

» “A university is just a group of buildings gathered around a library.” —SHELBY FOOTE

Strategic Library™



Issue 18 // July 15, 2015

LASR Pointers

» **Assessing the need for, creating, and measuring standardized training for an automated storage and retrieval system.**

LIBRARIES AWARDED NATIONAL MEDAL

The four library winners of the 2015 National Medal provide inspiring programs and services to patrons.

DATA MAPPING: WHO NEEDS IT?

The visual display of community demographics helps libraries meet the needs of internal and external constituents.

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DESIGN LIBRARIES AS A COMMUNITY OF LEARNING

As libraries evolve, new tensions have emerged between learning activities and space design.

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MANAGING THE ONE-PERSON LIBRARY

All librarians share the interests and goals essential to the success of their counterparts in smaller libraries.

BY LARRY COOPERMAN

BY HEATHER JOHNSON AND GREG VOELKER

At the University of Nevada, Las Vegas (UNLV) University Libraries, the Lied Automated Storage and Retrieval (LASR) system is an onsite overflow storage facility that provides a valuable service to all library users. The automated system has large moving parts that need an operator for exact instructions, interpretation, and judgment. As a result, operating and understanding LASR functions requires extensive training.

With a shift toward a broader inclusion of operators among the libraries' 200 staff members, University Libraries is currently creating internal library-wide standardized training to more effectively instruct staff for consistent operation and performance of the LASR system. The goal of this revised training is to create improved, outcomes-oriented instructional materials for varying levels of functionality (basic, intermediate, and advanced) and learning styles.

ASRS — WHAT IS IT?

An automated storage and retrieval system (ASRS) is an operator and computer-controlled framework of bins (**see Image 1 and Image 2**). Items stored are retrieved by a robotic crane that moves up and down a central aisle. When given a command from the operator, the crane retrieves a bin from the frame and deposits it to a designated workstation. When the operator completes a task, the crane returns the bin to its home location.

ASRS technology has been used in the industrial world since the 1950s to significantly decrease the time it takes to manually retrieve items in storage.¹ These systems have been installed in American libraries since the 1970s; however, the first systems experienced difficulties with suppliers, maintenance costs, equipment, computer control, and user requirements.²

As technologies advanced, libraries began to pilot ASRS again in 1990. The



Image 1: Lied Automated Storage and Retrieval (LASR) System



Image 2: Operating LASR

first successful American library ASRS was installed in Oviatt Library at California State University Northridge (CSUN).³ The success at CSUN encouraged other university libraries to develop and install an ASRS for their institutions, including Eastern Michigan University, Sonoma State University, and UNLV.⁴

INSTALLING AN ASRS AT UNLV

The development of ASRS at UNLV University Libraries began in 1993 when a

consultant was hired to lead the discussion about future collection growth through the Libraries Space Feasibility Study. Since the university had begun to construct a new main library building in the early 1990s, this was a perfect time to consider incorporating a new storage space.

The library planning group, including outside architects, toured the ASRS installation at the Oviatt Library at CSUN to inquire about adapting this technology. Weighing

the advantages and disadvantages observed in the study, members of the UNLV library planning group were convinced that an ASRS would be necessary to most effectively store its collections for ongoing and future needs.⁵

Once the decision was made to adopt an ASRS, planning, construction, and installation began. The group estimated the amount of space needed to house 1.2 million volumes, allowing for expansion through the next 40 years.

The planning group determined all specifications for the system in detail, including bins, storage racks, computer hardware and software, storage and retrieval vehicles, electrical and data wiring, and conduit. Certain collections were easily identified to be housed in storage, namely bound periodicals, select government documents, Special Collections archival materials, microfiche collections, and older reference materials.

In April 2000, a nearly 40-foot-high three-aisle system was installed in the newly constructed Lied Library with expansion room for three additional aisles. This system was given the name: Lied Automated Storage and Retrieval (LASR) system.⁶

SPECIFICATIONS

The LASR system consists of a framework of six metal racks that hold 5,665 sheet-metal bins. Two of these racks are assigned to each of three independently functioning aisles. Each rack has 37 columns with 26 bins in each column. All bins are the same length and width, but differ in height (6", 10", 12", 15", or 18") to accommodate a variety of materials:

Specific configurations of sectors within each bin can be created and rearranged using wooden or metal partitions as dividers, which helps support the contents and makes it easier for staff to locate any particular item. Each item stored in the LASR is assigned a barcode, which links to a unique bin and sector location for inventory and retrieval purposes. Potentially, anything that can fit into a bin can be stored in LASR.

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ITEM RETRIEVAL AND STORAGE

The two main operations of LASR are item retrieval and item storage. Each of these processes has a series of steps initiated and managed by a staff member. During the regular item retrieval process, a request for a stored item is placed through the online public access catalog (OPAC). The OPAC sends the request to the LASR software, which in turn alerts staff to retrieve the item.

A staff member must identify which aisle houses the item(s) and enter the commands to start the retrieval function. The bin's location is given as a coordinate consisting of the aisle number, side of the aisle, column number, and row number (for example, 01-2-015-08). The crane adjusts to the level of the bin and pulls it from the rack onto a carriage platform. The crane then deposits the bin at the staff workstation.

Removing the item from the bin requires a staff member to access the bin and locate the item. The computer monitor at the staff workstation displays a diagram of the bin and highlights the sector where the item is stored. The staff member uses the barcode to identify the correct item and scans it to complete the retrieval process and update the system's inventory. The item barcode is also scanned for usage statistics. A receipt is printed with the requestor's name and is placed with the item for easy identification at pick-up. The entire retrieval process is estimated to take about five minutes.

The process of item storage is usually started by placing an item on a designated LASR re-shelving cart. A staff member goes to a workstation, enters the appropriate commands, scans the item's barcode, and sets the appropriate parameters to retrieve the correct bin. The system retrieves the bin and deposits it to the workstation, highlighting a sector in which to store the item (see Image 2). Staff members must use their judgment to determine appropriate space within the sector, scan the item into inventory, mark the sector capacity, and return the bin to its place in the rack in the correct order.

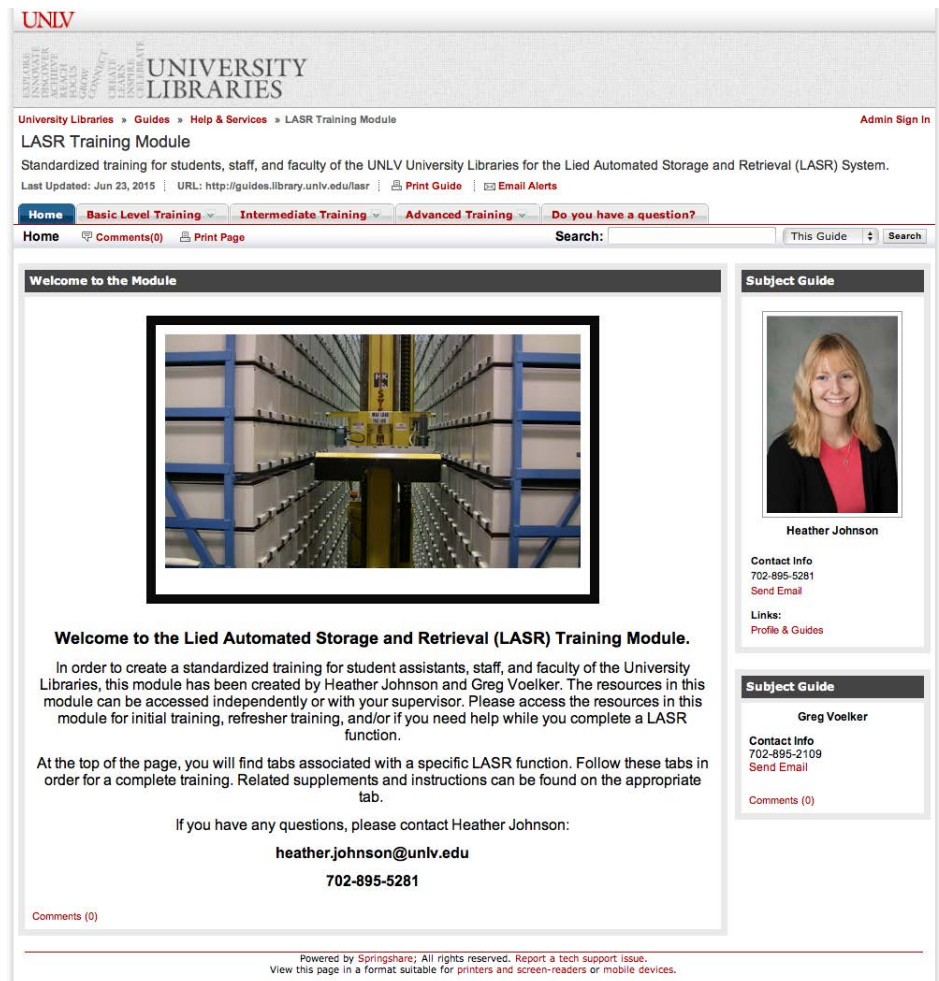


Image 3: LASR Training Module

THE NEED FOR STANDARDIZED TRAINING

During the process of designing and installing the system, workflows and data-flows were defined. To accomplish these tasks, the library planning staff "walked" the item retrieval and storage processes multiple times from the perspective of staff, patron, and the system. In the process, library personnel learned what standard materials handling procedures and quality assurance measures were needed. The library planning staff also developed and documented the processes and flow of information among users, the integrated library system (ILS), and the LASR system.⁷

Since LASR's April 2000 inception, front-

line managers have repeatedly uncovered errors in the workflow during regular operations, audits, and inventory processes. Items incorrectly stored, damaged, or even believed to be withdrawn from the system were all found within the bins. The initial standard materials handling procedures and quality assurance measures failed to prevent these mistakes.

