THE CHRONICLE Of Higher Education_®

The Library of the Future

101

How the heart of the campus is transforming

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About the Author



Scott Carlson is a senior writer at The Chronicle of Higher Education who explores where higher education is headed. Since 1999, he has covered a range of issues for the publication: college management and finance, facilities, campus planning, energy, sustainability, libraries, work-force development, the value of a college degree, and other subjects. He has written such in-depth reports as "Sustaining the College Business Model," "The Future of Work," "The Right Mix of Academic Programs," "The Campus as City," and "The Outsourced University."

Carlson has won awards from the Education Writers Association and is a frequent speaker at colleges and conferences around the country. His work has also appeared in *The Baltimore Sun* and *Baltimore City Paper*, among other publications. He is a graduate of the University of Minnesota-Twin Cities.

Cover photo by Matt Roth for *The Chronicle*

INTRODUCTION

cademe thrives on information. In articles and books, in oneof-a-kind items and hard drives full of data, scholars find the raw material for their work. And once their work is published, it enters that same ecosystem, to inspire researchers to come.

The collectors, curators, and guardians of that scholarly material have traditionally been academic libraries and the people who staff them. Libraries occupy a central position on campus, literally and figuratively. For scholars and students, they serve as an essential gateway to knowledge, providing resources and readings that would not be available otherwise. For publishers, they have been both a financial lifeline and a challenger in debates over copyright, censorship, and free and open access to information. For the campus and community, they are a place to connect.

Recent years have seen enormous upheaval for the world of academic libraries and librarians. The challenges started nearly 30 years ago, when the internet put many libraries' worth of material into the hands of anyone with a broadband connection. Since then, academic libraries have been central in a range of debates and challenges at colleges: the use of data and privacy, the cost and accessibility of scholarship, the support for underserved students on campus, and the financial problems that trouble higher education as a whole. Covid-19 brought a new set of challenges to colleges and universities — and yet it was the libraries, prepared by their work on the issues above, that helped institutions make the transition to teaching and research in the pandemic.

The world of academic libraries is vast. Libraries are distinct among campus facilities in that they serve at least three functions: as a place, as a collection, and as a source of human expertise. This report looks at those three functions and how they have become loci of change for academic libraries:

• **Space:** Despite worries about declining usage with the advent of the internet, library buildings have remained a campus anchor and a popular destination for students and scholars. As scholarly materials have shifted from paper to electronic forms, colleges have had to rethink what purpose a library building serves.

Libraries are distinct among campus facilities in that they serve at least three functions: as a place, as a collection, and as a source of human expertise.

• **Collections:** Those changing scholarly materials have presented new challenges related to copyright, access, and preservation. Libraries are playing an increasing role in transforming the publishing world, and they have to make hard decisions about what to emphasize in

a collection. Sometimes, that choice of what to emphasize can mean highlighting priceless items that are invaluable to the institution.

• The profession: The changing information landscape is affecting the work of librarians, too. Their skills have had to become more technical and more varied - and the librarian profession is seeking more diversity in its ranks as well.

Libraries are often described as the "heart" of a campus — a designation that acknowledges their physical presence and their traditional role in managing the intellectual output of academe. Libraries stand as one of the biggest investments for a college — and as one of its most potent resources. Shepherding the library through this period of change is vital work for campus leaders who want to protect the legacy of an institution.



Temple U's Charles Library, designed by the international firm Snøhetta.

TEMPLE U.



MATT ROTH FOR THE CHRONICLE

The Future of Library Spaces

IBRARIES ARE OFTEN among the most iconic structures in a community. The Great Library of Alexandria, which burned during an invasion by Julius Caesar more than 2,000 years ago, is still regarded as a kind of mythical place that collected the knowledge of the ancient world and hosted the great scholars of the era. Celebrated American libraries like the majestic New York Public Library, guarded by stone lions, or the many smaller Carnegie libraries scattered across the nation — have long served as grand, public gathering spaces for learning and discourse.

On a college campus, too, the library is a focal point, frequently occupying a prominent place on the quad. Just think of how Low Memorial and Butler Libraries anchor Columbia University's lawn in Morningside Heights. And while college campuses have no shortage of noteworthy buildings by star architects, the libraries are often the most stunning buildings among them — like the rounded reading room of Lehigh

TAKEAWAYS

As information

has become available online, libraries have gone through renovations to emphasize social connections, group study, and new services for students and scholars.

Master-planning the evolution of a library is a key step in saving money on a renovation or new construction, and in creating a building that can evolve for new demands.

Departments and offices outside the library often

seek space in a new or renovated building. Entities that align with a library's mission and roles should get priority. University's Linderman Library, with its stained-glass dome over rows of bookshelves set up like spokes on a wheel, or the new Charles Library at Temple University, with its soaring, cedar-clad atrium, designed by the celebrated international firm Snøhetta. New, well-planned libraries and thoughtful renovations often draw visitors in droves after the ribbon is cut.

Libraries are often four to five times the size of many other buildings on campus, which makes the challenge of managing them particularly acute.

While libraries are signature places on a campus, the actual uses of those spaces have shifted. As information has migrated from bulky paper journals that occupy shelf after shelf to databases that can be readily and remotely accessed, library spaces have opened up and changed purposes in recent years, leading to a wave of renovation plans and new building projects. At the core of this transformation is a question: How should colleges build and renovate libraries to accommodate new technology, incorporate campus centers and programs, and still serve their traditional functions as storehouses of knowledge and places for social interaction?

THE RECENT EVOLUTION IN LIBRARIES

Traditionally — and particularly at large and medium-size research institutions — libraries were about the ordering and offering of stuff on shelves. Because of the voluminous output of academe — and the pre-internet need for each college to own a hard copy of everything — the library was often a hulking structure, filled with paper. Study spaces could be solitary, dark, and spartan.

But as the internet emerged as a powerful research tool in the 1990s and early 2000s, the use of paper materials began to decline dramatically — and the number of library visitors fell with it, particularly at buildings that were dark, outdated, and uninviting. Some administrators and board members began to question why a campus needed a library at all.

This skepticism led librarians to show that a library can be more than just a pile of books. Library directors began to realize that people could be drawn in with comfortable furniture, warm and natural lighting, and well-curated materials — really, all the elements that big-box booksellers had borrowed from the classic libraries of yore. In return, college libraries borrowed something from the booksellers: They ditched prohibitions on food and drink, and set up coffee shops and cafes.

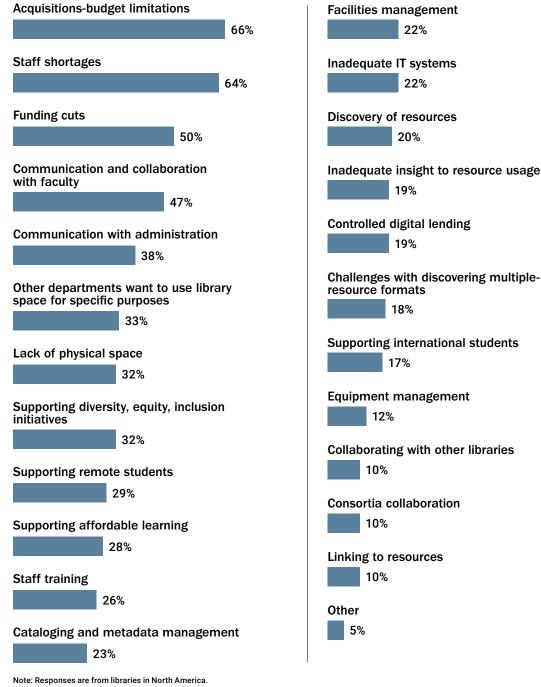
Particularly on large campuses, the decline in paper materials enabled many institutions to close specialized libraries for various disciplines. "You're trying to bring more of your resources under one roof, whether it's your collections or your people, so you're not as spread out and the staffing needs aren't as great across campuses over multiple facilities," says David Zenk, a principal with the Gund Partnership architecture firm.

As libraries consolidated and discarded paper journals, they made way for open spaces that could draw in students with other kinds of services — and that put pressure on libraries to house programs that might once have seemed far afield. More libraries began to include writing and tutoring centers, "makerspaces" and fabrication labs, and technology rooms for data visualization and virtual and augmented reality. Some libraries have included lecture halls and classrooms,

Top Challenges

Tight budgets, staffing, and communication are among the chief issues facing academic libraries.

Which of the following are significant challenges for your library?



Source: Library Journal/State of Academic Libraries survey, 2021, conducted spring 2021, released summer 2021.



A college store, cafe, art gallery, and radio station can all be found at the Athenaeum, a library at Goucher College.

radio stations, museums, even treadmills — all of which can be found in the Athenaeum, a library at Goucher College. Study spaces also changed. Now libraries offer a range of seating possibilities and configurations for students working alone and in groups.

The library as a place is as vital as ever, but the demands on its spaces are high, and new technology and new workplace patterns following the pandemic only add to the complexity of stewarding the design and construction of a library. The sheer volume of space in libraries — they're often four to five times the size of many other buildings on campus — makes the challenge of managing them particularly acute. Planning for that space at a time of change is crucial.

THE MASTER-PLAN PROCESS

To manage the various demands on library space and prepare for changing technologies and practices, college libraries should devise a master plan, says David R. Moore II, the higher-education studio director at the architecture firm McMillan Pazdan Smith and a co-author of *Planning* Optimal Library Spaces: Principles, Processes, and Practices (Rowman & Littlefield, 2018). Master plans are well known in the context of campuses or cities, where they lay out the fundamental rules and goals guiding growth, development, and other future changes. Rarely are master plans seen in the case of single buildings, Moore says, but master planning is essential for libraries because they are so complex.

"Leverage every square inch of space for its best and highest purpose," Moore says, and a first step is to assess how much of that space is taken up by rarely used paper materials. At one Midwestern university library, Moore found that 75 percent of the institution's materials had not been checked out or moved in a decade or more. "That was the equivalent of almost a 120,000-square-foot building in the heart of campus that was doing nothing for the university."

The librarians who have worked in that space for years sometimes have a hard time conceiving of how to change it; people outside the library often have little sense of how the space is divided, or even how many people occupy it on a day-to-day basis. The master-planning process involves conceptually emptying out that space, and then putting elements back in, based on the specific needs and mission of the institution and its students. Input should be solicited from library personnel, college leadership, campus planners and facilities offices, patrons, and the academic-support programs (like writing centers) that could occupy the space.

The master-planning process is also a way of staging a renovation. Most campus libraries can't simply shut down for two years for construction; students, staff, and faculty members need access to the library materials continuously. Undertaking a renovation in stages can help cash-strapped institutions transform a library, tackling the space section by section over years. "You can begin to implement that work and move that ball forward five yards at a time, rather than waiting for the one big Hail Mary check," Moore says.

