the process the subgroups identified what information was needed from stakeholders to inform the process, what data was already collected that could answer questions about space use, and what studies should be implemented in the future.

In addition to the above-mentioned work, the Building Task Force identified and engaged with libraries and academic institutions, which had either recently completed, or were in the process of, an innovative renovation or building project. This work was paired with an exhaustive literature review, targeting trends in higher education and libraries, and visioning exercises with L&ET staff.

JMU Libraries & Educational Technologies background and need for growth

• Since 1994 (date of most recent Carrier Library renovation), the enrollment at JMU has doubled. The addition of Rose Library has alleviated some of the pressure on Carrier, but not all. L&ET does not meet standard university recommendations for seating. Currently seating about ten percent of campus FTE; twenty percent is recommended.

• L&ET has 1.7 million visits a year. Over 1 million of these visits are to Carrier Library. These numbers do not include the millions of visits to our virtual spaces.

• Overcrowding forces students to study in areas with poor lighting, inconsistent access to Wi-Fi, and compromised electricity. Student safety in remote locations within the building is a concern. Way finding throughout the building is an ongoing challenge.

• Despite efforts at retrofitting older sections, many public spaces are not ADA compliant. Fire safety also remains a major concern.

• Chronic environmental instability impacts public, staff, and collection and server storage. The current building infrastructure is prone to water leaks, poor drainage, inconsistent HVAC controls, and pests. Carpeting and flooring of varying condition and design present tripping hazards. Chipped asbestos tile in the basement and original stacks is dangerous.

• Music collections and user spaces are in high demand and are inadequate to meet current needs. Environmental collections instability is a growing concern as well.

• Moving from physical to digital formats does not eliminate the need for shelf space. In fact, it creates new needs, such as space and tools for the high-tech processing of non-traditional materials. Retaining access to the essential physical collections and collaborating responsibly with partners means that the storage of the physical collection must be flexible to allow for needed student spaces.

As an organization, L&ET strives to enrich our com- munities by building learning and information environments where people connect with ideas and each other to discover, create, and share knowledge. Students spend enormous amounts of time learning in L&ET spaces – working, creating, studying, and interacting. To say L&ET spaces and services are both busy and rapidly growing would be an understatement. User services range from traditional circulation of materials and reference services, to video production projects, engaging speaker series, collaborative campus & community programming, and desktop delivery services of hard to access materials.

Carrier Library, quiet study area, 2015

Demand for library spaces at JMU has never been greater: One million of the total in-person visits to JMU Libraries each year take place in Carrier Library. Nationally, academic libraries aim to seat twenty percent of the campus FTE at any one time, JMU's libraries can currently seat only ten percent of the population, well under the recommended target for a campus of 21,000. In 2008, Rose Library (then East Campus Library) was constructed to alleviate some of this need, as well as to serve the specific needs of JMU's growing East Campus. The construction of Rose Library was an important step towards meeting recommendations for library seating and spaces.

Carrier Library, stack level 2, 2015

With ongoing support and resources from JMU administration, L&ET has worked hard within the constraints of the current buildings, to meet student and faculty needs by:

- reconfiguring public spaces;
- compressing staff offices;
- embarking on small renovation projects;
- and updating furniture, servers, and adding strategically placed electrical outlets.

These efforts are no longer enough. Spaces in the Carrier and Music Libraries are overflowing and do not provide the collaboration-friendly and technology-rich spaces our students and faculty need.

