Wesleyan University Libraries

Workflow Analysis

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I. Introduction

In April and May 2007, R2 Consulting LLC spent nine days analyzing the selection-to-access workflows at the Wesleyan University Libraries. The project included two days of onsite meetings and interviews, extensive review of documentation, follow-up discussions via phone and e-mail, preparation of this report, and a return visit to present our observations and recommendations.

Our findings reflect a stable and productive organization; well funded for materials; well informed; and well loved by the University community. The Wesleyan University Libraries have many strengths, highlighted by an experienced and dedicated staff; an evolving relationship between the Library and ITS; a director with enthusiasm for change; and active support from the Provost. On the part of the administration there is a clear commitment to move toward an access model for collections, which we see as highly appropriate. As well, there is genuine interest and creative thinking about the changing character of local cataloging efforts, the role of the OPAC, and discovery in general. Wesleyan's Macro Express solution to a known problem in Voyager overlay of item and holdings records should be shared with other libraries.

Like most academic libraries, Wesleyan is still navigating the transition from print to electronic as the dominant information format. As we see it, there is too much staff time still committed to supporting traditional print workflows, and too few resources committed to electronic resources and unique and locally produced content. Points of organizational strain include:

- Electronic Resources Management appears to be too centralized, understaffed, and complicated by reliance on two separate knowledge bases
- Special Collections lacks some staff resources to accomplish their goals; cataloging backlogs continue to build
- Library Systems is unable to provide sufficient attention to non-ILS systems
- Various digital projects need additional support for metadata creation
- Recent issues related to bookkeeping and accounting
- The collections in Olin have not been inventoried in many years
- Space within Olin remains very tight; significant weeding is needed
- Relationship with Academic Affairs is not adequately defined

The overall goals of this project are to identify opportunities for increased operational efficiency, to confirm and/or clarify the library's long-term goals, to suggest new or revised polices and procedures, and to realign staff in accordance with the Libraries' priorities. By investing in a project of this nature, the library is responding appropriately to changing patron expectations for services; mapping the essential if painful shift toward an access-based model of content delivery. As we understand it this report will serve as one source of ideas for the library's strategic planning session, scheduled for May 31, 2007.

R2 recommendations are extensive and wide-ranging. In our view, this does not indicate a myriad of problems, because Wesleyan University Libraries are performing admirably in many respects. Rather, we see several opportunities to find or create additional capacity, which can be focused in any number of productive directions. We suggest that capacity can be increased in several ways:

- Commit fully to cooperative Collection Development with CTW

- Spend less time managing print monographs
- Further systematize e-resources management
- Further reduce local cataloging efforts for commercially available content
- Make the shift from print to electronic for US Federal Government Documents
- Engage the Library more fully in planning and support for digital projects

Our time onsite in Middletown was well spent. To a person, staff members were forthcoming and very much engaged in the process. We thank all of you for the opportunity to have had such a close look at your work.

II. Strategic Directions

At Wesleyan University Libraries, another round of planning is just getting underway and of course, strategic thinking never completely stops.

As the Library realizes its own future, the most forward-looking elements of the organization will become more integrated with the ongoing, day-to-day workflows of the core service organization. As we mentioned during the kick-off meeting, it's typical that the most difficult aspect of being strategic is the need to stop doing things that we've always done, that we like doing, and that we're good at. To facilitate the transition, R2 recommends that the library re-envision library services as specifically as possible. Statements like these can sometimes help staff members imagine the change more concretely.

- the primary means for students and researchers to interact with the scholarly literature will be electronically
- the purchase of new print, and the onsite retention of out-of-copyright print works will be far more selective
- the vast majority of resources will be electronic --- most will be subscribed rather than owned
- the library will work with users in "their" environments
- the selector's role will evolve into promoting and contextualizing content
- the library will facilitate the social creation of knowledge
- the library will integrate online databases and journals into teaching and learning

Even as a shared vision of the future library continues to emerge, other strategic steps should be taken; many of which are well underway.

Maintain a high profile on campus

At present, the Libraries appear to be well positioned within the University but it will be crucial that the new President recognize the unique value and the critical role of the library on campus. This relationship is vitally important as the library continues to compete for funding and influence.

The library's relationship with Academic Affairs is also critical, especially in maintaining an appropriate balance between ITS and the library and in assuring direct collaboration between the highest administrative levels. An excellent recent example of Academic Affairs' support of the library involved the contentious serials review process. The vacancy caused by the impending departure of the Director of Digital Library Initiatives should be monitored carefully to assure that the library needs and viewpoint remain well represented.

As in many university settings, there may be a serious misconception on campus as to what librarians do, and what the role of the library should be. R2 suggests that the library extend their efforts to clarify and promote a new understanding, particularly in regard to digital content. Moving the digitization lab to Olin will go a long way in the right direction. We applaud this idea and encourage the library build on it.

The meaning of the phrase digital library varies tremendously, but it will be in the Library's best interest to promote a simple definition like: *the use of computers to store library materials appearing in electronic (digital) format.* It is important now, and will be increasingly critical for the Wesleyan community to recognize the library's central role in identification, selection, creation, description, and promotion of digital resources. Take every opportunity to change the general impression that librarians checkout books and dust the shelves!

Maintain momentum and coherence on Content Management Initiatives

On a strategic and a practical level, R2 applauds the concept and the successes of the Content Management Initiative. Its related working groups have built and continue to strengthen bridges between ITS and Library. Coordinated efforts related to managing Monographs, Serials, Data Sets, Student Theses, Special Collections, University Records, Audio & Video Files, Digital Images, Course Management Systems, Web Sites, and Faculty Scholarship have been undertaken in a serious and productive way. Each working group has made significant progress and more is anticipated.

One of the most far-reaching (and illustrative) decisions made is the recent purchase of Xythos, a commercial content management system, to underpin the Library's Web sites and digital library. While it's good news that a selection has been made, the process that led to the decision highlights an important difference in the cultures of the Library and ITS. From the ITS point of view, the slow pace of deliberations and the absence of early involvement by the Library created significant frustration. The Library, for its part, expected that ITS would make the infrastructure decision, and believed its participation should focus on content and metadata. One participant averred "the Library works on a different time scale." Because the two organizations have such different expectations about decision-making, it might make sense to develop a set of ground rules regarding participation, roles and timeliness.

Another apparent difference between the Library and ITS cultures (and perhaps one that should be addressed) has to do with level of attention given to ongoing assessment and enhancement of new applications and interfaces. Given the rapid pace of change in the library environment, it will be important for both parties to remain engaged over the life of a new initiative or service. Especially in a 2.0 environment, the launch is just the beginning.

Despite issues with the process, the adoption of a single content management system will certainly help both the Libraries and ITS. Although we are not familiar with its specific functions/features, this platform creates real opportunities for coordination of content in many formats from any number of sources. Our rather obvious recommendation is to maximize the benefit as early as possible. Be sure to keep the library staff closely involved in its implementation; applying their professional skills related to content selection, description, and organization.

Although the subgroups meet on a fairly regular basis, it was apparent that the entire group does not meet often and perhaps not often enough. R2 recommends that concerted efforts be made to ensure long-term coherence between the various initiatives. A system like Xythos can become pigeonholed or single-threaded if the planning and implementation is handled by too small a group. Even during the meeting with R2, it was clear that there are possible synergies and overlapping interests between several of the sub-groups.

In a separate document, R2 was supplied with an impressive list of projects that involve digitization and/or improving access to print materials by way of web interfaces. Some of the projects on the list clearly overlap with those being addressed under the Content Management Initiative, whereas others don't seem to. Those that apparently fall outside the CMI include:

- NITLE's D-Space pilot project, which offers the opportunity to create an institutional repository for the intellectual output of faculty, students, and staff. Both groups cited the joint ITS/Library work on the Electronic Theses and Dissertations pilot as an example of effective collaboration.
- Department Collections, for which ITS and the library have developed a system to help departmental libraries catalog their collections, which would otherwise be unexposed. The Cataloging Librarian assists departmental staff in how to describe their collections, while ITS created and maintains the infrastructure to support the search process. Again, this initiative was characterized as a major success in terms of collaboration.
- Audio Processing for online music reserves --- is this the same as the work being done by the Audio & Video subgroup? Is staff from the World Music Archives involved in these discussions? At present, tangible copies are made (CDs are ripped by ITS staff) if a faculty member or librarian asks for access. But there is no central repository, and no consistent approach to metadata, which leads to tracks being ripped more than once. Our point here is to ask whether disparate initiatives are underway that should be merged.
- Academic Media Studio
- Visual resources, including 60,000 images on slides held by the Art Department
- Catalog of the Future (ERATS)

It is clear to us that these projects are of the highest value and relevance and it may be that there is adequate coordination between and among them. Our concern, however, is in their magnitude and number; resources needed to accomplish them will be stretched too thin. As a result, communication will falter, work will occur in isolation, and momentum will be lost. Our recommendation is simply to take the time to meet often as a big group, coordinate and prioritize projects in a single rubric, establish time frames, ensure a shared agenda, and maximize the benefit of each initiative.

We should note that this level of experimentation and confusion is by no means unique to Wesleyan. With multiple stakeholders (the Library, faculty academic departments, ITS) embarking on multiple experiments (links with Blackboard, ETD, Institutional Repository, electronic reserves, Web site revamping) across multiple platforms (D-Space, Xythos, Docutek, Blackboard), the potential for overlap and confusion is high. It's also likely to remain so for the foreseeable future, as the results of various experiments play out. In our view, that makes it doubly important that a group such as CMI continue to meet regularly, as difficult as those meetings may be.

As strategic planning continues, R2 suggests that the following ideas be incorporated into discussions about the Libraries' future. No doubt most of these are on the table for consideration, but we note them here to reinforce their importance.

Realign staff: prioritize work on e-content and unique resources

In FY06, Wesleyan spent approximately $1.3 million on electronic resources. This represents approximately 40% of the materials budget. In terms of responsibly managing library assets, R2 would suggest that an analogous percentage of staff hours in Collection Development and Technical Services be spent on tasks related to electronic resources. Although Wesleyan has done a better job of dispersing these tasks than some libraries we've worked with, it's clear that the aggregate total of hours is far less than needed. In part, this is because the demands related to print have not yet abated. 483 serial titles were cancelled last year, and as many more will be cancelled in the coming year, but there are still over 2,000 print subscriptions in place. And of course, print cancellations create significant additional work in the short term, requiring that vendors be notified, check-in and holdings records be adjusted, titles closed and bound, etc.

R2 recommends that Wesleyan University Library deliberately align its strategic thinking to reflect the priorities expressed via spending patterns. In practice, this means that work with e-content, where user demand is highest, should be prioritized. Each year, it is likely that the percentage of the acquisitions budget spent on electronic resources will increase. Staffing patterns should closely parallel that growth.

Secondarily, R2 believes that Wesleyan should increase its operational focus on unique print resources, concentrating on titles where Wesleyan's efforts add the greatest value to the national and international scholarly collection. In practice, this means Special Collections. This will also require some realignment of staff and adaptation of the organizational structure. R2's workflow analysis project is intended to provide some ideas on this topic, and we believe the timing for these changes is optimal.

Redefine the relationship between collections and discovery

As more and more content becomes available in digital form (such as the millions of titles digitized by Google and the Open Content Alliance), a library's role begins to shift. Rather than identifying and acquiring resources, collection development activity becomes more focused on providing access to content. That is, the pathways to the content become as important as the content itself. This suggests that those services that enhance access, such as vendor-provided cataloging records (or A-Z lists, or link resolver knowledge bases, or federated search modules), might be considered part of the "content" that is purchased. At Wesleyan, as in many other academic libraries, an argument has been successfully made that these access-enhancers be funded from the materials budget.

That idea underlines a broader idea: that collections are ultimately for users and that management of those collections – and the access to them – needs to be moved as close to users as possible. It seems clear that the ERATS taskforce is already focused on new ways to facilitate discovery and delivery. As we understand it, their task is to reconsider the Libraries' Web presence and all content from the user's point of view. In some ways, this idea is a corollary to consolidating service desks, which we consider later in this report. The intent is to think as carefully about the virtual door to Wesleyan University Libraries' services as to the physical door to them.

