Can Academic Libraries Get Rid of Their Books?

By William Miller

Futurists typically overestimate in the short run, but underestimate in the long run. It is probable that, many years in the future, most academic libraries will not warehouse substantial numbers of printed books and journals, and depend instead on online resources, though they will always continue to have at least some printed works, including rare books and special collections.

Today's large legacy collections consist, in part, of outdated, out-of-copyright material, much of which has been digitized and is freely available online, or in centralized repositories, if the print version is desired. The journal literature is substantially all digital now, at least for the most recent few decades. While it is tempting to jump from these facts to the conclusion that traditional collections can now simply be dispensed with, such a conclusion would be quite premature. Acting upon the assumption that everything is now electronic would be very damaging to most academic institutions, because the idea is far from being true at this point.

Lurking in the background of the assumption that all will be electronic is the wistful hope that everything will somehow also become free of charge in a future all-electronic universe. That hope is highly unlikely to materialize. Scholarly literature will not be like CNN or CBS, supported by a mass audience constantly subjected to a barrage of advertisements in order to earn the right to read the free content. Someone will continue to pay, and the money will come from academia's coffers, one way or another.

Much has been made of a handful of public libraries, small academic libraries, and medical libraries which have announced the elimination of their traditional collections. However, there is generally less to these examples than meets the eye. Public libraries normally have no mission to support research and scholarship. They do not need to carry scholarly journals, in any format, preferring subscriptions to collections of popular magazine articles in databases, without ownership or permanent access to the magazines, and they can acquire a general digital collection of book titles from Overdrive, which does not carry scholarly materials. They are content to depend on Google Books and other openly-accessible digital resources for older materials, to the extent that any of their users would want them, if any do, and they feel no need to provide access to anything else.

New, smaller academic libraries certainly do not want to amass large-scale print collections, and to the extent that their institutions support research and can afford it, they can offer faculty and students extensive access to online journals, selected newer digital books, free online resources, and the extensive print resources of their larger academic neighbors, government agencies, and centralized print repositories, for which they can pay to have access.

Two major medical libraries (at Johns Hopkins University and University of Michigan) have

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recently eliminated their print collections, and this would seem to confirm the notion that mass emulation is imminent. However, when we look more closely at these instances, we realize that medical research occurs almost entirely in the (very expensive) journal literature, which is already being subscribed to online for these libraries' users, and that the existing print book and journal collections have simply been moved to another nearby campus library or centralized repository.

Medical students and practitioners depend to a large extent on a handful of (very expensive) online databases and handbooks like Dynamed and UpToDate ("the premiere evidence-based clinical decision support resource, trusted worldwide"), and several extensive medical resources that are either commercial or government-funded, such as PubMed, from the U.S National Library of Medicine, and MedLine. Few fields have such focused, comprehensive, and targeted resources at their fingertips, along with a need, almost exclusively, for only the latest information.

Why Eliminate Printed Collections?

Many large academic libraries have extensive traditional collections, and continue to add at least modestly to them, in hard copy, even though the preponderance of materials budgets is now spent on online resources. Such print collections take up much space, and many large libraries have had to acquire storage facilities, either on campus or off, just to store some of the collections.

Making space for new materials. It makes sense, under these circumstances, to off-load little-used print materials, especially when these are already held at the Center for Research Libraries or other centralized repositories around the country, especially when the materials are also available electronically, so perpetual access is guaranteed. This has led to the widespread elimination of print journal collections, which, unlike individual books, are largely available electronically (though at an exorbitant annual cost), and take up enormous space while causing minimal record-keeping effort to de-accession. US Government Documents, now all online for about the last 40 years, are also good candidates for storage or discard, including the older materials even though they are not available digitally.

Clearly, eliminating large portions of the traditional collections can make space for new physical acquisitions and obviate the need to store materials in main libraries.

Ability to repurpose space. Beyond the need to make space for the remaining traditional collections, however, institutions are increasingly wanting to repurpose library space for other needs. Chief among these have been computing labs and large information commons areas, writing centers and other student help centers, coffee shops, and a variety of other student service functions more traditionally housed elsewhere on campus. There is something about being in a library that students find highly attractive, and they gravitate to library spaces, even for non-library functions.

Repurposing library space, and off-loading collections to remote facilities, can forestall the need for new libraries or other campus buildings, which could represent real savings.

Maintaining necessary functions. On the other hand, certain library functions must still be accommodated, even in a totally electronic environment.