Further analysis demonstrated that these errors could have been avoided had the processes of item retrieval and item storage been completely understood by the operators. The lack of codified procedures and easily accessible documentation coupled with successive, and varying, individual

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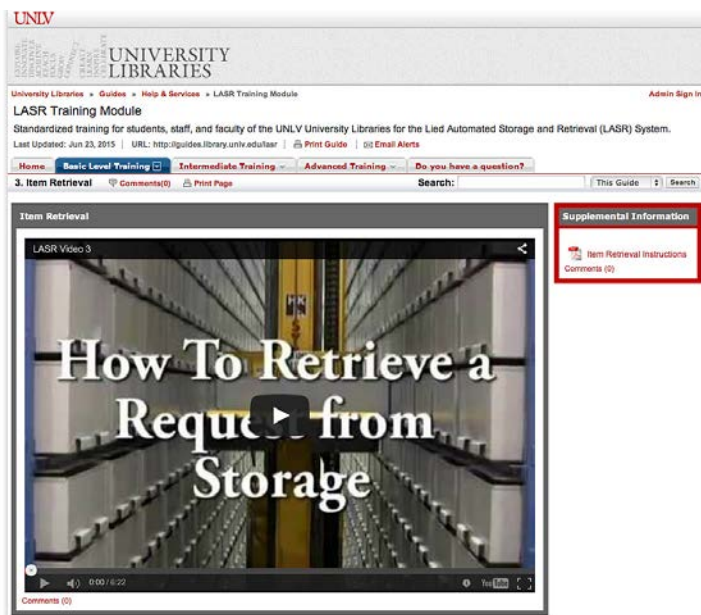


Image 4a: LASR Item Retrieval Training Page

understanding appear to have contributed to these errors.

Originally, the library allocated two new staff positions to handle daily operations in LASR. All Circulation staff and students were trained to at least retrieve requests for items with the goal of always having a staff member available to meet user demand.⁸ As needed, Circulation staff and students would be trained to store items.

Currently, no full-time staff members are assigned solely to LASR operations. Item retrieval is handled by any Circulation employee (staff or student) whereas item storage is handled by staff and students from various library departments, including Stacks Management and Special Collections. Designated staff members from certain departments (Collections, Acquisitions, and Discovery (CAD); Stacks Management; and Library Information Technology) are responsible for troubleshooting LASR software and mechanical problems.

Front-line managers observed that new student operators of LASR were being paired with more experienced operators, who could be either peers or supervisors. While the experienced operators had a documented sequence of steps to follow, each instructed new operators using slightly different techniques. These differences created variations in the workflow, which led to confusion regarding procedures and an increased number of errors.

This reduction in quality led front-line managers to think about the need for revised standards and enhanced training. Much of their thinking was guided by their

reading of *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. In their book, authors James Womack and Daniel Jones define standard work as “the best way to get the job done in the amount of time available and how to get the job done right the first time, every time.”⁹

While the initial planning fifteen years ago had documented the processes and flow of information, current managers decided to investigate ways to make the information more understandable and accessible, thereby making the work more consistent and allowing employees to self-monitor their work for errors at the time of operation. More effective communication and inclusion was also needed within the multiple library departments since staff came to the project with diverse technical abilities, backgrounds, learning styles, and vocabularies.

LASR STANDARDIZED TRAINING

In September 2014, a seven-part training program was developed to decrease the time needed for instruction and discrepancies in teaching. Ultimately, the overall program would comprised basic ASRS operations, inventory auditing, and troubleshooting.

Currently, two of the individual training modules have been completed: *Item Retrieval* and *Item Storage*. This initial training was tested with student assistants employed in

Image 4b: LASR Item Retrieval Training Page

the spring of 2015.

The training program is hosted on a Springshare LibGuide (see Image 3), which consists of five main sections: Home, Basic Level Training, Intermediate Training, Advanced Training, and an online form to submit questions. Each of the seven modules has a separate page that includes a training video, supplemental instructions, and a survey (see Images 4a, 4b, 5a, and 5b).

While designing the training, staff considered content accessibility to be a primary goal. The training was designed to be accessed either independently or with a supervisor for initial training and refresher training, or even remotely while operating the system. Currently, the revised training is available on a shared library drive (LibGuide) and hosted on a third-party website (YouTube). Digital back-ups were created and stored on a portable storage device.

In addition to accessibility, staff also considered learning styles to be of high importance. The modules, therefore, are being designed to incorporate various instructional methods of learning using visual, auditory, and even kinesthetic stimuli.

Employees are instructed to navigate a

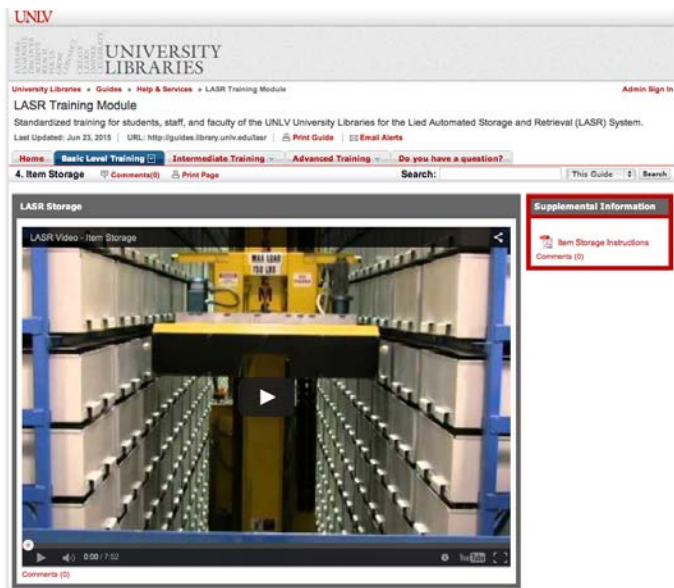


Image 5a: LASR Item Storage Training Page

website, watch and listen to training videos (created using video equipment and Adobe Premiere), respond to surveys, and then practice the functions demonstrated in the video with a declining amount of supervisor direction and assistance. Surveys were created to check for understanding by asking specific questions about the processes and to obtain feedback from trainees about the video's application to their job and the processes.

PILOT DATA

Item Retrieval training was tested with seven student employees, with three assigned to a Control group and four to an Experimental group. *Item Storage* training was tested with six student employees, with the group split equally between a Control group and an Experimental group. None of the students had any previous experience working with an ASRS or LASR.

Students assigned to the Control groups completed training through traditional techniques. An experienced supervisor was paired with another staff member or student employee. The trainers explained the process, modeled the instructions, and allowed the student operator to practice the process.

Students in the Experimental group followed enhanced guidelines, accessed the LibGuide, watched the video training, completed the accompanying survey, and also practiced the processes.

During practice sessions, trainees were asked to complete three different tasks. For *Item Retrieval*, both the Control and Experimental groups practiced retrieving a single item, multiple items, and one missing exception item. For *Item Storage*, both groups

practiced storing a single item, multiple items, and one exception item from Special Collections.

While completing the process, the trainers timed the length of the instruction and the duration of each task performed, counted errors, recorded the number of questions asked, and noted if coaching from the trainer was required.

ITEM RETRIEVAL RESULTS

Overall, the total training time for the Control group was nearly twice that of the Experimental group (Control: 38 minutes, 1 second; Experimental: 19 minutes, 15 seconds). Training times provided for the Control group fluctuated, however, since the trainer verbally expressed the directions, modeled the instructions, checked for understanding, and answered questions from the trainees. Training times recorded for the Experimental group were consistent, since the instruction came from the same uniform source material.

On average, the Experimental group asked more questions about the process of *Item Retrieval* except in the task of retrieving multiple items. In all three tasks, the Experimental group consistently required more coaching, which appeared to indicate positive involvement and participation in the learning process.