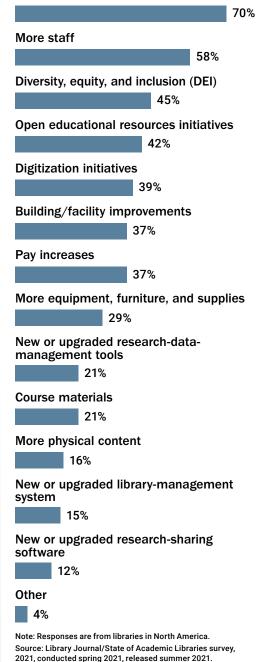
And master plans are a way of boosting morale among personnel and excitement among donors. During the recession, Moore saw how master plans rejuvenated library staff who believed that money for a renovation would never arrive. "Put a master plan out there, and let them realize that there are actually intermediate things that can happen and projects that the library staff can rally around," Moore says. "It gives intermittent goals. It can create a sense of purpose."

A Long Wish List

Staff and electronic- and diversityrelated resources were the top areas in which libraries wanted to invest.

If your library budget magically received an additional 25 percent to further the institutional mission, what might you invest in?

More electronic resources



The library at Northern Arizona University completed a master plan in anticipation that the university would soon undertake its own major master plan, which could incorporate the library's potential future scenarios in its decision-making. Staff and faculty members supporting the university's Cline Library worked, entirely remotely during the pandemic, with the Boston architecture firm Sasaki. Under the plan, the library would seek to unify its amalgamated building, composed of three sections built in the 1960s, '80s, and '90s. Its floors could put more emphasis on its special collection of items



Cynthia Childrey, library dean and university librarian at Northern Arizona U., with a map from the Cline Library's collection of materials on the Colorado Plateau.

JILL KOELLING FRIEDMANN

from the Colorado Plateau, on the library's makerspace, or on collections of children's literature kept by the university's College of Education, the College of Arts and Letters, and the Honors College.

"We called out those possibilities for the university to consider in the future as a part of its plans," says Cynthia Childrey, library dean and university librarian.

In the library-design and planning stages, architects and designers offer some consistent pieces of advice: First, the position of a library in the organization can make a crucial difference in library support. Zenk has seen cases where the library is just another entity in the organization, vying for budget dollars at meetings with the president and CFO. Since libraries already serve numerous colleges, departments, and administrative entities on campus, he advocates a "hub and spoke" structure. "When the library moves from being one of the chairs around the table to being the center of the hub, they actually become more successful," he says. "You're not necessarily competing for the same resources as everyone else. You're helping everyone else to be successful."

Second, design for flexibility. Libraries are in the midst of major changes in what materials they carry, how they are used by people, and which kinds of technology they support. "You need to have a long-term view," says Zenk. While working on the library at Ohio State University, he and his colleagues discovered that different departments and groups needed modular space that could grow and shrink with the university's needs. "Leverage what you can do with furniture and movable elements — everything on casters and wheels." Don't adhere too strongly to a single vision for what a library can be. Years ago, he worked on a reference-staff area, tailoring every square inch to the librarian who led the facility - who retired right before the area opened. "Everything that we had done to respond to one set of needs was probably going to be a pitfall for the next person who came in."

And hire architects and designers who have experience with library projects. Libraries have unique elements: structural requirements to support the weight of books, large open spaces that demand attention to acoustic properties, climate control for not just comfort but preservation, and a balance between spaces for people and for materials. "I've known some library projects that got pretty close to the completion within a couple of months from opening and somebody says, Where's all the library

"Leverage every square inch of space for its best and highest purpose," says one architect. A first step is to assess how much of that space is taken up by rarely used paper materials.

shelving?" says Peter Bolek, president and director of design at HBM Architects and Interior Designers, a firm that focuses on public and academic libraries. Designers who do not have experience with library projects might also fall into outdated ideas about what a library is — or they could feel pressure from administrators to include in the library plan campus offices that need square footage but are not necessarily best situated in the library.

THE SPACE LEFT OVER BY BOOKS

Compact shelving (which allows whole shelving units to roll together side by side, cutting down on aisle space) and off-site storage (in which libraries often combine collections, discarding underutilized duplicates) have opened up possibilities on the cleared floors of library buildings. Some institutions have also done away with reference desks and other fixed service points, relying on mobile librarians armed with devices.

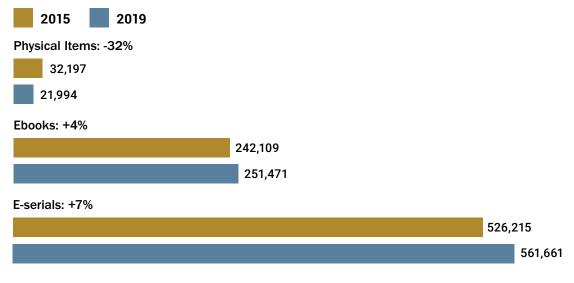
All of that new open space can be a source of inspiration, leading libraries to feature complementary services or centers from other parts of the institution, or it can be a point of conflict among library staff, the administration, and people at various centers and departments on campus seeking more room.

"My philosophy is that we want partners, not tenants," says Lorraine J. Haricombe, vice provost and director of the University of Texas Libraries. A faculty-innovation center will get space in her library, in part because librarians already work with that center on digital materials and new teaching practices. Campus security has been lobbying for room in the library, too, but Haricombe has not granted it. "They just want offices. They are not going to do anything for me in particular." Space is sometimes a contentious topic on a campus. It's often a resource that various departments and offices compete to get, and they hoard it once acquired. With space opening up in the library, librarians have often felt pressure from upper administration and various academic departments that want to claim that space. Library directors, meanwhile, have their own ideas about what they would like to see in their buildings, tied to the library's mission.

"Maybe the library no longer needs as much square footage for the physical collection, but that doesn't mean that they don't have their own internal needs that can replace that freed up space," says Eric A. Kidwell, director of the library at Huntingdon College, in Montgomery, Ala., and co-chair of a committee surveying academic library buildings for the Association of College & Research Libraries. "But what some academic libraries are facing is that our administrations are just looking for space, and they're viewing the library as an easy target."

Electronic Materials Dominate

Electronic books and serials accounted for the vast majority of materials checked out in 2019, and their usage has been growing.



Note: E-serials include electronic articles, journals, periodicals, and other materials available online. Source: Association of College and Research Libraries, 2019 The primary resource the library offers isn't actually square footage, it's librarians, says Bolek. To counter a sense that the library is merely overflow space for the campus, administrators should choose departments and centers that have a connection to library expertise to enrich students' educational experience. In Bolek's work, he has seen libraries incorporate academic departments that are working on preservation efforts, mapping and data, and genealogy. Writing and tutoring centers, commonly found in libraries, are connected to student research and the help that librarians can provide beyond a mere Google query.

Much of the new space in library renovations is open and loosely programmed,



Middle Tennessee State U.'s James E. Walker Library makes virtual-reality equipment available to students through the library's makerspace, established in 2016.

CAT CURTIS MURPHY, MTSU

VIRTUAL LEARNING

Meaghan Moody is an immersive-technologies librarian at the University of Rochester. But she says her MLIS degree wasn't of much help in developing the tech skills she now relies on. Instead, she gained hands-on experience with virtual-reality (VR) and extended-reality (XR) projects through internships with academic libraries. Moody described how such projects have contributed to the learning experience for both students and faculty members.

I tried VR for the first time in 2016, and I was drawn to the idea of being able to create and experience new realities and new forms of storytelling. So many writers, artists, filmmakers, and activists use these technologies to tell new, immersive stories that engage the user in a different way."



"In my previous position [at the University of Pennsylvania], I collaborated with Senior Instructor Mélanie Péron on her 'Paris Under Occupation' course. Together, we traveled to Paris just before the pandemic as part of a study-abroad class. I helped her students create 360-degree recordings of places in Paris that were described in *On The Inner Stage* by Marcel Cohen, which tells the story of his family who never came back from deportation. We asked the students to engage with the text and instructions from the author (whom they later met) to create scenes which were later embedded into a map and used as course material for future classes.

"I also participated in the creation of the Penn & Slavery Project augmented-reality campus tour, which takes users on a tour of slavery's legacy at the University of Pennsylvania in six stops. The project is centered on undergraduate archival research and shares this history in a transformative way that aims to broaden the audience and make this history more visible on Penn's campus.

"More recently, I worked with Associate Professor Kate Phillips in the Writing, Speaking, and Argument Program here at the UR, who is teaching

an introductory writing course themed on the concept of 'uncertainty.' We led her students through some VR experiences such as virtual climbing walls and roller coasters that would test their senses of certainty. She then asked how the experiences impacted their awareness of being physically located on campus while virtually being somewhere else. Students were then asked to reflect on this experience in a series of writing assignments."

"XR allows users to explore a topic in new ways that may inspire new questions and ways of thinking. XR also requires diverse perspectives and skill sets and provides interesting opportunities for the merging of theory and practice. ... The inherently interdisciplinary nature of XR also benefits from having a centralized space, where all disciplines can engage with one another." meant to draw students to study and socialize. Kidwell and others believe that libraries will return to an ancient concept exemplified by the Library of Alexandria, where the building takes on a primary role as a community, lecture, and exhibition space.

Some architects caution against planning for too many loosely programmed community areas. With colleges opening new dorms, recreation centers, student centers, and more, many campuses have no shortage of places where students can hang out. "Open study space is probably running its course as a sort of a standard project," says Nate Goore, a principal at MKThink, a planning and design firm. "There are just not enough people to go around to fill these places." Administrators, library directors, and library planners should consider what else is available on campus — and what kind of interactions those places support.

Amy E. Badertscher, associate vice president for libraries and strategic innovation at Kenyon College, was wary of following the usual trends while planning a new library, which opened in 2021. As she toured other libraries to get ideas for her own building, she noticed several of them had set up social spots, but couldn't draw students or muster resources to fulfill the purpose of those places. "Everyone was all into the cafes, but we saw so many places where there was supposed to be a cafe, but never was a cafe," she says.

"What is the library that's going to last 50 or 100 years?" she says. "Is this just a student union, or is it really a go-to place for student success?"

Groups oriented toward student success got square footage in the new library: offices for the registrar, student support and accessibility, academic advising, the writing center, and career development. She calls them "partners" in the mission to get students through college and into a calling. Grouping these functions together helps serve students.

"Our challenge is creating a multitude of spaces," says Kidwell. "Group spaces, individual spaces, spaces for technology or collaborative learning, or a space where somebody just wants to go off and read a book." After all, the library offers yet another unique resource: rooms and even whole floors where people can sit together, silently working. It's the library's traditional role — one rarely found on campuses or in the surrounding cities, without having to pay a fee.