- Material, whether in print or electronic, must still be ordered, paid for, processed, and cataloged or linked somehow to the library's proprietary holdings.

- Online systems and computing hardware and software must still be maintained.

- Contracts and licenses for electronic resources must be negotiated.

- The reference and instructional functions will continue to exist.

Librarians still need space for instructional activities, because students need a level of instruction in the use of online resources far beyond what physical materials require.

- Electronic resources need to be embedded into online courses, and librarians need to collaborate with faculty to make sure that they and their students are aware of available resources and that class assignments are facilitated.

Downside to Eliminating Print

Before eliminating print materials, however, one should consider the downsides.

Lack of browsing ability. Some researchers simply prefer print, or work best when they can browse shelves of material and make serendipitous discoveries (though of course such discoveries can also occur online). For many humanities and social science researchers, the need for material not yet in the public domain and not available electronically is constant.

Not everything is digitized. Because of the constraints of copyright law, libraries cannot normally digitize entire in-copyright books, and even Google, while it did digitize such material (quite controversially), does not make that full text available to the public. The fact is that much scholarly material has not been digitized, and may never be. Such material nevertheless has value, and the discovery that items owned by the library are in off-site storage can be frustrating and impede research. To a visiting scholar in the area for a short time, it could mean the failure of the research trip.

Material doesn't "go down." Physical materials offer distinct advantages. Printed materials do not "go down" and become unavailable when power dies or the online system (or a user's personal equipment) malfunctions.

Ownership in perpetuity. When an institution owns a book or issue of a journal, in print, it owns those

items perpetually, for an unlimited number of uses by as many people as wish to use them. With very few exceptions, such material is paid for once and then no longer belongs to the publisher; it does not have to be returned to the publisher if not continually paid for. Such statements seem almost ridiculously too obvious to need stating because we are so used to the world of traditional publication.

Rules of licenses and contracts. In the world of electronic materials, however, a completely different set of rules applies—the rules of licensing and contract negotiation. The publishers substantially control access to their product, year after year, and a failure to renew the yearly fee, regardless of how high it has increased from a prior year, means that the library has lost access to that resource—unless the library has also paid a hefty fee for perpetual access, along with continuing to pay a smaller annual access fee supposedly covering product development, storage, and additional content. In the case of reference books, a printed item is often replaced only every 2 or 3 years, because changes are minimal and a library still has access to the basic content, whereas in the digital world, the choice is either to purchase the new edition, every year, or have no access at all to the resource, unless it is purchased yet again.

Loss of resource-sharing abilities. Publishers charge for and control who is authorized to use what continues to be their property, not the library's. As part of their control, publishers can restrict an institution's right to lend to others through interlibrary loan, thereby undermining the long-established value of resource sharing. Negotiating with scores of publishers over initial contracts and contract renewals has become a full-time job for some library staff, as well as a headache for an institution's attorneys and business office.

Ease of use. Another advantage that printed materials offer is ease of use, from several different perspectives. The printed book is a mature technology that most people have figured out how to use long before they reach college age. Working with open books is easier than working with open windows. Electronic resources, unlike books, vary enormously in software and formats, all of which change periodically—or disappear altogether. Mastering the software necessary to use one book, database, or journal may not help a user at all to use the next resource, and even once one masters the software to use a tool, it then often changes, sometimes without warning, and the user is back to square one.

Increased instructional needs. A corollary of this complexity is its effect on the library's instructional role, and that of faculty members as well. It takes a reference/instruction librarian 10 times as long to explain how to use an electronic resource as it does to explain a printed one, and this creates an increased need for intermediation, at the reference desk and in the classroom, and increased faculty reliance on librarians as instructional partners.

The Pandora's Box of Online Open Access

Free online material is very useful to the general public, and even to the scholarly one. Google and Wikipedia have their place, and a wide variety of other free resources, some produced by governments and some by non-profits, libraries, and researchers add great value to what is available without charge to the public. There is also a morass of free-but-suspect or even spurious and misleading online resources, which too often find their way into undergraduate work.

Most importantly, students and scholars now have access to millions of out-of-copyright items, and partial access to many in-copyright items, through Google Scholar, the Internet Archive, and other online resources. Such access is clearly a game-changer for many. However, when it comes to true scholarly resources, online usually does not mean free. The paradigm of publishing has not changed. Publishers are in business to make a profit, and if they fail to do so, they go out of business. The last hundred years saw the establishment of a symbiotic relationship between publishers and academic institutions, via library materials budgets. Publishers did the hard editorial work and disseminated scholarly information; libraries then paid the publishers for the resulting products, making these available to their users.