Carrier Library, main floor entry, 2015

In addition to traditional library research support offered in Carrier Library, the Center for Instructional Technology (CIT) is involved in the design and delivery of instruction, partnering closely with instructional faculty and departments from across the University to leverage high-impact teaching strategies, concepts, and tools. Specifically, CIT provides services for faculty in the development of multi-modal assignments, online and blended course design, and innovative and flexible teaching spaces. Media Resources and CIT both assist students and faculty respectively in media production and content creation, offering numerous workshops for creating digital assignments and multimedia projects throughout the year. Demand for these user-services is growing exponentially on JMU's campus.
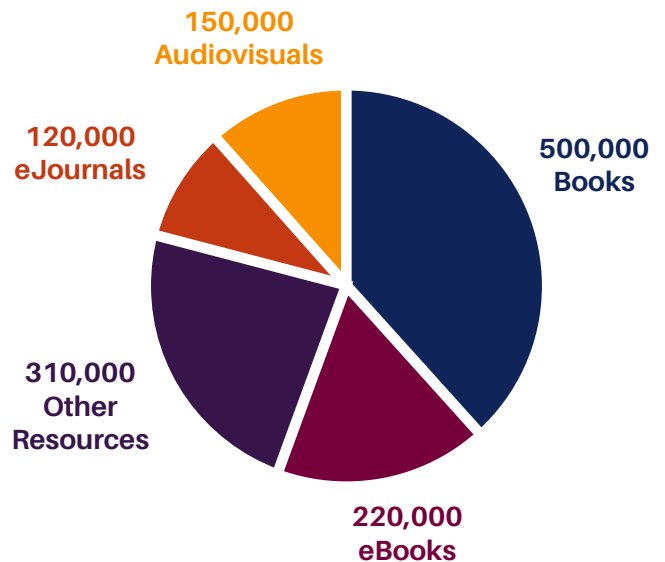
Special Collections, also located in Carrier Library, has expanded greatly in the past decade. Providing access to primary source materials that detail the rich history of the university and of the Shenandoah Valley, as well as developing manuscript and rare book materials in support of curriculum, is of growing importance to the library and the university. In response, Special Collections secure stack spaces are expanding, and require close environmental monitoring of humidity and temperature.

L&ET Collection

In 2013, the Digital Collections department was added to L&ET in direct response to articulated campus needs for a centralized space to highlight JMU's faculty and undergraduate research and publications. Digital Collections works closely with Special Collections, CIT, faculty, and students to produce and preserve multi-media exhibits and scholarship, and host JMU publications and conference proceedings. In addition to virtual space needs, Digital Collections digitization and preservation practices require spaces that are easily reconfigurable for student and staff workstations, and that can accommodate scanners and digital imaging tools in all shapes and sizes, as well as digital forensics hardware.

150,000 Audiovisuals

120,000 eJournals

500,000 Books

310,000 Other Resources

220,000 eBooks

1.3 million items strong

 As a founding member of the Virtual Library of Virginia, the statewide library consortium, L&ET works with libraries across the state to bring shared resources and collections to Virginia public universities – this partnership provides JMU with substantial cost savings on databases, journals, ebooks, as well as the promise of future stacks space savings on shared distributive collections initiatives. The Music Library, located within the Music Building, has significant collections that include JMU performance recordings, scores, LPs, CDs, DAT tapes, and reference materials. The collections space is currently overflowing. The Music Library also houses select and rare archival materials that need special handling and care, not available in the current space. Originally built to seat 40 students, the Music Library now serves almost 600 music majors and minors in addition to general education requirements.

With the exception of Rose Library, all other library spaces on campus are 25-75 years old. Aging facilities present special challenges when dealing with deferred maintenance and limited facilities budgets. Modern building codes; multiple heating, ventilation, and HVAC systems serving connected spaces; gaps in compliance with the Americans with Disabilities Act; and re-purposed spaces never designed for their current use all contribute to a dysfunctional building.

National Trends

Libraries are not just passive repositories for books and manuscripts. They advance cultures of change and create new knowledge in the communities they serve. **Libraries are advocates and leaders in**:

- online learning;
- open access publishing platforms;
- multi-disciplinary and cross-institutional research;
- data management;
- digital humanities;
- blended learning;
- and redesigning learning spaces.