PLANNING FOR NEW TECHNOLOGIES AND NEW USES

But many emerging spaces in libraries are anything but quiet and traditional.

"Makerspaces" and seed libraries: As people have expressed increased interest in learning practical skills and crafts, libraries have followed, setting up rooms with various tools and workstations aimed at building electronics, sewing fabric, or making art.

Libraries have added "makerspaces," seed libraries, immersive classrooms, media rooms, and even space for children.

"I've worked with a lot of different academic libraries where a librarian has gone on to get additional training in woodworking to become a resource in a creation lab," says Bolek.

Middle Tennessee State University's James E. Walker Library established a makerspace in 2016, helping the university earn a mention in *Newsweek* last year as one of the "best maker schools in the nation."

"It was clear that there was growing



A student at James Madison U. uses a 3D printer.

demand for more experiential learning and access to advanced 'making' technologies," says Kathleen L. Schmand, the library's dean. "The library had a reputation for being an early adopter of innovative technologies, and it was interested in extending more experiential learning to support teaching and learning at MTSU."

The makerspace has been used by students in English classes, to retell stories with various equipment in different media, and by students in mechatronics courses, to build circuit boards. Interior-design students have built prototypes of furniture for classes and competitions. "3D printing is by far our most actively used technology, but AR/VR technology is not too far behind," Schmand says.

Valerie Hackworth, who leads the library's curriculum support for the makerspace, works with faculty members to find ways to use the workshop in their courses. "I customize experiences for individual faculty, groups of faculty, classes, and groups from off-campus, including other universities, STEM camps, high schools, and military groups," she says. In November 2021, the makerspace attracted nearly 2,500 visitors — a record at the time. The university spent \$150,000 to establish it, and spends about \$30,000 a year on supplies and new technology.

James Madison University features the Makery and 3SPACE, two places for creative, hands-on work, within Carrier Library. With money from the math department and the College of Science and Mathematics, JMU established 3SPACE in 2013 as the first general-use 3D-printing classroom in the country, and faculty members frequently reserve the room for credit and noncredit courses and workshops. The Makery - which features laser cutters, sewing machines, a workbench for building electronics, and more — is available for drop-in visits from students. faculty, and staff members; it also lends out a range of digital and audio-visual equipment, like cameras and microphones, digital drawing tablets, and lighting. The space has been used to create a diverse array of items, like personal-protective equipment against Covid-19, and machines to weigh and measure delicate, endangered pygmy shrews.

Carrier Library also features a seed library, established in early 2020. James Madison is in Harrisonburg, Va., in the Shenandoah Valley, with its rich farming and gardening culture. Librarians at the university had dreamed for years of starting a seed library, in part as a way to connect with people and organizations in the surrounding community, and to support food-justice programs. The seed library is run on an honor system: Patrons can take the seeds they need and are not expected to contribute ones harvested from last season, although the library encourages people to "engage with the full life cycle of the plants they are growing and share seeds back with the community." The library does not track how many use the seed library, but seeds were distributed to nearly 400 people through a contactless pick-up program from the spring of 2020 to the spring of 2021.

Immersive technology and media rooms: Planners of Kenyon College's new Chalmers Library focused on setting up technologically complex rooms, giving instructors a chance to shake up how they teach.

A studio, for example, offers digital-media resources to students at Kenyon, where there has been growing demand for media production not tied to a specific discipline. A history major, for example, can use equipment in the studio to make a documentary film, calling on nearby library staff members for help.

In its special-collections section, the library has set up a classroom with large screens that can show the details on fragile and rare items. In another part of the building, a classroom enables students to gather in small-group pods with shared screens and other ways of interacting through technology.

The crowning room is the library's immersive classroom, with large screens that extend 270 degrees around occupants. Faculty members had asked for a room that would feature immersive technology that would allow a student to experience what it's like inside of, say, a human heart, or a 17th-century cathedral. At the library's opening, a professor displayed a high-definition digital image of the 224-foot-long Bayeux Tapestry on the surrounding screens, lecturing while zooming in on some of the tapestry's scenes of the Battle of Hastings.

These tools are pricey to purchase and maintain. "A decent projector can cost \$10,000," says Paul Mollard, the library's director for academic technologies. "We've got seven in the immersive classroom, plus a high-end computer. So you can see how it adds up quickly." Not to mention that the library had to hire audiovisual designers and installation contractors to set up the room.

Badertscher is trying to build an endowment that will cover technology replacement in the future, but raising money for intangible infrastructure is always challenging.

"What is the library that's going to last 50 or 100 years? Is this just a student union, or is it really a go-to place for student success?"

A place for children: Late adolescents can be found in droves in college libraries, but one might not expect toddlers. Yet with more adult students balancing coursework with parenting, and with young graduate students and faculty members raising families of their own, more academic libraries have had to accommodate the youngest patrons.

Iowa State University conducted a \$320,000 renovation of its Parks Library during the summer of 2019, adding more seating, outlets, whiteboards, and audiovisual equipment. But the library also set up a family-friendly study room that features two universal docking stations, printers, and whiteboards for adults, along with small furniture, various toys, and computers loaded with educational software.

Wendy Wintersteen, Iowa State University's president, set up a task force to study the need for child care on campus, which found that students wanted a place to be with their children without feeling out of place. The university's vice president for human resources suggested the library as a central location for a family room. As soon as word got out that the library would feature a room for children, people began inquiring about reserving it. (After it opened, librarians had to change some of the reservation procedures to prevent students without children from camping out there.)

Parents have rules: Children cannot be left alone, and parents must submit user and



The planners of Chalmers Library at Kenyon College focused on setting up technologically complex rooms, giving instructors options for how they teach.

JAMES D. DECAMP

emergency-contact information. "For us, it all came down to policies," says Hilary Seo, dean of library services. And a clear message: "We are not a day care."

The library worked with the university's family-services office to pick safe furniture and toys for the room, which is close to a family restroom, a lactation room, and the children's literature area. For security measures, the window into the room has a vinyl film to limit visibility, the door has a key-code, and the room is on campus security officers' rounds.

When the Cline Library at Northern Arizona University began considering incorporating collections of children's literature as part of its master plan, faculty members suggested that the library could draw more local grade-school kids through College of Education courses and summer programs.

The notion of bringing children into the building stimulated a conversation on the steering committee, which included faculty members with kids.

"There has been a very long-term desire at the university for child care," says Childrey, the dean. "This topic coming up in the context of the master plan immediately raised that idea — the feeling that as a staff or faculty member, I would love to be able to bring my children into Cline Library and have a place where there are collections that will serve them."

Lan Ying Ip, an architect with Sasaki who worked on the Cline master plan, says the prospect of kids in a college library might raise some unexpected design and operational challenges. Not only does the college have to provide kid-size bookshelves, furniture, toilets, sinks, and so on. "You have to have sightlines to make sure you can see the little kids everywhere, and you have to have staff in proximity to these spaces," she says.

Unique collections as an anchor: For years now, special collections have been of increasing importance to the mission and public profile of the academic library — a trend that seems likely to continue. In a world where you can get almost anything

mass-produced or delivered online, special collections can stand out as beautiful and almost mythical troves that fascinate prospective students, draw the attention of scholars, and excite donors. Special collections are often related, even deeply attached, to the mission and academic focus of a college. And special collections often house the archives and history of the institution itself.

Cline Library will put more emphasis on its collection of materials of the Colorado Plateau, the central focus of the university's special collections, which includes thousands of photographs, films, maps, and letters documenting the history of the region. Through partnerships, the library also maintains archives for the Hopi Tribe, the Navajo Nation, the Arizona Historical Society, and more.

Special collections are often related, even deeply attached, to the mission and academic focus of a college.

"Because of all of the relationships we have," says Childrey, "we felt it was important to think about how special collections and archives draw people into the library, connecting it with the community and beyond in the region, and connecting it with these other cultural organizations."

The master plan calls for the collections to move from a gallery on the second floor to a prime location in the front of the building on the first floor. Ip, from Sasaki, says that the placement also signals the library's commitment to local Indigenous people.

ROLE AND RELEVANCE

Q: What do you see as the value of libraries, and what do they need to do to stay relevant?

Libraries are the great equalizers in combating the digital divide and the information divide. I want to help advance the commitment of diversity to all in fostering lifelong information-literacy skills: technology imagination and innovation: strategic researching: and transforming libraries into indispensable learning environments for promoting multicultural awareness in all libraries."

"ALL universities and colleges need to offer undergraduate and graduate degrees in librarianship and information science to create more opportunities for people of color to look at the profession as a thriving and surviving one."



- Kimberly M. Gay, head of the Reference and Information Services Department, John B. Coleman Library, Prairie View A&M University

Libraries need to act more quickly to show our value to our institutions, so that our budgets aren't cut because 'everything is online and students have been searching the web for years, so they can find anything.' We should have curricula that we can present – not just a random set of information that might be useful, but a series of sessions that will build students' knowledge in specific ways, with class time to practice skills.

"We need to be more agile so that we can make decisions or changes quickly, not over years. It's good to be thoughtful and we don't have to react to every new idea, but we also have to be willing to fail on occasion, and then learn from that."



- Carol Shannon, informationist, A. Alfred Taubman Health Sciences Library, University of Michigan at Ann Arbor

THE PANDEMIC'S EFFECT ON LIBRARIES

After Covid-19 shut down campuses across the country, libraries were one of the first institutions to adapt to a "contactless" world, having spent years already delivering materials through the internet and supporting students and faculty in remote locations. Many academic libraries helped the rest of their campuses adapt as well, offering help in designing online courses and in finding high-quality open-access materials for students under financial strain.

Naturally, the use of library space changed drastically during the pandemic, as buildings emptied out. A number of academic libraries shifted their in-person programming (like book readings and library workshops) to Zoom, and found that they were getting many more people to participate in the events — and from locations around the world. Some librarians saw online events as a good way to engage alumni and donors.

Many library staff members found that they could do essential work from home, since much of their work was online anyway — and for some, working remotely has become a preferred setting, at least part of the week. Many library directors and college human-resources directors are already thinking through who gets to work from home and how often, and how that might affect workplace culture and customer service.

As the world tries to go back to "normal," many of the adaptations for Covid could stick around, with profound implications for space. "In the next three or five years, that's what's going to affect planning decisions more than anything else," says Goore, of MKThink. But the outcomes are largely unknown at the moment.

Will people remain remote part of the time, in work or in class? Offices consume a third to nearly half of available square footage on some campuses, so work-from-home policies could lead some institutions to reallocate office space and set up "office hoteling" workstations, where a staff member with a laptop or a device can set up shop for the day. And students may prefer the conve"The model of libraries being an academic center is going to have to expand to being kind of a center of student experience and kind of a center of the whole student."

nience and connectivity of an online setting for large survey courses and lectures.

