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**Title of Column: ERM Ideas & Innovations**

**Electronic Resources Management in the Time of COVID-19: Challenges and Opportunities Experienced by Six Academic Libraries**

Randall A. Lowe, Collection Development, Acquisitions & Serials Librarian, Lewis J. Ort Library, Frostburg State University, [rloew@frostburg.edu](mailto:rloew@frostburg.edu)

Fanuel Chirombo, Ph.D., Acquisitions, Serials & ERM Librarian, Earl S. Richardson Library, Morgan State University, [fanuel.chirombo@morgan.edu](mailto:fanuel.chirombo@morgan.edu)

John F. Coogan, Systems & Electronic Resources Librarian, UMGC Library, University of Maryland Global Campus, [john.coogan@umgc.edu](mailto:john.coogan@umgc.edu)

Alexander Dodd, Discovery & Electronic Resources Librarian, Loyola Notre Dame Library, [adodd1@loyola.edu](mailto:adodd1@loyola.edu)

Corrie Hutchinson, Associate University Librarian for Acquisitions, Collections & Technical Services, University of Missouri Libraries, [hutchinsonca@missouri.edu](mailto:hutchinsonca@missouri.edu)

Judith Nagata, Content Strategist Librarian, College of the Holy Cross Libraries, [jnagata@holycross.edu](mailto:jnagata@holycross.edu)

**From the Column Editor, Randall Lowe:**

Academic libraries have focused much of their efforts since March 2020 addressing the many challenges presented by the COVID-19 pandemic. While libraries have long supported students, faculty, and researchers in off-campus locations by offering e-resources and digitized collections, fulfilling the many responsibilities that comprise e-resources management (ERM) operations also shifted to remote locations as librarians and staff completed their work from home. This reality presented ERM librarians with a new set of challenges in providing uninterrupted access to e-resources and enhanced user support; however, as with all disruption, challenges arising from the pandemic have also created opportunities to improve ERM operations.

In this ERM Ideas and Innovations column, librarians from six diverse public and private higher education institutions address the following questions in relation to these challenges:

- *What has been the greatest ERM challenge(s) your library has experienced during the COVID-19 pandemic?*
- *What ERM opportunities, planned or unexpected, have arisen as a result?*
- *Will any of these challenges or opportunities lead to permanent ERM changes for your library?*

Facing budget reductions, supporting an abrupt shift to online teaching modalities, pivoting to telework, evaluating and revising ERM workflows, and meeting increased user expectations are among the challenges detailed in this column. While the environment that precipitated these challenges is temporary, some of the solutions implemented to address them will represent permanent changes to ERM operations.

The experience of the University of Maryland Global Campus (UMGC) Library during the pandemic presents a juxtaposition to what the other five libraries report in this column. UMGC, with its decades of experience supporting online educational programs, demonstrates to more traditional institutions that online education and research, and the library role within it, is viable and sustainable.

**Column:**

**Judith Nagata, Content Strategist Librarian, College of the Holy Cross Libraries**

***Catalyst for Change: The Pandemic's Effect on Electronic Resources Management at the Holy Cross Libraries***

The College of the Holy Cross is a small selective liberal arts college serving traditional aged undergraduate students in Worcester, Massachusetts. Before 2020, most of the students and faculty lived on or near campus and there were almost no online courses offered. The library had been licensing databases, ejournals, ebooks and streaming media for years, but more recently had been deliberately shifting more collections, especially journals, to electronic format. This practice helped us make a smoother transition in the first months of the pandemic.

On March 15, 2020, the College sent all students home for the rest of the year. All learning moved online due to the COVID-19 pandemic. For databases and journals the shift was not much of a change since these resources already were online. We did make significant acquisition changes from print monograph and DVD video purchases to ebook and streaming media licensing. Our challenge in this regard was one that libraries have been battling for years: how to transition from one-time purchases at a relatively low per unit price to single or multi-user

licenses that incur more cost. To minimize the effect upon the budget, the library asked faculty to only request ebooks or streaming media that would be used for courses. All other requests (including those for print monographs) would be deferred until a later date. Streaming media requests for courses that needed unlimited or multiuser licenses became the most significant problem for the library. Some requests were met by using trials and free resources and others were resolved by allocating other library funds or working to find alternative resources.