The academic spaces that meet scholars' needs should be thought of as living ecosystems that evolve over time to meet major shifts in pedagogy and changes in scholarly communication. **To meet the needs of their users libraries must account for**:

- "engagement and creativity" of their inhabitants, as collections and services do;
- ongoing participatory design and ethnographic research;
- user desires for "efficiency and productivity, as well as for thinking, dreaming, and imagining" (Foster, 2015);
- and a shared vision between experts and the expert users (L&ET staff, students, faculty, zarchitects, and administrators).

Librarians and Instructional Technologists/Designers have expertise at the fulcrum of pedagogy, technology and research: they have an unobstructed view of the impact of active and collaborative multi-disciplinary learning models on library spaces. **Librarians and Instructional Technologists/ Designers are ideal partners to**:

- re-engineer traditional spaces from repositories of books and siloed quiet study;
- create dynamic community hubs that encourage experimentation and media-centric activities;
- architect flexible spaces that stimulate solitary and group work;
- provide easy access to rich scholarly resources;
- and focus on local community-driven, faculty- and student-led, programming.

Within this context of changing services and spaces, the personnel needed in the academy grows more complex. **Libraries have an opportunity to retool their diverse workforces by**:

- opening their organizational structures to allow for agile response to needs;
- offering team-based service with single access points;
- creating and maintaining technology infrastructure, support and training;
- leveraging librarian and instructional technologist/designer expertise in teaching and learning;
- collaborating with faculty on course and assignment design that prepare students to work in multi-modal and highly flexible work environments;
- and blending computer programming services in research projects.

Finally, no two libraries are the same. **To meet the diversity of needs on today's campus necessitates engaging and collaborating closely with campus communities through:**

- ongoing studies and conversations with users;
- close alignment with university values and mission;
- remaining agile to respond to newly identified needs;
- a willingness to try new things and fail;
- and letting go of services that don't meet current user needs.

Research with JMU stakeholders

In order to accurately capture both current and future user needs, with a focus on user engagement and user-centered services, the Building Task Force engaged JMU and L&ET stakeholders in a variety of ways, and employed targeted data collection methods. The following section provides summaries and brief findings from stakeholder groups.

Students

Data collection methods included the use of an exit survey of visitors to Carrier and Rose libraries, the deployment of a tablet-based space assessment tool, an ethnographic study with students outside of the libraries, student interviews, and a focus group comprised of undergraduate members of JMU's Student Government Association. Other metrics considered included the review of LibQual+ survey results for longitudinal data about services, collections, and spaces.

A study of particular note was the series of interviews, grounded in ethnographic research principles, held with students at three locations around campus in April of 2015. This study supplied some of the most nuanced data the task force received. The group asked students open-ended questions to learn about both where they did their work and why they chose those locations. To learn about different student needs for different kinds of work, questions were divided into three work session types: exam study work session; group project work session; and research paper work session.

Library User Satisfaction Change 2011 to 2013

LibQual+ Results, Space Satisfaction Declining
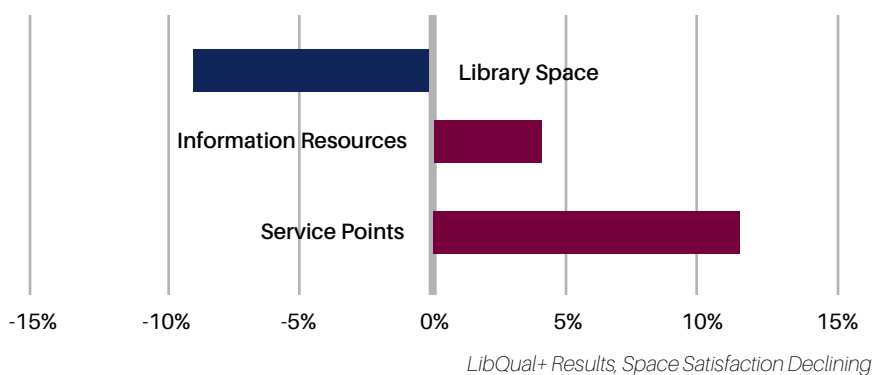
The rich qualitative data gathered in this preliminary study could be analyzed in a number of dimensions. For this report, the analysis focused on student need. What are the characteristics of student's favorite study spaces? What draws them to these spaces? Out of a nest of over 80 needs, the most coveted characteristics are: comforts of home; quietness; individual work space, group work space, access to food, convenient locations, open floor plans, easy access to parking, and comfortable furniture.