As Wesleyan moves forward with its own Catalog of the Future, it may be instructive to study the new catalog at the University of Washington: http://www.lib.washington.edu/.

This is a beta site for WorldCat Local. A general search of "terrorism" brings back an impressive result set, with categorical search options and resource counts for author, subject, format, language, and year. Note that included among the "authors" are the *United States* and *UN Security Council* and under content type one of the options is for Government Documents.

Expand the definition of Collection Development

Whether in print or electronic form, resources created and sold or licensed by commercial publishers represent only one source of content. Even as the percentage of library materials budgets dedicated to electronic resources rises to 80 or 90 percent over the next ten years, the content it represents will be more common than unique. Most books, journals, Government Documents (especially at the Federal level), DVDs and microfiche are available to any interested library, provided it has the funds. As these items become easier to share, through consortial arrangements, ILL, or by virtue of digital distribution, library collections begin to distinguish themselves by what they provide access to from outside this mainstream.

Libraries have already entered a time when unique and local resources are more valuable. At Wesleyan, these include manuscripts, dissertations, and other Special Collections, as well as an increasing number of digital objects created in areas outside the library. They may also include material that still requires conversion to digital form, such as films and field recordings on reel-to-reel tape. As the Institutional Repository grows, it may include ePrints, excerpts from course management systems, and any other format that contains the fruits of scholarship. Collection Development activity should gradually begin to incorporate some of these elements, and gradually de-emphasize its focus on print monographs.

Align selection responsibilities more closely with the Liaison Program

This idea is already under consideration at Wesleyan, and we support it. Per our conversation with selectors, the liaison program has been almost exclusively a public services initiative but should be expanded to coordinate selection activities and promote local publishing/archiving solutions for faculty and students.

Integrate selection for the institutional repository into existing Collection Development responsibilities

This expanded definition of collections needs to become more central to the work of subject liaisons and Collection Development. These areas are central to the vision of Library as collaborator with faculty on locally produced content—and on making it discoverable to users at Wesleyan and beyond.

Standards will need to continue to be developed, as will new kinds of relationships with faculty and departments. All manner of challenges await here, and meeting them will require less title-by-title attention to monographs, and other tasks related to mainstream print.

Balance the incoming flow of specialized content with library's capacity for managing it

Most curators we meet have the perspective that even if we can't create access, "at least we have it." There is a pervasive fantasy that "someday" there will be resources to catalog and preserve it all. Despite R2's recommendation to allocate more staff resources to Special Collections, there is still a need to rationalize the long-term collecting patterns. Start now to prioritize collections. Draft more finite Collections

Policies and stop accepting material that does not fall within scope. We see this to be necessary in Special Collections generally, and in the World Music Archives specifically.

Don't allow donors to drive the library's priorities

As we understand it, World Music donors pressure the library to make their content accessible to meet their own needs. Here as elsewhere, the library should be setting its own collecting and processing priorities. A new gifts policy should include language to this effect (for all gifts-in-kind, including World Music).

Substantially reduce print reference collection

As we heard while onsite, Olin Library is currently in the process of weeding its print reference collection, with a goal of reducing the footprint by 25-30%. R2 applauds this initiative and urges even more substantial culling over time. E-Reference titles have proved among the most successful of eBook formats, and the number of titles available continues to increase, both for ready reference and topical works. In fact, electronic reference has become the norm in most academic libraries. It is generally agreed that this category of eBook enhances the user experience, while saving space, and reducing exception treatment. Over the longer term, it is conceivable that Wesleyan could eliminate print reference as a physical location. Pseudo or highly advanced reference materials should be shelved in the stacks.

Move to e-only formats for new Government Documents

Most FDLP libraries, true to their mission, are holding fast to traditional models where tangible material is trustworthy and secure. At the same time, the FDLP community is working hard to design new models replacing paper and fiche with e-content when possible, for all the obvious advantages, including speed and ease of accessibility, lower costs, and a more complete repository of government information.

The push to publish more digital and less tangible content is picking up speed, and statistics from the Government Publication Office illustrate how quickly the change is happening. For example; in 2001 the GPO created 14,215 MARC records containing PURLs. By 2006 the number of MARC records with PURLs had jumped to 63,963; an increase of 450% in less than six years. Another indicator of the emphasis on digital content is the increase in total online-only records from 10,433 in late 2003 to 63,963 in late 2006. Again, explosive growth at 600%. At present, 65% of GPO publications are in electronic format only, and 94% of the remainder is available in both tangible and electronic formats. Only 5%, then, have no e-component.

As a 30% Selective FDLP (and as we read the FDLP Guidelines on Substituting Electronic for Tangible Versions of Depository Publications) Wesleyan has the opportunity to eliminate tangible receipts almost entirely. Per our conversation with the Documents Librarian, electronic only may be perfectly acceptable to the Wesleyan community for forthcoming documents. Accessibility is, of course, the key. R2 recommends that Wesleyan move sooner rather than later to deselect fiche and paper formats in favor of online only.

Subsequent strategic decisions will have to be made in regard to description. Should eDocuments be retrievable via the local OPAC or will other access paths be more viable over the long run? See again the University of Washington OPAC: http://www.lib.washington.edu/.

Local inventory work, weeding and cataloging of the legacy print collection is underway at Wesleyan, but progress is slow and expensive. R2 suggests that local efforts of this nature are of decreasing importance users. National level efforts are underway to create access to pre-1976 documents. As we see it, Wesleyan should be tracking these broader initiatives, participating if feasible, and reaping advantages for local users as early as possible.

Where to house the Art Collection?

Not surprisingly, Art library constituents don't want it to be moved – it is "the heart" of the department. And it's true that art materials have characteristics unlike other disciplines. R2 has no specific recommendation here as physical space solutions fall outside the scope of this project. We include this question only to acknowledge a significant level of the concern.

Where to house the Media Collection?

Here again, we have no specific recommendation; to R2, the current solution doesn't appear overly problematic. However, we heard concerns expressed often enough to suggest that the current location in the Science Library is not seen to be optimal in terms of the user experience.

Weed all microforms that are also available online

If we understand correctly, the Microfilm Center has historically been underutilized, in part because of the inconvenience of the format itself, but also because portions of the collection have never been cataloged. The Center has also been understaffed, the result of which is "a nightmare" combination of hidden collections and microfilm duplicates of content now held online. Because some segment of this material is available electronically, the chances of it being used in microfilm format are small.

At this time, R2 does not recommend significant investment or re-investment in this resource. Rather we recommend that serious culling could ease some of the operational issues. We also suggest that students could be trained to search targeted microfilm content to determine availability of electronic alternates, and thereby identify titles for withdrawal and disposal. We also recommend ignoring the uncataloged titles for the time being, to focus on higher-interest electronic materials.

Use R2 audit methodology for Public Services

Some thought has been given to the idea of replicating the R2 audit and redesign process in other functional areas like Public Services, and that a description of our approach would be helpful. To that end, we've included an outline of our methodology as an Appendix to this report. Public Services, of course, are very different kinds of operations than Technical Services, and some thought should be given as to which of the R2 techniques might apply.

III. Draft New Policies

As we may have mentioned while onsite, carefully articulated policies can help to bring the organization closer together philosophically and operationally. Once embraced, policy statements can systematize thoughts and actions, minimize inconsistencies, justify elimination of low-value tasks, and help to control individual predilections.

Draft a new collection development policy for Wesleyan University Libraries, across all subjects. Include media, gifts, special collections, reference, and digital collections

At present, no overall CD policy exists at Wesleyan, except in the virtual sphere. With the imminent departure of the long-time Collection Development Librarian, this may be an opportune moment to embark on this initiative, enlisting the assistance of subject liaisons and reference librarians. The first step might be to develop an outline of the kinds of information that would be most useful, including not only topical, historical, and geographical parameters, but also format preferences and substitution rules: when will print be preferred? What are the policies on electronic backfiles? Print retention periods? To what degree should popular media be collected? What are the rules regarding duplication? How to filter gifts? What categories of material belong in an institutional repository? How will it be identified and obtained? Each section should include basic parameters for weeding as well, and some assessment of how often the collection should be analyzed or compared against peer institutions. Art and Music should be included.

At best, this work would be structured and coordinated at a consortial level. Please see our description of a new CTW Collection Development Position, later in the report.

Create a rush policy for cataloging and marking

It's not at all unusual for us to hear about workflow confusion and potential or suspected abuse of RUSH processing services. As described to us during the interview process, it is inefficient and frustrating to have to drop everything for a rush request. Some faculty apparently use the RUSH designator for the notification service only, which causes consternation among those who provide the service. It would seem a useful exercise to define a RUSH service more carefully. We heard one suggestion to batch RUSH processing, and schedule the work to occur just three times per week.

This might also be a good time to promote the RSS capabilities for new resources which have already been developed; the content can be parsed by subject, and is available to all interested parties.

Reduce the capture of student recitals

R2 suggests a minimalist approach, which would be to stop recording/archiving student concerts unless the work is equivalent to a Senior Thesis. If we understand correctly, this topic is already under discussion and we simply want to add support for the idea of reducing the amount of time and effort now expended on these recordings. To the extent that student recitals will still be added to the collection, we suggest some adjustments to the workflow itself which are described in a subsequent section of the report.

Develop policies for archiving, and describing free web sites, pdf's, political blogs, listservs and other unlicensed scholarly electronic resources

The Collections Committee should be encouraged to begin (or continue) identifying such resources, and developing ideas about hosting and archiving them—and working with

Resource Description staff to set up submission and notification procedures. Although some of this work may already occur, we recommend that it be given higher priority, since this content is both electronic and unique. In some cases, especially with important material that may not persist on the open Web, copies could be downloaded and hosted locally. Cataloging records should include 856 links to the content, whether that content remains on the Web, or is downloaded and hosted by the library. We do suggest that the policy be construed fairly narrowly; the intent is not to catalog the Web, but rather to highlight content essential to a discipline that might otherwise be missed.

Adopt an e-only policy for student theses

Again, R2 applauds the work already accomplished regarding the digitization of 50 undergraduate and 12 graduate theses on DSpace, and recognize the wisdom of the incremental (pilot) approach taken to date. Broad acceptance by the Wesleyan community is critical to the success of a policy shift like this one. Nevertheless, it may be reasonable to increase the speed of change in this particular area. Eliminate printing, binding, and physical archiving from the library's workflow so that library staff can focus on higher value tasks. In many academic communities this approach has been happily and painlessly embraced. In fact, it is fast becoming the norm.

IV. Take a New Approach to Access

In R2's view, Wesleyan has taken a pragmatic and sensible approach to cataloging and database maintenance. Wesleyan was a relatively early adopter of PromptCat; a service that now provides automated batch copy cataloging for nearly 11,000 of the library's 17,629 annual book receipts. Full-level LC records, which account for 75% of the YBP stream, are "eyeballed for obvious problems", based on a "Copy Cataloging Checklist" that is a model of brevity and clarity. (We particularly like the advice on Main Entry: "Don't agonize over the main entry.") These titles typically reach the shelves within 2-3 days after arrival, allowing Wesleyan to reap the full value of outsourced cataloging and shelf-ready treatment.

The other 25% of the YBP stream (PromptCat no-hits) also moves quickly through Technical Services, as does copy cataloging that arrives from other sources. The 7,000 titles that still require copy cataloging is a relatively large workload, but the benchmark requirement of 20-25 titles per day per person keeps the Library relatively current. During our visit, the "on the wall" working queue stood at 608 units, one of the smallest we've encountered. OCLC's Bib Notification service provides updates automatically as they become available.

R2 is impressed by the documented cataloging procedures and statistics which are simple, thorough and up to date. However, it appears that there is more record scrutiny and maintenance than the procedures would suggest, and perhaps more than is needed. As described below, R2 suggests a sampling approach to quality control rather than item-by-item review, knowing that some small number of errors will slip through. These should always be corrected when identified. This of course, begs the question of series tracings, which would go unchecked. It occurs to us that this is a conversation worth having, focusing of course, on the user experience.

