4

SERIALS AND CONTINUING RESOURCES

Kristin Calvert and Whitney Jordan

Serials and continuing resources may be the most regularly assessed areas of technical services, certainly in collections. Though the formal vocabulary of assessment may not always be in use, the practice of reviewing, evaluating, and improving serial titles is alive and strong. Subscription resources dominate many library collections' budgets. By their very nature, subscriptions require ongoing care and attention; the simple act of renewing a serial title requires some measure of assessment, even if the only criterion is a price check. Annual serial price increases, especially when library budgets are unable to keep pace with them, make serials review projects a regular necessity for library acquisitions units. Scarce financial resources demand the regular assessment of serials collections by forcing libraries to be more critical of long-standing subscriptions in order to allow for new resources to meet emerging needs. It is incumbent upon librarians to regularly assess serials in order to be good stewards of the collections budget and to ensure that libraries are meeting their patrons' needs.

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It is impossible to know how to approach the assessment process for serials without first understanding the reasons driving the assessment. The motivating factors behind the project will shape its scope and depth. Understanding why the assessment needs to happen will help align the review process with the desired outcomes. Four categories of outcomes typically drive the assessment of serials:

1. Achieve cost savings
2. Identify unmet content needs
3. Identify underperforming titles
4. Improve content delivery

Because subscription obligations represent 70–80 percent of most academic libraries' collections budgets, serials and electronic resources are the focus of most collection reviews. Given these rising costs, maintaining journal packages necessitates the allocation of an ever-increasing amount of money to the serials budget. If the budget is flat or slow to increase, libraries face the unpleasant option of either canceling subscriptions or cutting money from monographs; and choosing the latter course places the burden of budget problems on those disciplines that rely primarily on monographs.[1] Thus, cost savings will drive almost every assessment project.

Assessment is a time to revisit existing resources in order to evaluate whether the collection is continuing to meet the needs of the library and the patrons it serves. The second and third categories of outcomes—identifying unmet content needs and identifying underperforming titles—are two sides of that process. The need to identify resources in new collection areas is an excellent reason to undertake an assessment project. Academic programs grow over time, and the curricular or research focus of the department may not look the same as it did ten years ago. Likewise, resources that were seen as essential to the discipline might no longer be so—the library's serials collection often moves more slowly than the speed of innovation and changes in knowledge, and so underperforming titles must be canceled.

Finally, the processes within technical services for serials acquisitions continue to evolve. Consolidation among vendors and subscription agents has brought an upheaval to library business processes. Changes to the landscape of scholarly communications—whether from open access or the rise of academic networking sites like ResearchGate—are challenging the subscription paradigm to defend its role in delivering scholarly resources to patrons. Libraries are looking to new acquisitions models, like article pay-per-view, to provide quick access to research through flexible content delivery. Consequently, assessment can be driven as much by the needs of technical services units themselves as it is by external forces.

This chapter focuses on the main area of assessment for continuing resources: conducting a serials review. The majority of the chapter is given over to describing the process for undertaking large-scale collection review projects. The focus on serials includes journals, periodicals, standing orders, newspapers, and microfilm subscriptions; it omits databases, streaming resources, and other aggregated online research content. Special consideration is given to the review of large packages of e-journals—typically referred to as "Big Deals." The process for a comprehensive collection review of electronic resources (more broadly) is nearly identical to that of a serials review; these different types of assessment typically diverge only in their evaluative criteria and strategies for identifying alternative content.

Despite the overwhelming preference for and predominance of electronic journal content, it would be remiss of us not to devote some time to the management of print journals. The latter portion of the chapter looks at what are being called the legacy services for print serials. Obviously, the volume of print serials in libraries has waned from the height of the serials crisis of the 1990s. Nonetheless, the few that do remain still require staff processing. Assessment for print serials in this chapter encompasses staffing, workflows, and criteria to consider whether in-sourcing, outsourcing, or elimination is the best option for a department.

SERIALS REVIEW PROJECTS

There is no shortage of case studies of libraries that have undertaken major serials reviews. The assessment process described herein reflects the authors' experience conducting multiple reviews, and their knowledge of these published studies.[2] A well-conducted serials review will include every aspect of serials assessment, from needs assessment to identifying cost efficiencies. While most serials reviews will result in cancellations, these approaches can be applied to all collection review scenarios. There are four phases to the assessment project (see table 4.1):

TABLE 4.1 • Project phases and sample project schedule for serials review

PROJECT PHASE	MILESTONE	DURATION	DEADLINE
Planning and Data Collection	Project team assembled		May 1
	Set goals for review	2 weeks	May 15
	Set assessment strategies	2 weeks	May 15
	Data collection and presentation	4–5 weeks	June 21
Stakeholder Review	Subject liaison review	2–4 weeks	July 21
	Faculty review	3–4 weeks	August 24
	Project team compiles feedback	1 week	August 31
Enacting Decisions	Project team prepares list of cancellations, etc.	1–2 weeks	September 15
	Feedback and approval to proceed from administrators	1–2 weeks	September 21
	Finalized list sent to subscription agent	1 week	September 30
	Publicize decisions	Ongoing	October-December
Post-Assessment Review	Track feedback concerning the process, decisions, etc.	Ongoing	January-April
	Monitor demand for cancelled serials from stakeholders or interlibrary loan	Ongoing	January-June

1. **Planning and data collection:** The project team is assembled and charged with determining the scope, goals, and strategies for the assessment; and the data are identified and gathered.
2. **Stakeholder review:** How will feedback be solicited and from whom; how will feedback be considered, and who holds final decision-making authority?
3. **Enacting decisions:** What changes will be made? The project team communicates decisions to patrons, publishers, consortia, or subscription agents; and the changes are reflected in library systems.
4. **Post-assessment review:** Feedback is tracked and integrated into future assessments; and the demand for new and canceled titles is monitored.

PHASE 1

Planning and Data Collection

By the end of Phase 1, the aim will be to have assembled the project team, established the goals and strategies for the review, and gathered the data that will be presented to the project stakeholders. Before starting any assessment project, you should include the library administration in the plans. While they won't often be on the project team, their perspectives and support for the project will be invaluable.

While not the longest phase of the project, Phase 1 is the most labor-intensive portion for technical services. It is crucial for the project team to take the time to come to agreement on the broad goals for the review. What gets decided on during this phase, from the data presentation to the choice of metrics, is critical because the targeted outcomes and choice of strategies will have a huge impact on how stakeholders will review and make decisions about titles.

Project Team

Each library will have its own system for managing collection development decisions. Authority may be decentralized, consolidated, or decided collectively. In smaller libraries, one person may manage everything from selection and acquisition to access. In larger libraries, these responsibilities are distributed; data will pass through many pairs of hands throughout the project. Regardless, it is advisable to form a project team to manage the project. A successful team will include people who can gather and provide information on the serials under consideration; people who can provide subject-specific and resource-specific feedback; and serials and acquisitions staff who can act on the decisions. The team should include representatives from technical and public services, and representation from both areas should be sought if they are lacking. You should consider the following questions when drafting people to join the project team:

Who in technical services needs to be involved, either directly or indirectly? The personnel needs can evolve over the course of the project, since each phase may require a different skill set. The needs of the decision-making phase are different from what is needed to carry out the decisions. Adjust the project team accordingly.

Do people have the requisite skill sets? Important skills include order and subscription knowledge; data management skills, especially with tools like Microsoft Excel or Access; accounting and budget knowledge; administrative perspective; and subject-matter expertise.

Project Goals

As mentioned earlier, review projects can have different triggering events. The trigger fundamentally shapes the scope of the project. One-time serials reviews often accompany tough budget times—either due to a reduction in funds, or because rising journal prices and inflation have outstripped available funding. In these cases, a fixed amount of money must be recouped through cancellations or other cost-saving measures. Serials can also be part of a regular collection review calendar in which portions of collections are reviewed at specific intervals. One advantage of a regular review cycle is the reduced overhead for the project; there are fewer titles to review, and it reduces the number of stakeholders that need to be pulled in for the project.

The first question to ask is: what resources are on the table? A massive budget cut might require a comprehensive approach, and an all-encompassing review. Several years ago, at Western Carolina University (in Cullowhee, North Carolina), the serials review was so extensive that the motto was "everything is on the table—even the TABLE is on the table." When was the last time the collections were closely examined? One can start with making small changes, one year at a time, when renewals are processed.

Selecting Titles to Be Reviewed

When starting a large-scale project, one way to keep the project manageable is to subdivide the project by format. Print journals, e-journals, journal packages, standing orders, newspapers, microforms, and even databases could be potential candidates for a format-specific serials review. Just as with a rolling cycle of review by subject areas, only one specific subcollection might be reviewed each year. Another alternative to a comprehensive review is to divide the work among the project team by subcollection. The timeline for making decisions may vary across collections, which may lend themselves to a staggered timetable; this can reduce the stress of getting all decisions made and processed simultaneously. Here are a few ways to break down a serials review:

- Comprehensive (all current orders)
- By format (e.g., microfilm, newspapers, popular magazines)
- Rolling, annual reviews
    - ◊ By academic department or college
    - ◊ By subject librarian

There are a few other smaller considerations for what titles to include. E-journal packages are often tied up in multiyear agreements; even if changes to the agreements are desired, it may not be possible to make them in the same year. New resources can also be problematic for serials reviews. A resource that has been recently acquired may not yet generate high use numbers. Depending on which criteria are used for the assessment, the new resource may be at a disadvantage compared to a more established resource. You should consider deferring cancellation decisions for newly acquired resources.