These diverse studies helped the task force to surface some overarching trends regarding student needs. These included:

- Students need library spaces for both individual study and collaborative work spaces.
- Students continue to use library provided technology, but there is a growing trend of bring-your-own-device.
- The majority of students use personal devices (e.g. laptops, tablets, and phones) and have a need for reliable and accessible Wi-Fi and electricity, as well as workspaces for their equipment.
- Students indicated a preference for quiet, but not too quiet, study spaces with ambient noise and quiet conversations.
- Comfortable furniture and easy access to food, as well as the ability to take breaks and roam when engaged in quiet study.
- Students prefer the ability to choose from a variety of study areas and atmospheres that support different forms of studying.
- Aesthetics also play an important role in dictating study behavior and comfort.

Current barriers students identified included:

- Overcrowding came up consistently, with many students sitting on the floor, and in non-public spaces in order to find a place to work.
- The lack of ability to comfortably or effectively manage collaborative work in small and over crowded spaces in Carrier Library was also a major concern.
- Students reported a confusing division of service points and inconsistent signage, which causes them to not use services and facilities. Centralized service points are desired.

L&ET Staff

Surveys, focus group sessions, meetings, and interviews helped engage the organization in the data collection process. At an open focus group session, all L&ET members had the opportunity to provide input on the most important statements of need, vision for renovation and expansion, and strengths and opportunities. Group consensus formed around the following themes:

- Active engagement and collaboration with university and community throughout the process.
- Synergy of combined services was highly valued.
- Diversity of spaces should be prioritized (reconfigurable, communal, quiet, partners, green, digital, presentation, experimentation, display, storage).
- Design considerations need to include the wide variety of student study and faculty research behaviors.

Additionally, the task force sent a 19 question survey to all employees of L&ET with the goal of gathering quantitative data on the climate and conditions in library spaces, qualitative data on the perceptions of library spaces, as well as needs and aspirations for reconfigured and new spaces. Following this survey the task force conducted interviews with the housekeeping staff to better illuminate the initial findings. Much of the input gathered from the organization appears throughout the report since the organization helped direct the work of the task force. The full results of the L&ET meeting and the survey can be found here. Some additional findings and highlights include:

- 37% of respondents find their workspaces too crowded or noisy.
- More than half of respondents are not physically comfortable with the temperature, humidity, or lighting in their workspaces.

- **Only 22% reported working with adequate task lighting**.
- Crowding, privacy, and furnishings are all major concerns.
- More than 60% find technology sometimes insufficient. **29% find technology insufficient.**
- 78% indicated that electrical outlets in office spaces are not conveniently located while 41% say the same of network outlets.
- Lack of supply storage and the safety aspects of cords impede housekeepers' ability to move carts and equipment in public spaces.
- The loading dock and staff entrance scored very poorly. Stacks, navigation/wayfinding, and restrooms also scored poorly.

"Library staff need effective, inspiring places to work both individually and cooperatively. They need participatory planning processes so that they can shape and buy in to the alterations and so that the process of designing their services and spaces can model the kinds of organizational approaches that staff can apply in all aspects of their routines."

- "Rethinking the Staff Workplace" Library Journal, Spring 2015

The task force distributed a different survey to students working within L&ET. Students were asked about perceptions of the library spaces. Some of the overarching themes include:

- Needs for a variety in lighting, social activity, noise level, and furnishings were identified. Expressed value of social activities, clean and well-lit spaces, and a desire for additional dining options in the libraries; this was paired with a distinct need for designated and enforced quiet spaces.
- Needs for more electrical outlets and charging stations, stronger and more consistent Wi-Fi access, restroom facilities, and group study rooms with tools that students use.
- Frustration with the competition for spaces that occurs, particularly at later times in the semester. Table and cubicle space was of higher value than couches, including movable furniture to push together for group work and break apart for individual work.