In addition to PromptCat, other types of outsourcing have also been adopted at Wesleyan: OCLC TechPro for non-Roman scripts; Marcive records for Government Documents (although this has recently been discontinued); LTI authority control processing; purchased MARC record sets for some large online resources and microfilm. In general, Wesleyan accepts duplicate call numbers and minimizes local Cuttering and other specialized practice. For monographs, separate records are maintained for print and electronic versions, enabling use of purchased MARC record sets. For e-only journals, records are actually being pulled from the catalog in favor of the Journal Locator. Bravo!

Many Oberlin Group libraries are still holding fast to the idea that the OPAC should remain central to the user's experience. In fact, this is not the case at Wesleyan. The Cataloging Librarian is very much attuned to alternatives such as WorldCat Local. As she herself has noted in her presentation about the future of cataloging, many observers agree that the OPAC will no longer be central to user access. Rather, it will either be optimized to become one of many targets for Google or a federated search tool, or it will remain to provide access to print material only. Already, more users find electronic resources via A-Z lists, link resolvers, and ERMs than through OPACs—especially true at Wesleyan. The effort expended on MARC cataloging will be drastically reduced, while diverse metadata schemas and standards will assume greater importance. Much "cataloging" effort will shift to advising on and creating standards for user-created tags and metadata. Increasingly, discovery will focus on users rather than resources.

In our view, the Cataloging Librarian at Wesleyan is exceptionally well oriented to this vision of the future. Much of her work is already aimed in this direction, but could and should be more fully embraced by the rest of the library. R2 recommendations in this area are offered simply to bolster ongoing efforts to maximize the value of local cataloging expertise. To a large extent, a shift of this nature demands that less time is spent editing local records.

Analyze Voyager search logs

Although this is less true at Wesleyan than at some other libraries, it's sometimes surprisingly easy to forget that cataloging is not an end in itself, but rather a tool to help users find relevant content. In order to focus cataloging effort appropriately, it's important to understand how patrons search the OPAC. And here we mean how they actually search it, as opposed to how they "should" search it. We suggest regular collection and scrutiny of search logs from Voyager. Analysis of this data will reveal which indexes are most commonly used, patterns of keyword choice, and other information which can indicate where most cataloging effort should be placed.

Catalog to the level needed

The high cost of traditional cataloging in an era of declining library budgets and competition from commercial search engines, has inspired libraries to find new ways to meet user needs while decreasing costs. Wesleyan has already simplified cataloging in some ways; for example, LC subject headings are no longer assigned to undergraduate theses. R2 urges additional steps along these lines.

As Wesleyan is already aware, alternative standards have begun to emerge at the national level, which are intended to simplify the cataloging requirements while maintaining appropriate access. These new record types are designed to function in library ILSs, shared catalogs, and metasearch systems. We recommend that Wesleyan track these developing standards, and adopt non-MARC alternatives where possible. Some of these include:

- *VRA Core Categories (for DVDs and Videos)* http://www.vraweb.org/vracore3.htm
- *Access Level Record (for Series)* http://www.loc.gov/acq/conser/alrFinalReport.html
- *Access Level Record (for Non Serial Remote Electronic Resources)* http://www.loc.gov/catdir/access/accessrecord.html

Maximize Google hits via OCLC's Open WorldCat

As you are no doubt aware, Wesleyan can configure its link resolver to be a target of Google Scholar. This will allow patrons who search in Google Scholar to be presented with results that include Wesleyan e-resources in their search results. Assuming the user is authenticated, s/he can click from the search results screen to the full-text. (http://scholar.google.com/intl/en/scholar/libraries.html)

Joining OCLC's Open WorldCat service, and turning on "deep linking" can also enhance book discovery. This allows a user to click from Google search results to the "Find in a Library" interface (where the user enters a ZIP code), and directly from there to the item record in the OPAC. A description can be found at: http://www.oclc.org/worldcat/open/deeplinking/default.htm

These approaches can help optimize Wesleyan's content (both journal and book) for discovery via Google — in effect, enabling Google to function as a metasearch tool for your users. One critical element of course, is for Wesleyan holdings to be current on OCLC. Since the Library already participates in OCLC's e-Serials program, this may already be true.

Explore other MetaSearch tools

If we understand correctly, Wesleyan owns MetaLib, but has not implemented it yet. By itself, of course, MetaLib provides only the metasearch component of federated search: the ability to search remote heterogeneous resources from a single interface. (To integrate those results with hits from the OPAC and locally indexed resources requires a true federated search module, such as Primo or Encore.) Since a federated search can subsequently incorporate existing metasearch functionality, it may be expeditious to implement MetaLib now, targeting heavily-used remote sources. Focus on targets that might help reduce descriptive work now done locally, such as the GPO Access site. It would also be useful to see some demos of the generation of federated search tools now under development.

Implement a URL checker

At present, Wesleyan has no automated link checker in place, and that may be just as well, since there is not sufficient staff time to fix the broken links found. However, broken links are a continual annoyance to users, and any proactive steps that can be taken to reduce their occurrence will improve the user experience. As some of the changes suggested here are adopted, additional staff hours will become available, and a simple link checker could routinely identify problems needing attention. Again, student workers could likely handle some of the most routine work, once procedures are written.

Further enrich OPAC Records

Library patrons who are used to Amazon and other richer displays of bibliographic data are sometimes under whelmed by OPAC displays. This can be addressed in several ways. Some libraries, for instance, link directly from the OPAC record to the Amazon display, as Wesleyan does. Others have worked to enhance the OPAC locally or at the consortial level, by purchasing Table of Contents records, cover scans, blurbs, reviews, and other commercially available data. The ability to provide this extended metadata could also be linked to the "new resources" lists that are currently available via RSS feed. We recommend that Wesleyan investigate the costs associated with this kind of enrichment, and raise the topic at the CTW level to consider cost-sharing.

Simplify cataloging for local concert recordings

Wesleyan Music students produce as many as 80 local recordings each semester. At present, there is a two-year backlog in cataloging this material, in part because of the intensely detailed and manual approach to description. As described above, the first most critical step will be to drastically reduce the number that receives this service. Beyond that, however, it appears that the process itself could be streamlined.

Surprisingly, this work is as complex (and as seriously backlogged) as any other in the Scores and Recordings library, requiring a great deal of high-level attention and quality control. Sometimes, a concert must be listened to, in order to figure out what it even is. The first step if for the staff member to assess the content (usually on audio cassette), assign a preliminary call number (actually a shelf list #), and then pass it along to a grad student who creates a disc, types up a Table of Contents in Page Maker Pro, and applies labels. The disc and the TOC are returned to the initiating staff member for full cataloging. A considerable amount of paperwork, including a printed MARC record is filed and the disc itself is finally shelved. R2 suggest careful scrutiny of this process. Some ideas that may be worth pursuing include:

- Require metadata from the performer(s) and or faculty

- Allow the grad student to assign accession numbers --- start the process with the grad student --- with final attention from the staff member
- Eliminate the Pagemaker TOC --- include necessary details in the MARC record
- Stop printing and filing descriptive information about each recording – again, rely on the record in the system
- As soon as the technology is available, move forward with digital sound recordings --- eliminate the tangibles; this would be the obvious corollary to e-only dissertations.

Stop loading shipping records for Government Documents

Since MARCIVE Record loads have been discontinued, it makes sense to stop loading the much less complete shipping records. In fact, as we heard suggested, since virtually all electronic Government Documents are searchable and accessible through the GPO Access site, we believe it makes sense to cease all cataloging for these. If and when the MetaLib module is implemented, GPO Access could be configured as a target, which would integrate search results for Government Documents with those from other remote sites.

Complete the retrospective cataloging

It's unlikely that anyone would argue with this, and if we understand correctly, main entries are all that remain to be done. This would go hand-in-hand with the physical inventory, and as described elsewhere, would create efficiencies for several public services functions. The question is of course capacity for the project. If record review can be minimized for PromptCat and DLC records, the right expertise could be made available for this project. As well, whenever salary savings are available, they should be directed at this and/or other similar projects for which there is not adequate capacity.

Reconsider Authority Control

At present, new or edited records are sent to LTI on a monthly basis. On a semi-annual basis, Wesleyan (or CTW?) gets updates to LC authority records. Time is not currently spent on manual clean-up; Wesleyan instead chooses to replace the base bibliographic file each year. Authority control does not get much more efficient than this. A more challenging question may be this: Is authority control work needed at all if the OPAC will eventually recede in importance? Clearly, since any decision here will affect the CTW "universal catalog", decisions of this kind should be made in consultation with Trinity and Connecticut College.

Take fuller advantage of student workers

Wesleyan already relies fairly extensively on student workers. Because training and scheduling can be onerous and sometimes wasted, Wesleyan, like most libraries, uses students for relatively simple tasks. However, in Special Collections, for example, students do most cataloging of theses. Good students could certainly be trained to work in Serials Solutions and to fix URLs. Students could potentially perform initial searches for "off the wall" cataloging titles, or to identify online duplicates of microfilm titles. Student workers might also be trained in application of non-MARC metadata once procedures and standards have been documented.

V. Reduce the Cost of Handling Monographs

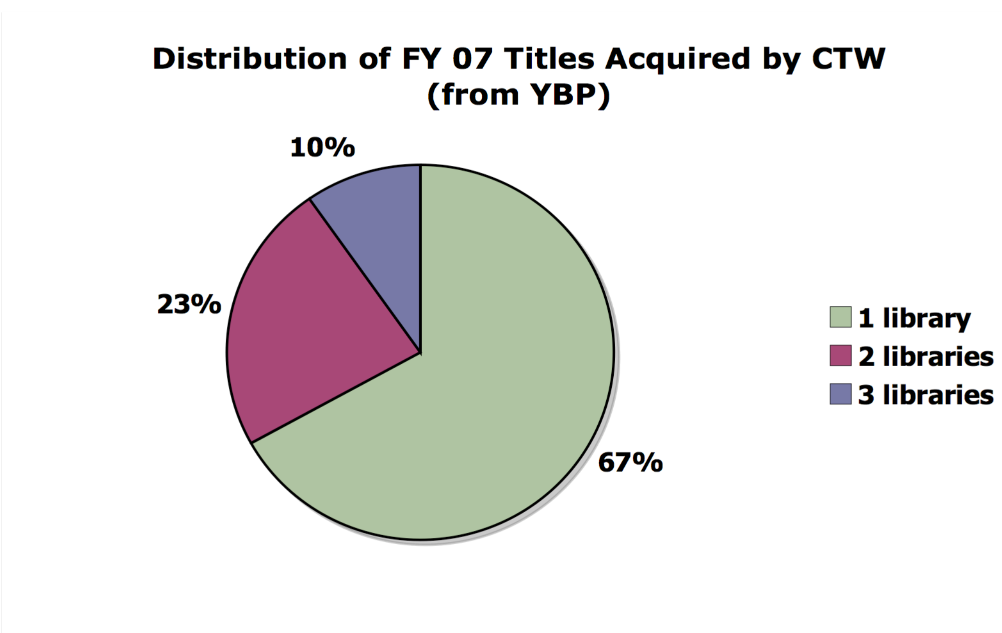
As stated in our kickoff presentation, R2 strongly supports consolidating vendors and creating, or strengthening, mainstreamed workflows. To a very large extent, Wesleyan has already consolidated monographic purchasing with a single vendor. In FY 06, 77% of the library's monographs were ordered from YBP. The remaining 23% (including media not handled by YBP) were distributed amongst 200 vendors. About 450 orders were placed with Amazon and Alibris. Some additional efficiency may be gained by shifting these to YBP. When duplicate checking, order creation, record retrieval, order transmission, physical processing and invoicing are factored into the workflow, any additional consolidation frees capacity for more important work.

Choose rapid delivery over ownership

On average, Wesleyan purchases 16,000-18,000 monographs per year. These levels are high, and match the monographic purchases of some ARL libraries, including Washington State, Boston University and the University of Nebraska. The processing costs for these increase each year while staffing remains static and budgets for monographs decline in favor of electronic subscriptions.

To reduce the expense and speed access, cooperative collection development within CTW takes on added importance. Wesleyan's collection development policy should contain guidelines on when and what to purchase if the item is already owned or on order for a consortia member. (This information is available in GOBI).