Average times, number of questions, and coaching data for the *Item Retrieval* training

LASR Item Storage Survey

LASR Item Storage Survey

Please enter your responses for the video you completed. Survey responses will be confidential. Last Name will be collected to combine separate workshop data for analysis, not to judge performance or skills. Results will be generalized.

Last Name *

1. During the item storage process, how many times do you scan the item's barcode? *

☐ Zero

☐ One

☐ Two

☐ Three

2. Which items are stored permanently in a specific aisle and bin location? For these items, you do not need to verify or adjust the item parameters. *

☐ Special Collection

☐ Media

☐ Microfilm

☐ All of the above

3. On a scale of 1 - 5 (1 = strongly DISAGREE, 5 = strongly AGREE), rate this statement: The information presented in this video will help me with my job. *

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

4. In what specific ways did the video help you understand the work? *

5. What do you still have questions about, or would have liked more detail on? *

Submit

Comments (0)

Image 5b: LASR Item Storage Training Page

are compiled in **Table 1.1**.

When comparing overall accuracy in *Item Retrieval*, the Control group was more accurate (97.50 percent) than the Experimental group (95.83 percent). When retrieving one or more items, both groups were equally accurate. In the task of retrieving exception items, the Experimental group was less accurate (95.00 percent) than the Control group (100.00 percent). The difference centered on one trainee from the Experimental group who had difficulty navigating the text-based system of the ASRS and correctly marking the sector capacity. The small sample of trainees might also have contributed to the degree of variance.

Accuracy measures for the *Item Retrieval* training are compiled in **Table 1.3**.

The four trainees in the Experimental group who participated in the *Item Retrieval* survey either agreed or strongly agreed that the information presented in the video would help them with their jobs. In fact, all four were 100 percent accurate in correctly identifying and determining the steps of the *Item Retrieval* process in the survey without assistance. One participant expressed liking the visual showcasing of LASR and watching

Table 1.1 Average Time, Number of Questions, and Coaching Instances For Item Retrieval

	One Item		Multiple Items		Exception Item		Training Total	
Control (n=3)	Average Time	4:49:00	Average Time	5:28:00	Average Time	5:12:00	Average Time	38:01:00
	Average No. of Questions	1.67	Average No. of Questions	1.67	Average No. of Questions	0.33	Average No. of Questions	3.67
	Average No. of Coaching Instances	0.67	Average No. of Coaching Instances	1.00	Average No. of Coaching Instances	0.33	Average No. of Coaching Instances	2.00
	One Item		Multiple Items		Exception Item		Training Total	
Experimental (n=4)	Average Time	5:02:00	Average Time	4:37:00	Average Time	3:14:00	Average Time	19:15:00
	Average No. of Questions	2.75	Average No. of Questions	1.50	Average No. of Questions	0.50	Average No. of Questions	4.75
	Average No. of Coaching Instances	3.00	Average No. of Coaching Instances	1.25	Average No. of Coaching Instances	0.50	Average No. of Coaching Instances	4.75

**Items highlight indicate the higher value between the Control and Experimental groups for that particular criteria (time, questions, or coaching).

Table 1.2 Average Time, Number of Questions, and Coaching Instances For Item Storage

	One Item		Multiple Items		Exception Item		Training Total	
Control (n=3)	Average Time	3:18:00	Average Time	3:42:00	Average Time	2:01:00	Average Time	18:14:00
	Average No. of Questions	2.00	Average No. of Questions	1.33	Average No. of Questions	0.33	Average No. of Questions	3.67
	Average No. of Coaching Instances	1.00	Average No. of Coaching Instances	0.67	Average No. of Coaching Instances	1.00	Average No. of Coaching Instances	2.67
	One Item		Multiple Items		Exception Item		Training Total	
Experimental (n=3)	Average Time	3:00:00	Average Time	3:49:00	Average Time	1:48:00	Average Time	16:30:00
	Average No. of Questions	1.67	Average No. of Questions	1.00	Average No. of Questions	0.33	Average No. of Questions	3.00
	Average No. of Coaching Instances	1.00	Average No. of Coaching Instances	1.33	Average No. of Coaching Instances	1.00	Average No. of Coaching Instances	3.33

**Items highlight indicate the higher value between the Control and Experimental groups for that particular criteria (time, questions, or coaching).

the process unfold on-screen, while another related feeling more prepared after viewing the video before practicing with LASR. Some participants asked for more information about other LASR commands and requested further practice. The new, enhanced video content stimulated an interest to learn and begin training with the system beyond what was originally expected.

ITEM STORAGE RESULTS

While administering the training for Item Storage, the Control group took longer than the Experimental group (Control: 18 minutes, 14 seconds; Experimental: 16 minutes, 30 seconds). On average, the Control group asked more questions about the process than the Experimental group; for the exceptions item task, both groups asked the same average amount of questions.

Both groups required the same average amount of coaching from the trainer for the one item task and the exception item task. The Experimental group did require more coaching during the process of storing multiple items. This variance may indicate increased participation in the learning process, expressed need for validation, or unfamiliar content in the video.

Average times, number of questions, and coaching instances data for the Item Storage training are compiled in **Table 1.2**.

When comparing overall accuracy, the Control group was more accurate (97.53 percent) than the Experimental group

(95.06 percent). When storing multiple items, both groups were equally accurate. When storing one item, the Experimental group was more accurate (96.30 percent) than the Control group (92.59 percent). One possible explanation for this discrepancy is inconsistent wording used by the trainer, which may have influenced the individual trainees' understanding.

The Experimental group had difficulty with the exception task, which resulted in decreased accuracy (88.89 percent). Two trainees had questions and required coaching on how to access the bin, scan the item, and mark the sector capacity.

Accuracy for Item Storage training can be found in **Table 1.3**.

All three trainees from the Experimental group participating in the *Item Storage* survey strongly agreed that the information presented in the video would help them with their jobs, noting that the video was "descriptive," "clear," "instructive," and "helpful." One trainee, however, had difficulty understanding how exception items are stored in LASR, which





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Table 1.3

		Accuracy	
		Item Retrieval	Item Storage
Control	<i>One Item</i>	96.67%	92.59%
	<i>Multiple Items</i>	95.83%	100.00%
	<i>Exception</i>	100.00%	100.00%
	Total	97.50%	97.53%
		n=3	n=3
		Item Retrieval	Item Storage
Experimental	<i>One Item</i>	96.67%	96.30%
	<i>Multiple Items</i>	95.83%	100.00%
	<i>Exception</i>	95.00%	88.89%
	Total	95.83%	95.06%
		n=4	n=3

explains the lower accuracy for the exception task. Most trainees expressed that the video answered their questions, but some wanted to know more about item height guidelines and troubleshooting the system.

INTERPRETING THE RESULTS

As anticipated, the standardized training did demonstrate significant benefits, such as shorter instruction times and higher levels of accuracy. In response to the number of questions asked and coaching required by the Experimental group, further revision of all training modules should allow for increased opportunities for one-on-one practice with an experienced trainer. This change will both strengthen the trainees' understanding of LASR operations and provide feedback for continuous improvement of the instruction.

Although limited, UNLV University Libraries staff believes this initial data is informative and beneficial in shaping future training and standardization of the process. As desired, pilot data about task performance and trainee survey feedback indicated areas for improvement. For example, the *Item Retrieval* and *Item Storage* videos can be further revised to include more detailed instruction requested by trainees, while the *Item Storage* video will explain more about matching item size and sector dimensions.

Admittedly, more training with more trainees may yield different results. As this project moves forward, however, more detail on ASRS operations and refined wording will help to facilitate the operator's understanding of the material and improve accuracy during task performance. ■

ABOUT THE AUTHORS: Heather Johnson manages the physical collections at UNLV University Libraries - Lied Library as Stacks Supervisor. She can be reached by phone at (702) 895-5281 or by emailing heather.johnson@unlv.edu. Greg Voelker coordinates continuing resources workflows and database subscription renewals for UNLV University Libraries. He can be reached by phone at (702) 895-2109 or by emailing greg.voelker@unlv.edu.

FOOTNOTES:

¹ Sarah Elizabeth Kirsch, *Automated Storage and Retrieval—The Next Generation: How Northridge's Success is Spurring a Revolution in Library Storage and Circulation* (ACRL Ninth National Conference Papers, 1999), pg. 2.

² Ibid.

³ California State University Northridge Oviatt Library, "Automated Storage and Retrieval System (ASRS)," <http://library.csun.edu/About/ASRS> (accessed May 21, 2015).

⁴ Miller Nichols Library, "About the Robot," <http://library.umkc.edu/newmnl/about-robot> (accessed May 21, 2015). pg. 5

⁵ Michaelyn Haslam et al., "The Automated Storage and Retrieval System (ASRS) in Lied Library," *Library Hi Tec*, 20, no. 1 (2002) <http://www.emeraldinsight.com/doi/full/10.1108/07378830210420708>.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ James P. Womack and Daniel T. Jones, *Lean Thinking: Banish Waste and Create Wealth in Your Corporation* (New York: Free Press, 2003), pg. 113.