With the college community working off-campus, the library had to pay closer attention to e-resource authentication and access. Almost overnight, we found ourselves having to solve a greater number of problems with off campus-access to resources. As a result, we updated outdated URLs in the catalog and the library's databases A-Z list, corrected old EZproxy prefixes and IP addresses in e-resource administration modules, and adjusted ejournal holdings or asked our discovery vendor to update URLs in the product knowledgebase. We further resolved authentication issues by working through problems with browsers and Google authentication for specific resources.

The library also experienced collections budget reductions that, for the most part, were absorbed by measures such as greatly shrinking physical item purchases and using other budget lines. In addition, we contacted all our e-resource vendors, consortia, and publishers asking for a price freeze or reduction for Fiscal Year 2021 subscription renewals. Some multi-year contracts had to be renegotiated or revised; this constituted our biggest ERM challenge. We scheduled meetings with vendors and publishers, tracked all subscription changes, and noted start and end dates on offers and options. Without a fully functional electronic resources management system, we

monitored the changes through spreadsheets as well as by saving notes and invoices in a Google Drive folder. We also adjusted workflows so that we could access, manage, and save files while working remotely.

The library did benefit from the pandemic in some ways. We were able to swap out resources for better products, sometimes for less cost. We also saved a significant amount through zero or reduced annual price increases for many subscriptions. While ebooks and streaming media still present challenges, we have updated workflows for ordering, managing, and providing access (often, quickly) to these resources. Significantly, post pandemic teaching and learning at the college will change to a hybrid model with continued off-campus work. Thus, focusing on authentication and access will remain a priority even after the students and faculty return to campus. In a way, just asking questions and revising workflows on the fly has been helpful in updating our ERM processes. In the end, many of the changes we implemented to meet the challenges presented by the pandemic will remain in some way moving forward. The COVID-19 pandemic was a catalyst for change in electronic resources management for our library.

**Alexander Dodd, Discovery & Electronic Resources Librarian, Loyola Notre Dame**

**Library**

***Finding Opportunity to Improve Electronic Resources Management Processes in the Time of COVID-19***

Loyola Notre Dame Library (LNDL) in Baltimore, Maryland went fully remote on March 16, 2020, with virtually no preparation time for the drastic shift and no idea when we would be allowed back at the office. As of April 2021, a large portion of the library staff continues to work

remotely, but for patrons, most services have returned to pre-shutdown levels with new safety guidelines implemented. ERM was an area that seemed to be particularly situated for an easy shift to remote work; however, that is not to say the COVID pandemic did not pose challenges for our team.

One of the largest challenges for LNDL and our Acquisitions Department was we primarily used paper copies for most of our e-resources renewals processes, especially for billing and invoicing. When we moved to remote work, most of our workflows and file organization needed to be substantially changed.

While at first this was a daunting task – mail needed to be forwarded, our Acquisitions Operations Supervisor needed to get a scanner for her home office, and all of our current workflows needed to be adjusted – it led to an opportunity to streamline our billing and invoicing procedures. All e-resources invoices are now stored in our Microsoft Teams environment, making it much easier to locate them. The shift to virtual work pushed us to begin using our recently acquired ERM system (ROAM) more substantially than we had before, given that we no longer had a paper trail to keep track of our payments and invoices. Evaluating and revising our workflow processes also gave our Acquisitions Department a chance to increase the communication within our unit. We were able to examine the overall renewal process from a high level and streamline procedures, which then helped us clearly define our roles and what is expected of each of us during the fiscal year.

While there will likely be changes to these workflows when we return to working in-person, I do not see our unit going back to a paper-based system. This year we completed our e-resources renewals significantly faster than previous years, which demonstrated that the digitizing process we went through, stressful as it was, helped the unit overall.