Even without an extensive cooperative collection development plan, the chart below shows that 67% of titles purchased from YBP by a CTW member are owned by only one of the three libraries. But 33% are located in two, or even all three libraries. There are 12,565 total titles represented in this chart so 4,100 were ordered by multiple CTW libraries. As the level of cooperation increases, Wesleyan's monographic acquisitions could diminish over time, freeing additional staff resources to handle electronic content.



Reduce the number of slips supplied by YBP; convert a subset to books

In FY 07, Wesleyan has received close to 31,000 paper notification slips. The manual work this generates for the library is considerable. Slips are sorted and distributed to selectors, who then sort, discard or return slips to acquisitions to be manually entered as orders in GOBI. About 8,700 slips were ordered, or 28% of the total generated for the library. This means that more than 22,000 were handled several times before being discarded. R2 suggests that this number be reduced to increase selection efficiencies.

In briefly analyzing Wesleyan's approval activity report, we believe some publishers should be eliminated from consideration – particularly those that inspired no orders. See Appendix A for a recommended list. (This list only shows publishers with slip counts higher than 10. There are many more publishers on Wesleyan's approval plan with very small slip outputs, often fewer than 5. These should also be considered for removal.)

Conversely, Wesleyan has placed orders for the majority of slips generated for another subset of publishers (Appendix B). Changing these publishers from slips to books introduces an opportunity to bring in books on approval. If this isn't acceptable, there are some subject areas where books instead of slips make good sense. We noted that the majority of slips were purchased in BV, DB, DE, DJ, DP, PA, PG, PK and TC. It wouldn't take much time to analyze the slips in these areas that were not ordered and adjust the plan accordingly. Then, in these subject areas only, books could come automatically, eliminating the extra work to review the slips and place the orders.

Another area where slips can be reduced is in blocking series that are received on standing order elsewhere. Wesleyan appears to have blocked only about 30 series on approval. If not blocked, slips are arriving for series Wesleyan has set up for standing orders with other vendors. If this hasn't been done recently, we recommend the library send YBP a current list of standing order titles to be blocked from the approval plan.

Try purchase-on-demand for some publishers

Yet another option to reduce the investment in title-by-title selection is to experiment with a purchase-on-demand pilot project like one underway at the University of Vermont, where records are loaded for several large academic publishers with an "order" button in the OPAC. The idea is that these publishers will be blocked on the YBP slips plan, and the library will rely instead on users indicating interest in specific titles. Moving from a just-in-case purchasing model to a just-in-time purchasing model is something that many libraries are contemplating. One significant benefit is that it minimizes professional time currently spent on monographs selection.

Promote electronic selection

There is no doubt that a good deal of title-by-title selection will continue at Wesleyan for some time to come. To increase efficiency, we would encourage all those involved in the selection process to review YBP notification slips electronically in GOBI. From there, they can tag titles they wish to acquire, adding whatever local data is required. The benefits are significant and are summarized here.

1. For those whose interests overlap multiple subject areas, and need to look at a broad range of slips, online slip review offers immediate access to all of the library's slips. (The Reference librarian doesn't currently get any slips at all.)
2. Electronic notes on individual titles, eases communication between selectors, regardless of their physical location.

3. GOBI provides up to the minute information about any Wesleyan University (and/or CTW) activity on each title.
4. Electronic selections become open orders on a daily basis.
5. Slip alerts can be generated to come automatically, eliminating the need to manually search for them.
6. Extended metadata (flap copy, review copy, TOCs) supports the selection decision for more peripheral titles, whether or not they were originally supplied as slips.
7. This approach eliminates the need for printed slips --- and the need to sort and distribute them
8. This approach also eliminates most of the paper-based ordering workflow in Acquisitions.

Change YBP ordering to GobiExport/Voyager EDI

Wesleyan's current ordering procedures (for monographs from YBP) begin with paper notification slips marked with local ordering information. (The Collection Development Librarian prepared most of these slips, and in some cases selected and ordered too. With his retirement, selecting and ordering backlogs could build unless accommodations have already been made.) Pre-order searching occurs in the OPAC and then the slips are ordered, one-by-one, in GOBI. The next day an FTP file with order confirmation records is retrieved and loaded into Voyager to create order records and generate PO#s. Because the PO #s aren't available to YBP at point of order, invoices arrive without them. This prevents the implementation of EDI invoicing, which we discuss further along in this report.

Other YBP/Voyager libraries, including Connecticut College, have taken a different approach. Rather than ordering directly in GOBI, library staff uses the "export" command for wanted items in GOBI, and then import records that contain both bibliographic and transaction data such as fund, location or notes. Once a day, library staff imports the GobiExport file to Voyager using its bulk import tools. Upon import, Voyager automatically creates a bibliographic record, a pending purchase order, a holdings record, and an item record. (Voyager forces creation of these.) The process identifies exceptions requiring staff attention, such as potential duplicates and over-expended funds. Once these exceptions are resolved, the pending purchase orders are approved and sent via EDI to the vendor.

Under this scenario, the vendor has a Voyager purchase order number to provide a match point for both EDI invoicing and overlay of the brief bib record with a full cataloging record at receipt. For shelf-ready titles, this is where a known Voyager problem raises its (ugly) head. As part of the bibliographic record overlay, Voyager also creates holdings and item records, based on the call number and barcode number in the incoming record. However, since Voyager does not support overlay of holdings or item records—and because Voyager forces those to be created at point of order---update of item and holdings records has to be done manually. This, of course, can undermine many of the advantages of batch processing. However, Wesleyan has overcome this problem via a Macro Express routine written by the former CTW Librarian. Although it may require some minor modification under the GobiExport scenario, it should serve the same purpose, allowing both overlay and EDI invoicing to occur.

As a minor aside, despite the fact the volume is small, it may be worthwhile for Wesleyan to set up similar batched workflow in OttoEditions for orders sent to Harrassowitz.

Schedule GOBI training

It's our understanding that YBP plans to introduce some significant changes to GOBI this summer, which should make it easier to use GOBI for selecting and ordering. Some of these changes are available now on a library-by-library basis, and we recommend Wesleyan contact YBP to arrange training for selectors and the acquisition staff. If possible, this should occur before ordering begins for the next fiscal year. YBP does have training capability via the web.

Implement a FastCat process at point of receipt for the non-YBP stream

In the case of books for which adequate copy is available at receipt, it is possible to eliminate the acquisitions to cataloging hand-off if the receivers are trained to identify acceptable copy. For shelf-ready materials from YBP, this is also the best point in the process to impose quality control via sampling (described below). As we see it, this could allow most material to by-pass cataloging and preservation entirely. We urge consideration of these opportunities to reduce hand-offs and multiple stagings. We also urge additional use of student labor for various receiving/copy cataloging tasks, as described below.

Control quality via sampling

As we've already alluded, R2 suggests that shelf-ready material could be put to the shelf with less item-by-item scrutiny; thereby taking even fuller advantage of the third party services received. The Wesleyan process as we understand it has multiple parts:

First, the receiver examines and checks-in all of the books. An estimated 25% of them are routed to the copy catalogers because they are PromptCat no-hits or they are part of the non-PromptCat stream. Those with PromptCat records (and spine labels) are also routed to copy catalogers, for records to be finalized per the Copy Cataloging Check-List.

Next, they're put on carts and unloaded onto shelves in the marking room for spine labeling and spine label checking. The most common change is to reprint spine labels with call numbers ending in "x". Finally, they're re-loaded to carts, charged to the new bookshelves and relocated there. After a week the books are removed from the new title shelves, discharged, and then re-shelved in the stacks. We suggest that this level of attention may not be warranted.

As an organization, Wesleyan must recognize that cataloging errors are a fact of life. Regardless of the process/procedures used, it is impossible to buy or to produce 100% error free records. Cataloging is a complex task performed by humans. Rather than seeking/expecting perfection, via 100% review (for example), it is important to establish and communicate an acceptable error rate. It can be as low as 2% or 3% and still be useful for workflow purposes. The point is to have one.

As for the quality review itself, set standard simple checks (as already identified for DLC record review), and only count errors if found in one of the most critical fields. At the outset, ensure that all sources (every person and every third party) generate records with an error rate of less than 2% or 3%. From this point, move to a sampling approach of no more than 5% -10%, but perform this same level of quality review on every source. At that point, you can be sure that the records added to the catalog are 98% accurate.

Recognize, accept, and communicate this level of accuracy. Knowing and reporting your error rate is actually the best way to inspire confidence in your service. When errors are found in the OPAC, they should be fixed as quickly as possible without discussion and without re-routing to the one who made the error. If the rate of error exceeds the 2-3% benchmark, the contributor (in-house or third-party) should be involved in problem solving. This approach is much more cost effective, and helps to reinforce a new philosophy.

Implement electronic invoicing for the YBP mainstream

The invoicing process at Wesleyan is overly complicated and highly manual. Because YBP orders aren't assigned a Voyager PO# at point of order (see earlier section for explanation), each PO# is handwritten on each invoice line. Then the invoice is created in Voyager and printed. Next it's manually logged in a notebook/ledger in Acquisitions, and then re-entered in the FRS accounting system. Some of these steps can be eliminated with electronic invoicing.

R2 strongly recommends implementation of electronic invoicing but this will require the previously described adjustment to YBP ordering. Because the YBP transaction volume is so high (more than 12,000 orders in FY06), the workflow benefit is significant. There will be 12,000 invoice lines that no longer have to be created individually.

Voyager offers two different kinds of electronic invoicing; "embedded order data", which works with approval shipments; and EDIFACT invoicing, which works for firm orders. If there is a decision to receive some books on approval, then two different electronic invoicing solutions will be needed: embedded order data for the true approval titles, and EDI invoicing for the others.

Embedded order data means only that transaction data (invoice number, invoice date, list price, net price, fund code, etc.) is carried in 9xx fields in the MARC records supplied by the vendor. Upon import, Voyager creates a bib record, an item record, and a pending PO. Here too, potential duplicates are flagged for manual review. The same process also builds a pending invoice in Voyager, populated with all line items in a single batch process.

For firm orders, because of pre-existing records in Voyager, electronic invoicing requires a different approach. Under this scenario, YBP would provide two separate files for each shipment. The first would contain MARC records. The second would contain invoice data in EDIFACT format. Upon load of the invoice file, Voyager automatically associates the invoice line with the appropriate PO/Line item # --- flagging as errors those without corresponding POs. Voyager also creates item records upon load of the invoice, thereby eliminating the need to create them one at a time.

YBP should be asked to supply EDIFACT invoices for materials shipped on all active sub-accounts including 3520-02 (Rush), 3520-04 (Endowment funds), 3520-06 (By-pass), 3520-07 (Jackets), as well as the primary sub-account 3520-09 (on which most materials are ordered.)

Revisit and implement Voyager/FRS interface

We understand Wesleyan's IT department did, at one point, look into creating an interface between Voyager and FRS, and that the project was suspended. R2 strongly recommends this be re-opened and resolved. Other libraries with the same systems have found ways to eliminate the manual redundancies and we feel this should be a priority for Wesleyan.

Choose a platform for e-monographs

Although eBooks (or more precisely, online books) have struggled to find acceptance, this seems poised to change in the near future. E-Reference works and large historical collections such as *Early English Books Online,* along with eBook subscription products such as Safari and Knovel, have seen increasing adoption and use. Springer, Wiley, Elsevier and other major publisher offer eBooks via their proprietary platforms. And Google's digitization work will soon create an enormous body of eBook content of a slightly different type.

But compared to e-journals, electronic monographs have lagged in availability and adoption. There are signs of change. Four companies serve as aggregators of individual e-monograph titles: netLibrary, ebrary, MyiLibrary and EBL. The major print book vendors are all developing strategies to integrate eBooks into their existing print book systems and workflows. For instance, YBP announces and sells netLibrary titles through GOBI, along with eBooks produced directly by publishers. Because they are integrated with pBooks, this GOBI service makes it possible to prefer e over p if appropriate, and control unwanted e/p duplication.

Purchasing individual e-monographs, of course, requires that the Library have a platform on which they can be hosted, read, and their use controlled. netLibrary, ebrary, MyiLibrary and EBL each offer their own platforms, which are purchased separately or funded by annual or transactional access fees—often independently of the book price.