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Libraries Awarded National Medal

Since 1994, the National Medal for Museum and Library Service has honored 152 outstanding institutions that have made significant contributions to their communities. Selected institutions demonstrate innovative approaches to public service, exceeding the expected levels of community outreach. The winners are selected by the director of the Institute of Museum and Library Services (IMLS) and the National Museum and Library Services Board.

For the last six years, personal stories demonstrating the ongoing impact of the award winning institutions are being documented through a cooperative agreement between IMLS and StoryCorp, the national nonprofit organization dedicated to recording, preserving, and sharing the stories of Americans from all backgrounds and beliefs. These stories are preserved at the American Folklife Center at the Library of Congress.

The following four libraries, winners of the 2015 National Medal for Museum and Library Service, received their awards from Mrs. Michelle Obama in a recent White House ceremony. The range of services they offer can provide a template for library administrators as they set programming priorities in their strategic plans.

CECIL COUNTY PUBLIC LIBRARY, CECIL COUNTY, MD

"Public libraries have a powerful role in creating opportunities by keeping the doors to knowledge open, allowing creativity to flourish, and never letting barriers become insurmountable." Denise Davis, Director.

The Cecil County Public Library serves a predominately rural area in the northeast corner of Maryland with seven branches and a bookmobile. The library's Small Business Information Center is an anchor for the local small business community, providing free information and individual assistance with the process of starting or running a small business.

To address educational challenges including a high dropout rate among lower-income students, the library established strategic partnerships with schools so its summer reader program reached more stu-

dents living at or near poverty. Through the SPARK (Students Progress and Achieve with Reading Kits) program, the library works with schools and school librarians to connect with these students before they leave school. Librarians help children select five books based on their interests, which they can take home over the summer.

The library has also used its bookmobile to circumvent transportation barriers and connect with low-income housing neighborhoods in the county. Administrators have initiated a transformational service model for equipping nearly 500 veterans who reside in the area with technology and employment skills. They have also partnered with a local credit union to provide a series of financial literacy classes for veterans. The library has become a leader in state-wide efforts to develop services for veterans in public libraries.

CRAIG PUBLIC LIBRARY, CRAIG, AK

"Craig is a very small town...we don't have a theater or a big arts community—everything is at the library. But we connect people on this remote island to the world. Their world. And we have watched patrons succeed beyond our wildest dreams." Amy K. Marshall, Director.

The Craig Public Library is a small institution in southeast Alaska on Prince of Wales Island. For nearly 80 years—predating Alaska's statehood—the library has served local citizens, seasonal visitors, and a summer fishing fleet. In an area where 90 percent of children qualify for free or reduced school lunches, the library serves as a community resource. Families come to the library to access materials, involve their children in programs that teach literacy and science, and use public computers and other technology.

In response to high unemployment rates, the library facilitates job readiness pro-



grams, interview and job skills training, and testing for certification exams. The Alaska OWL (Online with Libraries) Program allows distance learning students and professionals to access classes. The library also assists patrons as they prepare for GED tests and works with the local courts to create opportunities for community service work so individuals can gain workforce skills.

Through a grant from the Young Adult Library Services Association, the Craig Public Library was the first public library in Alaska to make a 3-D printer available for patron use during a Teen Tech Week Project. Teen library patrons spent a week building the printer on site then demonstrating how it works during a community-wide science celebration.

EMBUDO VALLEY LIBRARY AND COMMUNITY CENTER, DIXON, NM

"Our modus operandi is to say yes when people in the community ask for our support." Felicity Fonseca, Executive Director.

Located in an unincorporated rural community in northern New Mexico, the Embudo Valley Library receives only a small portion of its budget from local government services, raising 60 percent of the budget from foundations and local donors. It fills a key need in its community of nearly 1,500 people for literacy and education support and offers programs and services maximizing economic advancement. A move to a new site in 2014 allowed the library to introduce more public access to computers while also providing space for tutoring, distance learning, an expanded collection, and a radio station.

The library's Caterpillar Club Early Literacy program serves children 0 to 5 who attend with their parents, grandparents, or caregivers. This pre-kindergarten program focuses on early literacy and school readiness with



The Institute of Museum and Library Services (<http://www.imls.gov>) is the primary source for federal support of the nation's 123,000 libraries. Its mission is to inspire libraries to advance innovation, lifelong learning, and cultural and civic engagement. Through its grant making, policy development, and research, IMLS helps librarians deliver valuable services that make it possible for communities and individuals to thrive.

IMLS thanks HISTORY for their generous support of the National Medals celebration.

a read-aloud story time; crafts, music, and games; and outdoor activities. Expanded adult learning programming includes book reading by local authors, documentary film screenings, and movies as well as discussions on palliative care and end of life issues for seniors.

LOS ANGELES PUBLIC LIBRARY, LOS ANGELES, CA


"In addition to providing exceptional traditional public library service, we have opportunities to change people's lives, address significant public issues, and welcome individuals into the community." John F. Szabo, City Librarian.

Through its 73 locations, the Los Angeles Public Library serves the largest and most diverse population of any library in the country. Under its Path to Citizenship program, the library partners with U.S. Citizenship and Immigration Services, social service agencies, nonprofits, and local governments to help immigrants navigate the path to citizenship and integrate into local culture. Every branch has a Citizenship Corner with resources in multiple languages and staff members trained in

the naturalization process.

The library works to reduce health disparities through Health Matters, an initiative that provides direct access to workshops that encourage healthy food choices and behavior as well as to flu shots, eye exams, and free prescription eyeglasses in underserved communities. Its Money Matters program helps patrons get their finances in shape and avoid predatory financial products and services. It also provides a financial resource guide to point patrons to library and online resources providing information on savings, credit, investments, budgeting, financial planning, and consumer protection.

The library's free college preparation workshops, practice tests, and Student Zone nurture student learning. Adults have the opportunity to earn an accredited high school diploma and career certificate online. It also launched Full STEAM Ahead, which presents science, technology, engineering, art, and math programs for preschoolers and school-aged children to address the lack of free or low-cost afterschool programs. ■



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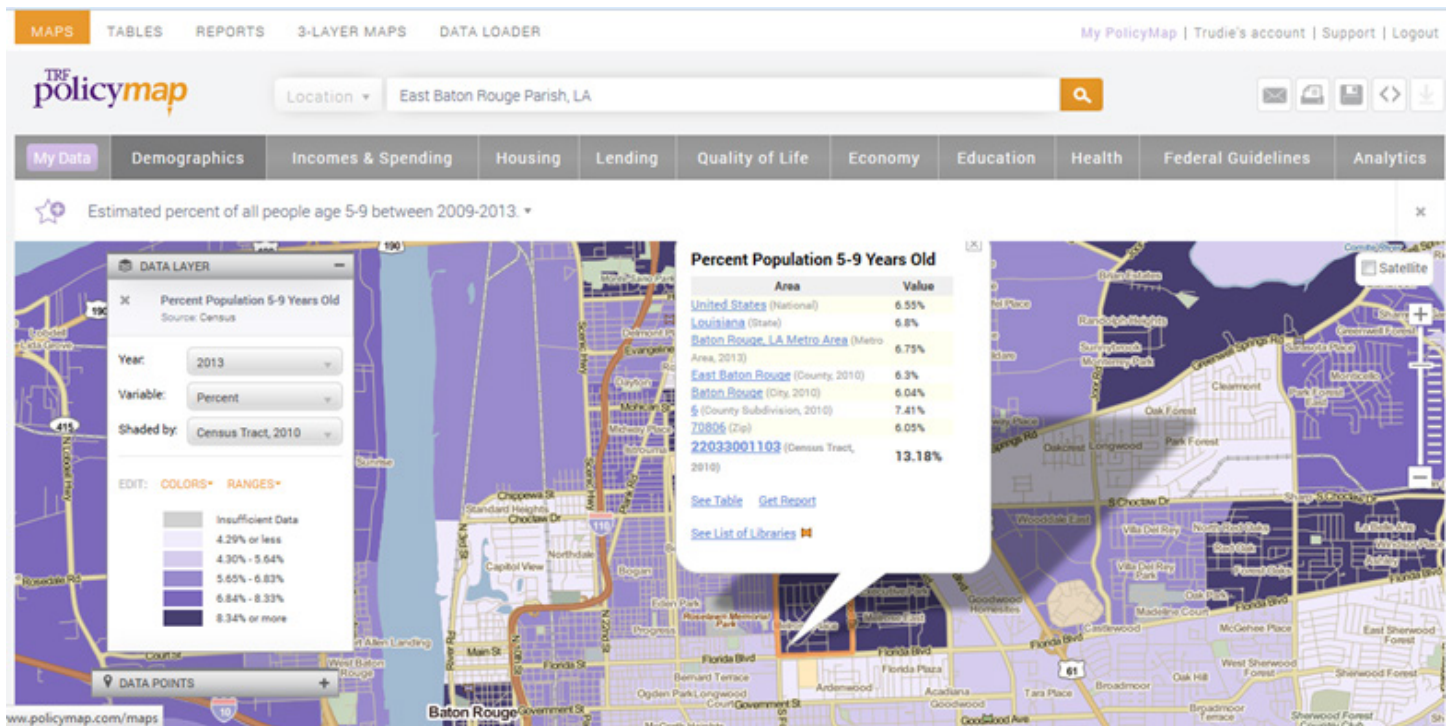
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Data Mapping: Who Needs It?