Another major challenge we faced due to COVID restrictions was the pause in physical borrowing at our library as well as lending through interlibrary loan and our consortium's patron-placed holds program. This pause led to several substantial changes in our EBSCO Discovery layer. When we got word that physical lending was going to pause, we promptly updated it to remove borrowing and lending links to our physical collection, while still allowing for these services to take place with our electronic resources. This change helped our patrons navigate the discovery layer more easily and reduced the potential for confusion at the beginning of the pandemic.

This discovery layer update created an opportunity for cross-unit collaboration between the Discovery & Electronic Resources Librarian and the Access Services Librarian. As the library began to open and physical borrowing and lending began to return, these changes were edited (and removed in some cases) in incremental phases, requiring additional collaboration from both librarians. While this challenge has not led to any permanent changes, and our discovery layer is now back to its pre-pandemic form, the Discovery & Electronic Resources Librarian and Access Services Librarian do not often get a chance to work closely despite being in the same department. The opportunity to work together on an extended project throughout the year created

a new, beneficial working relationship between our two positions. We look forward to collaborating more in our post-pandemic library.

**Fanuel Chirombo, Acquisitions, Serials & ERM Librarian, Earl S. Richardson Library,  
Morgan State University**

*Addressing ERM Operations and Staff Readiness During a Period of Significant Disruption*

In March 2020, when the president declared a national emergency due to COVID-19, it was immediately clear that the Earl S. Richardson Library of Morgan State University in Baltimore, Maryland faced two significant challenges. The first was an inadequate contingency/continuity of operations plan to avert traditional service disruption. This exposed serious weaknesses in the library's readiness to meet the challenges of operating in a pandemic environment, such as staff learning how to telework effectively. The second challenge was that many staff were insufficiently trained to manage and support e-resources. For example, there was a surge of access queries from faculty and students principally about login credentials solely directed to the ERM Librarian despite the fact these were basically public service issues. The short-term solution, to avoid burnout of the ERM Librarian, was a hastily created guide posted to Google Docs to help students direct their inquiries as well as to increase communication and collaboration between the public services librarians and the ERM Librarian in providing timely assistance to the campus community.

This disruption magnified the workload of normal ERM processes, including evaluating (and possibly canceling) existing e-resources as well as identifying new ones for potential procurement. This would typically consist of a quantitative analysis of usage statistics and a

qualitative evaluation based on feedback from faculty. The pandemic induced a 20% library budget cut from the University as it swiftly responded to the resulting financial impact. This deprived the library the time to follow traditional assessment steps; a qualitative assessment approach requires considerable time to connect with faculty. Rather than basing cancellation decisions on the quality of e-resources, decisions were made quickly to reach the 20% budget cut target. This involved not renewing subscriptions to products for which license agreements were expiring to avoid litigation from vendors if we tried to cancel those for which agreements were still in effect. Without a contingency plan, cancellation decisions were thus not based on best practices and there is a chance that valuable continuing resources may have been lost.

As a specific example, the cancellation of Kanopy streaming videos created an incident that laid bare the weaknesses inherent in pre-pandemic communication; however, it may also have hinted at the possibility for an improved relationship between the library and faculty. The faculty actively advocated against the cancellation despite their previous apathy towards feedback requests for e-resource cancellation proposals. Hopefully, this experience will lead to greater collaboration with faculty in the future. A shared approach to assessing library e-resources is a more effective method for building e-resources collections that are primarily targeted at the scholarly, instructional, and research needs of the University.

Personally, I weathered a triple pandemic of strained internal communication with faculty, stressed panicky vendors seeking audience with me, and an increased workload. Adapting to the virtual environment, especially on short notice, not only had a negative impact on the delivery of e-resources, it also focused unwanted attention on an outstanding personnel situation. The

Acquisitions/Serials and Electronic Resources Management Unit includes three library technicians whose job classification reflects their responsibility for ordering and receiving print materials but not for handling electronic resources. Retraining the staff to manage e-resources would require support from the library administration and from the University's human resources department. It could easily mushroom into a full-scale assessment of library support staff positions which would, in turn, have budgetary implications because of increased compensation. The lesson learned from this experience is the importance of cross-training staff to prevent a single point of failure or bottleneck during crisis situations.