A focus group comprised of L&ET faculty and staff members responsible for leading or managing direct services were invited to participate in a services and programming focus group to create a roadmap for how users will interact with L&ET services in the future. Major themes of consensus from the meeting include:

- A shared vision for increased collaboration across the organization, enhanced by shared and flexible spaces and services. Ideally users will have easily understood, welcoming, and interactive access to all services, with no need to understand departmental functions or delineations.
- Team based approaches to serving campus groups came up repeatedly, particularly in the areas of meeting digital and multi-media scholarship needs.
- Incorporating the Music library into Carrier Library.
- Streamlining duplicative services across departments, and increased communication between areas that serve similar user populations.

Finally, the task force met with the Collections departmental units (Preservation, Digital Collections, Collection Management, and Special Collections) to hear specifically about collection space needs, as documented earlier in the report.

Faculty, Administration, and Community Partners

Although no specific studies were conducted with the above partners, both the literature and site-visits showed that engaging these groups early in the process of a design is key. Faculty needs differ greatly from student needs. Services of note in this area include: desktop delivery of materials; easy off-campus access to journals; and consultation on issues of copyright, open access, management of research outputs, media production services, digital assignment design, and online and blended course design. Access to primary resource texts, technologies to support shifting pedagogy, and quiet areas of study were also noted.

Administration at all levels should be involved in the visioning and alignment of new spaces with JMU values and aspirations. This includes, but is not limited to, academic campus heads, advancement and development, and centers and institutes as appropriate.

Finally, understanding overlap, and ongoing opportunities for collaboration, between community and building partners, such as the Learning Resource Centers, the Center for Faculty Innovation, and the Office of Sponsored Programs, should be a part of any planning process.

Moving forward, the task force recommends a series of focus groups and interviews with campus partners, faculty, and campus administration be conducted.

Reports on each of these research activities can be found here: http://www.lib.jmu.edu/about_us/buildings.

Inspirations to Guide Design

Inspirations and images were pulled from on-site visits, webinars, literature, and conversations with academic libraries that are in the process of, or have recently undergone, renovations, new build- ing projects, or expansions. Each of the subgroups identified inspirations that resonate with JMU ideals. While it is essential to keep pace with contin- ued university growth and shifting trends in the educational landscape, it is equally essential that spaces reflect JMU community values. This includes spaces that are transformative and flexible, active and service focused, and iconic while remaining technologically rich.

"Most importantly, this building is the place we wanted for our students—a place that stirs the spirit, stimulates the intellect, supports learning, invites engagement, and accommodates their need for comfort and community."

- Lee VanOrsdel, Dean of University Libraries, Grand Valley State University

Eastern Kentucky University, Noel Studio for Academic Creativity

Transformative.   Transformative spaces support trans- formative learning. Stepping through the doors of the library is the gateway to active, engaged learning at JMU. Everything needed to get work done is at users' fingertips — easy to use, borrow, move, and play with. This philosophy is applied consistently to building spaces, resources, and services.

Flexible.   Responsive spaces allow the library to meet student and faculty needs in the ever-changing world of higher education. Spaces should accommodate dynam- ic programming. Examples include auditoriums with retractable seating, bookable spaces for multi-purpose programming, movable furniture designed to facilitate group and solo work, and wireless connectivity.

Iconic.   A flagship building, the library embodies the universities' aspirations as a national model for the engaged university, while retaining its historical symbolism as the heart of campus. Learning is visible and inspiring – a connective space for the university where all disciplines come together to engage with ideas and the world.

Active.   Highlight the dynamic process of learning and research. Make learning visible across disciplinary communities, facilitate conversations, collaborate with university partners and community on programming, experiment with new technologies, and provide expert assistance.