Although confusion abounds in terms of which titles are available on which platforms, more and more content, including front list, is becoming available. Increasingly, Olin Library will have the choice of eBook or pBook immediately upon publication. In order to choose e-monographs cost-effectively, the Library will need to decide on its preferred hosting arrangement. Evaluation of the available options could begin at any time.

Stop separating music CDs from parent book

At present, CDs are separated from the book, cataloged and stored in LC order in the Scores and Recordings Collection. Books are cataloged in Technical Services and go to the stacks. At some point, it was decided that accompanying CDs and CD-ROMs should be separated from their parent book, put into jewel cases and a separate item record created. R2 suggests re-evaluation of this procedure. The current process is time consuming and the benefit to the patron dubious.

It may be helpful to recognize that the mixed book/CD format is becoming somewhat outdated. More importantly, the accompanying media is likely to offer little additional value, and is often ignored when separated from the book it is intended to support. Library staff may want to substantiate this assumption by monitoring the use of these "accompanying" CDs, but it may be more worthwhile to reconsider the underlying argument for separating the discs. Is it fear of theft? Is there an idea that a user would want to borrow one but not the other?

Most importantly, the library must consider the opportunity cost. What is not getting done, in favor of this? With all these issues in mind, many libraries are opting simply to place the CD in an envelope glued inside the back cover and take no additional steps. If it gets used once and lost, at least it was used once!

Improve timeliness of routine maintenance

Books that are sent to Preservation are not indicated in the OPAC, and are perceived to have fallen into a "black hole". This causes problems for ILL staff who spend time looking for the books in the stacks. These books should be charged before going to Preservation where they can remain for some time.

Also, withdrawals from the catalog for missing books are not happening in a timely manner. The same books show up again and again on quarterly reports of missing titles and cause wasted time in unnecessary repetitive searching.

Eliminate low-value tasks

These tasks fall into the category of what may once have been deemed critical, and might still offer some diminished value, but use time and resources needed for more important activities.

- New books with more than 400 pages are pulled from the mainstream and sent to preservation for binding. This should only happen if they circulate.
- Don't apply date due slips until book circulates.
- Eliminate use of bookplates --- in coordination with the development office if necessary.
- Stop having YBP bind paperbacks --- bind only after there are signs of wear
- Stop keeping manual statistics that can be retrieved programmatically

Use student labor more fully

Students should be opening boxes and checking in books. Along with Library Assistants they can be trained to look for records for the "off the wall" books in cataloging. Later in this report we discuss centralizing the mail functions; this is another area where student labor could be used.

Eliminate redundant paper files

Although use of paper files is not widespread at Olin, we suggest at least one area where they could be eliminated, which is the paper ledger still used in bookkeeping. As we mentioned during the kick-off session, redundant (online and offline) systems are inefficient at best. Equally important perhaps, is the fact that two systems are never fully in synch and by maintaining an offline system, you degrade organizational confidence in the shared system. In some cases, paper files are kept so that they may be referenced when errors are identified. This practice focuses on identifying the source of the problem, rather than the solution.

VI. Serials: Shift Effort from Print to Electronic Journals

As in many libraries, Wesleyan's Serials staff is struggling to balance the demand of e-resources and print serials. At present, the group is "overwhelmed" by this year's serials review, and the clean-up from last year's "format review" (titles that were migrated from print to electronic). In many ways, despite that overwhelmed sensation, Serials is performing very well. Responsibility for e-resource maintenance has been at least partly dispersed throughout the department. Participation in OCLC's e-Serials holdings service is underway. For material available online, the library allows binding of incomplete runs. Students do most routine check-in work. Tools and services such as SFX and Serials Solutions are used. Trouble-shooting access problems occur reasonably quickly. EDI invoicing is in place for EBSCO, the largest single stream. Serials has recently taken on responsibility for serial standing orders. Selection and licensing is done through consortial deals whenever possible.

However, there are difficulties as well. Staffing levels are out of balance with the volume of material handled. As noted earlier, 40% of Wesleyan's expenditures are for e-resources. But when print serials are included, nearly 67% of Wesleyan's expenditures go toward subscriptions. Given the extra print-related work generated by cancellations and format review, it might be reasonable to assume that 67% of technical services time should be dedicated to Serials. This is clearly not the case. So it's not surprising that some tasks, such as link checking, cannot be accommodated. There are many separate sources of data to manage, and it's difficult to keep them all in synch. The separate knowledge bases underpinning the Journal Locator and the link resolver are one example of this. Coordinating those with the catalog adds another dimension of complexity.

The Serials Administrator performs key roles for both print and electronic titles, and for coordinating activity between them. The demands involved in annual renewals, set-up of trials, licensing, ordering, and trouble-shooting are more than a single individual can reasonably accommodate. This is the sort of "hub" situation described in our kick-off meeting; it works well at first, but ultimately is not scalable. While some steps have been taken to reduce pressure here, it is clear that more needs to be done.

Continue to reduce print subscriptions

Despite the recent cancellations and format review, Wesleyan's 2,000 remaining print subscriptions represent a large workload. We support the recent format review, and would only suggest that it be repeated annually or biennially, with the clear goal of reducing print even further. Not only will electronic options be increasingly available and preferred, but the library's space issues and need for staff resources in higher priority areas will make this option necessary. We suggest the Library's message on this point needs to be constant and consistent.

Reduce the number of print standing orders

In the same vein, we recommend that print standing orders be significantly reduced, again with e-versions subscribed when available. At present, Wesleyan has approximately 750 [monographic] standing orders, dispersed among HARRASSOWITZ, Coutts, Eastern Book, Aux Amateurs, Nardecchia, Puvill, and direct with publishers. We suggest that Wesleyan attempt to reduce that number by one-third. It may also be possible to reduce some of the cataloging effort on standing orders, by agreeing to catalog volumes individually whenever possible. The standing order list could then be split into "cat seps" and "cat together", with the former group becoming part of PromptCat/Shelf-Ready stream.

Reduce check-in of print periodicals

Librarians at the University of Nevada, among others, contend that check-in of print periodicals can be suspended without undue impact on the patron. The hours saved can be redirected toward higher-demand electronic resources. [See: Anderson, R. and Zink, S. "Implementing the unthinkable: the demise of periodical check-in at the University of Nevada *Library Collections, Acquisitions, & Technical Services 27 (2003): 61-71* for a compelling description.]

While many libraries find this approach difficult to accept in its entirety, most can realize benefit from a more limited application of it. While Wesleyan has already stopped checking in newspapers, non-academic titles, and some irregulars, R2 recommends further reducing check-in of other low-cost and low-risk titles—for example, anything for which an electronic version is available. Even a moderate approach like this would reduce check-in significantly, since it focuses on the highest-frequency titles. The same decisions would eliminate most claiming on these titles, as only those issues not found by patrons would surface as problems.

Reduce binding

If we understand correctly, the majority of print serials are bound; the only exceptions are those titles that will be replaced by microfilm. We suggest expanding this to include titles where backfiles will be available electronically, as well as low-priced or low-use titles. Some libraries simply keep individual issues in magazine boxes on the periodicals shelves indefinitely, or until it's time to dispose of the print versions.

Choose between SFX and Serials Solutions (get to one knowledge base)

Discussion and decision-making is already proceeding on this topic, but we think it's critical that Wesleyan consolidate its e-resources activity around a single knowledge base. SFX reportedly suffers from slow response time, and the knowledge base does not have sufficiently granular detail for some resources. Reference staff generally prefer the Serials Solutions A-Z list, which drives Journal Locator A-Z list. On the other hand, some view the Serials Solutions knowledge base as sloppy, with, for instance, multiple entries for works from a single publisher. SFX is designed to work with MetaLib, another point in its favor.

Although neither knowledge base is an ideal solution, we urge Wesleyan to choose one, and work with its weaknesses. The conflicts and discrepancies that now occur between the two create an additional layer of unnecessary problems. This decision should be made immediately, and any conversion work done during this summer if possible.

Consolidate fully with EBSCO or implement EDI serials invoicing for HARRASSOWITZ

Although much of Wesleyan's serials business is consolidated with EBSCO, a significant number of titles remain with HARRASSOWITZ. We recommend that EDI invoicing be applied to these additional titles. This could happen in either of two ways: Wesleyan could move its HARRASSOWITZ titles to EBSCO, or implement EDI invoicing with HARRASSOWITZ. We have no strong preference for either; we'd simply like to see the benefits of electronic invoicing extended to more titles.

Implement a commercial ERMS

As noted earlier, the Serials Administrator (and others, including members of the Collections Committee) would find very helpful a consolidated view of data and activity related to e-resources. An E-Resource Management System (ERMS) can provide a common platform for this kind of information, and serve as a primary communications tool among staff involved in all parts of the e-resources workflow. Most of these also have regularly updated knowledge bases that help selectors and serials staff discover the various packages in which a piece of content may appear.

Wesleyan could certainly benefit from such a system. However, if additional cooperation with Trinity and ConnCollege are wanted, it may make more sense to pursue an ERMS at the CTW level. This would enable still broader sharing of trials and management of the licensing, purchasing and activation processes.

Disperse e-resources responsibility more fully within Technical Services

Consolidation of e-resources activity around a single knowledge base and implementation of an ERMS should help create a structure that will allow broader participation in this enormous workload. A fair amount of e-related work has already been distributed, if we understand correctly. For instance, the Serials Administrator estimates that 10% of her time goes to e-resources. One Library Assistant performs most SFX activation. Both Library assistants do some work in Serials Solutions. Cataloging works on combining records for print/online and withdrawing records for e-only titles. A Library Assistant gathers usage statistics, although there is almost no time for analysis of them.

Continued reductions in print will ultimately make more Library Assistant and student worker time available for other purposes. Changes in copy cataloging suggested in other parts of the report could result in some additional hours as well. Student workers might be trained in the most routine forms of Serials Solutions maintenance, link checking and repair, addition of proxy prefixes to URLs, etc.

VII. Public Services

Public Services fall outside the scope of this project but in our interviews with Public Services staff we became aware of issues we feel deserve mention in this report.

Prioritize a physical inventory

As we understand it, and with the exception of Art and Reference, Wesleyan's collections have not been inventoried for a long, long time. We would expect then, that many resources are missing or misplaced. This negatively impacts the patron experience, confounds weeding and transfer projects, and creates additional work for the ILL department when a book isn't where it's supposed to be in the stacks.

This issue appears to be a fairly serious concern to many. Could students and/or a group of temporary hires be trained to work on this project with staff assisting as necessary?

Consolidate reserve and circulation desks

Currently these two functions are performed at separate locations on the same floor. Combining them provides coverage when student workers aren't available.

Consider purchase on demand instead of ILL borrowing

In many circumstances, the "cost" of borrowing a book via ILL exceeds the cost of buying it outright. If adequate RUSH delivery services are in place (as they seem to be), the patron experience may also be enhanced. In some libraries, careful analysis has inspired the library to purchase a copy (sometimes a used copy) of the desired title and literally give it to the patron rather than catalog and process it upon return. An approach like this seems to support the access over ownership mission, while simultaneously lowering costs.

Consider delivery of CTW books to faculty

Faculty members are notified by email when their CTW requests arrive. There are instances when the books remain on the hold shelves for ten days without being used. If this occurs often, delivery to faculty might be an option. On the other hand, there may be some confusion over the "notify" process, inspiring more special handling than necessary. Again, if the issue is significant, further investigation may be warranted.

Reconsider necessity of gate numbers

Often processes are implemented and become routine when the original intent was to perform them intermittently. Perhaps the recording of gate numbers belongs in this category. Is it important to register each visitor to the library, or can this information be collected at certain times during the year?

Circulation staff are editing faculty instruction sheets, and entering enrollment updates for the University

Do these tasks belong outside the library? Or, could students be used in place of library staff? Could enrollment updates be handled more efficiently via a batch update of the patron file from FRS?

Stop double-discharging in Circulation

Students at the circulation desks discharge returned books. Because of concern about whether the first pass was successful, these same books are discharged a second time. Students perform the second discharge unless circulation staff has to fill in for missing or absent students. If problems occur often with the first discharge, R2 suggests that the cause be investigated and fixed.