» The visual display of community demographics helps libraries meet the needs of internal and external constituents.



BY TRUDIE THOMAS

Online mapping enables government, commercial, non-profit, and academic institutions to access data about communities and markets across the United States. Through web-based geographic information systems, users can analyze large amounts of data to produce maps, tables, charts, and reports.

Data on thousands of indicators such as demographics, lending, housing, income and spending, quality of life, education, jobs, health, and federal programs can be accessed independently or through services, such as PolicyMap, that provide online software.

DATA MAPPING AND LIBRARIES

Academic libraries are a natural fit for including data mapping software in their offerings, and the results are used by faculty and students in course work and for research. Mapping software allows users to

focus on analyzing data, not on collecting it. The data has also been used by academic library administrators to assist with development projects, community engagement, and grant writing.

More recently, public libraries have learned that data mapping can be a valuable tool for decision making in various library contexts and for providing valuable information for community partners.

EAST BATON ROUGE PUBLIC LIBRARY

With a staff of more than 540 employees, Louisiana's East Baton Rouge Parish Library System (EBRPL) has been an important community resource for 75 years and has received numerous national and state awards. EBRPL operates under the control of the City/Parish government and at the direction of the Library Board of Control, which is appointed by the Metropolitan Council. Assistant Director Mary Stein has been with EBRPL for 30 years and is passionate about

helping her community, from patrons and organizations served by the local branches, to the local businesses and governmental entities. While attending the Louisiana Library Association's annual conference, and she identified a number of ways her library system could benefit from data mapping, including site selection, advocacy, and strategic planning.

One of the first projects Stein explored through data mapping was a comparison of two locations the library was considering for a new branch. Visualizing a 1-mile, 3-mile, and 5-mile radius around each location, she accessed online demographic maps to compare who was living in each location and what other community resources were available in the area.

"Finding a site for a new branch is politically sensitive," she explained. "You can't just say, 'That'll be a good place!' You have to prove that the residents match up with the library's customer base."

» **“We want to maximize successful outcomes for our community, and yet we know we only have limited resources,” says McCullough. Mapping helped the group begin to visualize current efforts across the city and to place these activities within a larger demographic context. “This is exactly the kind of information we need to help guide our decision making.”**

Stein shared the location insight she acquired through the maps with Library Director Spencer Watts, who passed it on to the Library Board and a site search firm that was helping them through the process. As a result, the Library Board was able to clarify their ideas about population demographics and refine their site selection parameters for the new branch.

The library also used mapping to advocate for funding. In preparing for the 2015 election that will include a vote on millage rates, Stein again relied on online maps to illustrate demographic changes in East Baton Rouge over the past decade. In particular, she highlighted the population boom post-Hurricane Katrina, when nearly a quarter of a million people descended on the city overnight, many of them staying on as permanent residents.

Through the mapping data, Stein was able to document growth points and points of change, “input measures” that are essential to communicating the library’s value to the community (along with “output measures,” such as circulation). While the election will take place next October, the library is actively lobbying now with the Metro Council, government officials, and stakeholders to set the millage rate.

EBRPL has also used data mapping to help increase the relevancy of the library’s reference services and to broaden its outreach to the community. One of the first reference requests came from the Baton Rouge Area Chamber (BRAC), which needed a variety of economic and workforce data. The library reference staff was able to locate and export the data as maps and reports to provide visual information for the BRAC.

Stein plans to reach out to the city council, the planning office, the mayor’s staff, the redevelopment association, several local and state non-profit groups, and grant writers to let them know how the library can help

them provide reliable insight for their work. The reference staff is even beginning to populate the library’s own interactive Community Information Database/Asset Map with relevant data.

BALTIMORE COUNTY PUBLIC LIBRARY

The Baltimore County Public Library (BCPL) has been serving the suburban community surrounding the city of Baltimore since 1948. Based in Towson, Maryland, this nationally recognized library system has nineteen branches, almost one-half-million registered users, and more than ten million loans per year.

Emily Gamertsfelder, BCPL’s planning, projects and data coordinator, uses data mapping software to input patron data and assess a variety of indicators in relation to that data. According to Gamertsfelder, BCPL is using the data to redefine their services and analyze the community demographics of each branch. BCPL generates reports based on newly defined services and compares those to radius reports two or more miles around the branch library locations. The reports illustrate vast differences between the new services and the existing radii around the branches.

This information has also been used by the 70-plus staff members who are working to determine priorities for BCPL’s FY16-18 Strategic Plan. To further help with this project, BCPL staff created maps based on who is using the library, finding that patrons may be visiting branches outside of their neighborhood. They are then using the software to help determine which services—e-government or passport services as well as literacy programs—are needed at the various branches.

For example, workforce and employment data indicators helped BCPL identify areas that might need mobile career centers with laptops to help residents find jobs. Also, the

population of Baltimore County is aging: 14 percent to 16 percent of the residents are age 65 or older. Through mapping, BCPL can visualize areas with concentrated numbers of senior citizens and tailor services relevant to this age group.

CARNEGIE LIBRARY OF PITTSBURGH: OFFICE OF PROGRAMS AND PARTNERSHIPS

Carnegie Library of Pittsburgh’s (CLP) mission is to engage its community in literacy and learning. Established in 1895 by philanthropist Andrew Carnegie as a public trust to be funded by the community, the library derives approximately 90 percent of its annual operating budget from public or government sources, including the Allegheny County Regional Asset District, the Commonwealth of Pennsylvania, and the City of Pittsburgh. With more than 2 million visitors and 3.9 million items borrowed each year, CLP is one of the largest public libraries in Pennsylvania.

CLP contributes to the educational attainment, economic development and cultural enrichment of the region. Through critical services—such as early learning programs for children, job search assistance, and computer and Internet access—the library fosters lifelong learning. Assistant Director Holly McCullough heads CLP’s Programs and Partnerships Office. McCullough and the program and service coordinators she works with were interested in using data tools to target and strategically prioritize the library’s efforts.

“We want to maximize successful outcomes for our community, and yet we know we only have limited resources,” says McCullough. Mapping helped the group begin to visualize current efforts across the city and to place these activities within a larger demographic context. “This is exactly the kind of information we need to help guide our decision making,” she adds.

» “Librarians know their communities, but it’s powerful to be able to confirm our experiences,” says Kinney. Once she set up custom regions, Kinney has been able to run reports. “I can export age ranges from our ILS and easily see the number of children registered with the library in any part of the county,” she explains.

McCullough has also found the tool to be beneficial when accessing needed data during communications with stakeholders. “We work with a number of funders who are focused on particular neighborhoods and regions,” she explains. “Being able to respond to questions about needs and demographics in any particular area communicates that the library is a valuable community asset and partner.”

As a Fellow in Public Affairs for Coro Pittsburgh, an organization with a mission to advance ethical and effective leaders who share a commitment to civic engagement, Flavia Bleahu served a rotation supporting CLP’s planning efforts. She created custom regions for each library service and uploaded data on their outreach and in-reach programs. She also mapped K-5 and early learning programs to visualize against criteria such as families in poverty and changes in the areas over time.

Through pinpointing an area of interest by layering different conditions, Bleahu was able to explore beyond the original scope of her deliverables and offer recommendations for new sites of outreach to Pittsburgh communities.

PRINCE GEORGE’S COUNTY PUBLIC LIBRARY

Prince George’s County Memorial Library System (PGCMLS), just outside of Washington, DC, in suburban Maryland, provides materials and information for study and personal enrichment to its patrons. The librarian staff offers strategies for lifelong learning through access to varied media and professional guidance. These services include a range of programs, from literacy education for toddlers to outreach functions for seniors.

Anita Kinney, data analyst, uses online mapping for analysis and planning purposes. By uploading library-specific program and patron data, she is able to create custom service area boundaries for reporting purposes. Comparing the geographic boundaries of each library branch with school boundaries allows librarians to do more effective community outreach.

Recently, librarians also included Prince George’s County local council districts in a special project the library is completing in preparation for an annual meeting about the library’s budget. PGCMLS was able to identify the number of library customers in each representative’s district.

“Librarians know their communities,

but it’s powerful to be able to confirm our experiences,” says Kinney. Once she set up custom regions, Kinney has been able to run reports. “I can export age ranges from our ILS and easily see the number of children registered with the library in any part of the county,” she explains. Library managers receive a custom demographic report for the areas served by each of their branches, which helps them calculate market penetration of their library’s services.