Journal Package Analysis and Assessment

Journal packages come in all different shapes and sizes. Traditionally, packages were set up through an agreement with the publisher in which the library would maintain current subscriptions and then be granted access to previously unsubscribed titles for an additional fee. This deal has often benefited libraries, especially smaller ones, because it offers them a chance to access a larger number of journals for not much more money than they were already paying. Once access to a vast number of journals is gained via a Big Deal, it becomes more difficult to imagine the collection without them.

Thinking about assessing, or even canceling, a large journal package can be daunting. Even discerning how a package is being paid for is not a straightforward process. Payments are often spread across titles, and titles are constantly changing publishers. It is tempting to avoid the headache of reviewing packages, but the cost of maintaining large journal packages will inevitably force libraries to question the sustainability and value of these Big Deals. The need to locate significant cost savings may compel libraries to consider making a change to a package, regardless of whether they want to or not. These packages represent sizable portions of the serials collection (both in terms of dollars and number of titles), and it is negligent to leave them out despite their challenges.

There is a growing body of literature devoted to the cost-benefit analysis of exiting Big Deal journal packages. The results of such exits have been mixed.[3] The breaking point where the benefits of cancellation outweigh the costs of continuing to subscribe to the package will be different for each library. Not only does the library stand to lose access to hundreds of journal titles, but the cost to individually subscribe to a handful of high-use titles often ends up being close to the entire amount of the package. For this reason, journal package assessments deserve to have their own set of outcomes, separate from the general serials assessment. As with other serials, the assessment of journal packages may be driven by budget crises or by routine evaluation.

Before digging in, you should review the license and payment structure for the package. There are many ways for journal packages to be billed, and knowing how titles within the package are structured will make a difference in how the package is reviewed. These questions will help the library know whether the package can be changed, or if cancellation will be an all-or-nothing endeavor. Later sections in this chapter will go into more detail about how these packages can be evaluated, and what metrics to consider. The following are some questions to ask when reviewing a journals package:

- Is the package made up of subscribed titles, access-only, or a combination of both? Many packages are priced based on a list of subscribed titles, plus a package upcharge. Others are priced into one lump sum.
- Is the library locked into a multiyear deal at a high inflation rate?
- Does the license require a minimum spend from the library? These rules limit the extent to which the library can make title-level cancellations.
- Can individual titles be swapped in and out? How much control (if any) does the library have over the title list?
- Are smaller or subject-based subcollections available?
- Is the subscription negotiated through a consortium?

Package cancellations may have broader implications if they were made as part of a consortial deal. These deals, at times, can be contingent upon all participants maintaining their subscriptions. If one library decides to cancel, it may cause the deal to fall apart or need to be renegotiated. It is worthwhile to contact the lead negotiator for these consortial arrangements as part of the data-gathering process. This person should be able to warn the library about the nature of the deal and whether cancellations will impact other libraries.

Project Strategies

At the outset, it is important to identify the strategies the project team will use to guide the review. Strategies and goals comprise the key factors that guide how titles will be targeted for review and which review criteria are used. When facing budget reductions, for instance, a guiding principle is often to do the least amount of harm to the collection, and to try to minimize the impact of cuts on students and researchers.[4] There may be cuts to the collection that can be made easily, without restricting access to needed content, especially if the collection has not been assessed in a while. If there are serials that are not being used, who will even notice when they are gone? While this is not always possible, it is an example of a user-centered approach to collection development. Here are some sample strategies:

- Prioritize the alternatives to losing access to content.
- Prioritize minimizing the effect of changes on a specific user-group (e.g., graduate students).
- Prioritize making equal cuts across subjects/collection areas.
- Prioritize protecting underserved or emergent subjects/collection areas.

Alternative Cost Savings (Non-Cancellations)

There are alternatives to cancellations for reducing expenses. For example, one can renegotiate subscription terms with the publisher. Publishers are often willing to be flexible in order to find the price point that will work within the library's budget. The library can also rein in spending by negotiating the inflation rate or extending the length of the contract. Going through a consortium (or other buying club) can provide better business terms because the deal has been centrally negotiated for a much larger group of libraries.[5] The library can also bring a package to their consortium, if it is not currently offered, and seek out other libraries that may be interested in joining.

Often overlooked are the fees charged by subscription agents. The service fees charged by these companies can and should be revisited regularly. A library with a 4 or 5 percent service charge on a Big Deal package may decide to seek cost savings by renewing directly with a publisher. However, working with a subscription agent to manage journal subscriptions provides many benefits, from streamlined invoicing to incentive programs for early payment or prepayment; Grogg discusses these benefits in detail in an article in the *Journal of Electronic Resources Librarianship*.[6] Deciding to cut out a subscription agent might be monetarily advantageous, but there will be major drawbacks. The management of title lists for e-journal packages is one of the most difficult parts of maintaining access to these collections. The challenges of e-journal packages are discussed in more detail later in this chapter.

Selecting or changing a subscription agent may require initiating a request for proposal (or RFP) process. An RFP is a document with the library's requirements for a service used as a basis for sending a business proposal out to bid. Before sending out an RFP, be sure to check with the financial or accounting departments at the institution or municipality that has administrative authority over the library. There may be policies and price thresholds which govern when the library must send a request out to bid. More information on writing an RFP is available in the "Resources" section at the end of this chapter.

Evaluative Criteria

The decision of which criteria to use when evaluating serials deserves some thought and care. The criteria should be applicable across all serials titles. Consistency ensures that every person uses the same standards to review titles and that every title is judged by the same set of standards. At more than one point in the project, the library will face questions about its decisions and the process. Taking care early on to establish the standards for reviewing serials will make it much easier to defend and justify decisions when they are scrutinized by those outside the library. An excellent starting point is with the survey of cancellation factors conducted in 2006 by Mark Ware for the Association of Learned and Professional Society Publishers.[7]

Be wary of using metrics that are the easiest ones to gather. The criteria chosen should reflect the library's specific needs and be aligned with the project's guiding principles and strategy.[8] The library's collection development policy, strategic plan, and mission statement all inform which criteria are selected and how they are prioritized. The project team should consider the information that reviewers will need in order to evaluate a title. What are the types of decisions they will need to make? What is valued most highly by the library or institution? Not all metrics should have the same weight. The importance of each metric will depend on the project's scope and the institutional mission. For example, journal impact factors or journals in which faculty members' works are cited will matter much more to research-intensive institutions, but may be ignored in other settings.

The measures for evaluating serials can be grouped into three categories: availability, financial, and value.

I. Availability Measures

Format duplication: Does the library collect serials in multiple formats? In what cases?

Duplicated electronic access points: Is the journal available from more than one online source? Is the coverage comparable?

Embargos: How critical are the most recent issues of a journal? Does this vary across disciplines?

Indexing: Where is the journal indexed? Is it only available through the publisher's platform?

Full-text availability: Does the full text of an e-journal need to be on hand? Or are abstracts through an abstracting and indexing database sufficient?

On-demand availability: How easy is it to get an article through interlibrary loan? What is the typical turnaround time for ILL article requests? Does the publisher participate in any on-demand article service (e.g., Get It Now, Reprints Desk, article tokens, pay-per-view access)?

II. Financial Measures

Cost: This varies by discipline, but in terms of the bottom line, high-priced journals will bear additional scrutiny.

Cost-per-use: This is typically the annual cost divided by the number of uses (or article downloads) in a single year. You should establish a threshold for what a "high" cost-per-use means to the library (or discipline): $25? $50? $75? The number can be compared to the average cost of an ILL article, or the purchase price for per-article charges offered by an on-demand purchase.

Inflation rates: Which titles or packages have higher-than-average inflation rates (e.g., over 6 percent)? Does the license agreement cap these increases?[9]

License terms: Particularly for packages, does the publisher allow the library to swap or cancel titles in a package? (See the section on "Journal Package Analysis and Assessment" earlier in this chapter.) Is the library required to maintain subscriptions when titles transfer between publishers? Or to subscribe to newly launched titles?

Vendor: Is the publisher/vendor easy to work with? How responsive are their customer service reps? Are they able to provide timely invoicing that meets the library's needs?

III. Value Measures

Use: This is the most common metric for demand. Typically these comprise the number of article downloads for e-journals, and circulation/reshelving counts for print journals and microfilm.

Accreditation: Is the journal required for an academic program's accreditation?

Citations: Resources like Journal Citation Reports can provide subscribers with lists of journals where their institution's researchers have been cited.

Journal prestige: Does the institution highly value impact factors, Eigenfactors, or altmetrics to rank journals?

Curricular importance: How important is the journal to student education in the discipline? Is the program growing or declining at the institution?

Research importance: How important is the journal to the research done by scholars at the institution?

Unmet demand: Is there a high demand for the journal or journals in the discipline? Interlibrary loan requests or turn-away reports can demonstrate unmet need at the institution.