Seattle Public Library

University of Maryland, Academy for Innovation & Entrepreneurship

Service Focused.   A continual focus on the user experience allows for the creation of flexible and agile services to meet campus needs. Lowering the threshold to access these services, and integrating technology support, further advances interactions. This approach to service should be incorporated into any renovation or building project.

Technology Rich.   Technology should be fast, reliable, and expandable. It should enhance spaces by providing opportunities for face-to-face collabo- ration, virtual collaboration, presentations, and active teaching and learning. Dedicated spaces should support digital media, the maker movement, digital scholarship, and innovative teaching by providing users with technology, tools, and resources to experiment, design and create learning content.

Sustainable.   Connect the building to the environment and sustainable environmental standards. Consider energy efficiency, support for alternative transportation, and outdoor spaces.

North Carolina State University, Hunt Library

North Carolina State University, Hunt Library

Approach for Carrier Library renovation and expansion

• Create spaces flexible enough to meet the current and future needs of our scholars.

• Provide adequate seating proportional to the JMU population with room to accommodate future campus growth.

• Update and expand Carrier Library to better reflect JMU's unique, bluestone version of American Colonial Revival with an eye towards uniting fragmented interior spaces created by multiple building additions.

• Serve as a one-stop location where students and faculty can easily access the resources and expert services that they need.

• Increase the visibility of user services through wayfinding and relocation of select units.

• Build innovative, multi-use spaces that highlight the dynamic learning process and provide students with a sense of ownership; a place for students and faculty to experiment and build with cutting edge technologies and resources.

Grand Valley State University Libraries

• Ensure all common spaces are technologically rich, and include a variety of wired options – including group study rooms, presentation and gaming spaces, a video production studio, and a 24-hour lab space.

• Meet the influx of current research, integrate technology assistance, and reduce barriers to students and faculty through streamlined and reimagined services offered in a single, supportive space.

• Provide centralized exhibition and programming spaces that reflect the vibrant partnerships within the JMU community, Libraries & Educational Technologies, and the local community. These spaces will highlight JMU as a leader in engaged learning.

• Reduce the footprint of the lower use collections; expand digital resources and locally created collections; create secure and environmentally sound spaces for rare, unique, and fragile collections materials.

• Accommodate the growing demand for Music, Media, Digital & Special Collections, and Instructional Technology services and resources to support the current and future scholarship and instructional needs on campus with technologically rich and flexible spaces.

North Carolina State University, Hunt Library

• Move the Music library and staff into a renovated and expanded Carrier Library in order to adequately care for the collections and better serve the expanded student population. (Current footprint of Music Library services & collections is 3,127 square feet, with only 1,000 square feet for public spaces.)

• Adjust staff spaces to accommodate new workflows that support 21st century libraries; include, collaborative, private, and flexible spaces as needed.

RECOMMENDATIONS

Design Approach

The building task force acknowledges that Carrier Library's inclusion on JMU's six-year building project and master plan underscores the commitment the University has already made to a renovation and expansion of this facility. The BTF strongly recommends that as an immediate next step a design and architectural firm is engaged to conduct a "Design Charrette" process. This process would allow us to develop a set of strategies to enhance and transform Carrier Library holistically, include thoughtful planning and prioritization of needs, and allow for a shared understanding from the outset of the final vision for the renovated building. A major consideration during this process will be a need to keep Carrier Library open during the project. With over 1 million visits per year by the JMU community, shutting down access of the facility, resources, and services is not an option. The Auraria Design Charrette serves as an example of this process: http://library.auraria.edu/sites/default/files/charette/AurariaFinal01132011.pdf

Future Research

In this brief 10-month study we were able to engage valued stakeholders to better understand their needs. The building task force recommends expanding the focus to a wider variety of stakeholders including: graduate students, faculty, library building and campus partners, and campus administrators and academic unit heads. Feedback from these stakeholders is integral to the renovation and expansion planning process. Immediate and ongoing user engagement should directly inform the charrette process and all future design considerations.