"I hope after this we don't see another 100-seat lecture hall built again," says Zenk, the architect with Gund. Remote learning offers more flexibility than "a large, structured learning environment like that, that you can't use for anything else," he says.

At the same time, Zenk says, more library services and features may be higher-touch than before. Students have lost a lot in the pandemic, and they have experienced significant stress. Tutoring and writing centers may be busy helping them catch up, but Zenk says he has worked with clients who are considering locating counseling services and career development in the library.

"The model of libraries being an academic center is going to have to expand to being kind of a center of student experience and kind of a center of the whole student," he says.

Many architects discuss the ways their industry pays more attention to ventilation and flexible spaces that include moveable furniture or mobile dividing walls. "If a library can move their equipment around to provide more space," says Bolek, of HBM, "that's going to allow them to still be operational if there is a need for more social distancing in the future."



The rotunda at Lehigh U's Linderman Library has a stained-glass dome over rows of bookshelves set up like spokes on a wheel.

THE LIBRARY AS A PUBLIC — AND WELCOMING — SPACE

There has never been a more crucial time for the public space the library provides.

Online, people are able to wall themselves off from information and fellow citizens who might have different views, and they can be as cruel or dismissive as they want to be, as they never have to encounter people with differing opinions in the flesh. In many ways, the library will continue to play its longtime role as a connector and reconnector, and as a center for democracy.

Public space has become sparse in America. It is often privileged and not really public at all, because it requires a fee to be enjoyed. This tension was cast in sharp relief in 2018, when two Black men were arrested in a Starbucks coffee shop in Philadelphia, in front of incredulous onlookers.



The men hadn't ordered anything yet they were waiting for a friend to show up — and Starbucks employees had called the police to remove them.

In the years since, the country has struggled with race relations, stark political divisions, sophisticated misinformation campaigns, and finally the pandemic, which shuttered most public spaces in the country. Those dynamics create an opportunity for libraries.

"It's even more important now,"says Lisa Forrest, director of the Davidson College Library, "to connect people to your services and your resources, to ideas and to one another."

Public space has often been called a "third space" — that is, not home and not work, but a location that supports serendipitous interactions. The coffee shops and reading rooms that have long been part of library buildings support this kind of interaction. Some libraries have added small theaters or auditoriums, where people can gather, along with programming to support such spaces.

Library directors and designers note that it's important to signal the kind of community connections and interactions the library wants to encourage through the aesthetics and layout of the building. Does the design of the building celebrate dead white men who established the institution, or the array of people who use it today?

"Libraries now have to really be careful to be welcoming to all students," says Ip, of Sasaki. In her focus-group sessions with students from Northern Arizona University, she found, "students did not feel welcome in the library because of how the space looked, how it felt, and what was hanging on the walls."

A focus on wellness — even beyond avoiding airborne viruses — also permeates today's discussion about library spaces. Rooms that support quiet meditation and study, solitude in the presence of others, and biophilic design (which incorporates living plants and other natural features) all have been shown to have beneficial effects on health.

In a noisy era, designers and librarians need to plan for those elements. But they are well within the tradition of library design. Libraries may take new and exciting modern shapes, but there is still a public love for the traditional trappings of a library.

"People come into our library, and they say, This feels like a library," says Kidwell, of Huntingdon College. "That's always said positively, never said as a negative. There's still value in your campus library looking like a library, not looking like a convention center."





TAKEAWAYS

The Future of Collections

ANY PEOPLE SEE a library as a place that simply gathers a vast range of knowledge in a physical place and stores it for eons — a giant brick box of stuff. But that view doesn't quite capture the real influence that academic libraries have on the production, vetting, and interpretation of all that material — or the changing conception of what's considered collectible material in the first place.

Major research libraries have some of the largest single budgets of any entity on campus. Each year, they spend tens of millions of dollars on books, journal subscriptions, various technology platforms, and many other things. That buying power held sway in a subtle but profound way. In a sense, libraries for many years have been a hurdle for publishers and authors on the path to success, and a check on their work. Books and other publications that peddled blatant misinformation generally did not find a home in academic libraries, and thus could be more financially difficult to produce. A growing movement toward open-source journals, course materials, and other scholarly products is strongly supported by the library community.

Data will play a more important role in scholarship in the coming years. Libraries may need more resources to work effectively with data.

Special collections and unique items can be a draw for scholars, and can bolster a library's connection to students and the local community. "What we chose to purchase set what was financially viable to publish," says Lisa Janicke Hinchliffe, an affiliate professor in the School of Information Sciences at the University of Illinois at Urbana-Champaign. We clearly live in a different world now, where the barriers to publishing have dropped. Anyone with a phone and a Twitter account can create content; people with more-sophisticated technology can create whole publications. "The degree to which libraries as collectors served as a sort of filter on quality, it's really quite gone away," Hinchliffe says. "The dynamics are different."

Libraries' traditional role as gatekeepers of information distribution has diminished, but they are increasingly involved in knowledge production and in shaping the publishing industry. Librarians are working with scholars to produce textbooks, monographs, and journal articles. And a new and emerging role for libraries — collecting the data behind the latest research — is creating opportunities for even more new content and discoveries.

"It's an interesting shift from libraries being concerned with acquiring and preserving what is produced to actually having an active role in shaping what is produced," says Hinchliffe.

Libraries are driven by two imperatives: a vision for openness, where information is publicly available, and a responsibility to identify, collect, and offer validated, trusted information. Those two imperatives are often at odds under the current system.

"The work of maybe several decades for libraries and publishers alike is to manage this tension," says Roger C. Schonfeld, the program director for libraries, scholarly communication, and museums at Ithaka S+R, a consulting and research firm that specializes in libraries, museums, and academe.



U. OF ILLINOIS

Libraries have increasingly been playing an active role in shaping what is produced, says Lisa Janicke Hinchliffe, an affiliate professor at the U. of Illinois at Urbana-Champaign.

THE OPEN MOVEMENT

For more than two decades, librarians have been integral to the growing movement surrounding open access to scholarly research and materials. The open movement embraces the ethos of open access as well as the enhanced exchange of knowledge during the research process, among other priorities. It is driven by some grounding principles, including that access to knowledge and research is a fundamental right, not something that should be placed behind barriers of cost or restrictive copyright, particularly now that the internet has made publishing easier and less costly.

After all, librarians and other advocates point out, much of the financial support for the research and writing of journal articles and other scholarly material comes from public coffers. Why should the product, then, be owned by corporate publishing giants who guard that material with multimillion-dollar contracts and licensing agreements?

Initially, the idea of offering free access to scholarly publications was met with derision from publishers and even some in the academic community. But today, open access has blossomed into an international movement, drawing the attention of government agencies and nongovernmental organizations — even bodies as prominent as the United Nations. "Compared to when we started in 2001, the good news is that it's hard to throw a rock and hit somebody who hasn't at least heard the term 'open access' or has some sense of what it is," says Heather Joseph, executive director of the Scholarly Publishing and Academic Resources Coalition, an advocacy group for the open movement. "Where we are now in the movement is in sort of a battle for the heart and soul of how open access is implemented — and to what end."

Publishers have accepted that higher education and the research community support open access, says Joseph, and many are adjusting their business model to respond to the movement. Where publishers once charged subscribers and readers to access journal articles and other scholarly work, many now seek to charge institutions and authors substantial fees on the front end to guarantee free access to readers. Those fees can range widely: *PLOS*, a nonprofit open-access publisher, charges anywhere from \$775 to more than \$5,000 per article; *Nature*, the prestigious science journal, charges more than \$11,000. "Show me a researcher at a small institution here in the U.S., let alone a developing country, that's going to be able to do that," Joseph says. "They can't."

"It's hard to throw a rock and hit somebody who hasn't at least heard the term 'open access' or has some sense of what it is."

Publishers are pushing libraries and library consortia to sign on to these "transformative agreements," under which libraries essentially must pay to publish the work of their institutions' scholars instead of paying for users to access articles.

The evolving relationship between libraries and publishers was crystallized in a series of contract negotiations between the University of California system and Elsevier in recent years. In 2019, the university system canceled its subscription package with the international publishing giant, and it pushed Elsevier to support more open-access publishing; the publisher came back to the university with a costly contract. When the two parties returned to the negotiating table to sign a contract in 2021, UC agreed to pay Elsevier \$10.7 million, with small increases every year, while Elsevier agreed to provide open access to work produced by the university's scholars. In an announcement about the agreement, Elsevier noted that it published 81,000 open-access articles in 2020, about a seventh of its total output that year.

The deal was met with mixed response. Some librarians and open-access advocates said it was a step forward for the movement, with a major publishing company and one of the largest university systems working together on a transition to open access, demonstrating the power that libraries have in negotiation on the issue. But others noted that such deals are possible only with the biggest and most prominent universities and systems.

"We have real concerns over that model," says Joseph. "We do not promote the library community entering into these kinds of agreements with publishers." Not only does the deal exclude smaller institutions that do not have the power to negotiate with a major publisher, it does not substantially transform the relationship between libraries, scholars, and publishers.

Open access is a global endeavor, and similar efforts in other countries yield only limited insight into what's possible in the U.S. Schonfeld, of Ithaka S+R, believes that European universities, because they engage collectively on these issues, have clear advantages in securing open-access deals with established publishers. "We're not seeing this large-scale transformation toward publisher-driven open access in the U.S. in the same way we're seeing in Europe," he says.

Institutions in France, the Netherlands, and Poland are brokering deals with publishers as a national bloc, which both brings institutional heft to the negotiating table and allows smaller institutions to ride along with big ones.

"What ends up happening is that the universities that don't publish very much, in theory, can pay a lot less," he says. "When you're negotiating at a national level, you can do that rebalancing, especially if the funding all comes from the central government."

In the United States, there are fewer instances of large, statewide systems with centralized funding. Even consortia or groups of large research institutions — like the Big Ten or Ivy League universities — do not negotiate as a bloc, and they exclude smaller and often struggling regional colleges and universities.

But Joseph argues that even European countries have been rethinking their agreements with publishers. Sweden is one example. Its universities were early adopters of transformative agreements, following a national goal to provide complete open access, but these accords are now seen as too costly. "We don't find the transformative agreements sustainable for the future," Wilhelm Widmark, the library director at Stockholm University, wrote in a newsletter in late 2021. Sweden's library consortium is reconsidering the contracts they signed with publishers and are beginning to investigate alternatives.

In general, Joseph notes, the open-access movement has not focused enough on a holistic notion of opening up scholarship and making it broadly available at low cost to all institutions and scholars. By retaining a reliance on legacy publishers, institutions have created "built-in biases and mechanisms that just replicate barriers that are in place."