Despite several challenges, including hastily learning how to use Zoom in order to communicate virtually with staff and making arrangements for those who did not have access to the internet or a computer at home, the opportunity to telework provided ample evidence that ERM work can be successfully performed remotely. This removed any lingering doubts that library administrators previously harbored about telework. I will not be surprised if remote working becomes a permanent feature for ERM librarians.

**Corrie Hutchinson, Associate University Librarian for Acquisitions, Collections &**

**Technical Services, University of Missouri Libraries**

***The Challenge of Meeting User Expectations***

When the University of Missouri closed due to the pandemic in March 2020, my biggest concern at the time was personnel management. As a large research institution with online educational programs well entrenched in the curriculum and 90% of our library's collection budget dedicated to e-resources, I was not initially concerned about online resources or related ERM

considerations to meet user needs as they transitioned to working from off-campus. In addition to having our proxy server set up to provide remote access to e-resources, we had the infrastructure in place to support user interactions with them. However, I soon learned that I had greatly underestimated the expectations and needs of our community.

Like many libraries, we offered a Demand Driven Acquisition (DDA) streaming video program with the vendor Kanopy. Faculty and students loved it and we spent more money than we could afford in a very short period. As a result, we switched to a mediated program and only purchased access to films needed for classes or included in syllabi. Unfortunately, faculty had come to expect immediate access to the large catalog of films and became frustrated by the requirement to work with a librarian to purchase access. Understandably, the culture that had been established during the original DDA program created problems with faculty who were pivoting with no notice to an online-only method of instruction with only six weeks remaining in the semester. Kanopy's lease-only business model also clashed with the library's preference to focus on perpetual purchases for online content.

The faculty's experience with the Kanopy DDA program also fostered the expectation that all films were available to an academic institution for educational viewing. Requests for videos from distributors with whom we did not have existing agreements skyrocketed. Besides Kanopy, the library did not support much streaming video content save some films available from major vendors such as ProQuest for which we had access to a variety of products. Loaning independent films we held in DVD format before the pandemic became a crisis after lockdown when the DVD was physically locked in a building to which we had no access and for which

streaming was not an option. Questions of copyright and the library's flexibility in providing content during an unexpected and unprecedented crisis were discussed at length.

These expectations also extended to ebooks. The idea that every print book has an electronic counterpart and that all textbooks are available for purchase by educational institutions in online format was widely held. Books from small independent presses or those which had not been in print long enough for the publisher to release the e-version, a common practice, were now unavailable not only physically but also digitally. We had months during which we were incapable of providing physical or digital versions of these types of books due to closed libraries and restricted interlibrary loan options.

The community we serve is often reasonably unaware of the work necessary for the library to provide access to e-resources. Library policies that ask users to provide a minimum of a week's notice to acquire digital content can be confusing to people who experience instant access when making personal purchases. Steps such as obtaining licensing approval by the University's Legal Counsel and waiting for access to be established by a vendor are items faculty do not and honestly should not need to know. It is our job to create a smooth and easy service for our patrons. Because faculty did not understand library ERM processes that necessarily led to delay in access from the time a request was made, we often had students emailing the library asking why videos which were assigned were unavailable. Add in the fact that we were endeavoring to order content from distributors or vendors seeing an increase in demand from hundreds of libraries facing the same challenges due to the pandemic, the situation was further compounded.

However, these challenges provided us with the opportunity to better educate our user community about how the library serves them via our online resources; this was a silver lining of the pandemic period. Faculty and student expectations have become more reasonable and tempered, and we have faculty who are now even greater partners and advocates.

**Randall Lowe, Collection Development, Acquisitions & Serials Librarian, Lewis J. Ort Library, Frostburg State University**

***Preserving E-Resources Subscriptions and Implementing New ERM Workflows***

The greatest ERM challenges for the Ort Library of Frostburg State University, located in Frostburg, Maryland, during the first year of the pandemic were centered on budget reductions, workflow changes resulting from the implementation of staff telework, implementing freely available e-resources from vendors, and user support.