When journal packages are part of the review process, they deserve special attention. While the criteria used to assess packages are much the same as for individual titles, there is specific information that should be considered when reviewing these types of subscriptions.[10] Because of this, it is important to identify and separate package titles early on. Two additional categories of evaluative criteria for packages are business terms and license terms. While this section references Big Deal packages, the discussion applies to smaller e-journal packages as well.

There are business terms that put pressure on the library's budget without impacting the patron. This aspect of journal packages can drive decisions, but this behind-the-scenes maneuvering is challenging to communicate to patrons who never experience their impact or see the bill. Business terms vary, but some common themes are:

Inflation caps: Are price increases fixed over the duration of the contract?

Required pickups: Can the library opt out from adding new titles to the package? Is the library required to subscribe to new titles acquired by the publisher? Are these prices capped?

Swap and cancellation allowances: What percentage of the title list can the library cancel or exchange for other titles?

Multiyear licenses: Will the publisher reduce the subscription price or inflation rate if the library agrees to subscribe to a package for more than one year at a time?

Bail-out or hardship clauses: Does the library have a way to cancel before the end of the contract due to changes in its budget?

Nondisclosure agreements: Is the library barred from sharing contract terms or pricing with colleagues?

Aside from cost, there may be other rights and permissions the library is interested in adding to the package. The library's licensing requirements may have changed since the license was first signed. Irrespective of its satisfaction with the business terms, the library may want to inventory and assess what standard rights are included in all licenses. Licenses should be reviewed and updated every few years to ensure compliance with all state or institutional requirements and to ensure that they are meeting the needs of library users. Terms that might be negotiated could include:

- Text and data mining
- Electronic ILL sharing
- Use in coursepacks or in learning management systems
- Perpetual access/post-cancellation access: Will the library retain access to any content paid for during the subscription period?
- Scholarly sharing or self-archiving for authors in a repository

Data Collection and Management

The data used to support the evaluative criteria will come from many sources. Title and order information will come from the library system; usage statistics, indexing information, and online availability will come from publishers' web pages; and qualitative feedback will eventually be provided by faculty and library personnel. Juggling all of this electronic paperwork is one of the most challenging practical aspects of review. You must decide early on who should have responsibility for maintaining the files, and what access other people should have to them. Accidentally deleting data, or even sloppily sorting a spreadsheet, can undo weeks of work. Bear in mind that publishers' contracts may specify that cost, usage data, or both must be treated as confidential. Aspects of the data compiled and used for the serials review may need to be locked down—for instance, behind a firewall in an intranet. The sections that follow recommend some best practices for data management.

Keeping a Master List

You should keep a list of all titles that will be under review for the project. The list should include the minimum amount of bibliographic information needed to be able to locate the title and order information. This information could consist of the title, standard numbers, library system record numbers, format, and any fund codes to indicate which department or subject librarian has a stake in the subscription. This should not be a working list, but it should include a column to indicate a final decision.

Internal and External Data Sources

Reviewers will need information to make decisions based on the criteria and strategies developed for the review. It will not be practical to have reviewers look up information from each source title-by-title. In most cases, it is more efficient to export the data and compile them in a single location. This saves time by providing all the information in one place. It also ensures that the same metrics from the same sources are used for every title. Libraries using an electronic resource management system (ERMS) may be in a better starting position than libraries whose information is disaggregated. The downside to this approach is that it takes time and skill for technical services staff to locate, export, and manipulate the data into a usable form. There are many ways to do this, depending on the resources and skills of the people on the project team. The typical data sources accessed are:

Library system: order and payment information, circulation information (checkouts and internal/in-house use)

E-journal holdings/A-Z lists: alternate access online, coverage years, embargos

Indexing/abstracting information: Ulrich's Serials Analysis System, or information that is available from subscription agents

Interlibrary loan: the number of borrowing and lending requests for the title

Third-party providers of impact measures: journal citation reports, Scopus, altmetrics, core subject lists, accrediting body requirements

Statistical repository/publisher sites: EBSCO's Usage Consolidation, 360 Counter, and the publisher's COUNTER reports, especially JR1, and JR5 in Release 4

The decision on which solution to use for the data-gathering will be dependent on the total number of serials under review and the tech-savviness of the technical services staff. A small number of titles can be compiled by hand, but the same cannot be said for hundreds or thousands of titles. But it is not only necessary to consider what tools the staff have the skills to work with; one also needs to consider what the stakeholder groups will be comfortable using. Most people are comfortable working with spreadsheets (with varying degrees of sophistication). There are also tools available to assist libraries with preparing data and working with more advanced techniques.[11] This section will briefly touch on several ways to manage storing and presenting data from multiple data sources. You should choose which option(s) work best for your library.

Relational databases (Access or MySQL): These have more sophisticated options for combining data sources and can export reports as PDFs or spreadsheets.

Spreadsheets (Excel): These are ubiquitous, and they include additional features for advanced users.

- The VLOOKUP function can pull information stored in a different table based on a common value.[12]
- Merge macros can be used to combine multiple worksheets.[13]
- Otherwise, you can manually enter data into a single workbook.

Regardless of which approach is chosen, the data will need to be standardized (or cleaned). Each source may use a different piece of information as the main identifier for records. Some may use ISSNs, whereas others may only have titles, and each may format those fields differently. For instance, ISSNs include hyphens (or not), and may be tracked using a print ISSN, e-ISSN, or have both. Title matching is possible, but it can be more difficult to match on text fields and account for the myriad ways that titles can be entered (e.g., initial articles, subtitles, abbreviations).

Specific Data for Journal Packages

When it comes to measuring the value of a journal package, it is difficult to know how to define value. A single journal taken on its own will be either high- or low-performing. But when there are hundreds of titles and years of usage statistics for each package, the value equation becomes more complex. The package is more than a collection of titles; its value is also affected by the terms of the contract governing the deal. Even with a firm understanding of the pricing structure and business terms, it is challenging to know how the package is actually performing and whether the library is getting a good return on investment (ROI). Each library will have a different threshold for what a good ROI entails. This section suggests several metrics that have been useful for drilling down into a package, and even comparing the performance of different packages head-to-head.

The first step will be to get the title lists and the most recent two or three years of usage data. There are three key package-level analytics to calculate. First, there is the cost-per-title, which can provide an average subscription cost for each title. This is especially helpful for packages that lack title-level pricing. Next, you can calculate the cost-per-article download at the package level. Lastly, you can look at the percentage of package titles with zero use. Some subscription agents can provide these package-level analytics as part of their suite of subscription management tools. These key performance indicators (KPIs) are one way to narrow down which of the library's packages, on their face, are underperforming compared to others. Because packages are often large, it is advisable to focus on one or two packages with the worst KPIs per the review.

The second step is to drill down into the title-level performance by looking at the average number of downloads annually for each title. You should decide the baseline for low-, mid-, and high-use. The Commission on New Technological Uses of Copyright Works (CONTU) guidelines typically allow up to five articles from the last five years to be borrowed through ILL without paying copyright charges (often referred to as the "rule of five").[14] Any titles falling in the range of five to ten downloads per year might be designated low-use titles. Using these categories, you can show the percentage of titles in the package for each category (see figure 4.1).

From here, you can compare the cost of the package to the cost of subscribing to the high-use titles. Would there be a savings in moving to a small core of individual subscription titles? Another option is to take the current usage

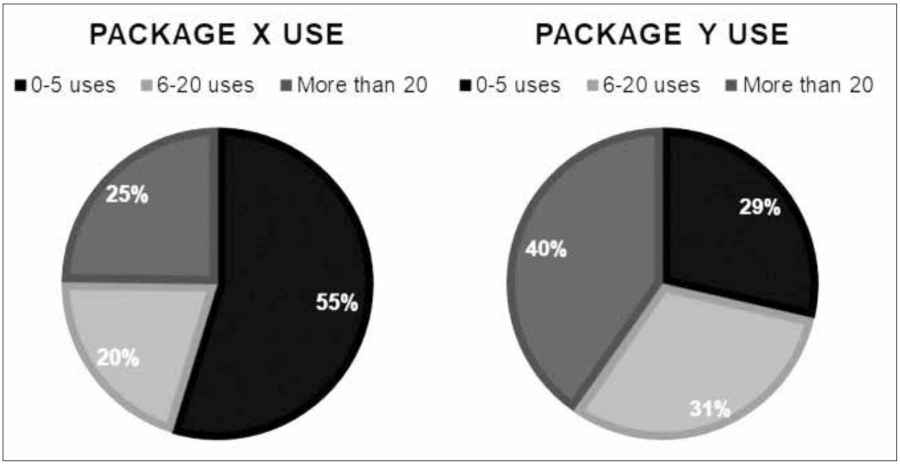

FIGURE 4.1 • Comparing the number of uses per title in two journal packages

figures and the typical cost-per-article for ILL (or some other pay-per-view service) and calculate how much it would cost the library to meet the current demand without committing to an annual subscription.[15]

It is useful to look up sources of alternate access to these titles. For instance, the library may find that there is acceptable (if embargoed) access to the titles through an aggregator database. For titles lacking access to the current year, it is necessary to decide what an acceptable embargo period is. The answer will vary depending on the discipline, but typically, one year to eighteen months is acceptable.[16] One way to help determine if an embargo period is acceptable is to refer to COUNTER report JR5, which breaks down use by publication year. If most of a journal's use is from years where the content is available through an aggregator, it doesn't make sense to pick up a separate subscription to that title.