"It's not about just taking what we're currently spending and giving it to the same players and hoping that we end up with a larger number of open articles at the end of the day," she says. "It's about changing the rules of the road, right? It's about us regaining control of our intellectual output."

A NEW SCHOLARLY PRESS

Libraries are even stepping into the world of scholarly publishing — as publishers themselves. Lever Press, founded in 2015 by the Oberlin Group, a consortium of libraries at liberal-arts colleges, has published 15 monographs on topics as wide ranging as musicology, Sophocles, higher education, and child sex abuse. The books can be purchased inexpensively in paper form or downloaded for free from the press's website. The site shows that Lever Press books have been downloaded by scholars from nearly every continent.

Quality was extremely important to the press's legitimacy, particularly for faculty members who are frequently skeptical of publishing with an open-source press instead of a legacy academic one. Established scholars were quicker to buy into the idea than were more-junior ones, who needed recognizable publishers for their tenure reviews.

"It was frustratingly long until we actually had a book come out," says Marta Brunner, librarian at Skidmore College and a member of the press's oversight committee. "What we learned is it takes a while to generate a pipeline of viable manuscripts, and then it takes a while for the editing and production process." Marketing and fundraising were also challenges early on.

The Oberlin Group formed partnerships with Amherst College Press and Michigan Publishing, the scholarly publishing arm at the University of Michigan and a division of the library there, to help with acquisition, editing, peer review, digital layout, and printing options.

Academe would benefit from more partnerships like these, says Gregory Eow, president of the Center for Research Libraries. Libraries, university presses, and scholars (and scholarly societies) form "three legs of the stool" in higher ed — and libraries and university presses, frequently in the same administrative unit, often struggle for funding.

"Maybe we can come up with a whole new model for producing content in ways that keep the different parts of the stool that are working," Eow says. "Can we redefine the relationships between these different stakeholders to find a sustainable path forward?"

To cope, these disparate parts of the university could work more closely together to share resources and expertise. Some jobs are not that far apart anyway: A research librarian with a connection to the history department could be of great help to an acquisition editor who specializes in history. "Research librarians and acquisition editors could probably be in the same department and, in some instances, actually the same staff," he says. But on most campuses, those two people don't even know each other.

OPEN EDUCATIONAL RESOURCES

The open movement has also drawn attention to a related issue: the high cost of textbooks and other learning materials assigned to students, which often adds hundreds of dollars to the cost of a course. For students from low-income families, these textbook costs can be prohibitive, and, even for students from moderate-income families, a significant financial burden. The open educational resources movement, or OER, has arisen in response. Where open access deals with scholarly publishing, OER applies principles from the open movement to textbooks and other course materials to reduce costs and barriers to students.

Broad, campuswide adoption of open educational resources can require coordination. Libraries often serve that function.

The energy around open-educational resources started with faculty members who saw how the cost of textbooks affected students. Librarians' involvement has been more recent — only in the past 10 years or so — but it has also been catalytic. That's because libraries could bring a wealth of expertise on how to make materials available online at a low cost or free — librarians tend to understand copyright restrictions — and in finding new materials.

"Many faculty don't have those skills to search databases and understand the licensing," says Una Daly, director of the Community College Consortium for Open Educational Resources.

Libraries have also been key in organizing OER efforts on campuses from a central point. Broad, campuswide adoption of open educational resources can require coordination among academic departments, teaching-and-learning centers, campus bookstores, student-government bodies, and other entities. Libraries often serve that function.

Big Contributions to Open Educational Resources

More than half of librarians surveyed said they either made OER available or supported their development at their institution.

In which of the following ways is the library involved with open educational resources content?

Make OER content available via the library

63.7% Support the development of OER content at this institution 51.5% Support OER initiatives at the state or consortial level 39.1% Other 9.2% Library is not involved with OER content 20.8%

Note: Responses are from libraries in North America. Source: Library Journal/State of Academic Libraries survey, 2021, conducted spring 2021, released summer 2021. "Libraries originally came to this as maybe an extension of their work on open access," says Nicole Allen, director of open education for the Scholarly Publishing and Academic Resources Coalition. "It has created opportunities for libraries to open conversations with faculty and sort of expand the work that they're doing in teaching and learning in new ways. And that's especially been accelerated by the pandemic, when every faculty member has had to make the jump into online learning."

Public financial support for the development of OER materials has also been a huge boon for the movement. California gave \$115 million to the California Community Colleges system to create and support "zero textbook cost" degrees.

In 2017, the City University of New York asked the state for \$1 million a year for three years to start work on open educational resources. The following year, the state gave CUNY and the State University of New York system \$4 million each for projects in open educational resources. "We were off and running" — and the money was routed through the libraries, "which is really amazing," says Ann Fiddler, the CUNY system's open-education librarian

With all the bureaucratic hoops associated with state money, "it's not easy to spend \$4 million, but we managed it, and now we're in year five," she says. New projects often wither and die with natural attrition at CUNY, she says, but the open-educational projects remain popular with staff and faculty members.

The money primarily goes to faculty members who want to convert their courses to OER, and to OER librarians who assist those faculty members. Librarians have been involved in conducting reviews of course syllabi and other learning materials used by professors, making suggestions for readings and materials that can be accessed for free, and helping professors publish their own material for courses online for students to use. Since 2018, various colleges in the CUNY system have converted 30,000 course sections to OER, saving students around \$90 Text and data mining is a research method where researchers go through a database and download massive quantities of text automatically to then analyze for evidence of things like relationships, public sentiments, etc. It's catching on in many academic disciplines now, but our traditional-use licenses with our vendors do not allow for such mass harvests – additional licenses need to be negotiated for that, at an additional cost. The Wild West days of the internet are over, and fences are going up everywhere. An increasing amount of my time is devoted to helping researchers navigate all this."



- Jeffrey A. Knapp, communications librarian, Pennsylvania State University Libraries

million. In course catalogs, the university advertises "zero textbook costs" and "low textbook costs" for courses.

Most OER materials at colleges across the country are covered under Creative Commons licenses. In many cases, instructors can adopt OER courses and materials from other institutions free of cost and alter them to fit their needs — even to include local cultural perspectives and populations.

"We know that when students can see themselves in the materials," says Fiddler, "there is research to support that they do better, they engage better with their courses."

Studies show that students who are using OER course materials do just as well in courses compared with students using traditional commercial materials. Some studies show that students who are Pell eligible, part time, or nonwhite fare better academically in courses with open materials.

In some ways, the librarians' old role of gatekeeper to trusted information has changed to one of advocacy for free and low-cost materials for students. "Some of the challenge is getting past a faculty bias that the materials weren't published by, say, Macmillan," says Daly. "So we have them look at the statistics: How many students in your class are actually buying the textbook? Or are a lot of them trying to get by without it?"

The commercial publishing industry is adapting to OER and has unfurled various offerings to try to compete with free and lowcost open-source materials. The most-prominent adaptation is something the publishing industry calls "inclusive access," which bundles online course materials with tuition and fees. Access to the book is available only while the student is enrolled in the course. Borrowing or buying a used textbook at the beginning of the semester or selling it off at the end isn't possible under that model, another aspect that irks student advocates. Those advocates are also worried about the data that publishers and associated companies are collecting from students. But data, used in a different context and purpose, has also presented an opportunity for librarians.

THE MANAGEMENT AND USE OF DATA

Data has become the DNA of academic research. Organizations and agencies that

HIDDEN INFORMATION

The African American Subject Funnel Project does imperative work for addressing informational access inequities. E-catalogs, databases, digital collections, and other materials are all indexed by language drawn from the Library of Congress's name and subject authority terms. When these terms become outdated, misapplied, or not applied at all by various catalogers, vendors, or metadata specialists, it creates discoverability issues. Information, especially when it comes to research about or by individuals of color, becomes technically accessible but 'hidden' within larger information schemes. As such, this makes it difficult for the average person to find



information about or written by people of color. On a wider scale, linked data addresses this very issue by making connections between resources. But the work of the African American Subject Funnel targets this issue by addressing the existing terminology available to describe African American culture, history, and life broadly."

- Gemmicka Piper, assistant librarian and humanities librarian, Indiana University-Purdue University Indianapolis University Library

support research now frequently require scholars to store that data — to vet and reproduce studies, and potentially to repurpose or combine with data from other research for new discoveries. Those changes have had implications for the work of librarians.

Data comes in different forms and sizes, and it spans a huge range of activities and disciplines. The storage and management of it can be challenging. A researcher who has done a survey with thousands of participants can store much of her survey results and associated materials on a thumb drive in the drawer of a desk; in such cases, libraries need to be available to scholars to help them store and curate the data in appropriate ways. Librarians also are guiding scholars to external resources for data management; some of those are open-source research-management tools and repositories, like the Dataverse Project or OSF, while others are commercial options.

So-called Big Data is another challenge altogether. Much of the storage and curation of Big Data in the sciences — for example, the 90 petabytes of data produced each year by the Large Hadron Collider — is managed by multiple institutions or governmental entities. But even social-media platforms produce an enormous amount of content; Twitter or Facebook produce petabytes of data every day.

Observers of the library field say that the management and use of data in libraries is relatively new, and that depth of experience and interactions with data curation and analysis vary among institutions. But on the whole, "universities tend not to have an integrated strategy for how to undertake research-data management," says Schonfeld, of Ithaka S+R. Instead, roles for data management are often split among various offices in compliance, research, technology, and the library, which may have a few people devoted to data.

This may represent a lost opportunity, he argues. The library community could have made a case a decade ago to become a home for all things related to research data — compliance, storage, consultation in working with data, and so on. Relatively few libraries made that case, he says, yet where they did, their impact has been limited. "It's been great work where it's happened, but it has resulted in a library with 400 employees and five of those people working on research data, not 200 people working on research data."

Just as college and university libraries centralized over the decades, more institutions will place the management of data under a centralized office on campus. "But I doubt the library will be the vehicle to do that centralization," he predicts. Libraries may simply be overextended.

"Libraries have an enormous amount of recurring commitments" — to personnel, to collections, says Schonfeld — "and have really struggled with the scale of redeployments necessary to really capture some of the newly important strategic roles."

But observers also argue that libraries already have troves of data on shelves in the stacks and in special collections. Thomas Padilla, senior director of collections, technology, and partnerships at the Center for Research Libraries, advocates a framework of "collections as data."

"Don't only think about something as a book — or, once it's scanned, as a picture of a book," he says. "If you think about it as data, it opens up all these different affordances of possible use." The text can be scanned and mined, and compared with other texts. That framework paves the way for additional uses for historic collections, and offers a new way to think about collections of new material.