***Budget Cuts and Preserving E-Resource Subscriptions***

The Ort Library's budget was cut approximately 11.5% for the fiscal year beginning July 2020 due to a reduction in state funding for the University combined with a significant drop in student enrollment. Given that instruction moved to an all-online modality beginning March 19, 2020, and that all courses were offered in either online-only or in-person/online hybrid formats during the 2020-2021 academic year, we were committed to continuing all our e-resource subscriptions. Making significant reductions to our student employment budget, book/audiovisual allocations to academic departments, and professional development funds enabled us to achieve this objective.

One of our greatest challenges in relation to ERM during the pandemic was to evaluate and license a new database subscription to support the University's College of Business despite facing these budget cuts. Fortunately, we were able to successfully meet this challenge, as described in a previous ERM Ideas & Innovations column (Lowe, 2020), by leveraging established procedures to collaborate with faculty to identify and cancel underutilized subscriptions to fund the new database.

### ***Telework and Digital Workflows***

The Ort Library remained closed to all staff from March 19, 2020 through late July 2020. Some University and library accounts payable procedures were still conducted using paper forms and ink signatures. The pandemic expedited the transition to migrating all remaining procurement processes and library fiscal tracking procedures to digital workflows, something that was initially a challenge as staff adjusted to working from home. This included implementing access to the University's Virtual Private Network (VPN) and establishing workflows for various required invoice payment approvals. Once implemented, however, these changes resulted in more streamlined procurement processes within the library and across the University – changes that are likely permanent.

### ***Temporarily Free E-Resources from Vendors***

Many vendors provided expanded access to e-resources without charge beginning in spring 2020 to assist educational institutions with the abrupt shift to online-only course delivery. In response to this, the International Coalition of Library Consortia (ICOLC) (2020) released a statement on the impact of the pandemic on library services and resources and provided a link to a

Complementary Expanded Access Specifics Sheet that provided details for over 100 of these offerings. The USMAI Library Consortium, of which Frostburg State University is a member, also produced a similar list (USMAI Library Consortium, 2021).

Given the small size of our staff and the temporary nature of these offers, we decided that we would not create a public list of freely available e-resources or take the steps to activate them in our discovery service or link resolver (SFX), with three exceptions: expanded EBSCO database offerings, JSTOR journal archive content, and Project MUSE journals. Content from these vendors are quite popular with our users and each had clear targets within the SFX knowledgebase, thus being relatively easy to activate and deactivate once the offers expired. Even though we did not advertise that these resources were available, usage statistics indicated that our users took advantage of them.

We feel that our approach was realistic from an ERM perspective given our small staff size. It also allowed us to avoid setting up false expectations for continued access to these resources after the pandemic.

### ***E-Resources Usage, User Experience and Support***

We hypothesized that use of our library's e-resources would increase as students, faculty, and staff began to work exclusively from home and courses migrated to online-only format. Instead, we experienced flat use as measured by full text article and ebook retrievals from COUNTER-compliant vendor usage reports. Full text retrievals rose 0.3% from January through June of 2020 when compared to the same period in 2019. There are any number of factors that may have

contributed to virtually no change in e-resource usage trends, but the most common-sense explanation is that students and faculty already relied on library e-resources to complete their work and simply accessed them from different locations when the pandemic began.

While e-resource use was unchanged during the first months of the pandemic, an increase in user frustration with authentication methodologies, broken full text links, and navigating multiple web browser windows, were reported. Moving forward, we will need to spend more time addressing these issues, perhaps working with other libraries within our consortium to update our current authentication software and pursuing single-click solutions to access full text e-resources.

**John Coogan, Systems & Electronic Resources Librarian, UMGC Library, University of Maryland Global Campus**

*Business as Usual at UMGC*

The University of Maryland Global Campus (UMGC) was in a very good position to ride out the pandemic, with minimal disruption to our workflow, services, and budget. Founded in 1947 to serve working adults, we have evolved into a predominantly online university with an online library, so we did not need to pivot our classes and services from in-person to online – we were already there.