A MANAGEMENT TOOL

Libraries of all types are finding ways to not only provide data mapping software to patrons but also to use that software to further their own strategic planning and outreach services. By exploring the possibilities, librarians can hone in on comparative data that enhances their own decision making and allows them to become trusted resources for their community partners. ■

ABOUT THE AUTHOR: Trudie Thomas is PolicyMap’s vice president for business development. She can be reached by phone at 215-574-5923 or by email at Trudie.Thomas@policymap.com.



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Design Libraries as a Community of Learning

» As libraries evolve, new tensions have emerged between learning activities and space design.

BY MARK WALTERS

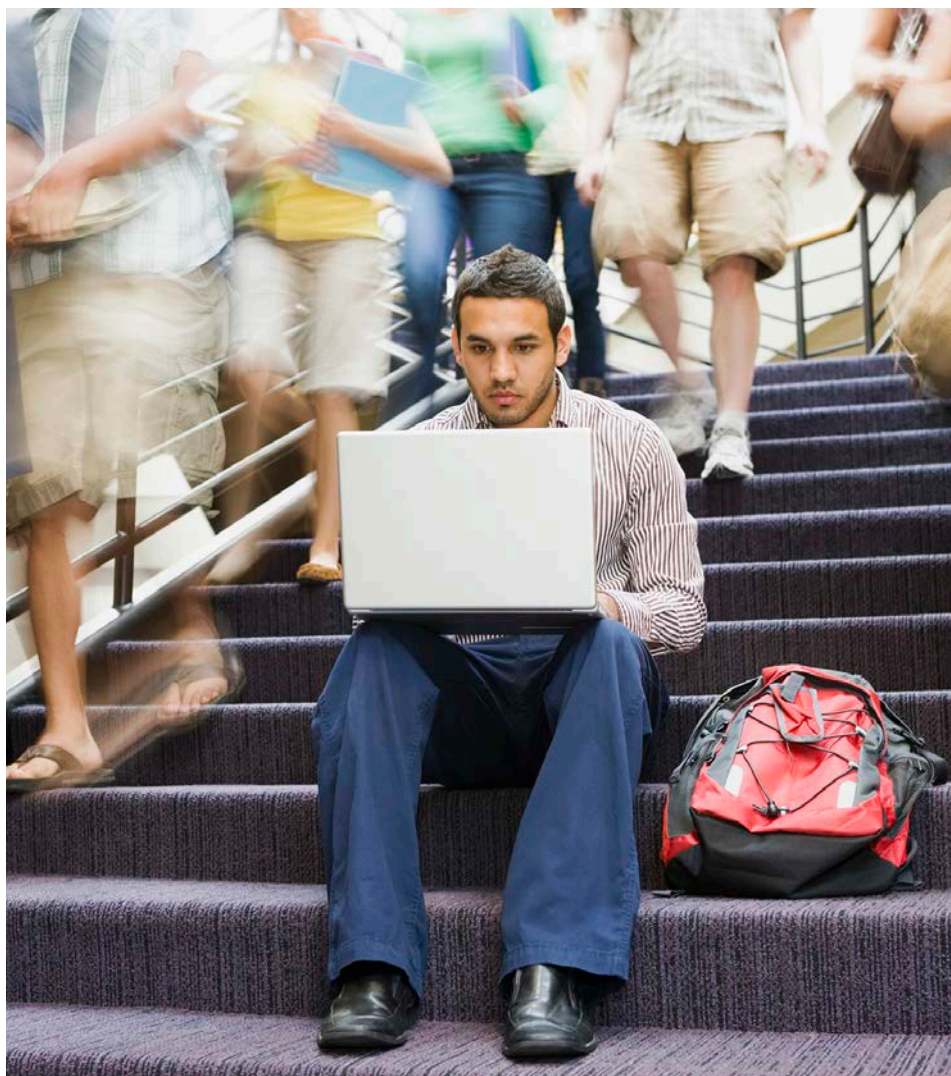
On today's campuses, learning happens anywhere and can be synchronous or asynchronous, formal or informal. This change from passive to active learning should be considered holistically—not only as part of a library's building master plan, but also as a part of its learning master plan. This learning strategy influences all library spaces and helps connect different stakeholders on the quest for higher-level learning throughout the day.

LIBRARIES AND LEARNING

Research suggests that a multi-sensory approach to learning increases engagement, promotes deeper participation, maximizes student achievement, and elevates the idea that learning is fun.¹ Steelcase research and other investigations also suggests that the engagement and interaction of active learning is a more effective way to learn than passive learning.²

To fully capitalize on the benefits of active learning, a library's physical space must support and enhance the pedagogies employed in the classroom. Active learning assumes student involvement in content sharing and building new knowledge, leading to greater student engagement, comprehension, and ownership of the information. As learning becomes more interactive, libraries must support multiple types of collaboration, including informative, evaluative, and generative, as well as peer-to-peer learning. These modes of learning all depend on equal access to analog and digital information, no matter where users are located in the library.

Static furniture and one-size-fits-all libraries neglect the modern day needs of students. Just as there is a variety of ways in



which students learn, there must also be a variety of spaces in which learning occurs.

RETHINKING SPACE

Today's library should be a broader and deeper resource than ever, a place where instructors and students along with traditional and new knowledge resources converge in an ongoing process of learn-

ing, teaching, and discovery. That concept doesn't require more real estate, but it does demand rethinking on how library space is used. A major study of libraries at thirteen public and private colleges and universities across the United States revealed that the library is a key location outside the classroom where students learn to analyze information and create new knowledge,

» While learning is increasingly social and collaborative, deep focus by individuals still requires the management of distractions. Research shows that inhibiting responses to outside stimuli hinders the ability to think creatively and process complicated concepts. Library spaces that haven't been planned with this consideration can often place quiet, contemplative zones too close to noisy collaborative zones and can frustrate students trying to concentrate.

often working in groups.

For many libraries, the shift to a multi-dimensional space hasn't been easy. But to meet the changing needs of students, library spaces must adapt. A reduced emphasis on housing books frees up real estate for individual and group learning. The library remains a key resource for learning how to find and use information efficiently, but it also must become a place for peer-to-peer mentoring, small group projects, and access to hardware and software.

A variety of settings thoughtfully located throughout the library allows students and instructors to choose the space appropriate to different kinds of learning. This transformation drives the need for new, multi-use library spaces, and multiplies the way the library supports teaching and learning.

INFORMAL LEARNING SPACES

A library space should also include lounges where students can meet and work with others to build community. These spaces can be remarkable for their energy and activity, buzzing with the enthusiasm of a team at work or students engaged in animated conversation. To foster a lounge spaces as a learning environment, libraries should consider their design in terms of the following three factors:

Control: Students should have a measure of control over how they use the space and where furniture can be positioned. To support students whether they work in groups, pairs, or individually, a variety of spaces should be provided for both collabora-

tive and solo study. Wi-Fi in the library is a given, and access to power should be also. Students bring laptops, tablets, mobile phones, and other portable devices to the library, and they need places where they work to plug in.

Comfort: Learning involves a variety of postures: stand-up conversation, group discussions, or project work stations. People are most comfortable and most productive when they can move in their chairs and when furniture adjusts to various work styles and postures.

Collaboration: Students need tools that support collaborative learning methods for sharing digital and analog content. To accommodate that need, library lounges should include tools for informal brainstorming such as whiteboards and tack-able surfaces as well as work surfaces that accommodate computers, books, and other materials.

ZONES FOR INDIVIDUAL FOCUS

While learning is increasingly social and collaborative, deep focus by individuals still requires the management of distractions. Research shows that inhibiting responses to outside stimuli hinders the ability to think creatively and process complicated concepts. Library spaces that haven't been planned with this consideration can often place quiet, contemplative zones too close to noisy collaborative zones and can frustrate students trying to concentrate.

Distractions come in forms beyond just noise as well. Visual distractions can be just

as powerful, as can the distractions that come from discomfort and frustrations in trying to connect to a power source. Individual study spaces should manage these distractions with intelligent visual shielding and convenient access to power. Consideration of good ergonomics in computer use will also allow students to effectively focus as they work quietly alone.

DESIGN FOSTERS CHANGE

Both instructors and students look to the library as an essential resource to support changes in education. Librarians' roles are also changing; they interact as instructors, technology advisors, research assistants, and collaborators with students and faculty. This transformation drives the need for new, multi-use library spaces and multiplies the ways the library supports teaching and learning. ■

ABOUT THE AUTHOR: Mark Walters is the category product manager for Steelcase. He can be reached by emailing mwalters@steelcase.com

FOOTNOTES:

¹ Baines, L. (2008). *A Teacher's Guide to Multi-sensory Learning: Improving Literacy by Engaging the Senses*. Alexandria, VA: Association for Supervision and Curriculum Development.