"So much of contemporary cultural production already is data," says Padilla, in the form of Zoom calls, emails, online news, YouTube videos, and Facebook posts. Much of that will be valuable to historians, sociologists, and political scientists seeking to interpret, say, politics leading up to the 2020 election. But "the extent to which libraries are supported to engage with contemporary culture that way is very uneven."

"Is the profession going to be trained and supported appropriately," he says, "so they can easily move between supporting interpretation of a static newspaper as they would a collection of 10 million tweets around the presidential election?"

The library community could have made a case a decade ago to become a home for all things related to research data. Relatively few libraries did so.

For now, too often, data is merely treated as a static collection. "If they don't treat it like a bunch of interlinked relational data, with standards governing it and a sense of algorithmic amplification," Padilla asks, "what is the future role of libraries in supporting interpretation of the cultural record?"

SPECIAL COLLECTIONS

Of course, many libraries already have a lot of important material about the cultural record. They are the special collections that are often among the most-valuable pieces of cultural heritage that a library owns. Such collections often reflect the values or mission of institutions, and they form a piece of

CONNECTING THROUGH PODCASTS

Junior Tidal, associate professor and web-services and multimedia librarian at New York City College of Technology, City University of New York, is also author of *Podcasting: A Practical Guide for Librarians* (Rowman & Littlefield Publishers). He talked about what podcasting can bring to librarianship.

My book is an introduction to how librarians can create their own podcasts. The proposal was accepted right before the pandemic happened, and written entirely during the pandemic, so the context of writing it was through that lens. The book covers the basics of podcasting, such as the technical set up of what



equipment to use, how to get it on the internet, the interview process, and delving into videocasting, catered to the specific needs of libraries and librarians.

"I believe that podcasting is a huge thing in libraries today! I actually interviewed several librarian podcasters about their own experiences, which I drew upon and included in the book. My advice for initial library podcasters is to jump in and record. It won't sound perfect but that gets easier and refined over time."

"Since libraries were shut down due to Covid, I felt like librarians still needed to connect with their communities, if not face to face. Podcasting is a low-barrier and accessible way to do that, and I feel like it is an important and intimate medium that supports remote learning and community-building.

"Libraries are in a unique position to not only create podcasts, but to share those digital-creation skills with students and faculty. That way, they can create their own, be it for pedagogical or personal

purposes. Podcasts are both an information resource and an opportunity to learn a new digital skill.

"There are typical library podcasts that promote library collections, services, and events, but also thematic shows that highlight librarians from underrepresented communities (the LibVoices podcast). and the labor involved in librarianship (the Librarypunk podcast). I believe that podcasts can reveal what happens behind the scenes of the profession, and can break the stereotype that librarians just sit around and get paid to read books. We're involved in our unions, faculty governance, and teaching! The library isn't a traditional classroom, but I feel that many don't perceive it as the transformative learning environment that it is."

a college or university's reputation.

Yale University has been collecting items for 300 years. In its Beinecke Rare Book & Manuscript Library, just one of seven collections the university owns, you could find a 13th-century Arthurian romance, 180-yearold pencil sketches of the Amistad captives awaiting trial in New Haven, and papers and manuscripts of many famous authors, including James Baldwin, Rachel Carson, and Edith Wharton. Some 40 percent of the library staff at Yale work on special collections.

While scholars interact with items in special collections regularly, they are often invisible to students and the public — or even hidden from them. Barbara Rockenbach, university librarian at Yale, plans to restructure special collections to provide the broadest possible access to library patrons and a frictionless experience for scholars.

The university's special collections — in discipline-specific areas including the arts, divinity, medical history, and music, along with the Beinecke Library, the Lewis Walpole Library, and Manuscripts and Archives had been managed separately within the organization. Rockenbach unified the seven collections under one associate university librarian, to unify the vision for the collections and strengthen the experience of library users.

Five directors work under that associate university librarian, but they don't focus on specific collections. Rather, they focus on areas that Yale wants to improve across the seven collections. A director of community engagement, for example, will focus on drawing people from the community — not just students and scholars — into the library to see and experience special collections.

Technical services were brought under another director. "The challenge with having seven different repositories is that we had seven different procedures, and seven different backlogs. This enables us to get a full picture of what we've got and how we are making it accessible." The university library can also coordinate its current work in "reparative descriptions," where librarians are revising the ways that some items in the collection have been described that are offensive or "not in keeping with our current understanding of the world," Rockenbach says.

A big piece of how Yale is rejiggering special collections focuses on the education of students. "The Yale library can play a role in educating our students in the kinds of skills that they are not going to get in the classroom," Rockenbach says. The library already has a good track record of familiarizing doctoral students in history and English with its special materials and placing them into jobs at special-collections libraries across the country. Rockenbach sees Yale training students in a wide range of skills through special collections, like paleography, data management, or digital humanities.

"Often these collections are tucked away; you have to go find them," Rockenbach says, and the lack of accessibility can diminish their impact. When she worked at Columbia University, she found that the university's acquisition of the Latino arts and activism collection was an effective way to engage the Latino community surrounding Columbia. "Every new collection we bring in is a new audience."

The library has established some prominent exhibition spaces that will advertise to visitors the kinds of things that are in the collection. Several years ago, Yale did a security audit to determine what it needed to do to open up its special collections more broadly to the public. In response, the library bolstered its inventory and security systems for the collection.

"The internet in some ways has shown us that if you put primary sources in the hands of people who are not scholars, they can do really incredible things with them," Rockenbach says. "Primary source material is where knowledge production comes from, and knowledge production can come from all over."





The Future of the Profession

ITHOUT LIBRARIANS, a library building is merely a warehouse of stuff. It's the librarian that makes a library what it is.

And the library profession, much like the library itself, is undergoing profound change. As many of the activities of the library have

moved online, the essential role of the librarian has had to adapt to keep up with broader shifts in technology, society, and demographics, all of which have had profound implications for the people entering the profession and the skills and qualifications it requires.

The ubiquity of information has changed librarianship in multiple ways. It has arguably elevated the profession to a position that is far more technical and diverse, in terms of roles and responsibilities, than it has ever been. In the past, librarians' relationships with professors centered on finding and retrieving materials, but librarians today are increasingly asked to help make sense of the information that those

TAKEAWAYS

Librarians have to bring a range of technical, legal, and people skills to work — and the growing and changing forms of information have made the job more complex.

The library profession is often a second career, and libraries are increasingly interested in hiring people who have degrees in disciplines other than library science.

Diversity remains a major challenge to the field, which is largely female and white. researchers are getting. That role requires a combination of technical, teaching, and people skills that can be rare on campuses.

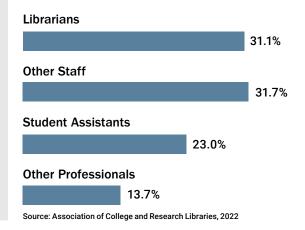
In a sense, the internet brought automation to the library; professions that have been affected by automation tend to evolve by incorporating more services that require so-called soft skills combined with specialized professional or technical skills.

"A librarian today has to be not only a librarian, but kind of a social worker, a lawyer, a business agent," says Gary Marchionini, dean of the School of Information and Library Science at the University of North Carolina at Chapel Hill. "You're trying to understand the patrons' emotional state and needs. You're trying to stay within the laws and regulations that govern copyrighted materials or even open-access materials that may be restricted in some way. There's a lot more nuance to the job than people think."

And, many library directors point out, many more types of people work in libraries now — not just people trained as librarians. Only about a third of people working in libraries identify as librarians, according to Association of College and Research Libraries. About 13 percent identify with another

Differing Backgrounds

People trained as librarians make up about a third of a library's staff.



profession, and a quarter of the workers in libraries are students.

In academic libraries, "we have a lot of professionals who run the gamut, but they wouldn't necessarily be called librarians," says Julie Garrison, dean of libraries at Western Michigan University and president of ACRL. "There are people who have curriculum-design or online-course-design skills that are being hired into libraries. In some cases, research libraries are hiring lawyers who can focus on intellectual property, copyright, and scholarly communications kinds of issues, issues around authors' rights, etc. We are hiring people who are doing marketing. We're hiring people who are doing fund raising."

THE SKILLS

Clearly, librarians and other people who work in libraries need to have a broader set of skills than they did in the past. But what skills, specifically, does the academic world want of them?

"Librarians today certainly have to be more technically savvy," says Marchionini. Most of the students in the program at UNC take courses in databases. Research funding in higher education often comes with requirements to preserve and maintain the data associated with research at the institutions, and that responsibility falls to librarians much of the time.

But leaders of library-information schools say that a comfort with data is not merely about knowing how to store the numbers, or retrieve them from a repository somewhere. Librarians who are doing essential work are not just helping scholars get access to data, but also helping them interpret it, or figure out how to combine that data with other related information. In many ways the new role of the librarian is an enhancement of the traditional function of the job, retrieving documents.

The duties of the job increasingly involve helping scholars find other scholarly work — perhaps across disciplines — that can transform a project, says Eric T. Meyer, dean of the information school at the University of Texas at Austin. "Librarians are playing more of a role in helping educate based on their interactions with previous scholars to say, 'Well, here's something another person did,'" he says. The process of searching for information becomes a learning activity.

Meyer has seen instances in which librarians have been able to help scholars studying a particular piece of music by finding digitized versions of related pieces of music to compare to the original. "That's a pretty transformative use for someone who's interested in musicology," he says. "Librarians are getting more in the business of helping people see those connections. It's much more about partnerships."

The conceptual framework for the purpose of library work is also being rethought. Rachel Ivy Clarke, an assistant professor at Syracuse University's School of Information Studies, argues that librarianship should be focused on design as a process for interacting with scholars and students. Library "science" may be a misnomer, she says. The job is really much more about creativity and flexibility.

"What librarians really do is design tools and services to help connect people with information," she says. Design in libraries isn't just about buildings and pretty interiors. "If you look at the discipline of design and the

SECOND-CAREER LIBRARIANS

My original career goal was to go into child/adolescent psychology and become a counselor. I was a higher-education counselor for several years, and while that was fulfilling, it does come with some burnout. I transitioned my passion for problem solving, academia, and helping people into a career in librarianship."

"There are so many parallels between counseling and librarianship. Students come to you in both professions with a problem to solve, and you as the professional teach them what tools they can use to solve them. Another similarity is the discovery process that comes with both professions.



Much of the time when a student came to me as a counselor, they had an idea of what brought them to me, but after exploration and going down different rabbit holes they discovered something new about themselves. This is similar to the discovery process of research. As a librarian I love being present for those 'aha!' moments students have while discovering something new."