Our students are primarily working adults, located throughout Maryland and the United States, with a military contingent of students in Europe and Asia. Most of our classes are online and asynchronous and were able to continue without interruption when our physical facilities were shut down in March 2020. Our hybrid classes, which meet in-person with an online component,

shifted to fully online, using our online classroom platform and Zoom sessions for face-to-face time.

Since our library serves remote learners, our collection is predominately electronic and our services predominately online. We no longer collect print materials but focus on ebooks and other electronic resources. Reserves are electronic and posted in the online classroom.

Reference is via chat, email, and phone, with an occasional in-person appointment. All this enabled library staff to pivot easily to full-time teleworking, especially given that most of us were already teleworking one day per week anyway. We had already switched from desktops to laptops for our work, so no change of equipment was needed.

Two services did need to be suspended: book delivery and phone reference. While we do not have an in-house physical collection to speak of (it is very small), we do obtain books from USMAI Library Consortium members and ship them out to students in the continental United States. As of this writing, that service is still suspended. (Interlibrary loan for articles and book chapters was able to continue remotely.) For reference inquiries, we initially had to suspend our phone service, but later got it going again by using CISCO Jabber, which enables us to access the Library's reference extension and our own individual extensions remotely. In addition, our research consultation appointments, which had been both in-person and online, switched exclusively to Zoom.

As far as ERM work is concerned, while we have had to make a few tweaks (e.g. using Zoom for meetings and calls), there have not been any major procedural changes. A few minor obstacles

required workarounds – for example, processing a refund from LYRASIS, our consortial subscription manager. Normally this would have been completed by check, but we had to set up an electronic transfer – which is probably how it will be handled in the future.

Regarding the budget, we were extremely fortunate that the University did not experience a drop in enrollment during the pandemic, so the library did not have to face painful cuts. In fact, for Fiscal Year 2021 (FY21), because many vendors decided not to increase their rates (or increase them less than they normally would) and because our consortium refunded a portion of our annual commitment, we ended up spending significantly less than our allocated budget and had a sizable remaining fund balance.

Having those extra funds has given us a wonderful opportunity to purchase ebooks, and we have enlisted the help of academic program directors to select titles. This in itself has become something of a project, and the program directors have been quite pleased, which is also very good for the library!

One challenge has been predicting the e-resources budget needed for FY22. Normally, we make our budget projections based on the rates that vendors raised prices the previous year. Because FY21 was such an aberration, it has been very difficult to make predictions for FY22. Will vendors hold off on raising rates again this year, or raise them, but at a lower rate than normal? What exactly is “normal” after a year of such upheaval?

In sum, our challenges have been mostly minor procedural ones. We were an online library before COVID and will continue to be one after COVID. Most of our work (except for our book delivery services) can be done as well from home as from the office. We experienced a one-time budget surplus which has enabled us to increase our ebook collection, and we maintain our sense of community through weekly staff meetings via Zoom.

Many traditional academic libraries have experienced abrupt, jarring, and painful challenges during the past year. Hopefully, UMGC can provide a helpful model for a path forward for academic libraries in an increasingly online educational environment.

## References

International Coalition of Library Consortia (ICOLC) (2020). Statement on the global COVID-19 pandemic and its impact on library services and resources. Retrieved from <https://icolc.net/statement/statement-global-covid-19-pandemic-and-its-impact-library-services-and-resources>.

Lowe, R.A. (2020). How to evaluate and license an e-resource during a pandemic (without scheduling a meeting). *Journal of Electronic Resources Librarianship*, 32(4), 307-315. <https://doi.org/10.1080/1941126X.2020.1821995>

USMAI Library Consortium (2021). Vendor offerings in response to COVID-19. Retrieved from <https://usmai.org/portal/display/COV19/Vendor+Offerings+in+Response+to+COVID-19>.