PHASE 2

Stakeholder Review

With Phase 1 complete and the data collected, it is time to solicit feedback from a wider audience. Serials reviews can be massive in scale and impact, involve a lot of data, and necessitate redundant avenues for communication and feedback. Not every piece of information for every metric can be gathered by the project team ahead of time. It is uncommon for technical services, for example, to have the most up-to-date information on accreditation or course adoption. Subject liaisons and patrons can provide deep disciplinary knowledge and firsthand testimony about the impact and value of the titles under review.

Additionally, what drives Phase 2 is the need to ensure that the review process is transparent and collaborative. The team should present and defend the process by which they selected the goals, titles, and strategies developed in Phase 1 before presenting the title-level data. At this point, the project team should set the timeline for gathering feedback and be clear about what stakeholders should provide, including who will have final decision-making authority over what actions to take.

Stakeholders

Major serials reviews, particularly when cancellations occur, can be politically fraught. Losing access to titles will often be met by strong emotions, ranging anywhere from disappointment to outrage. Not all of this pushback can be mitigated, but in general, a project will be more successful when the process is transparent and stakeholders are kept informed.[17] You should identify which external stakeholder or patron groups will need to be consulted. For academic libraries, there may be student or faculty advisory committees that can serve as proxies for the larger patron populations. In other situations, the library may rely on subject librarians to know which key individuals to contact. More details on soliciting feedback and announcing decisions are discussed later, as part of managing the assessment project and communicating the results of the assessment.

Timeline

Once the need for a review is identified, begin planning the project. The length of the planning period will vary depending on the number of people involved, the amount of data collected, and the extent of the review done by people outside the library.[18] You need to settle on a date when final decisions will be delivered to the publishers and subscription agents. For calendar year subscriptions, subscription agents prefer to receive this information by the end of September to allow enough time to communicate decisions to publishers. Some publisher contracts specify 30-, 60-, or 90-day notification requirements on cancellations. It is unpleasant to undergo review, and identify resources to cancel, but be unable to enact those changes because the notification window has closed.

You should identify key milestones along the way. Build in plenty of time to involve stakeholders in the decision-making process. There is ample evidence in the literature that, regardless of process, serial review projects produce better outcomes when they are done collaboratively with faculty.[19] Information will need to flow from the project team to the library and to institutional stakeholders and back again throughout the process. For academic libraries, faculty are typically not available during the summer. Mid-April is often the latest you can wait before asking them for feedback in the spring. In fall, the window between classes starting, typically in late August, and a late September project end date does not leave much time for faculty to contribute meaningfully to the process. It is helpful to work backwards from these types of fixed dates, since there will tend to be more flexibility internally with serials and acquisitions staff to complete the data-gathering processes than there is on the back end with outside groups. See table 4.1 earlier in the chapter for an example of a project timeline.

Asking for Feedback

You should reach out to all librarians and the stakeholder groups that have been identified early in the assessment project. The goal of this phase should be to gather the qualitative information about serials to complement the quantitative data provided by the project team. The importance of feedback from patron groups cannot be understated. This phase is typically marked by a flurry of e-mails and spreadsheet exchanges. Whether intentional or not, there will be more versions of spreadsheets than desired. Librarians reviewing titles will want their own copies to work from. Rather than fight against this, be clear from the outset how people should submit feedback. The master title spreadsheet could include columns for each reviewer's recommendation, or separate lists could be sent to review. Three things are key to communicate: when the feedback is due, how it should be submitted, and who has final decision-making authority.

Soliciting feedback from library colleagues is a relatively straightforward matter. For external stakeholders, like faculty, a variety of channels for receiving feedback can be used. The most effective choice for a library will depend on how the faculty are consulted in typical collection development decisions.

Much will depend on the relationship between the faculty and the library. The library may rely on a faculty advisory board to review decisions. There may be a faculty representative designated to work with the library on collection issues for their department. The subject librarian may attend the department's (or college's) faculty meeting. The consultation may happen purely over e-mail, or through feedback forms on the library's web page. The form of the consultation need not be the same for every stakeholder group. Use as many channels of communication as necessary to get the responses the library requires to proceed.

A public comment period can be left open for anyone to advocate for a resource on the library's website, or the comments can be submitted through subject librarians. For the former, a feedback mechanism on the website can be created to allow individuals to advocate for a title.[20] However feedback is to be managed, be sure to leave enough time for the project team to review and respond to the feedback before coming to a final decision for each title.

But what does feedback look like? The evaluative criteria selected by the project team is a good place to start. You should refer to the strategies and metrics identified in Phase 1, and identify what information the project team does not have and who can provide it. Subject liaisons possess both deep disciplinary knowledge and an intimate familiarity with library resources. They can help identify whether the content is available elsewhere or the subject matter is adequately covered by another title. Even though usage statistics are helpful in determining need, they are not always the most reliable source of information for demonstrating this need. Often it is up to librarians to assess whether or not a journal is truly vital to support the research interests of students, faculty, and staff at the university. Faculty, on the other hand, are uniquely qualified to provide information on emergent research areas, and changes to curricula. You can ask faculty members to rank titles that are important to their discipline, research, or students; their input may not necessarily match usage patterns.

Stakeholders can provide information to the project team, or they can recommend decisions. The approach to take will depend on who has final decision-making authority. Be transparent about the assessment and keep lines of communication open between the library and patrons.[21]

Stakeholders can:

- Suggest titles to be canceled
- Rank titles by importance
- Provide the context for a title's use
- Comment on the importance of access to the most recent issues of a title

- Suggest alternate titles
- Respond to individual recommendations made by the project team

Acting on Feedback

Once the window for feedback closes, transfer all the information received back into the master spreadsheet, where it will be easier to identify conflicting recommendations. With the project strategies in mind, the project team uses the feedback to finalize a decision for each title. Individual titles may be interdisciplinary and require input from more than one subject area. When there is disagreement about a title, the project team will weigh the provided justifications against the overall project goals. Stakeholder groups will naturally be focused on the titles most important to them. But the project team has an obligation to the collection as a whole, and must make decisions that keep in mind the bottom line and that meet the project's goals.

An example of this can be seen in cancellations of e-journal packages. Often there will be alternative avenues to access titles from database aggregators. When there is no alternative access for a title, the question becomes whether it is necessary to have a separate subscription. Having access to full text is great for patrons; however, if the article is indexed in the catalog and is still findable, relying on ILL or document delivery to fill requests may be an acceptable compromise. A cost-conservative option would be to allow the subscriptions to lapse and judge the true demand for the title through direct faculty requests or ILL requests. Patrons retain access to the content, and the cost savings are in alignment with assessment outcomes.

PHASE 3

Enacting Decisions

Now that Phase 2 is complete, feedback has been gathered and the project team has drafted decisions for each serial title under review. Phase 3 is the time to finalize and act on these decisions. Where the focus in Phase 1 was on the project team and Phase 2 focused on the stakeholders, Phase 3 re-centers the project in technical services. This is also the time to check in one last time with the library administration. When it is time for hard choices to be made, administrators get one last chance to provide their institutional-level, big-picture perspective. They can also help craft messaging.

The goal of Phase 3 is to maintain the transparency built in Phase 2 while acting on decisions and clearly documenting any changes taking place. Since not all decisions made by the project team will go into effect immediately, this section will discuss ways to publicize decisions, and it will reiterate the importance of record-keeping. By keeping the different stakeholder groups aware of what is happening and continuing to foster communication, Phase 3 will have a better chance for success.

Administrative Support

With any major assessment project, the library administration should be kept informed throughout the process. At the outset, and all along the way, the project team should keep the library administration apprised with status reports. This approach provides several benefits. First, administrators can help the project team formulate assessment goals and strategies that align with the library's strategic priorities. Second, they often have close relationships with other administrators on campus and can provide information on the wider budget and political climate. Finally, it is important for the project team to feel confident about the library administration's support of their recommendations, especially when there is pushback from faculty or other patron groups. It is good practice to share any e-mails the project team plans to send out about final decisions with administrators for their review and approval. Because regardless of how the results are communicated, or by whom, many people will contact the library director directly with comments or questions. You should arrange ahead of time what amount of information the director will want to have on hand to field those questions, or if they will simply pass them off to the project team.

Communicating the Assessment Results

The results of the assessment need to be distributed to the library, patrons, and vendors/publishers. Each group will require slightly different data for the titles, and each group will respond to different presentations of the data. The time for major objections to the process and the resources is past. The focus of this phase is to communicate the results, provide justifications, and perform a final check for accuracy. But that is the ideal case. In reality, people will respond most strongly when the cancellation is at hand.

The key takeaway from this section is that there will always be last-minute changes. It is crucial to build extra time into the timetable to accommodate these delays. There will always be patrons who are unhappy with cancellation decisions. Often, it will be a matter of responding to their concerns with information about the process or providing a justification for the decision. Occasionally, new information is introduced about the resource. For instance, a faculty member may be on the editorial board of a journal. Publishers will often provide counter-offers when the library announces its intention to cancel. They may even contact faculty members directly to drum up support for reversing the decision. Whether the library wants to reconsider the decision when faced with new information, or acquiesce to pressure, is a matter for the project team to decide. You should consider discussing matters with library administrators before moving ahead.