 Giovanna R. Colosi, librarian for the School of Education, subject instruction lead, Syracuse University Libraries theories that go into it, it's about creating tools, creating services that can be tangible or intangible." A key part of that design process is working with a scholar or student to find out their true need and to refine the tool or service.

Public libraries, in particular, have long been oriented toward interactions with patrons and public service. That ethos hasn't traditionally been prioritized in academic settings, librarians say — but that's changing. Library and information schools, and

"Librarians are getting more in the business of helping people see those connections. It's much more about partnerships."

the job market, are putting more priority on communication, public speaking, outreach, and teaching skills.

"The idea that somebody can be a successful librarian today by staying away from people to be a cataloger, work in a back room, or roam the stacks, it's not going to work," says Marchionini. "They have to be interactive and have to have some people skills beyond the core or organizational information skills."

Leadership skills are also crucial, say library directors, who note that the field is graying and needs younger librarians to shepherd institutions into a new era.

"If you talk to people in the field they will always say they want our new graduates to be more skilled in management," says Katherine Izsak, associate dean for academic affairs in the College of Information Studies at the University of Maryland at College Park. Most students, she says, don't see the importance of library-management courses until after they graduate and have to grapple with negotiations and contracts, supervise people, and make budgets. "Often younger librarians don't necessarily think that they'll end up in management roles, so they just don't see the value until they're on the job."

Sometimes, leadership and people skills include the ability to communicate the ways that librarians render valuable services across a range of disciplines. Studies show that scholars from disciplines that rely on online journal articles and documents might not even recognize that they are using library resources.

"Academic libraries were very good at making themselves invisible to the vast majority of users, which is good from a service point of view," says Meyer. "But it's not so good from a justify yourself as part of our budget point of view."

THE QUALIFICATIONS

A master's degree in library science has long been one of the basic qualifications for a librarian's job in higher education. Librarians were historically trained under an apprenticeship model, but in the late 19th and early 20th centuries, the library field adopted the word "science" and offered training. In 1883, Melvil Dewey, head librarian for Columbia University and inventor of the Dewey Decimal Classification, established the School of Library Economy at Columbia University. "Library science then was one of those rather American social sciences which began coalescing in the late nineteenth and early twentieth centuries as part of the move to professionalize vocational activities and as such would include dairy science, management science, military science, mortuary science, political science, and even creation science/intelligent design today," John V. Richardson Jr., professor emeritus of information studies at the University of California at Los Angeles, wrote in a history of the profession.

THE TEACHING LIBRARIAN

Among other previous jobs, Gayle Schaub taught English as a foreign language before she entered the library profession. Now, she's a liaison librarian at Grand Valley State University, where she runs information-literacy instruction sessions, consults with students, creates workshops, and develops materials, chiefly for online courses. She discussed her background and how it helps her in her current work. (This interview has been edited for length and clarity.)

Q: Why did you leave your previous teaching job and become a librarian? What do you bring from the old job to the new?

A: I served as an elected commissioner on our library board (in Grand Rapids, Mich.) for six years and realized through that experience that librarianship would offer me a way to help people gain knowledge and improve their lives with-



out having to be in front of a classroom, day after day. I never really wanted to be a classroom teacher.

I'm still an educator, though I don't have my own classes. I help students navigate increasingly complicated layers of tools and systems; I see it as a kind of translation. I help them to articulate and then translate their research ideas and topics into words they can use effectively to locate the information they need. Lots of professors assume – incorrectly – that their students know this stuff already. I do about 50 consultations each semester, so I can confidently state that a fair number of grad students don't enter their programs sufficiently prepared.

Q: You seem to favor working with students who are restarting, much like you did. What is satisfying about working with them? What do they need from academic libraries and higher education?

A: Maybe this population just fits my personality and approach; I'm very practical. The Grand Valley Education Department has over a dozen grad emphases, and these students are, for the most part, working adults with families and responsibilities and experiences that compete for their time. They may be returning to university study after many years away. Many are uncomfortable using the resources, they're intimidated and afraid of outing themselves as unsure and confused. Maybe it's because this role makes me feel needed. I have a box of Kleenex at the ready, because it's not unusual for students to let themselves feel vulnerable

and let it out with me instead of with their professor. I'm a teacher, a confidant, a guide, and more.

In my opinion, these students would benefit from a required information-literacy course, which is something we don't have in place. Students rarely have the time or the context in which to recognize and develop their identities as researchers. They're ticking boxes and completing assignments, mostly individually, without recognizing the bigger picture. They need help recognizing how one piece builds on another.

Q: What value do academic librarians bring to the university curricula?

A: We are always thinking about student learning. We are a big part of what makes this process work. In my situation, it's a liberal-arts education. We focus on the skills and concepts that enable learning to happen. Without understanding what information looks like, how information is organized and stored, the many ways it has value (and power), and how using information wisely helps one make sense of all the other content in a particular discipline, students can't really dig into a discipline with confidence. Given the ways that librarianship and scholarship are interacting and changing within a library, many academic-library directors acknowledge that they are seeking job candidates with other qualifications. The MLS qualification is coming under some scrutiny generally in the profession.

"Librarians who have been the most successful historically and today come out of an academic background," says Harriette Hemmasi, dean of the library at Georgetown University. "They understand the culture of that scholarly endeavor and they are able to speak the language."

"Both sides could learn from each other," she says. Too often librarians are technicians, who understand the tools and services but might not be familiar with academic culture or the topics.

In 2015, scholars at the library and information school at the University of Maryland released a report, *Re-Envisioning the MLS: Findings, Issues, and Considerations,* which examined some of the essential skills, competencies, and qualifications that the library job market would need. The authors noted that discussions about "whether an MLS is still relevant or necessary" arose throughout the work on the report. They called it the "elephant in the room"; some library professionals say the MLS is viewed as a kind of union card in the profession.

"There was a sense that an MLS is not required — nor perhaps desirable — for all aspects of library work," the report notes. "For

LIBRARIAN WITH A PH.D.

I am a librarian for Pennsylvania State University but I don't have my library degree and I never entered the library in undergrad! I am the online learning coordinator for Penn State, where I get to bring my functional expertise to the libraries and move us forward in the area of online learning. I have my Ph.D. in learning, design, and technology, and my main student population at Penn State is World Campus. This means that one day I might be helping a student in Asia access a book for their class and the next day I am building a module to be used across all English rhetoric and composition classes. If I knew this position existed in the library, I would have imagined myself in a library!"



"I think that I bring a unique perspective to the position. Diversity of thought is very valuable and I have a different skill set than someone from a more traditional background. For example, I am extremely strong in learning theory and research methods and, from talking with my colleagues, that is not a focus they have in library school. I do encounter some bias from people who think I need to have an MLIS, but I feel that I overcome that when I share my expertise and value their expertise."

- Victoria Raish, online learning coordinator, Penn State University Libraries example, having human resources, business managers, communications staff, information-technology staff, web designers, and other operations staffed by those with expertise and relevant degrees was preferable."

The Council on Library & Information Resources has long offered a fellowship program for recent Ph.D. graduates, giving them an opportunity to learn some aspect of information management and librarianship, while also placing them in a position at an academic library. Recent fellows earned their doctorates in such fields as American studies, design, education policy, English, history, media and communications, and organizational behavior.

When that program started about 15 years ago, some traditional librarians saw it as "class warfare," says Marta Brunner, the library director at Skidmore College. She has not a master's degree in library science, but a doctorate from the history of consciousness program at the University of California at Santa Cruz. She started working as a library assistant at the University of Chicago in 2004, while her husband was in graduate school there.

"In order to write my dissertation, I had to ask for a day pass each day just to enter that library, and then I couldn't check anything out," she says. "So I ended up looking for jobs on campus so I could get library privileges." Brunner found working in the library intellectually stimulating and interdisciplinary in nature, much like her doctoral program.

She rose up the institutional ladder, working in digital humanities and teaching-andlearning services, eventually becoming the head of collections at the University of California at Los Angeles, before moving to Skidmore.

Libraries can provide a more-diverse perspective at an institution by recruiting from applicant pools outside of the library-school track, Brunner and others say. With academic programs closing and a glut of Ph.D.s on the job market, libraries could find talented scholars to hire. Those scholars need to be interested in libraries and the work of librarians, says Brunner, not just seeking a backdoor into the institution. The library should also be conscious of protecting those scholars from being exploited at the institution as adjuncts.

Library programs themselves have considered providing alternative ways to enter the field. Many institutions are considering micro-credentials in library skills and other kinds of paraprofessional training. "Making sure that we've got multiple paths towards success in careers is important," says Meyer,

Libraries can provide a more-diverse perspective at an institution by recruiting from applicant pools outside of the library-school track.

of the University of Texas at Austin. Drawing nontenured academics into the library offers strengths but also requires some delicate framing. Institutions have to depict library work as a legitimate and successful career path, rather than a consolation prize for academics who couldn't find a tenure-track job.

Of course, some librarians have faculty status and even tenure, while others have ranks as staff members. At some institutions, that employment status is in flux. In late 2021, M. Katherine Banks, president of Texas A&M University at College Station, announced a plan to pull tenured and tenure-track faculty out of the library to be placed in a new information school; the library would be established as a "service unit" for the entire campus — a move that some librarians took as a status demotion. At about the same time at Northwestern Uni-



Average age of librarians and mediacollections specialists working full time in higher education in 2019

69.13%

Estimated share of female higher-ed librarians and media-collections specialists in 2019

Source: Association of College and Research Libraries, U.S. Census Bureau's American Community Survey

versity, librarians formed a union, after layoffs and years of working without substantial pay increases. At the University of Maryland at College Park, administrators say that some librarians struggle with a status that falls awkwardly between faculty and staff.

"It's all over the map in terms of how schools have decided to classify their librarians and what it means," says Izsak, of Maryland. She wants her students to be prepared for the publishing requirements and other expectations that would come with a tenure-track job, since not all are aware of how varied the field can be. "It's something that is really important for students to understand as they're going in."

DIVERSITY IN THE PROFESSION

The library holds a special place in the imagination of many people. The librarian, meanwhile, is often cast as a stereotype: Popular culture has long promoted an image of a woman with cat-eye glasses, an obsession with books, and a tendency to shush.

In fact, real librarians are quite different. Attend any college-library conference, and it's not uncommon to see librarians with tattoos and purple hair alongside others wearing business suits. Librarians have also been notably politically active in progressive causes: They frequently take stands against censorship and government assaults on privacy, and more recently have gotten involved in support for Black Lives Matter and equity issues. (In 2019, the American Library Association removed Melvil Dewey's name from its most prestigious award, given the library pioneer's history of racism, anti-Semitism, and sexual harrassment.)