VIII. Adapt the Organization

As in many academic libraries, the organizational structure at Olin has evolved slowly over a long period of time in response to workflow demands, individual career decisions, hiring opportunities, budget pressures, and available skills. In some cases, departmental staffing has not kept pace with the changing information environment and workflows are less efficient than they could be. Based on two days of interviews and data gathering at the Wesleyan University Libraries, R2 has identified several ways to increase efficiency and improve service, from resource identification through access. Those observations and recommendations are described above. However, we feel that our suggestions cannot be fully implemented without some degree of organizational change.

This section of the report is intended to highlight the organizational weaknesses as we see them; and to offer ideas about how the staffing structure might be adapted to address specific operational requirements, while advancing the strategic goals of the library. As we see it, the Wesleyan University Libraries have more needs than capacity to meet them. Ultimately, if new positions cannot be created within the library, difficult choices will have to be made concerning immediate and long-term priorities. Our intention is to shed light on some of these choices. Please do not consider this a blueprint, rather an opportunity to think with us outside the "box."

Organizational Needs

To our way of thinking, these are the most critical needs at Wesleyan, and the ones we have sought to address:

1. Cooperative CTW Collection Development has not been prioritized or optimized.
2. More in-house systems support is needed, for process improvement related to Voyager, ERMS investigation and implementation, federated search and other initiatives.
3. Additional expertise and capacity in non-MARC metadata (e.g., Dublin Core, MODS/METS, VRA Core) is needed.
4. There are significant cataloging backlogs in Special Collections and Archives.
5. Resources are needed to manage additional print serial cancellations, e-journals, databases, and eventually eBooks.
6. "Office management" skills are needed in Special Collections and Music.
7. There is an apparently pressing need for a physical inventory.
8. More Library participation is needed in development of a Digital Library.

To address these issues, R2 makes several organizational recommendations, some more far reaching than others. We urge you to consider them in the spirit in which they are offered; not as a prescription, but as a jumping-off point for your own discussions and strategic planning. Our best hope is that our ideas inspire conversations and solutions that have not yet been considered.

Differentiate Collection Development from Acquisitions functions

As noted in a previous section of the report, we see the role of Collection Development changing substantially in the digital age. There are numerous aspects to this, including: convergence of collections and discovery; evolving selection roles for institutional repositories; declining attention to print monographs; increasing need for weeding; the growing importance of collection analysis and cooperative collecting; and the need to prioritize new formats and unique print content. These are, in fact, very exciting times to be involved in this area, and we are frankly a little jealous of the opportunities!

The relationship between Collection Development and Acquisitions at Wesleyan is somewhat unusual in our experience, although the current arrangement has offered significant benefits. At a basic level, good communication between the two functions is not a given in most libraries but at Wesleyan, that has always worked well. Nevertheless, R2 suggests that this may be an opportune time for change. In large measure, we suggest this because collections work itself is changing rapidly. The impending retirement of the Collection Development Librarian also offers an opportunity to rethink the position.

The most fertile approach, in our view, is to align Collection Development with Library 2.0 thinking, by moving a traditionally back-room function much closer to users. Wesleyan has never really had a robust subject liaison program, and now may be a good time to revisit that idea, in coordination with Reference. More systematic use of circulation and usage data should be considered: ILL borrowing requests, circulation statistics, and detailed collection analysis would provide insight into user preferences. The current division of labor between "subscription" and "non-subscription" materials minimizes Collection Development's involvement with two-thirds of the materials budget; this should be revisited.

As noted earlier, formal collections policies need to be written. These should address emerging areas, such as what material should be prioritized for an institutional repository, and what material should be digitized. Large-scale weeding has already become a priority, and will loom larger in coming years. Collection Development needs a stronger voice in relation to long-range decisions about the use of space, preservation/archiving, cooperative collection development with CTW, and a host of other policy issues. Separating this function more completely from Acquisitions will enable the focus to shift away from title-by-title selection and ordering toward these longer-range goals.

Use the CTW position for Collection Development rather than Systems

Given space issues, Trinity's budget problems, the changing of the Collection Development guard at Wesleyan, patron preference for electronic formats, and emerging eBook products, this seems to us an especially opportune time to revisit CTW's commitment to cooperative collection development. Provosts and Librarians at all three institutions are reportedly open to the idea that access, rather than ownership, will characterize library "collections" in future.

The shared CTW position has historically been conceived as systems-related. This made enormous sense in the early days of a shared ILS and union catalog. Both Unicorn and Voyager required programming skill to elicit their best performance, so the systems position took on a very practical, problem-solving focus. As the systems infrastructure became more stable, different expectations grew around this position. It was felt that more vision and leadership were needed to expand the range of cooperation among CTW members. The position, so reconceived, has proved difficult to recruit and hire for. R2 suggests that the current emphasis may be misguided, and suggests reconsideration.

Specifically, we suggest that CTW view collections, rather than systems, as the driver of cooperation. While systems, especially those related to discovery, will continue to play an important role in cooperation, we suggest converting the existing CTW position to that of CTW Collections Officer. The position description should be written to emphasize collection analysis, shared licensing of e-resources whenever possible, minimization of overlap in print collections, a shared approach to archiving of print serials, and other initiatives that help the individual libraries manage space, materials funds, etc. If we understand correctly, there is also a Mellon grant application in place for a CTW support position that would focus on collection analysis. This would be ideal support for the CTW Collections Officer, and would enable rapid progress.

This would mean, of course, that each library would need to provide stronger systems support locally. For Wesleyan, this issue is addressed in detail below. Trinity, as we understand it, already has a strong systems librarian in place. Connecticut College has had trouble hiring into a hybrid systems position, but this change would enable them to revise the position description toward a more traditional systems librarian. The three systems librarians would share ideas and code and techniques, but operate independently. The focus at each library would be not only Voyager, but also other systems and perhaps "discovery", as outlined below.

We further suggest that Wesleyan not re-fill its Collection Development position, but instead rely on a more fully developed liaison program (described below), and transfer the funds for the CD position to a new Librarian for Systems/Discovery (also outlined below.) There are some open issues here, for which we don't have clear answers yet. One is who will administer the collections budget (or at least the one-third of it not claimed by subscriptions)? Who would coordinate and synthesize the discipline-specific collections policies into an overarching document? Who would coordinate approval plan profile changes? It's tempting to think that some of this activity should roll up to the CTW Collections Officer, and this should be considered. Perhaps that position could focus initially on book collections only, and an early goal would be to develop a shared budget, collection policies, and approval plans for monographs.

Ask Head of Reference to reshape the Liaison Program; liaise with new CTW CD Librarian

Again in the Library 2.0 spirit of moving collections input and information closer to users, we support Wesleyan's initiative to reinvigorate the subject liaison program. If any of the previous changes are implemented, the liaison program's collection development responsibilities will take a new direction. It may require that liaisons draft a collecting policy for their respective areas, but it may also require thinking about collections much more cooperatively than in the past. Development of this program will require guidance from both the Head of Reference and the proposed CTW Collections Officer. Decision-making may become more data-driven in terms of identifying collection gaps, overlaps and usage. Selection responsibility may become more time-consuming initially, and this will have to be balanced against Public Services duties. The Head of Reference is probably in the best position to help judge and adjust that balance as needed.

Create a new Librarian position for Library Systems/Discovery

We heard a great deal of support for this idea during our interviews, although those comments took many different forms. In our work, R2 always seeks to assure that automation is used to fullest advantage, because it provides so much leverage toward efficiency. Having this expertise reside within the library's organizational structure seems critical. We suggest that Wesleyan create a dedicated "Library Systems/Discovery Librarian" position that would guide optimal use of automation, to serve both user and staff needs. As noted above, some responsibilities will devolve to this person due to the transformation of the CTW position. But there are many other needs and opportunities that a local Library Systems and Discovery Librarian could address:

- Increase the Library's involvement in ongoing development of the Library's Web site
- Develop a Voyager/FRS interface for financial and patron records
- Process changes related to record export from vendor systems, EDI invoicing, revision of the existing macro, etc.
- Enabling Wesleyan resources to be discovered from Google Scholar, Google Book Search, WorldCat, Yahoo and other sources
- Selection and implementation of an Electronic Resources Management System
- Support for ILLIAD upgrades and trouble-shooting
- Fuller use of MetaLib; consideration of extended federated search module
- Closer working relationship with Director, Digital Library Initiatives—especially on course-level integration of Library resources with Blackboard
- Evaluation and implementation of an Archives management system
- Implementation of OPAC record enrichment program
- Additional support for Access Services

Other possibilities include improvement to the CTW "universal catalog", development of better reporting options (for inventory, batch record maintenance), support for WorldCat Collection Analysis software, digitization, etc. The biggest problem, in fact, may be setting priorities, since there are so many potential benefits to having this kind of expertise in-house. One other benefit: the job description for a position like this is likely to attract numerous candidates.

Technical Services needs to meet regularly as a group

One of the most consistent comments we heard was that Acquisitions and Cataloging need to work more closely together. This is especially true given the GOBI/PromptCat shelf-ready workflow, which combines ordering and invoice data with cataloging records. In our view, Acquisitions should have a major role in FastCat and copy cataloging, combining that process with receiving. This will drive a need for cross-training and close collaboration.

For databases and electronic journals, the hand-off from licensing and payment to activation, registration and access checking can occur in different ways, with some overlap or confusion in responsibility. This also highlights the need for a more cohesive structure and relationship. Ultimately, patrons don't understand or care about such intra-library distinctions. They see one organization—the library---that either does or does not serve them well.

Merge Monographs Acquisitions and Cataloging

In our judgment, any version of the changes related to Collection Development argue for a shift in the Acquisitions reporting line, even though we recognize that some of the value of the direct connection may be lost. More specifically, we recommend merging Monographs Acquisitions and Resource Description (Cataloging). The benefits here are two-fold. First, by merging two currently separate units, we free one librarian position to be leveraged elsewhere in the organization.

Secondarily, this merge creates a new opportunity to implement a Receiving/FastCat workflow for monographs (described earlier in the report.) Wesleyan's extensive use of

PromptCat and shelf-ready services lay the foundation for a combined receiving/copy cataloging operation, which can and should be extended to include all monographs copy cataloging. As noted earlier, when this is combined with a sampling-based approach to quality control, most monographs can go directly from receipt to shelf or Marking. Some of the time for this will come from implementation of EDI invoicing, which should eliminate the need to key 12,000 invoice lines each year.

Implementation of FastCat should in turn free some additional copy cataloging hours to be redirected toward e-resources, non-MARC metadata, or additional copy cataloging support to Special Collections. (We have also recommended eliminating mail sorting and delivery from their responsibilities, which should make more hours available.) There is a widespread view that the current Library Assistant in Acquisitions has the ability to handle increased responsibilities of this kind, and we urge that this be put to the test as soon as possible.

We believe that Acquisitions can absorb these additional tasks because the new GOBI procedures, implementation of direct ship approval, increased cooperative activity with CTW, EDI invoicing, and other changes should reduce time spent in searching, downloading bib data, and receiving/invoicing.

A related note: during our interviews, we heard about too much noise. As part of this organizational change, we suggest reconsidering the physical location of the catalogers. Their position in the middle of the workroom may affect productivity.

Segregate Bookkeeping from Acquisitions

The current vacancy in the Library Assistant/Bookkeeper position in Acquisitions offers a chance to change practices and staffing in this area. We recommend that Wesleyan move the bookkeeping position to Administration, where it would report directly to the AUL. This separation is common in other libraries, and would allow the position to handle all Library invoices. Under this scenario, invoices would be processed and posted to Voyager by Acquisitions, but the Bookkeeper would handle reconciliation with FRS. If the Voyager/FRS interface can be implemented, the workload may be manageable enough that other Administrative/Office duties could be combined with this position.

Resolve concerns about mail sorting and delivery

At present, two Library Assistants (whose primary duties include copy cataloging) are also responsible for sorting and delivering mail to offices in the library. Given the Library's needs for expanded metadata capacity, increased e-resources maintenance, and Special Collections cataloging, it seems to R2 that their hours could be better spent. We suggest eliminating this task from their jobs, and that the Library employ student workers to sort mail. We further recommend that the Library create a central bank of mail bins, and have each department or individual collect their own mail. Paychecks could also be distributed in this manner.