Patrons should be provided with sufficient background information about the assessment project and the list of serials and the action to be taken (i.e., titles to be canceled, format changes, new subscriptions). A good practice is to offer alternate options for accessing the journal—perhaps through an aggregator, or directing people to interlibrary loan. Graphs of declining library budgets paired with the rising cost of journals can illustrate the magnitude of the overall problem and reinforce the reasons behind the cancellations.

Communication Channels

There are a variety of communication channels that can be used to inform people about the assessment's results:

Library website or research guides: Post the information in a prominent place where it will be easy for library staff or patrons to locate. See the "Resources" sections at the end of this chapter for examples from various libraries.

E-mail messages: E-mails can be sent either to the library or to the campus community at large. They can also be customized and targeted towards a department, usually with a subset of serials appropriate for those subjects. Decide whether the e-mails should come from subject liaisons or from library administrators for the most impact.

Library newsletters: If the library sends out a regular newsletter, this can have a blurb about the decisions and can point readers to the library's website or invite them to contact collection development or subject librarians.

Attend departmental meetings: Likewise, information can be shared at academic departmental meetings, which are often held at the end of summer before classes start up. Controversial decisions may require representatives from the project team to attend these meetings and provide additional or background information.

Library signage: This is especially useful for communicating cancellation decisions about popular magazines and newspapers which community members may have come to expect. (See figure 4.2.)

Lists for public service desk staff: Where once public services staff maintained shelf-lists of periodicals, it can be useful to have a paper copy of the cancellation decisions at the desk in case front-line staff need to refer to them easily.

Now begins the long chain of events for serials staff who begin to act on the cancellation decisions. This process is time-consuming and painstaking. Subscription agents, vendors, and publishers need to be contacted directly with cancellation decisions. Be honest with the vendor about why the cancellation is taking place. Once the decision has been communicated, vendors will often try to work with the library to find a compromise that will work within the library's budget. Knowing this is a possibility, it is helpful to know what, if any, pricing would be acceptable to maintain the subscription. For any subscriptions that are licensed consortially, be sure to notify the person responsible about the cancellation. As mentioned earlier, one library's decision to cancel can have cost implications for the remaining subscribers.

FIGURE 4.2 • Signage announcing changes for print newspapers

CANCELLATION CHECKLIST FOR SERIALS STAFF

- Communicate the cancellation to the stakeholder
- (Optional) Cancellation notification sent to consortium
- Cancellation sent to subscription agent/publisher
- Update the library system
    - Close the order record
    - Add a cancellation note with the decision date (e.g., "Canceled for CY2019 per serials review")
    - Research perpetual/post-cancellation access
    - Update the holdings
    - (Optional) Update print retention or bindery

Record-Keeping

You should document decisions for posterity in the library system, a spreadsheet, or in an ERMS. Include information about the vendor or subscription agent, renewal dates, and any other notes that could prove helpful. It is important for library staff to feel comfortable justifying each decision when they are challenged by faculty or administrators. After several weeks or months, it will not be enough to rely on one person's memory for how the discussions transpired for each title—especially when there may be hundreds to cancel.

Duplicating this information in multiple places is not necessarily a bad thing. Having this information in multiple places is a better guarantee that subscriptions do not slip through and get paid for another year. It also serves as a reminder that access to titles will soon be lost and to look into what perpetual access (also referred to as post-cancellation access) the library is entitled to. Placing a note in the order record or in an ERMS with standard language provides a reference in the future for the reason the journal is being canceled and when the change will take effect. Using standard language also allows library faculty and staff to run lists or reports for records containing that note field.

PHASE 4

Post-Assessment Review

Phase 4 is the time to tie up loose ends and assess the assessment. Assessment projects often take the better part of a year, and demand a lot of time and attention from everyone in the library—not just the project team. Although the project team might feel dragged down by decision fatigue and ready for the project to be over once the decisions are sent to the publisher, this is the time to review any concerns that were raised during the assessment process and discuss ways to improve it for the next review cycle. It won't be long before another serials assessment project is needed.

This phase will be longer than previous phases, lasting months or even years. Taking a "wait and see" approach to canceled titles requires librarians to continue to track these titles through interlibrary loan requests and through direct patron requests. Monitoring the ongoing demand for titles can provide useful collection development data about actual patron needs versus perceived patron needs.

This phase will also involve following up with vendors about subscription changes and checking for perpetual access. This section will talk about the importance of tracking feedback, enumerate some of the challenges that might be encountered during a serials review project, and offer lessons learned from the authors' previous experiences with serials review projects. What follows are some words of wisdom that have come with the benefit of hindsight.

Tracking Feedback

Assessing the assessment and following up on the cancellation decisions are good practice. First, it is important to assess whether there were any problems in the process, in how feedback was gathered, or in the criteria used to make decisions. It will be inevitable that the process will repeat, and so it is good to learn from past efforts. Following up on demand is another crucial step. The library may have underestimated the use or demand for a journal. Tracking interlibrary loan requests for the canceled titles can be one way to monitor ongoing demand. It is always possible to re-subscribe to titles if demand outpaces what the library can borrow at low cost or for free. Many studies on the impact of serials cancellations on interlibrary loan demand frequently report very modest numbers of requests for canceled journals in the period following cancellations.[22] Often this is an outcome of the assessment strategy: identifying low-use titles or cutting subscriptions to journals but retaining access elsewhere typically results in few or no ILL requests.

Challenges

Too often libraries rely on institutional memory for subscription details. New staff coming in will only have what can be found in order records. For e-journal packages, especially, the payments are not always straightforward in the library system—they may be split across individual titles, with no package-level payments required. At Western Carolina University, there had been considerable turnover in the department prior to a major cancellation project in 2012. The new librarians were unaware that the library had only just moved to a Big Deal package for a major journal provider in January of that year. When they reviewed usage statistics, only a handful of titles that had been part of a smaller subject-specific package showed use. Without knowing the context, it appeared as if the Big Deal was not being well-used and could be safely canceled. Only later, when facing pushback from the faculty, did information about the order history come out. Closer scrutiny of the latest eight months of use then showed extremely high use across the entire package. Needless to say, the package was not canceled.

Packages Are the Worst

All serials, whether print or online, have challenges that require thoroughness and patience to maintain. While not an exhaustive list, here are some challenges that may be encountered when analyzing and assessing journal packages:

- Keeping track of titles the library will retain perpetual access to
- Having little or no flexibility to make changes and lower costs
- Documenting and updating publisher or package changes
- Explaining the cancellation decision to people who may view the package as a database instead of a journal package

Lessons Learned and Tips/Tricks

Cancellations are never popular. There will never be enough time for patron and faculty feedback. It is important to balance transparency with the necessity to make what, at times, are painful decisions to cancel resources.

You should overbudget how much to cancel in order to meet budget needs. Cutting more than the minimum amount will free up resources to add new titles or to reverse decisions at the last minute. It will also provide a buffer for the next year's inflationary increases.

Take time to get support and buy-in from administrators. Whether it is the library director or the university provost, it is important to keep administrators apprised of forthcoming decisions, especially if they will be unpopular.

Follow up to make sure that changes to subscriptions are actually made. It is easy, especially with a lot of subscription changes, for titles to slip through the cracks. Plan for the serials team to follow up with the subscription agent and confirm that everything has been processed.

EVALUATING LEGACY FUNCTIONS AND WORKING WITH PRINT SERIALS

In many libraries, the question of what to do with print serials has been asked, and answered, ten or even twenty years ago. Economic pressures, workforce reductions, and growing demands for dedicated electronic resources staff have led serialists to address the activities related to print serials: check-in, claiming, and binding. Many articles have addressed individual cases, several of which are cited in the "Resources" section for this chapter. For some libraries, the decision to reduce or eliminate print serials staffing may have been precipitated by financial or institutional crises. In others, similar changes may have waited until key staff members retired and the positions were reevaluated. But while the number of acquired print serials has dropped and workflows have changed, some of these serials continue to be acquired and processed by staff.[23]

Of the types of assessments enumerated for serials in this chapter, dealing with legacy processes has the most significant staffing implications. As with many areas of technical services that are involved in physical item processing, handling print serials is a hands-on process whose importance commanded a sizable cadre of skilled staff to manage at the height of print serials subscriptions in 1990s. While this section will discuss the ways to assess each process within the greater organizational context, the most challenging aspect will be addressing the existing personnel engaged in these activities and managing effective change for them.

Questions to Ask/What to Consider

As with all assessment activities, the choice of assessment strategies for print serials is dependent on the outcomes the assessment is intended to measure and the needs that are driving change in the organization. You will need to consider the forces behind the decision to initiate a review of print serials. For many libraries that have walked through this process before, budget crises and reductions in workforce have already caused reductions in print journal operations.[24] Other libraries have sought time and cost efficiencies by outsourcing many areas of technical services. Now libraries are assessing these activities to determine whether they still provide value to the organization. In an ideal world, libraries would regularly assess the day-to-day operations of their units; in reality, it is much more often the case that departments perform assessments only when tasked to do so by outside events or by administrators. Print serials operations are seen as outdated and outmoded—an area of technical services that is ripe for reallocating resources to emerging areas and resources. Patrons' preference for online journal content has driven most libraries to abandon print subscriptions whenever possible; however, there are still times when print makes sense. Consider the following sets of questions as the scope of the assessment project is developed.