And yet, the stereotypes about who works in the profession do have some basis in reality: Library directors and leaders in the field consistently say that the academic-library ranks lack diversity. The profession is overwhelmingly white and nearly 70-percent female. (Some analysis of the data suggests that men working in the profession are more likely to be nonwhite.) That might be a legacy of what librarianship has been on campus in the past.

"For many years, it was a good spouse job," says Meyer. "And so historically — for ill or for good, but mostly for ill — it was mainly men in the faculty jobs and women in the support jobs."

But the lack of diversity in the field may have as much to do with socioeconomic factors in society at large. Public investment in public and school libraries has been inconsistent, even in decline, in underserved communities across the country. That lack of exposure to well-funded, richly programmed libraries shaped the perceptions about libraries among young people in those communities. "One of the leading factors that influences people to go into librarianship is that they had a positive experience with a library or with a librarian in their youth," says Clarke, of Syracuse. "If you don't have that connection at a young age, if you don't have a librarian that you sort of bond with or see yourself reflected in, you're not going to see yourself going down that path."

Many leaders in librarianship and observers say the field's lack of diversity can pose problems in unexpected places — by, for example, introducing bias into the way that collections are identified, acquired, and described.

"To me, it's an existential threat to the future of the profession to not be sufficiently representative of the populations that we're serving," says Thomas Padilla, senior director of collections, technology, and partnerships at the Center for Research Libraries. "It creates all kinds of blind spots in terms of thinking about our collections, our services, and in ensuring that we're creating welcoming spaces for students or researchers."

Programs in library science are trying to counter these trends in various ways. The University of Texas at Austin, which has a diverse student body, has started an undergraduate program in informatics to build a pipeline into the graduate programs. Meyer has also noticed another trend among graduate students in the past five years: They are younger than they were in the past, an indication that young people see information-oriented fields as important and viable careers — a trend that could help diversify the field.

"The typical age used to be 30 for graduate students in our school," says Meyer, noting that many people came to library work as a second career. "Now our typical student in our graduate program is much more likely to be in their early 20s, either one year straight out of college or maybe just three or four years out of college."

The university is also planning to offer a concentration in cultural-heritage informatics, which deals with the access to, preservation of, and advocacy for materials important to specific cultures, and a program in social-justice informatics, which studies how information technology can "make the world a better place," says Meyer. Other library-science programs have similar offerings, all in an effort to help prospective students see a relevance in the profession.

"Those changes, getting more undergraduates opportunities to see our field as a choice, are starting to diversify the field. But it does take a while."

"I think we're a little stale. That's something at the heart of the future of the profession."

Future academic librarians — for now, largely white and female, and mainly coming from a humanities background — also need to be more sensitive to inclusiveness in serving diverse populations that might be unfamiliar to them. Those populations could come from a different socioeconomic status or a different country — or even a different discipline.

Librarianship surely needs to diversify in terms of race and gender, says Clarke, but it also needs librarians from diverse academic backgrounds. "How do we get more folks from STEM? How do we get more folks from art and design — so we can diversify our thinking and our approaches?" she says. "I think we're a little stale. That's something at the heart of the future of the profession."

LIBRARIES' STRUGGLES TO DIVERSIFY

Q: What do you think about diversity in librarianship over all? Why does the profession struggle to attract a more diverse work force?

Those who know me have heard me say, 'I feel like a unicorn in CUNY libraries.' This is not to say there aren't many other success stories, because I am certain of this. ... Why me? I'm no more special than the person sitting in the cubicle next to me. ... I see others work as hard if not harder. I know (numerous) classified staff members with postsecondary library degrees, yet they work, and will continue working as classified staff. One would wonder, How is this possible?"



"Part of what's missing is quite evident. ... CUNY libraries' internal talent pool. Hiring in any organization costs time, money, energy, and effort to

vet, train, and employ new staff members. CUNY invests in these resources with the intention of retaining valuable employees to grow and succeed in the job and/or profession. Here is where I struggle: Many of my library colleagues/friends work to progress in leadership roles within their respective departments, yet advancement opportunities are few and far between."

- Nilda A. Sanchez-Rodriguez, associate professor and chief architecture librarian, City College of New York, Bernard and Anne Spitzer School of Architecture

It is a complicated issue that can be resolved by inclusive-minded, proactive librarians, and management who are comfortable with diversity and change. The employment makeup of a library is a reflection of its internal political culture as well as its surrounding community. If the library has problems recruiting diverse professionals it should use library association diversity committees for assistance.

"The library profession has a negative public-relations image when compared to other professions. The profession is not perceived as exciting and innovative. Library associations need to recruit from ... professional associa-



tions that are showcasing their diverse membership. The American Chemical Society and other STEM associations have been showcasing librarians and members of diverse cultural backgrounds."

- Adwoa Boateng, library liaison to the Colleges of Science and of Health Sciences and Technology, Rochester Institute of Technology Modern American libraries are rooted in a history of white supremacy and exclusion; the lack of diversity in the field today is a consequence of that design. True change will only take place when leaders are willing to make sacrifices, relinquish power in pursuit of equity, and center Bipoc [Black, Indigenous, and people of color] voices. This is difficult for some to hear, but all the other small steps only serve to appease the guilt of the privileged. Token scholarships and decolonized collections mean little when most institutions have yet to hold themselves accountable in more important structural areas like recruitment and hiring practices."

> - Shiva Darbandi, director of the Joanne Waxman Library, Maine College of Art & Design



For most of my life I was a gay man, and in librarianship that isn't really a big deal, at least it wasn't for me. ... A few years ago, thanks in part to one of my library colleagues and her nail-polishing skills, I realized that I was nonbinary. Coming out at my library at an all-staff meeting was met with a bit of confusion and silence. Not much else happened. In retrospect it would have been a perfect opportunity for a gender reveal party at work, with a big cake, loud music, and dancing."

"I can't speak for the whole library profession and their connections to the queer community, but overall the engagement seems spotty. ... I see some



glimmers of growing diversity in librarianship. I'm a member of a gender variant Slack group and seeing new members join, students in library school, points to a sea change in library employee diversity. In library school there were few queer students, and I didn't really see any out and queer librarians in the profession until I moved to academia, so some of the issue is actually seeing and knowing of, or knowing a librarian which maps to your identity or identities. Having a supportive group to ask questions, field ideas, and share thoughts really helped me to adjust to my new life as a queer nonbinary librarian."

- Mark Bieraugel, business librarian, Orfalea College of Business, California Polytechnic State University

LIBRARIANSHIP AND THE PANDEMIC

While technology has wrought change on the profession over the past few decades, Covid-19 has had more immediate impacts. After the onset of the pandemic, librarians became vital partners with scholars, instructors, students, and patrons in a way few had experienced before. Librarians were working with instructional designers to teach people how to set up courses in online formats, with materials and readings that students could access remotely. They found ways to deliver research materials - both in paper and digitally - to scholars who would have otherwise been stifled when libraries closed their doors. They shifted much of their library instruction, book readings, and public events to Zoom sessions - and often drew far more spectators than they would have during in-person convenings before the pandemic.

If academic librarianship is focused on public engagement and service, can librarians effectively deliver those services from a computer and phone at home?

Librarians themselves also took advantage of the upended (and maybe extended) workday, increasing the time spent on professional development during the pandemic by an hour and a half per week on average, according to a survey conducted by Clarke. There is a strong desire for professional development among librarians, she says, but not enough time or money to meet the need. At many locations, libraries selected a handful of people who continued to work in college library buildings, retrieving bound volumes and maintaining other services.

But in many instances, librarians were working from home, like many other faculty and staff members. This arrangement, of course, has become a preferred option for employees who mainly have office work and colleges everywhere have to determine who gets the privilege of working from home, and how often. It can be perceived as an equity issue.

"As leaders, we need to dispel the myth that productivity equals presence on campus or in a specific work location," says Lorraine J. Haricombe, vice provost and director of the University of Texas Libraries. "If library staff members need a better work-life balance, give them that flexibility and trust that the work will get done. We've just demonstrated we can do it, and do it excellently, as librarians."

Certainly much of the decision would depend on the nature of the institution. Frances Maloy, the library director at Union College, says that part of the selling point of a small college is the personal touch which means remote work won't be a longterm option. But she thinks remote work is also changing the culture of the library.

"I feel things are fraying," says Maloy. "A huge part of communicating is not just the words coming out of my mouth and into your ear. It's the body language, and so many other things. As social beings, as humans, we need to be back together."

However, she acknowledges the competitive advantage of remote work. She has lost workers to jobs that promised work-fromhome options.

Even for libraries at larger research universities and community colleges, remote work raises some specific additional questions. If academic librarianship is focused on public engagement and service, can librarians effectively deliver those services from a computer and phone at home? Surely, in many cases they can.

But if the public already turns to Google

before they think of asking a librarian for help, should institutions make librarians even more distant from patrons? Or is online exactly where patrons want to interact with librarians, if only they could find them?

"Every person is a remote user of the library, and sometimes they come in," says Lisa Janicke Hinchliffe, an affiliate professor at the School of Information Sciences at the University of Illinois at Urbana-Champaign. Given that, demand for library expertise should have been higher during the pandemic, when everyone was forced online.

"The more people work remotely, the less they seem to actually seek out the expertise of library workers," she says. "So if we wish to stay in the workflow — not just from a collections perspective, but from an expertise perspective, a consulting perspective, what have you — we probably need far more aggressive outreach programs than we currently have so people think of us as a place to seek assistance."

A FINAL WORD

learly, libraries are going through enormous changes in their interactions with scholars and students. And even many experts in the field are not sure how libraries will evolve over time, given that their forms and duties are so dependent on factors that are in flux: the shape and flow of information, the financial prospects for colleges, and the societal commitment to education and community.

But some trends in libraries and librarianship will be with us for years to come, given their importance to the academic community

First, the library building will remain a campus hub. Many campuses are like small cities, and the library — as a multipurpose area that organically attracts the community — has long been a locus of campus activity. College leaders should consider how the library can support a range of activities related to student success and community building. Given the complexity of global challenges, higher education may need to encourage more interdisciplinary scholarship; the library could become a prime site for those cross-disciplinary interactions.

Library expertise will have to match the complexity of information and scholarship. The education and duties of librarians and the mission of libraries now have to cover a wider range of activities — preservation, data visualization and management, public engagement, digitization, and copyright, to name just a few. Some in the library profession say that jobs in the field could become even more specialized over time. The open movement will grow. A commitment from major organizations supporting the democratization of science and other scholarly work, along with financial pressures on institutions and students alike, will continue to drive interest in expanding access to scholarly materials and textbooks. How the open movement affects the relationship between libraries and publishers in the long run is yet to be determined.

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And higher-education institutions — and society as a whole — will continue to need people who can identify sources of valid information. This important duty — foundational in the mission of libraries — may become more vital as scholarship becomes more open.

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