² NSSE updated for 2013. *Promoting Student Learning and Institutional Improvement: Lessons from NSSE at 13*. Annual Results 2012. <http://nsse.iub.edu>.

Managing the One-person Library

» All librarians share the interests and goals essential to the success of their counterparts in smaller libraries.*

BY LARRY COOPERMAN

At various points in my career, I have worked as a solo librarian or as a manager of a small library. My colleagues in this type of librarianship work in public, school, college, and corporate libraries, and serve a diverse group of patrons: students, instructors, and business professionals, including lawyers, architects, and doctors, for example. These librarians generally work alone except for some assistants, such as students, library paraprofessionals, or volunteers. Nonetheless, they are responsible for managing all library functions, including collection development, cataloging, and circulation.

Because solo librarians work varied hours, they may not always be available to help their patrons and may need to rely on others to fill in the gaps. They may report to another corporate or institutional manager or may manage their own work schedules independently.

In either case, learning and mastering specific management skills will help solo librarians prioritize their tasks and run their libraries effectively on their own.

TIME MANAGEMENT

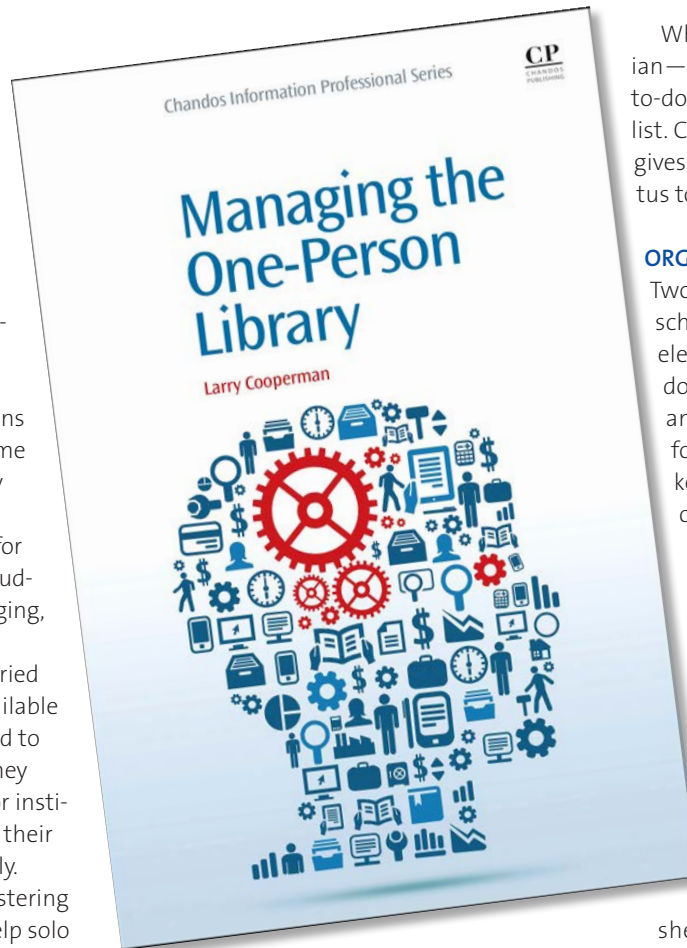
Some librarians may view time management as confining and restrictive, feeling they do not need to create a schedule covering every minute of their work day to feel organized and busy. But time management should be thought of as a skeleton that can be embellished later with bones, muscles, blood, and organs.

My plan, after I grasped what my daily job requirements and duties would be, was to write down specific tasks. Then I would organize those daily tasks on certain days and at certain times. For example, cataloging could be handled at a time of day when stu-

dents were in class and I could give it my undivided attention. But what if a meeting or event threw off my plan?

A time management schedule needs to be flexible. As most librarians realize, when an emergency or crisis occurs, they are the ones everyone turns to for help. As a result, a good time management plan takes into account meetings, time out of the library, and daily crises.

For example, if I received a book shipment of as many as 15 boxes from my bookseller, I would block off certain times during the day when I could devote most of my time to this task. I would divide a project such as this one into doable tasks—what I call “chunking.” In that way, I could make a seemingly insurmountable task surmountable.



When solo librarians—or any librarian—arrives at work, they should create a to-do list and prioritize the tasks on that list. Checking off a task when it is complete gives a sense of accomplishment and impetus to complete the next task.

ORGANIZATIONAL MANAGEMENT

Two methods can be used to organize schedules and projects—written and electronic. Some librarians write their to-do lists and reminders, and write dates and meeting times in a diary. Others opt for Blackberries and smart phones to keep track of the same lists and dates to create order out of chaos.

One advantage of the electronic methods is that they are portable and the entries and documents can be edited, changed, and created anywhere. Smart phones in particular also allow for easy and frequent communication with others. Numerous free applications, such as EasilyDo, Evernote, and ifttt (“if this, then that”) can help solo librarians manage their time, budgets, acquisitions, and shelf reads. Circulation and cataloging information is usually kept on a desktop or laptop, but this information can easily be synched or downloaded to a smart phone or other PDA if the data is needed for a meeting or conference.

On a number of websites, including www.microsoft.com, librarians can search for tutorials both in PowerPoint and audio formats to increase their knowledge of technological skills. Microsoft Outlook is a great organizational tool, with calendar and note features that allow a solo librarian to not only stay in touch with others but also to organize files and messages. Even Google, the website librarians love to hate, contains applications such as Google Now and Google Calendar to organize time effectively and efficiently.

What's your story? If you're like most librarians in management positions, you have one to tell, and *Strategic Library* would like to help you share your expertise with colleagues. Subscribers to *Strategic Library* are executive decision makers at all types of libraries: academic, public, and specialty. Click on this link for tips that will help to make the writing, submission, editing, and production of your article a smooth and enjoyable process. <http://www.strategiclibrary.com/Write-for-Strategic-Library>

The importance of using good organizational tools is that they allow solo librarians more time to assist and help patrons as well as to manage the library itself.

CHANGE MANAGEMENT

Many solo librarians work alone in their organizations, so change affects them quickly—there are no buffers. And perhaps no one feels the brunt of change more than the information facilitators and disseminators—the librarians.

From experience, I can say with confidence that change happens and moves faster in smaller organizations than in larger ones. And change, whether good or bad, can produce stress, anger and other negative behaviors.

There are two parts to understand change management: power and reason. Power consists of change management strategies for leaders; reason consists of implementing change when the librarian is not in charge of the situation.

Librarians are often put in this paradoxical position: they lead and are led. So how can solo librarians embrace and grow through change management? The following change management parameters can help solo librarians maintain their sanity and professionalism.

Communication: Maintain open lines of communication with managers and coworkers. These interactions allow solo librarians to gain some semblance of control over their work and stay ahead of the curve.

Adapt: Learn how to adapt to change gradually. Like chunking tasks, adapting to change gradually gives the appearance of

being undaunted no matter how impossible the task seems to be. If the change arrives unannounced, accept it willingly and, again, try to chunk it so you are not overwhelmed.

Lead: Take a leadership role in the organization when change occurs. Librarians are the gatekeepers and disseminators of information, and a major part of change management is communicating the policies and procedures that are going to change. Serving on the committees that deal with these changes sets a positive example of change within the library.

PROFESSIONAL DEVELOPMENT

The traditional method of librarian professional development has been, and remains, the live conference or annual meeting. They are the main way most librarians learn new skills and meet new people as well as get a much-needed break from work. To remain a competent manager, all librarians, and especially solo librarians, must look for ways to absorb new developments in librarianship.

Technology has changed how librarians can access best practices of noted experts, and for the better. Webinars and podcasts allow librarians to access other professionals anytime, anyplace, anywhere. They also allow solo librarians who cannot leave their libraries easily or often, to learn on the job. The major drawback is networking—it does not work as well on the Internet or iPod. So what is the solution?

First, it is important to realize that live meetings are important for any librarian's growth. If solo librarians cannot attend classes or social gatherings within the

library community, they may have to create events of their own or volunteer to serve on local, regional, or national committees. Creating continuing education classes for other librarians is another way to maintain professional connections.

Developing a personal learning network (PLN) is another way to stay connected. A PLN can include a group of librarians who interact to learn from each other. Given smart phones, Skype, and the Internet, a PLN is the perfect way to network and share experiences on how to manage a library successfully. With today's technology, any librarian can learn new skills and become an important and vital part of the library community.

Social media connections through Twitter, Facebook, and LinkedIn are useful resources for solo librarians to learn from others or work on projects related to library management. Listservs are another convenient way to contact other librarians and learn about the latest trends, technologies, and strategies available to solo librarians. Be sure to check the terms and conditions for how various sites use data posted on their sites. Terms of Service Didn't Read (www.tosdr.org) provides concise summaries of the main social media sites, including Twitter and Google, to help navigate their terms and decide which ones work best for an individual librarian's needs.