Methodologies that worked particularly well included focus groups and interviews. Convening represen- tative groups of each stakeholder category should be a priority. For example, capturing the perspective of library users as well as non-library users and differences across disciplines will be particularly valuable. Also, understanding space needs, such as student study preferences and faculty needs for teaching and research, longitudinally will paint a more holistic picture of campus needs. A strategic approach to captur- ing space use quantitatively within Carrier Library should be developed and implemented immediately. Adopting a framework for ongoing data collection and stakeholder engagement strategies should be developed in the near term as well, to ensure L&ET can make data-driven design decisions moving forward.

Based on the outcomes of the studies implemented here, the task force recommends that L&ET commit to a cycle of research conducted using ethnographic research techniques as demonstrated in Nancy Fried Foster's work: http://www.sr.ithaka.org/sites/default/files/files/SR_Designing_Issue-Brief_20140213.pdf. As task force members learned from colleagues across the state, small research studies of student behav-ior and expectations can result in high impact changes.

The renovation and expansion of Carrier Library is also an opportunity to build on successful relationships with users, while simultaneously contributing to the JMU mission and the learning outcomes of our students. The task force recommends approaching this renovation and expansion project with a partici- patory design philosophy. This will enable L&ET to strategically engage user communities, pay close attention to the work being done in our spaces now, and align spaces with JMU's guiding ideals and aspirations.

A participatory design approach has the added advantage of allowing L&ET to meet the needs of students and faculty while providing valuable opportunities for students to develop practical skills in their classrooms.

Participatory design recommendations include:

- Students: Prioritize student engagement in the renovation process through collaboration with anthropology classes, design classes, marketing classes, and others as appropriate, to integrate hands on student learning experiences with library design and service delivery decisions. This process can start immediately and continue through the design and renovation.
- Departments and Centers: Engage the Anthropology department and the Center for Assessment and Research Studies in constructing a participatory design process that includes administration, faculty, graduate and undergraduate students, community partners, and staff. This data could then be shared in a qualitative fashion with designers and architects.
- Services: Building on successful programs like the PEERS project at Rose Library and MadLab in Media Resources, work with ongoing L&ET student programs to expand and streamline these student teaching opportunities beyond our current capacity, focusing on the concierge model in the context of a renovation and expansion.
- Partners: Partner with faculty teaching in EPIC (Enhancing Pedagogy through Innovative Class room) Center and through CIT's Faculty Associate Program to develop spaces that encourage collaboration and enhance the teaching and learning process.

Organizational Structure

As we begin the process of rethinking library spaces, L&ET should also be evaluating and reconfiguring service models to meet newly identified and emerging needs of JMU users. This includes considering opportunities to consolidate service points, expanding peer-led offerings, integrating technology services for students and faculty into L&ET's suite of services, expanding collaborations in multi-modal learning environments, and exploring team-based models that meet needs in areas such as new methods of publishing, changes in scholarly communication, developments in digital humanities and data management, and multi-disciplinary research. L&ET should prioritize funding to support sustainable staffing, training, and technologies related to organizational restructure and shifting campus needs.

Recognizing that the most valuable resource in a library is the staff and talents inherent therein, L&ET has already begun to incentivize innovation and ingenuity. Projects like interactive tablet-based wayfinding, community outreach partnerships, tutoring opportunities for online students, and internships for graduate students in library and information science have been proposed and funded through L&ET foundation funds. In addition, a peer-to-peer service model has been implemented in Rose Library to extend research support during evening hours. The task force recommends that L&ET continue to incentivize innovation, with a focus on funding projects that pilot new service models, enhance student engagement, enrich the teaching and learning environment, and further inform the renovation and expansion of L&ET spaces. Some immediate recommendations include further exploration of the above listed models, the implementation of a technology and furniture sandbox area(s) to allow students and faculty to test new technologies and flexible furniture solutions before wide-scale adoption, and continuing explorations of trends and evolving pedagogies in higher education.