Increase record maintenance capacity for serials

To some degree, Serials staff are still dealing with the repercussions of last year's serials review and format review. It is an inescapable irony that, although print cancellations ultimately save time and effort, in the short term they actually add to workloads. Once cancellation decisions are made, agents must be notified, holdings and check-in records adjusted, binding or withdrawal decisions made and executed, etc.

At the same time, the workload related to electronic journals and other e-resources continues to grow: activation, knowledge base updates, access checking, and OPAC record maintenance. Although much of this work is being done now, there is a definite need for additional hours, at least for the foreseeable future, in these areas for both print and electronic titles.

This may require some hard decisions, and prioritizing some activities over others. For instance, a Library Assistant, Serials has been doing retrospective cataloging and barcoding in Government Documents. How important is that work compared to using those hours in e-resources--at least temporarily? The Serials Administrator is doing print check-in work; could some or all of that be eliminated or turned over to students, to allow her more time for work in Serials Solutions? Could student workers be trained to do the most routine work in Serials Solutions? At least one copy cataloger has expressed interest in taking on some responsibilities related to e-resources or metadata. Which should take priority?

In previous sections, we have recommended reducing print check-in and binding; de-emphasizing records for Government Documents; consolidation on a single e-resources knowledge base; reduced scrutiny of DLC records; implementation of a combined receiving/copy cataloging operation; elimination of mail sorting; and a number of other changes intended to free hours for new purposes. In our opinion, the first priority for these new hours should be electronic resources management. Once that area is operating at the desired level, some staff hours can likely be moved toward non-MARC metadata, weeding, or Special Collections backlogs.

R2 is optimistic that, although some of these recommendations may have been unanticipated, they will help to facilitate needed change in both the workflow and the library culture. It may be difficult for various members of the community to accept these ideas as they represent an entirely new and perhaps unimagined future. We believe these to be the biggest challenges and the most important hurdles to overcome. If achieved, these changes will strengthen the Wesleyan University Libraries and will create new opportunities for moving forward. And still, there will be unresolved concerns.

Although we believe that many of our suggestions will help create additional capacity for Wesleyan, there remain several areas where more is needed. Among the most important tasks without adequate attention are these:

- More non-MARC metadata time and expertise is needed to support digital library projects. To date, the Cataloging Librarian has developed metadata for the Departmental Collections, and the Assistant University Archivist has defined and created metadata for the ETD pilot project. In some areas, content producers have contributed their own metadata. But overall, much more is needed and will be needed, especially for Music and Visual Resources. Standards will need to be applied or defined to govern contributions from faculty or other producers. While some freed copy cataloging hours might be directed here, we believe more will be necessary than are likely to become available.
- Office or Departmental Managers are needed in Music and in Special Collections & Archives: In Special Collections & Archives, this level of staff could help handle the service desk, manage supplies and administrative tasks, help keep the Reading Room organized, and by doing so enable the Head of Special Collections and the Assistant University Archivist to extend their collection-related activities. In Music, similar organizing and coordinating functions could be handled by such a position.
- Commit to increased staffing levels in Special Collections & Archives over time: As noted earlier, there are very large cataloging backlogs here. While this particular need may

begin to be addressed with some additional copy cataloging hours, the staffing needs in SC & A extend far beyond that. Commitments to service desk hours limit other initiatives by the Archivist. Only 40-50 finding aids exist in EAD format, from a list of 500+ collections. SC&A has used library school interns and student hours to make progress on these and other tasks, but much remains to be done—and accessions continue to arrive at a rate of 50 or more each year. Although this "more product, less process" approach focuses on efficiency, there is still far more work than can be accomplished. It may be necessary to raise this issue of Special Collections and Archives in a strategic context: this material is much more likely to be unique and potentially valuable. If so, the Library and University need to decide how to support this operation more fully—or to scale it to a level that Wesleyan can afford.

Absorb bindery operation into preservation

At present, YBP provides most monograph binding as part of the shelf-ready service. In previous sections of this report, we have recommended additional cancellation of print serials, as well as more limited binding of serials. We recommend that Wesleyan consider moving the shrinking bindery operation into Preservation, and absorb it into that workload—continuing to diminish the volume if necessary. We suggest that the Library Assistant, Serials now responsible for binding would remain in Serials, but that those hours be committed to e-resources or Special Collections & Archives.

IX. Summary of Recommendations

As the length of this report attests, R2 seeks to provide the broadest possible range of recommendations. We expect that some of them will challenge existing practices and even values. We fully understand that the Library administration and staff must evaluate them, and decide which can benefit your organization. Some will be ignored or discarded; others modified to better fit your environment. But we urge careful consideration of them, because we know they can create new capacity within your operations, even as they push you beyond your organizational comfort zone.

We estimate, conservatively, that implementation of most of these recommendations represents many months of concerted effort. It will be important to think about how to sequence them, and to accommodate dependencies and communication with participants inside and outside the Libraries. As we've already alluded, staffing at Wesleyan is lean. Without additional staff, it will be necessary for the library to make very difficult choices between equally valuable services. A strategic plan that clarifies short and long-term priorities will be essential.

In the following chart, we've listed all of our many recommendations, indicating for each whether we think it should be addressed in a first or second phase of implementation. Primary recommendations are those "low hanging fruit" that seem most obvious, may already be underway, or may provide the biggest/most immediate benefits in terms of freeing capacity. In some cases, they are required first steps, upon which others hinge. Secondary recommendations are those we think have a lower priority, with less leverage in terms of specific workflow improvements. We like this model because it can serve as a brainstorming/prioritizing rubric, and can suggest first, second and even third steps in a staged implementation.

#	Page	Section	Recommendation	Primary	Secondary
1	2	II	Maintain a high profile on campus	*	
2	3	II	Maintain momentum and coherence on Content Management Initiatives	*	
3	5	II	Realign staff: prioritize work on e-content and unique resources	*	
4	5	II	Redefine the relationship between collections and discovery	*	
5	6	II	Expand the definition of Collection Development	*	
6	6	II	Align selection responsibilities more closely with the Liaison Program	*	
7	6	II	Integrate selection for the institutional repository into existing Collection Development responsibilities	*	
8	6	II	Balance the incoming flow of specialized content with library's capacity for managing it	*	

#	Page	Section	Recommendation	Primary	Secondary
9	7	II	Don't allow donors to drive the library's priorities	*	
10	7	II	Substantially reduce print reference collection	*	
11	7	II	Move to e-only formats for new Government Documents	*	
12	8	II	Where to house the Art Collection?		*
13	8	II	Where to house the Media Collection?		*
14	8	II	Weed all microforms that are also available online		*
15	8	II	Use R2 audit methodology for Public Services		*
16	9	III	Draft a new collection development policy for Wesleyan University Libraries, across all subjects. Include media, gifts, special collections, reference, and digital collections	*	
17	9	III	Create a rush policy for cataloging and marking	*	
18	9	III	Reduce the capture of student recitals	*	
19	9		Develop policies for archiving, and describing free web sites, pdf's, political blogs, listservs and other unlicensed scholarly electronic resources	*	
20	10	III	Adopt an e-only policy for student theses	*	
21	12	IV	Analyze Voyager search logs	*	
22	12	IV	Catalog to the level needed	*	
23	12	IV	Maximize Google hits via OCLC's Open WorldCat	*	
24	13	IV	Explore other MetaSearch tools	*	
25	13	IV	Implement a URL checker	*	
26	13	IV	Further enrich OPAC records		*
27	13	IV	Simplify cataloging for local concert recordings	*	
28	14	IV	Stop loading shipping records for Government Documents	*	
29	14	IV	Complete the retrospective cataloging	*	
30	14	IV	Reconsider Authority Control	*	

#	Page	Section	Recommendation	Primary	Secondary
31	14	IV	Take fuller advantage of student workers	*	
32	15	V	Choose rapid delivery over ownership	*	
33	16	V	Reduce the number of slips supplied by YBP; convert a subset to books	*	
34	16	V	Try purchase-on-demand for some publishers		*
35	16	V	Promote electronic selection	*	
36	17	V	Change YBP ordering to GobiExport/Voyager EDI	*	
37	18	V	Schedule GOBI training	*	
38	18	V	Implement a FastCat process at point of receipt for the non-YBP stream	*	
39	18	V	Control quality via sampling	*	
40	19	V	Implement electronic invoicing for the YBP mainstream	*	
41	19	V	Revisit and implement Voyager/FRS interface	*	
42	20	V	Choose a platform for e-monographs		*
43	20	V	Stop separating music CDs from parent book	*	
44	20	V	Improve timeliness of routine maintenance	*	
45	21	V	Eliminate low-value tasks	*	
46	21	V	Use student labor more fully	*	
47	21	V	Eliminate redundant paper files	*	
48	22	VI	Continue to reduce print subscriptions	*	
49	22	VI	Reduce the number of print standing orders	*	
50	23	VI	Reduce check-in of print periodicals	*	
51	23	VI	Reduce binding	*	
52	23	VI	Choose between SFX and Serials Solutions (get to one knowledge base)	*	
53	23	VI	Consolidate fully with EBSCO or implement EDI serials invoicing for HARRASSOWITZ		*
54	23	VI	Implement a commercial ERMS	*	

#	Page	Section	Recommendation	Primary	Secondary
55	24	VI	Disperse e-resources responsibility more fully within Technical Services	*	
56	25	VII	Prioritize a physical inventory	*	
57	25	VII	Consolidate reserve and circulation desks	*	
58	25	VII	Consider purchase on demand instead of ILL borrowing		*
59	25	VII	Consider delivery of CTW books to faculty		*
60	25	VII	Reconsider necessity of gate numbers		*
61	25	VII	Circulation staff are editing faculty instruction sheets, and entering enrollment updates for the University		*
62	25	VII	Stop double-discharging in Circulation		*
63	26	VIII	Differentiate Collection Development from Acquisitions functions	*	
64	27	VIII	Use the CTW position for Collection Development rather than Systems	*	
65	28	VIII	Ask Head of Reference to reshape the Liaison Program; liaise with new CTW CD Librarian	*	
66	28	VIII	Create a new Librarian position for Systems/Discovery	*	
67	29	VIII	Technical Services needs to meet regularly as a group	*	
68	29	VIII	Merge Monographs Acquisitions and Cataloging	*	
69	30	VIII	Segregate Bookkeeping from Acquisitions	*	
70	30	VIII	Resolve concerns about mail sorting and delivery		*
71	30	VIII	Increase record maintenance capacity for serials	*	
72	32	VIII	Absorb bindery operation into preservation		*

X. Closing

Recommendations from outsiders can have enormous value, but naturally they have limitations. Our observations and ideas are based on only a few days' immersion in Wesleyan University's processes, systems, and culture. We're certain that we've mistaken some of what we heard and saw, and that our recommendations will need scrutiny by those of you closest to the situation.

We look forward to discussing this report in more detail, once you've had time to read it. We thank the staff for participating so whole-heartedly in this process. Although there is a great deal of opportunity for improvement, the Wesleyan University Libraries have been built on a strong foundation, through the efforts of many dedicated people. Our recommendations seek to build on that foundation, and accelerate the library's creation of its next generation of library services.

Appendix A: Approval Plan Publishers with no Wesleyan orders

No slips from these publishers have been ordered. Removing them from the approval plan will cut more than 1000 notification slips.