For current print serials:

- How many titles are currently received in print?
- How many print titles did the library receive at its peak?
- Have staffing levels changed since then?
- When was the last time serials staffing was reviewed?
- What competing needs or processes require additional staff in the department/library?
- Are e-journals and other e-resource processes adequately staffed?

The following are considerations for keeping serials in print:

- Does the publisher offer an online subscription?
- Is there a cost differential between the print and online subscriptions?
- Are the authentication options acceptable to the library (e.g., user name/password access, IP authentication)?
- Does the library have existing online access to the title through a journal package or aggregator database?
- Is the title meant for browsing or leisure reading?
- Is the content best viewed in print (e.g., art and design journals)?

The following are considerations for outsourcing/insourcing:

- What technical services processes does the library currently outsource?
- What materials (if any) come shelf-ready?
- What funds are used to pay for these expenses?
- Which resource is more scarce in your organization: staff positions or operating funds?
- Can these tasks be handled centrally (for instance, centralizing processing for branch libraries, or sharing processing staff with consortial partner libraries)?

Depending on the answers to these questions, you may prefer to focus your assessment efforts on either outsourcing or insourcing.

Human Resources

The results of the assessment activity most often will recommend designating fewer positions for print serials. Union contracts and state and local personnel guidelines will dictate how and to what extent existing staff can be reassigned. Understanding the regulations and being attentive to employees' rights early in the process will prevent any sudden surprises down the line. Here are some questions to ask in this regard:

- What guidelines govern reassigning existing staff within the library?
- What skill sets do your staff currently possess?
- Can staff duties be updated without reclassifying positions?
- Will reassigning staff to new or updated positions require salary increases?

Space Planning

Library space considerations also drive decisions regarding long-term journal binding, storage, and retention. The trend to reclaim space from print collections in order to create other library functions can put pressure on serials staff to reduce or eliminate those collections. These pressures should be weighed against the intrinsic scholarly value the collections provide to patrons, and any obligations the library has for the retention of print journals.

- Are bound journals occupying a high-demand footprint of the library?

- What are the competing space needs at the library?
- What possibilities exist for alternative storage locations, either as closed stacks or off-site storage or otherwise?
- How would moving or reducing these collections affect other departments in the library (e.g., ILL, document delivery)?
- Are backfiles of the journal available online?
- Are online backfiles acceptable replacements for the print volumes (e.g. digitized cover-to-cover, adequately reproduced images or graphics)?

Retention

The following are questions to ask with regard to retaining print journals:

- Is the journal widely held within the state/region?
- What are the retention policies for journal titles?
- Is the library involved in a cooperative journal retention program?

These agreements contain stipulations for retaining journals in good condition and making them accessible to partner libraries.[25] Be aware of contractual obligations in these situations and which journal titles are covered by the program. You can save time by removing them from the analysis.

What to Assess—Staff, Skills, Workload, Workflows

Inventory Print Processing

The first step in the assessment process is to perform a self-study of the staffing model for handling print serials. You can begin by determining the amount of time that staff spend on each function; the options for doing so can be scaled to fit your circumstances. Existing job descriptions can be mined for a staff member's assigned duties (e.g., 15 percent claiming print serials) for an aggregate breakdown of total departmental FTEs that are dedicated to processing. Be sure to include student worker or volunteer labor. For detailed processes or per-item information, it will be necessary for staff to report their work. This can occur either through self-reported numbers, or as a time study where each staff member tracks their activities to the minute for a set period, often for a week or two during a representative month.

Next, create an inventory of what processes are carried out with serials staff. What portion of print serials receive processing? Do all serials receive the same amount of processing? Print serials may be checked in, but newspapers are not. What portion of the titles are claimed? How often does claiming result in receipt of the missing issue? Is there a good reason for the claiming? Claiming may be reserved only for titles destined for the bindery, when requested by a patron, or for newspapers that are converted into microfilm. Time studies are beneficial for two reasons: to account for staff work, and to assess the quality of service delivered to the patrons. For the latter, some metrics to consider would be the turnaround time between

- when a serial arrives in the mail and when it is checked in;
- when it is delivered to separate branches; and
- when it is on the shelf, available to patrons.

The inventory process can provide for the qualitative assessment of processes based on staff feedback. Ask staff to report what has worked well and what pain points exist in the system. Additionally, work with the staff to ascertain why certain steps or processes exist. Often, long-standing practices arise from the limitations of earlier systems that have never been revisited—for instance, the manual claiming of titles for which automated processes have since been created (or improved). It is possible to tease out unseen connections with other functions of the library by asking what happens before and after a process is complete, in order to tie print serials activities into the broader work of the department or library. From invoicing to stacks maintenance, a small aspect of these responsibilities may touch other parts of the organization and need to be considered as change is implemented.

Alternatives to In-House Processing

You should investigate the alternatives for processing print serials and determine the combination of options that is most advantageous to your department and your patrons. Generally speaking, the options include (1) scaling back the amount of processing, (2) eliminating some or all of the processing, or (3) outsourcing the processing to a vendor. The questions proffered earlier in this chapter for developing the framework for the assessment project will help you determine which set of options to explore. The external or internal forces which precipitated this review often will dictate the magnitude of the change. The inventory process can also illuminate the value placed on these services by the wider library. Whenever possible, you should query public services staff about which processes provide the most value to them or the library's patrons, and then use their feedback to shape the functional requirements of your solutions.

Consolidation services, or off-site delivery and check-in for serials, have long been offered by subscription agents as a suite of services for shelf-ready serials.[26] For the sizable proportion of libraries that outsource technical service functions—cataloging, shelf-ready books, authority control—adding print serials to the list amounts to only a minor change in their operations. For others, the decision to outsource is a balance of costs, staffing levels, and a negotiation of perceptions of differences in quality. The available services include receipt, check-in, claiming, processing, and shipping the issues to the library. These are accompanied by electronic shipping lists and Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) files to check in to your library management system. Ask the subscription agent for information on the costs and turnaround time for your title lists.

Staff Skills and Retraining

Earlier, the authors alluded to the impact on personnel as an outcome of print serials analyses. Sarah Glasser's survey on the staffing implications for print serials management queried libraries that had undergone a reassessment of print serials processes, asking what happened to not just positions, but the employees in those positions. A very small percentage of positions were eliminated entirely, and over 80 percent of the individuals in those positions were retained either in repurposed positions in technical services departments or in another part of the library.[27] The implication of these statistics is the obvious, as is the overriding need to retrain existing staff for new positions.

Retraining print serials staff to focus on electronic resources maximizes that staff's existing expertise regarding serials publishing, but it requires additional demands for technological competencies. A comparison of knowledge, skills, and abilities associated with print serials jobs to electronic resources jobs is provided in the "Resources" section at the end of this chapter. Often, the shift to electronic resources requires staff to move away from a production-oriented mindset, with its checklist of operations and routine procedures, towards a problem-solving mindset. E-resources demand an ability to tolerate ambiguity and frequent change.[28] Short of theft or loss, an issue of a print serial, once processed and added to the catalog, will not change—but you can find yourself fixing the same e-journal access issues again and again.

One recommendation is to establish the basic technological competencies expected of each library employee. Combined with the specific needs for the position under review, these competencies form the basis for a gap analysis of existing staff skills. From this will then come a training plan to address any deficiencies. The authors recommend being comprehensive: from training on how to scan documents, how to use features in e-mail programs to send attachments, and training on the basic functions in spreadsheets, to more specialized skills including subscription management tools, e-journal holdings and linking tools, and proxy server customization. A robust training plan for each employee is crucial to the employee's success in the new position.

Communicating the Assessment Results

You can create a workflow process diagram for how print serials are handled. Process mapping is a method for understanding a process with the intention of assessing and improving it. A process diagram closely resembles a flowchart and can be a useful way to document the steps and individuals involved with a process. It can also be used to visualize the changes made to a process as a before-and-after comparison. Swimlane maps can serve much the same purpose, but they are especially advantageous for processes that involve multiple units in order to evaluate their efficiency; a process that bounces between lanes may be a sign that resources are being physically handled by the same people more than once, and time and effort are being unnecessarily expended to transport the material back and forth.

The relative time and costs of processing options are well-suited for presentation as a table. Possible metrics include a comparison of in-house processing versus outsourcing for cost-per-issue (or cost-per-title); the total cost savings in reducing or eliminating processes; and the turnaround time for getting a serial title on the shelf and available to patrons.[29] You should report the aggregate reduction in time spent on print serials functions by staff-hours or by total staff FTEs.

Organizational charts are another tool for reporting staffing changes, especially when positions are reclassified or redeployed to another department. Updated organizational charts, when paired with updated job descriptions and training plans, can be provided to administrators or human resources staff as a road map for managing the personnel changes accompanying the recommendations for changes in the processing of print serials.

Lessons Learned

Staff engagement and involvement is crucial for most assessment processes, and when those assessment activities result in direct changes to those employees' positions and responsibilities, continuing to effectively manage change throughout and after the implementation phase is imperative. It is important to focus discussion from the outset on the position or process itself and not the person in the position. Language intended to describe the declining importance of claiming print serials can be misconstrued as describing the declining importance of the individual who does the claiming.