Circumstances in recent years have upset the equilibrium of this symbiotic system, however. Publishers now make more than a modest profit from scholarly resources. Consolidation and commercialization in the publishing industry, and the acquisition by publishers of scholarly societies' journals have created a near-monopoly over essential information, inflating profits beyond any reasonable level.

Libraries' budgets are being held hostage to the demands of conglomerate entities which now own and control the major publishing houses, enabling them to charge excessively for resources that scholars consider essential, and for which there is no alternative, competing resource.

In such a situation, free, open access has seemed to be a highly desirable way out. Librarians and scholars have struggled to force publishers to make their content free, especially where it has been underwritten with government funding. Publishers have responded only grudgingly, in many cases making their content "open" for all if authors or institutions pay hefty charges to, in effect, liberate the content. In fairness to the industry, there are real costs to publish, and someone has to pay them.

There have been efforts to create and underwrite quality online resources, such as making the Physics preprints widely available in a freely accessible database, and libraries and others have fostered open-access journals and databases such as The Victorian Web. But true leadership from academia, on a large scale, would be required in order to make

most scholarly resources widely available at reasonable cost.

Academia, collectively, is already paying whatever cost would be required, through its payments to the publishers. What would be required now would be leadership, will, and the vision to reimagine a vetted system of scholarly communication, in the online age, that would eliminate the middleman and satisfy the requirements of the promotion and tenure process. Unless this radical change occurs, however, libraries and their academic institutions will remain in thrall to the commercial publishers for the majority of their current scholarly resources.

Adding It All Up

Electronic resources are clearly gaining ascendancy in academic libraries. While printed material has its advantages, the same can be said for online resources. They can be made available 24/7, and physical access to a building, or proximity to a campus, is no longer required. Online resources cannot have pages ripped out of them, and even when they are stolen (as unnamed entities from outside the U.S. massively download publishers' proprietary data), the library's own copy remains intact. Electronic resources, when properly exploited, can often offer powerful search capabilities unavailable to the user of traditional resources, and even thereby open up entirely new options for scholarly inquiry.

The fact remains that both print and online resources will continue to occupy important places in the world of scholarship for some time to come, and as is usually the case

for academic libraries, they have to look backward to maintain and preserve the traditional, while simultaneously looking forward to make the newer set of resources, including those which are "born digital," available and preserved also.

The journal literature, especially in the sciences, is now predominantly online, though many older years are still not digitized. New monographs are increasingly being published online, though there remains a large portion of out-of-print but in-copyright titles which are not available in digital form, and may never become so.

It may be tempting, therefore, for the casual observer to over-generalize, see the future to the exclusion of the present, and conclude that we have reached a point at which libraries can dispense with their print collections. For the average institution, however, we have not yet reached that point, and indeed it could be said that we are in a difficult and expensive transitional period where very little can as yet actually be dispensed with.

In coming years, more and more libraries may find it possible to complete this transition, especially at institutions with very targeted academic missions. For larger institutions with complex missions, however, the time for substantially eliminating physical collections is still far away.

Furthermore, when that time comes, it will not mean an end to the era of paying for research resources. One way or another, institutions and governmental agencies will continue to have to underwrite the cost of research and acquisition

of publications. The era of mass storage for each individual library has seen its zenith, and there will be some savings achieved through cooperative storage and online vs. physical access, but we will not eliminate cost as a significant factor in our lifetimes. There is a cost to storage, and there is a cost for accessing online information, that shows no sign of diminishing any time soon.

The advent of the electronic era will increase the need for libraries' instructional and preservation efforts. Even while maintaining the networks, facilities, and cooperative agreements that ensure access to physical materials which may be off-site, librarians will have to intensify their liaison efforts with faculty and their instructional efforts with students, to help the latter to discriminate between the trustworthy and the misleading in what has become an untamed wild west online.

Moreover, the mere fact that an institution has purchased access to an expensive item does not guarantee appropriate use of that item, or even that the potential users will be aware of its existence and availability. Even now, we often hear of users paying for access to resources which would have been free to them via the library's collections, had they only realized what is being made available to them, at their institution's considerable expense.

We must promote awareness and intelligent use of electronic resources in this new environment, as has been necessary even before electronic resources predominated.--*miller@fau.edu*