A-R EDITIONS
ABINGDON
AMER BAR ASSOCIATION
AMER COUNSELING ASSN
AMER LIBRARY ASSOCIATION
AMERICAN SCIENTIFIC PUB
ARCHITECTURAL PRESS
BALLANTINE
BARRONS
BEDFORD BKS/ST. MARTIN'S
BERNAN PRESS
BLACK MOSS PRESS
BOREALIS PRESS
BRINDLE & GLASS PUB
CANTERBURY UNIV PRESS
CARNEGIE MELLON UNIV PR
COMMONWEALTH SECRETARIAT
CORWIN/SAGE
CSIRO PUBLISHING
DEL REY
DELACORTE
DELTA/DELACORTE
DOUBLEDAY CANADA
DUNDURN PRESS
ECW PRESS
EKSTASIS EDITIONS
ELSEVIER SAUNDERS
FEDERATION PRESS
FERGUSON/INFOBASE PUB
FREMANTLE ARTS CENTRE PR
GINGKO PRESS
GOOSE LANE
GOWER
GREY HOUSE PUBLISHING
HAL LEONARD
HERITAGE HOUSE PUBLISHING
HIPPOCRENE
HODDER ARNOLD
HOUSE OF ANANSI PRESS
INFORMATION SCIENCE PUB
INST OF ENGIN AND TECH
JAMES LORIMER & COMPANY
KACHERE SERIES
KEY PORTER BOOKS
LFB SCHOLARLY PUBLISHING
LIBERTY FUND
MARSHALL CAVENDISH ACAD
MATERIALS RESEARCH SOC
MCARTHUR & COMPANY
MCCLELLAND & STEWART
MICROSOFT
MORGAN & CLAYPOOL
NEAL-SCHUMAN
NEWNES
OCEAN PRESS
ORBIS
PAULIST
PFEIFFER
PHYSICA/SPRINGER
POLICY PRESS
PR DE L'UNIV DU QUEBEC
REED PUB NEW ZEALAND
SOHO
SYBEX
WAGENINGEN ACADEMIC PUBL
WOLF LEGAL PUBLISHERS
WOLTERS KLUWER HEALTH
WORLD TOURISM ORG

Appendix B: Approval Plan Publishers to change from slips to books

The majority of slips coming on approval for these publishers are ordered. We recommend these change from slips to books.

ALFRED A. KNOPF
BASIC BOOKS
BELKNAP/HARVARD
BUCKNELL UNIV PRESS
COLUMBIA UNIVERSITY PRESS
COMSTOCK/CORNELL
CORNELL UNIVERSITY PRESS
D.S. BREWER
DAVID R. GODINE
DEDALUS LTD
DUKE UNIVERSITY PRESS
DUQUESNE UNIV PRESS
EAST EUROPEAN MONOGRAPHS
ENCOUNTER BOOKS
ENIGMA
FAIRLEIGH DICKINSON UP
FARRAR, STRAUS & GIROUX
FEMINIST PRESS
FREE PRESS
GEOLOGICAL SOC PUB HOUSE
GEORGE BRAZILLER
GRAYWOLF
HENRY HOLT
INDIANA UNIV PRESS
IVAN R. DEE, INC.
J. PAUL GETTY MUSEUM
JOHN LIBBEY
LATIN AMERICAN LIT REVIEW
MARION BOYARS
MEDIEVAL INST PUBLICATION
MELBOURNE UNIV PRESS
METROPOLITAN/HENRY HOLT
MODERN LANGUAGE ASSN
MONTHLY REVIEW
NEW YORK UNIVERSITY PRESS
NORTHERN ILLINOIS UNIV PR
OHIO STATE UNIV PRESS
PANTHEON
SCHOCKEN
SOCIAL SCIENCE MONOGRAPHS
STANFORD UNIVERSITY PRESS
STONE BRIDGE PRESS
STUDIO BOOKS/VIKING
TAMESIS
TEMPLE UNIVERSITY PRESS
TIMES BOOKS
TWISTED SPOON PRESS
UNIV OF CALIFORNIA PRESS
UNIV OF CHICAGO PRESS
UNIV OF DELAWARE PRESS
UNIV OF EXETER PRESS
UNIV OF GEORGIA PRESS
UNIV OF MASSACHUSETTS PR
UNIV OF MINNESOTA PRESS
UNIV OF NORTH CAROLINA PR
UNIV OF PENNSYLVANIA PR
UNIV OF TENNESSEE PRESS
UNIV OF VIRGINIA PRESS
UNIV PR OF KENTUCKY
UNIV PR OF MISSISSIPPI
UNIV PRESS OF THE SOUTH
UNIVERSITY OF AKRON PRESS
UNIVERSITY OF UTAH PRESS
VANDERBILT UNIV PRESS
WALKER & COMPANY
WALLFLOWER
YALE UNIVERSITY PRESS
YORK MEDIEVAL PRESS

Appendix C: R2 Methodology

Methodology

R2 Consulting LLC

A. Step One: Understand the current process

This first step is critical, and can't be emphasized enough. For a variety of reasons, it is important to collect all existing documentation, and to interview every stakeholder and participant. Involving every staff member in this initial phase of research demonstrates the value placed on individual contributions, and gives everyone an opportunity to offer ideas/thoughts/concerns very early in the process. Attending closely to the details at this first step will ensure that none are overlooked later.

The following questions are often helpful as we seek to synthesize the information gathered:

1. What are the costs of the current operation?

What are the most expensive elements of the workflow? Are expenses predictable? Any surprises? Time spent and rate per hour for each function?

2. What are the critical time frames?

Are they acceptable? In Collection Management, the number of days elapsed from dock to shelf might be counted. In Administration, perhaps this would relate to budget allocations, response time for decisions, etc.

3. How is performance measured? Evaluated? Rewarded?

Everyone is better able to exceed expectations if those expectations are well defined, consistently measured, and appropriately rewarded.

4. What is the mission of the area being studied?

How does it compare to the needs of the wider community?

5. What is the MAINSTREAM?

Regardless of the work being done, there will be repeating patterns; types of work that act alike. Patterned worked must be batched, and rules/procedures must be imposed for speedy throughput of batches. Decision-making should be eliminated from batch processing, allowing for maximum automation. This patterned automate able workflow is the mainstream. It should be broadened at every opportunity.

Once the mainstream is discovered, it is important to understand the exceptions as well.

6. What does the workflow look like when drawn on paper?

If you haven't done it for a while, you may learn something by looking at a picture of the entire workflow; from beginning to end. It might take some time, and several pieces of paper. Include information about individuals, their discrete tasks and decisions, judgment calls, data elements, time spent, volume of work, methods of communication, tools and programs used, tracking mechanisms, queues, backlogs, bottlenecks, rework. Be sure that you're aware of situations in which the same person is responsible for several sequential or non-sequential steps in the process. Be sure to look for the mainstream. If the picture doesn't show one, it might not exist.

7. Do bottlenecks and backlogs exist? Under what conditions?

If the goal is to design and staff for a scalable, production-oriented workflow, the organization must be willing to rely on a process rather than a person to ensure results. For example, it is limiting to expect anyone to "review" ALL of anything. This concept eliminates the opportunity to increase throughput beyond the capacity of a single individual, or a single group of individuals. We have found that single threading or "hub" routines exist often in tech services, sometimes evidenced in job descriptions with phrases such as "point person"; "throughout the process"; "review all"; etc. In a streamlined work environment, it should be unnecessary for any individual to review "ALL", except to compensate for flaws in the workflow design.

8. Are there units or functions or tasks that management doesn't fully understand? To some degree academic communities have become captive to an "expert mentality", particularly prevalent in Collection Development, Serials, Cataloging, and Accounting. There is a predominant sense that an expert, primarily manual, item-specific approach is the only valid approach, and that a very few experts can truly understand (and do) what needs to be done. When this orientation prevails, otherwise good managers lose confidence (lack specific expertise) and inappropriately allow the "experts" to retain responsibility for making decisions about "what and why" and sometimes "whether" specific work should be done within their departments, in addition to the more appropriate "how".

This expert orientation is not uncommon, but is absolutely essential that the auditors become fully conversant with the details of the area being studied. Don't stop asking questions until you are confident that you understand the issues well enough to judge them critically.

9. Is everyone working at the appropriate level?

For example, are professional librarians focused on professional level tasks? Are staff members performing tasks that could as well be performed by students? Is everyone fully occupied?

10. To what extent do your systems support the workflow?

The picture of your workflow should help to answer this question. Which tasks/functions are accomplished outside of the ILS? What auxiliary systems are in place? Why? What other tools, spreadsheets, vendor databases, are used to accomplish important steps in the process? Are there instances when data must be double keyed, or re-keyed into the system?

11. Who are the customers of the area?

Take the time to identify and interview representative customers, to understand their expectations and their level of satisfaction. If there were a high degree of satisfaction, would they be equally satisfied with a different or modified "product"?

12. What's not getting done?

In every area, there are tasks that are deferred or ignored in the press of daily operations. It is important to identify and evaluate them in relation to those tasks that ARE getting done.

B. Step Two: Identify Best Possible Practices

Given the physical, cultural, economic, and systems constraints on the library, it is important to research state of the art solutions for those functions under consideration. This can be done by collecting current library literature, visiting peer libraries, attending professional conferences, arranging sales presentations from commercial vendors, and/or hiring experts. By fully understanding the current operation and its costs, it becomes possible to evaluate other options; new priorities. Whenever possible, apply basic business principles, including:

1. Incorporate "systems thinking"

Be sure that everyone understands the big picture, and his/her own role within it.

2. Define a mainstream

Make sure everyone knows what the mainstream is, and what the legitimate exceptions are.

3. Design a linear process

Eliminate "hubs"

4. Automate the mainstream and outsource when appropriate

Batch the work, and fully utilize available systems. Knowing your own cost structures (measurable performance standards help) can make it possible to judge the value of third party services.

5. Establish production/performance goals

What are acceptable performance measures, in terms of rate of production, throughput time, and quality? Be sure that the library's mission is reflected in specific departmental policies and functional requirements.

6. Measure performance

Establish routines for ensuring predictable, reliable service. Be sure that the department has a mechanism for identifying problems before the "customer" does.

7. Trust the process

Eliminate redundancies and offline routines whenever possible. Avoid manual transcription, broaden system access, and never adopt a permanent procedure to review or to recheck ALL --- use sampling techniques to ensure accuracy.

8. Be strategic

Near the beginning of this report, we suggested ways to think strategically about technical services but the same principle apply to public services. Every department should embark on structured thinking about the changing information environment; changing financial conditions; the role of the library on campus; deeper collaborative efforts; changing space needs; a clearer vision of how the Libraries might look in five or ten years; and especially develop a formal strategy to guide the steady transition from print to electronic as the dominant information format. This context will help every area to make choices in a manner consonant with the emerging environment.

9. Eliminate Low-Value Tasks

In order to move far and well into the future, it is important to re-evaluate library services and workflow priorities often. We must think clearly about the value or the service provided, and be bold about removing steps and tasks in favor of newer, more important ones. Those that will be eliminated are not inherently bad. They may once have been critical and even now, may offer some diminished value. But service pressures require that we eliminate low-value and non-critical tasks regardless of their original intent because there are so many newer and more vital tasks to be accomplished.

10. Reorganize the department to accommodate change

It can be difficult to establish a new philosophy, new priorities, and new routines without reconsidering the way in which the department is organized. Part of the plan should be to create new job descriptions and new reporting lines.

C. Demonstrate the benefits

Prior to implementation, it is critical that proposed workflow changes be fully understood, vetted, and tested by the effected group and all constituencies, including students. Very specific, quantifiable benefits must be demonstrated in terms of staff hours saved, speed of delivery, increased access to information, better communication, improved accuracy, and the like. This is the opportunity to address all the arguments, concerns, and drawbacks; the opportunity to reassess details and adjust the plan. Ensure adequate levels of buy-in. Don't assume.

D. Implement Changes

Be realistic about the level of effort necessary to effect the changes contemplated and be sure to give the organization plenty of time and provide plenty of support. Actively anticipate hurdles and brainstorm potential solutions before you start. Consider the following:

1. Name a project leader

This person should be enthusiastic; personable; detail oriented; and brave. S/he should have interdepartmental relationships, and a willingness to make decisions. This person should be hands-on; should be "in the trenches" everyday, throughout the implementation, and should not have other responsibilities that hamper his/her full attention for the project.

2. Name an implementation team

Depending on the nature of the project, this team could be large or small, inter or intra departmental and should include professional and non-professional staff. Members of the team should be freed from certain other duties, so that there is time to commit fully to the project. If possible, include someone from systems. This team should meet every week, else they will lose focus. Their agendas and meeting minutes (including task assignments) should be available to the entire library staff.

3. Establish specific communication guidelines

… and follow them. It is impossible to communicate too often with members of the team, with library administration, and with the various constituencies. Be careful to keep all third parties informed as necessary.

4. Publish a detailed implementation schedule that is republished whenever there are changes

Include testing routines. Be sure to identify training needs, and include training sessions in the schedule. Track progress.

5. Analyze the effectiveness of the change

Once implemented, ensure that the anticipated benefits have been realized. Promote your success.

E. Do it again