Transparency and involvement in all stages of the assessment project can reduce anxiety over job security. Furthermore, training plans and ongoing development of employees in their new and evolving roles can help build their confidence in taking on new responsibilities. These efforts demonstrate that the library is investing in their success.[30] Validating the transferability of an employee's previous skills can reinforce management's perception of their value to the organization by honoring their history and expertise within the library.

It has not been all that long since print serials check-in was a core service. Staff still remember how important it was for patrons to see that the library had received the most recent issue of a journal. Setting these duties aside can cause morale to drop among staff who may see their importance and value to the organization diminished alongside these changes. You should allow staff the time to mourn these processes while showing them a future where they (and their skills) are still valued.

Staff Qualifications

The knowledge, skills, and abilities needed for work in print serials are:

- Detailed knowledge of and experience with serials subscription and title maintenance, including management of lapses, title changes, cessations, and format and publisher changes
- Ability to perform work requiring accuracy and considerable attention to detail without close supervision
- Prior library experience in serials or technical services; familiarity with an online library catalog; familiarity with e-mail and the use of applications in a networked environment; some accounting experience preferred
- Expert knowledge of the functions involved in serials acquisitions processing, including ordering, receiving, invoicing, and renewals and cancellations within an academic research library

For electronic resources, the knowledge, skill, and abilities required to perform the duties are:

- Ability to work as part of a team in a complex and changing environment
- Familiarity with Windows desktop, word processing, e-mail, and Internet resources and tools
- Familiarity with electronic resources management systems—for example, Serials Solutions
- Experience with an integrated library system—for example, Innovative Interfaces
- Experience with loading vendor-supplied records into an automated library system
- Experience with electronic resources support systems—for example, LibGuides, EZproxy, or Summon
- Experience with a national bibliographic utility—for example, OCLC
- Demonstrated ability to adapt to rapid change and to exercise creativity and initiative

TRENDS IN SERIALS

The shift from print to electronic journal content has done little to challenge the supremacy of the subscription model for serials within libraries. Yet worldwide, the conversations between publishers, researchers, and librarians are dominated by disagreements over publisher profits, open access content, and the viability of Big Deals. Researchers' expectations for freely accessible content continue to rise, while libraries struggle to find practical solutions to keep pace.

Many librarians and academics are advocating to dismantle the paywall that blocks access to articles. Libraries have been promoting open-access publishing by marketing self-archiving in institutional repositories and by mediating, negotiating, or paying for article-processing charges. Academics are heading more often to the Web and the proliferation of sources like Sci-Hub and ResearchGate in order to share articles (legally or otherwise) peer-to-peer.[31] Publishers are fighting back by pursuing legal action against sites for illegally hosting copyrighted material.[32] The antagonism between for-profit publishing and the open access movement is ongoing. Libraries are left to make small, iterative changes to improve access within the limits of budgetary realities and copyright law.

A growing number of libraries and library consortia have walked away, or threatened to walk away, from Big Deals. SPARC, the Scholarly Publishing and

Academic Resources Coalition, has launched a new resource for tracking Big Deal cancellations in order to "detail what specific steps libraries have taken to 'cut the cord'; and to provide practical resources for libraries interested in evaluating collection strategies, honing value-for-money calculations, integrating faculty input into the process, and negotiating an exit from big deals."[33] In some cases, libraries have reversed course, having renegotiated better business terms with the publishers. Some statewide groups, like the University of California system, have canceled their statewide contracts with publishers like Taylor & Francis, but the individual libraries have in some cases individually pursued separate Big Deals.[34]

Likewise, many librarians have pronounced the Big Deal to be on its way out—its demise being only a matter of time. On the Scholarly Kitchen blog, Rick Anderson started a discussion about a growing number of libraries that are walking away from Big Deals. In it he predicts that as collection budgets continue to decline or remain flat, and as more libraries show that it is possible to walk away from Big Deals, there will be even more Big Deal cancellations in the coming years.[35]

CONCLUSION

The life cycle of serials is cyclical and ongoing. From the time a journal subscription begins, until the day it is canceled, regular evaluation will always have a role in this cycle. Annual renewals are a yearly reminder of the role assessment has in ensuring the vitality of the serials collection. It is imperative that technical services professionals create systems of review in order to make sure that the library's collections of journals and continuing resources are meeting patrons' collection needs, are sustainable within the library's budget, and are being effectively delivered to patrons. The pace of development in new fields of study will always outpace the available funding. So until there is a way for libraries and publishers to move away from the current subscription model, and its constant price increases, budgets will continue to be a driving force in serials reviews and cancellations.

Technical services must embrace a culture of assessment in order to keep pace with trends and stay in front of patrons' expectations for access to content. Acquisitions models are continually evolving, making content delivery less certain than when receiving issues through subscriptions was the only pathway for patrons to access the content. Staffing models need to become equally flexible and include positions that reflect the skill sets necessary to adequately manage access to this content. Unlike books, print simply has no place in the future of serials. These print collections linger for now, but they will become increasingly marginalized over the next decade. Concerns over space and accessibility will continue to drive questions over the value of these print materials and their place in the modern library.

NOTES

1. Susanne Clement, Gaele Gillespie, Sarah Tusa, and Julie Blake, "Collaboration and Organization for Successful Serials Cancellation," *The Serials Librarian* 54, no. 3-4 (2008): 230.
2. Recent studies include Jane Skoric and Carol Seiler, "Taming the Information Frontier," *The Serials Librarian* 68 (2015), who undertook a comprehensive review and created a framework for smaller ongoing reviews; Jacob L. Nash and Karen R. McElfresh, "A Journal Cancellation Survey and Resulting Impact on Interlibrary Loan," *Journal of the Medical Library Association* 104, no. 4 (2016), who monitored interlibrary loan demand after a cancellation project; Todd Enoch and Karen R. Harker, "Planning for the Budget-ocalypse: The Evolution of a Serials/ER Cancellation Methodology," *The Serials Librarian* 68 (2015), who underwent a multiyear, multimillion-dollar reduction to electronic resources and serials; and finally John S. Spencer and Christopher Millson-Martula, "Serials Cancellations in College and Small University Libraries: The National Scene," *The Serials Librarian* 49, no. 4 (2006), who conducted a multi-study review of the decision-making factors used for cancellation in college and small university libraries.
3. There are two studies worth noting here. Trey Lemley and Jie Li, "'Big Deal' Journal Subscription Packages: Are They Worth the Cost?" *Journal of Electronic Resources in Medical Libraries* 12, no. 1 (2015): 1–10, found that, in terms of cost-per-article, Big Deal packages were more cost-efficient than relying on pay-per-view or interlibrary loan. However, Jonathan Nabe and David C. Fowler, "Leaving the 'Big Deal' . . . Five Years Later," *The Serials Librarian* 69, no. 1 (2015): 20–28, argue that download statistics are not the best measurement for value or need and have found that "it is only possible [to determine the value/need of a journal package] when titles have been cancelled or otherwise lost." After canceling Big Deal packages, they found that while ILL requests increased, the demand for non-subscribed titles was not at a "high enough level" to change their decision. For Nabe and Fowler, cost savings and greater budget flexibility outweigh the downsides to losing these packages.
4. Mike Olson, David Killian, Debbie Bezanson, and Robin Kinder, "A Tale of Two Serials Cancellations," in *Proceedings of the 2016 Charleston Library Conference* (West Lafayette, IN: Purdue University Press, 2016), 187.

5. Bart Harloe, Pat Hults, and Adam Traub, "What's the Use of Use? Return on Investment Strategies for Consortial DDA Programs," *Journal of Library Administration* 55 (2015): 254–55.
6. Jill Grogg, "Using a Subscription Agent for E-Journal Management," *Journal of Electronic Resources Librarianship* 22, no. 1–2 (2010): 8, doi: 10.1080/1941126X.2010.492649.
7. Mark Ware, *ALPSP Survey of Librarians on Factors in Journal Cancellation* (Worthing, UK: Association of Learned and Professional Society Publishers, 2006), 1–19.
8. Thomas E. Nisonger, and Gloria Guzi, "Approaches, Techniques, and Criteria for Serials Evaluation in the Electronic Environment," *The Serials Librarian* 40, no. 3-4 (2001): 394, doi: 10.1300/J123v40n03_28.
9. Stephen Bosch and Kittie Henderson, "New World, Same Model: Periodicals Price Survey 2017," *Library Journal*, April 28, 2017, http://lj.libraryjournal.com/2017/04/publishing/new-world-same-model-periodicals-price-survey-2017/.
10. Clement, Gillespie, Tusa, and Blake, "Collaboration and Organization," 232.
11. Diane Carroll and Joel Cummings, "Data-Driven Collection Assessment Using a Serial Decision Database," *Serials Review* 36, no. 4 (2010): 227–28, doi: 10.1016/j.serrev.2010.09.001.
12. There is a two-hour webinar on prepping spreadsheets and using VLOOKUP referenced by Melissa Belvadi on SERIALST@listserv.nasig.org, December 12, 2017, Serials in Libraries Discussion Forum, www.nasig.org/site_page.cfm?pk_association_webpage_menu=308&pk_association_webpage =4955.
13. Diane Carroll, "Procedures for Using a Serials Decision Database," Washington State University Research Exchange, http://hdl.handle.net/2376/2277.
14. "Using Content for Inter Library Loan," Copyright Clearance Center, wwwdem1.copyright.com/Services/copyrightoncampus/content/ill_contu.html.
15. Paula Sullenger, "The Promise of the Future: A Review of the Serials Literature 2012–13," *Library Resources and Technical Services* 60, no. 1 (2016): 13, doi: http://dx.doi.org/10.5860/lrts.60n1.12.
16. Ingrid Moisil, "Renew or Cancel? Applying a Model for Objective Journal Evaluation," *Serials Review* 41, no. 3 (2015): 161. Moisil considers an embargo greater than twelve months the equivalent of having no aggregator access. Eighteen months may be acceptable for some disciplines or journals.
17. Cindy Sjoberg, "E-Journals and the Big Deal: A Review of the Literature," *SLIS Student Research Journal* 6, no. 2 (2017): 4–5.
18. TERMS 2.0 provides scheduling suggestions based on the library's fiscal year. See "5. Annual Review," TERMS: Techniques for Electronic Resource Management, https://library.hud.ac.uk/blogs/terms/terms/annual-review.
19. Clement, Gillespie, Tusa, and Blake, "Collaboration and Organization," 234; Beatriz B. Hardy, Martha C. Zimmerman, and Laura A. Hanscom, "Cutting without Cursing: A