Offering to write articles or book reviews for library publications allows solo librarians to acquire skills that help them prepare learning and research materials for their libraries—as well as providing visibility in the library community. (See Sidebar) Writing skills can also be useful in preparing grant applications to obtain funds that can augment the library budget.

IT RESOURCES AND TROUBLESHOOTING

Computers and printers (and faxes and scanners) are an integral part of libraries today. May patrons and students expect them

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to be working efficiently when needed. While large libraries usually have an IT professional standing by in case of emergencies, solo librarians must be prepared to manage these resources and must acquire their own technical expertise.

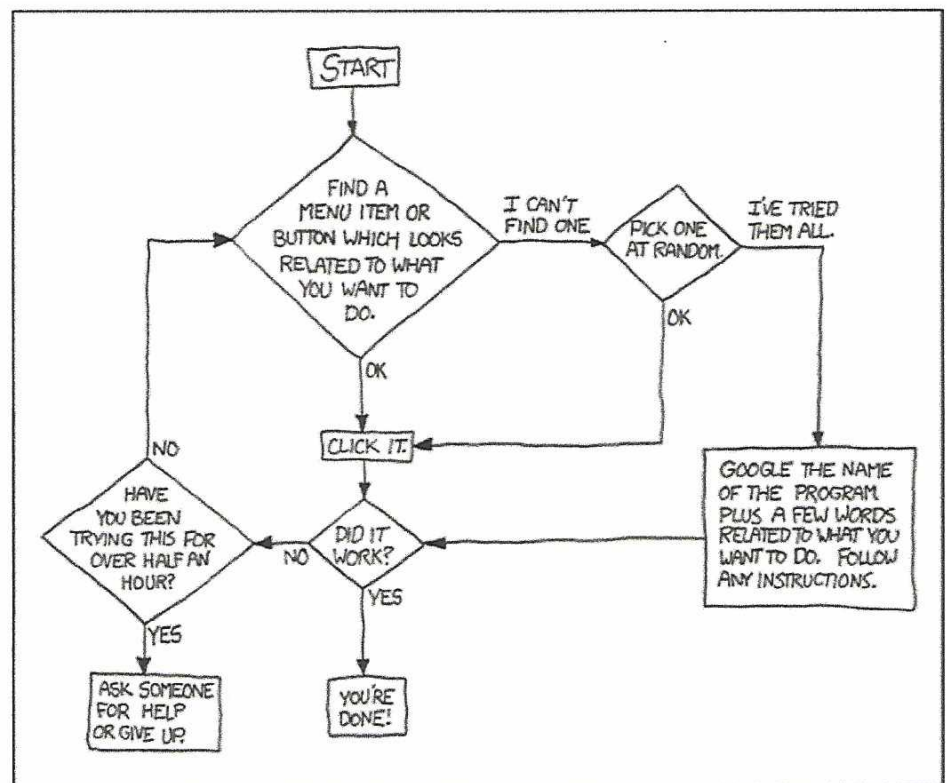
To stay on top of today's world of computing, solo librarians must learn as much as possible about how computer hardware, software, and networks operate. On the hardware front, librarians should be familiar with smart phones, Kindles, and other handheld devices—at the very least, they should have information on hand in the library to assist patrons using these devices or be able to direct them to websites that can help with questions. Earning a certification (such as A+ Certification) that focuses on how computers operate can be a life-saver when computer problems arise (and they always do!).

For software, librarians should be knowledgeable about Microsoft Word, Excel, and PowerPoint since they are used by many patrons. Java and Linux can be left to the experts or Internet resources. But the librarian should have at least a rudimentary understanding of how these systems function.

Computer software can be a major expense for a library, however. Open-source alternatives can be the answer. One example is Apache OpenOffice, which includes Writer (for word processing), Impress (for presentations), Calc (for spreadsheets), and Base (for database management and development). Open-source email options include Mozilla Thunderbird, eM Client, and Gmail, which is part of the Google suite of software products.

Creating a book collection devoted to basic computer operating systems helps librarians as well as patrons develop computer literacy. One good starting point is to access the Teach Yourself VISUALLY book series available from John Wiley & Sons. Given the size of small library spending budgets, computer textbook publishers may be willing to

One librarian posted this sign to help patrons troubleshoot their own library computer problems:



**PLEASE PRINT THIS FLOWCHART OUT AND TAPE IT NEAR YOUR SCREEN.
CONGRATULATIONS; YOU'RE NOW THE LOCAL COMPUTER EXPERT!**

provide review copies of their books for use by students and patrons. Also, networking and savvy will lead librarians to students or patrons who can provide technical assistance when paid to be onsite or available by phone for a few hours per week.

When patrons use library computers, they primarily will be accessing the Internet. Another good investment is to review Internet security options with an IT professional. Cost and coverage are two areas that are important in choosing the proper Internet security software, and there are many free versions of anti-virus and malware such as Avira, Glary Utilities, and Ad-Aware; others, including AVG, are available for free initially then revert to a paid option. These products need to be updated often to protect against

new viruses and malware. Trade publications such as PC Magazine and Computerworld, contain reviews of existing and new security software.

MARKETING THE LIBRARY

Dozens of books, articles, workshops, and webinars focus on how to market a library. Despite their claims of marketing successes, one important management component might not be mentioned—the librarian's motivation to market the library successfully.

If any librarians, and especially solo librarians, are motivated to make their libraries the best they can be, then marketing will not be an uphill battle—it may be a challenge, but it can be accomplished. Librarians who ignore marketing their libraries and re-

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» The simplest way a solo librarian can market their services is by word of mouth. Simply getting up from behind a desk and emerging from the office to connect with and help students will market library services. A solo librarian needs the drive, intelligence, and passion to provide excellent services for patrons. Once they see that their librarian is a helpful resource, patrons will tell their colleagues to do the same. This satisfaction leads to more visits, more uses, and potentially more funding.

sources do so at their own peril since there are many choices and options for people to find books and information through Amazon, Google, and Wikipedia.

But librarians provide people with in-depth, reliable information and resources that they may not know exists. Library marketing is essential to ensure that patrons know what is available at the library for them to use.

The simplest way a solo librarian can market their services is by word of mouth. Simply getting up from behind a desk and emerging from the office to connect with and help students will market library services. A solo librarian needs the drive, intelligence, and passion to provide excellent services for patrons. Once they see that their librarian is a helpful resource, patrons will tell their colleagues to do the same. This satisfaction leads to more visits, more uses, and potentially more funding.

Volunteering within the organization is another way a solo librarian can market what's available in the library through research and knowledge that generates good will and again the possibility of larger budgets.

Reaching out to the community to educate patrons can consist of PowerPoint presentation on available resources or a live tour of the library itself. Actively demonstrating the library's resources on a regular

basis shows patrons what is available through updated lists, new book reviews, and useful websites. One of the benefits of running a smaller library is the ability to personalize e-mails to patrons on what is of interest to them specifically.

Hosting other groups at the library also demonstrates that the library is a living place where the community is welcome. More adventurous librarians can design scavenger hunts and open houses to market their libraries. Creating Facebook and Twitter pages and advertising the library's service through other social media outlets, such as blogs, will showcase services and resources. They are also useful two-way communication tools where librarians can highlight what's available at the library and also learn what new services patrons are seeking.

GENERALIST OR SPECIALIST?

The management skills need to operate a successful library do not change whether the library is large or small. Solo librarians can be considered generalists because of the range of management tasks they must master. Librarians in larger libraries can develop specialties that make them experts on one important aspect of librarianship.

Regardless of the path chosen, today's librarians remain a vital conduit between the universe of resources that form basic

and complex knowledge. They are truly the gatekeepers of information. ■

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ABOUT THE AUTHOR: Larry Cooperman is an adjunct faculty librarian at the University of Central Florida in Orlando and a national adjunct online instructor for Rasmussen College, teaching research and writing skills to upper-level business undergraduates. He has worked as a solo and small-library manager and director for the past ten years, primarily in academic, public, and school libraries. He also received the 2009/2010 Librarian of the Year Award from Everglades University.

Coming in August!

Next month's issue of *Strategic Library* will include an **exclusive** survey on Mobile Technology in Libraries. Responses from librarians included in the *Strategic Library* and Library Works, Inc. databases will be given by type of library and by one of eight geographic regions in the United States. Questions will focus on what libraries include currently in their mobile websites, what they intend to add in the future, how they promote their mobile technologies to patrons, how satisfied they are with their current capabilities...and more!

This important information will help libraries evaluate their current mobile technology offerings as well as set goals for future enhancements. The issue will arrive in your e-mail by August 15th.

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Mary Alice Davidson
PUBLISHER

madavidson@charter.net
240.354.1281

Jennifer Newman
ASSOCIATE PUBLISHER

jenny@libraryworks.com
240.354.1281



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