Successful Cancellation Project," *The Serials Librarian* 71, no. 2 (2016): 16, http://hdl.handle.net/11603/3061 (author final version).
20. Google Forms make for an easy way to set up feedback mechanisms. See "Google Forms in the Library," *The Tech Lady from Texas Blog*, May 30, 2014, https://techladytx.wordpress.com/2014/05/30/google-forms-in-the-library for a library perspective.
21. Olson, Killian, Bezanson, and Kinder, "A Tale of Two Serials Cancellations," 188.
22. Nash and McElfresh, "A Journal Cancellation Survey," 297–99; Kristin R. Calvert, William Gee, Janet Malliet, and Rachel M. Fleming, "Is ILL Enough? Examining ILL Demand after Journal Cancellations at Three North Carolina Universities," in *Proceedings of the 2013 Charleston Conference* (West Lafayette, IN: Purdue University Press 2013), 299.
23. Rajia C. Tobia and Susan C. Hunnicutt, "Print Journals in the Electronic Library: What Is Happening to Them?" *Journal of Electronic Resources in Medical Libraries* 5, no. 2 (2008): 166.
24. Lisa Spagnolo, Buddy Pennington, and Kathy Carter, "Serials Management in Turbulent Times," *Serials Review* 36, no. 3 (2010): 163.
25. "Cooperative Journal Retention," Association of Southeastern Research Libraries, www.aserl.org/programs/j-retain.
26. José Luis Andrade, Heather D'Amour, Gloria Dingwall, and Julie Tao Su, "'Shelf-Ready' Print Serials Acquisitions," *Serials Review* 37, no. 1 (2011): 29–30.
27. Sarah Glasser, "Disappearing Jobs: Staffing Implications for Print Serials Management," *Serials Review* 36, no. 3 (2010): 142.
28. Patrick L Carr, "The Claim," *The Serials Librarian* 51, no. 1 (2006): 79.
29. Rebecca Schroeder and Jared L. Howland, "Shelf-Ready: A Cost-Benefit Analysis," *Library Collections, Acquisitions, & Technical Services* 35, no. 4 (2011): 131.
30. Lila A. Ohler, "The Keys to Successful Change Management for Serials," *The Serials Librarian* 51, no. 1 (2006): 51.
31. Björn Brembs, "So Your Institute Went Cold Turkey on Publisher X. What Now?" *björn.brembs.blog*, December 20, 2016, http://bjoern.brembs.net/2016/12/so-your-institute-went-cold-turkey-on-publisher-x-what-now.
32. Diane Kwon, "A Growing Open Access Toolbox," *The Scientist*, November 28, 2017, https://www.the-scientist.com/?articles.view/articleNo/51048/title/A-Growing-Open-Access-Toolbox.
33. Greg Tananbaum to SPARC mailing list, November 29, 2017, https://groups.google.com/a/sparcopen.org/forum/#!forum/liboer.
34. "Big Deal Cancellation Tracking," SPARC*, https://sparcopen.org/our-work/big-deal-cancellation-tracking/; Chan Li, "UC Libraries' Taylor & Francis Systemwide Journals License," CDL: California Digital Library, April 5, 2017, www.cdlib.org/services/collections/current/TF/index.html.

35. Rick Anderson, "When the Wolf Finally Arrives: Big Deal Cancellations in North American Libraries," *The Scholarly Kitchen* (blog), May 1, 2017, https://scholarlykitchen.sspnet.org/2017/05/01/wolf-finally-arrives-big-deal-cancelations-north-american-libraries.

RESOURCES

Serials Review Fundamentals

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"Introduction to Techniques for Electronic Resources Management (TERMS)." https://library hud.ac.uk/blogs/terms/announcing-terms-ver2–0.

Spencer, John S., and Christopher Millson-Martula. "Serials Cancellations in College and Small University Libraries: The National Scene." *The Serials Librarian* 49, no. 4 (February 2006): 135–55. doi: 10.1300/J123v 49n04_10.+

Serials Review Examples

Website examples of ways to present collection review projects:

New Mexico State University's LibGuide presents cancellations over multiple years and includes articles for further information about trends with publishers and libraries. http://nmsu.libguides.com/c.php?g=206139&p=1360279.

North Carolina State University's website has a cancellation FAQ and timelines for projects. www.lib.ncsu.edu/collections/collections review2014.

The University of Wisconsin-Milwaukee's website offers an example of how to communicate final cancellation decisions. http://uwm.edu/libraries/crm/cancellations/final-cancellations.

The University of Oklahoma's LibGuide about serials cancellations, specifically Big Deals, communicates what they are, the trends, and information about the decision to cancel. http://guides.ou.edu/c.php ?g=113949&p=739282.

Mississippi State University's library newsletter discusses cancellations and alternative options for accessing content. http://lib.msstate.edu/news/2017/database_cancella tions.php.

Western Washington University's website offers information about the culture of assessment at the library and how it is undertaken. Strategic goals are clearly placed. https://library.wwu.edu/about/budget_planning_assessment.

Western Carolina University's LibGuide provides information about reasons for the review and displays changes to resources in multiple ways. http://researchguides.wcu.edu/collection-news.

Data and Project Management Tools

- Open Refine is an open source program for manipulating and editing data. http://openrefine.org.
- Gantt charts are project management visualization tools that are used for tracking tasks and events against a timeline. www.gantt.com.
- Arizona State University offers an introduction to process mapping. https://service.asu.edu/blog/an-introduction-to-process-mapping.

Request for Proposals

Westfall, Micheline B. "Using a Request for Proposal (RFP) to Select a Serials Vendor: The University of Tennessee Experience." *Serials Review* 37, no. 2 (2011): 87–92.

Westfall, Micheline B., Justin Clarke, and Jeanne M. Langendorfer. "Selecting a Vendor: The Request for Proposal (RFP) from Library and Vendor Perspectives." *The Serials Librarian* 64 (2013): 188–95.

Wilkinson, Frances C., and Linda K. Lewis. *Writing RFPs for Acquisitions: A Guide to the Request for Proposal.* Chicago: American Library Association, 2008.

Legal and Licensing

General license information checklists:

- University of North Carolina at Charlotte, https://legal.uncc.edu/legal-topics/contracts#advisory.
- University of Texas, https://www.utsystem.edu/offices/general-counsel/contract-checklists.

Model licensing agreements that offer help with language and terms that are desirable for libraries:

- Liblicense model license, http://liblicense.crl.edu/licensing-information/model -license.
- Association of Research Libraries (ARL) license models and clauses, www.arl.org/focus-areas/scholarly-communication/marketplace -licensing.

Tokens and On-Demand Article Providers

- "Get It Now," Copyright Clearance Center, www.copyright.com/rightsholders/get-it-now.
- "Article Galaxy's Academic A-Z DocDel Collection," Reprints Desk, http://info.reprintsdesk.com/your-business/academia.

Hosburgh, Nathan. "Getting the Most Out of Pay-per-View: A Feasibility Study and Discussion of Mediated and Unmediated Options." *Journal of Electronic Resources Librarianship* 24, no. 3 (2012): 204–11. https://doi.org/10.1080/194116X.2012.706112.

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Glasser, Sarah. "Judging Big Deals: Challenges, Outcomes, and Advice." *Journal of Electronic Resources Librarianship* 25, no. 4 (November 2013): 263–76. doi: 10.1080/1941126X.2013.847672.

Schöpfel, Joachim, and Claire Leduc. "Big Deal and Long Tail: E-Journal Usage and Subscriptions." *Library Review* 61, no. 7 (2012): 497–510. https://doi.org/10.1108/00242531211288245

SPARC* offers a way to track Big Deal cancellations: https://sparcopen.org/our-work/big-deal-cancellation-tracking.

Vogel, Gretchen, and Kai Kupferschmidt. "A Bold Open-Access Push in Germany Could Change the Future of Academic Publishing." *Science,* August 23, 2017. www.sciencemag.org/news/2017/08/bold-open-access-push-germany-could-change-future-academic-publishing.

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