New Roads for Patron-Driven E-books: Collection Development and Technical Services Implications of a Patron-Driven Acquisitions Pilot at Rutgers

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Article begins on next page
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By Melissa De Fino and Mei Ling Lo

Melissa De Fino
Special Collections and E-books Metadata Librarian
47 Davidson Road
Piscataway, N.J. 08854
(732) 445-5903
mdefino@rulmail.rutgers.edu

Mei Ling Lo
Math and Computer Sciences Librarian
165 Bevier Road
Piscataway, N.J. 08854
(732)445-5435
mlo@rulmail.rutgers.edu
Running head title

New Roads for Patron-Driven E-Books: Rutgers Pilot

By Melissa De Fino and Mei Ling Lo

Keywords. E-books; Acquisitions; Patron-driven model; Electronic monographs

Abstract. Collection development librarians have long struggled to meet user demands for new titles. Too often, required resources are not purchased, while some purchased resources do not circulate. E-books selected through patron-driven plans are a solution but present new challenges for both selectors and catalogers. Radical changes to traditional technical services workflows are required, and selectors must modify the selection process to give more choice to the user. Rutgers University librarians have adopted an innovative new technical services workflow and collection-development model to manage a successful, patron-driven acquisitions project for e-books in the fields of math and computer science.
Collection development and cataloging are key components of any research library. Much of a collection development librarian’s time is devoted to building a collection that will be useful to faculty and students. His or her role is to select materials that support the research and curriculum of the institutions. The word “select” is so much emphasized in the profession that it is common to refer to a collection development librarian as a “selector.” Some research libraries are best represented by the specialties of their collection, and the prestige of a library is signified by its outstanding collections. It is the role of the catalog librarian to make these collections available and easily accessible to the user and also to guide the user to resources that have been selected for them. Both collection development and cataloging processes long have been an educated guessing game, with selectors determining which resources the user will need, and catalogers determining the ways in which the user will search for these resources.

With such a system in place, there will always be some resources required by the user but not selected by the librarians. These resources can be obtained through interlibrary loan (ILL), but if they are used multiple times, the costs of ILL will often exceed those of purchasing a new copy for the collection (Howard, 2010). A solution surfaced a decade ago with the idea of “patron-driven,” “user-initiated,” or “purchase on demand” acquisitions models. Rather than sending ILL requests to another institution, librarians began purchasing current imprints on demand, based on ILL requests. (Nixon, Freeman, & Ward, 2010).

The patron-driven model for ILL may be a service to library users, but it is not a comprehensive approach to address their needs. ILL requests may take a long time to fill, causing some users to obtain materials elsewhere. In addition, ILL gives users the impression that the libraries do not “own” these items, regardless of whether the libraries will place rush
orders and actually purchase the items. Most librarians want to give users what they need when they need it (Ruppel, 2006). Waiting a few days for the book to become available is not the best service they can provide.

With the availability of e-books, patron-driven acquisition models have gradually become more systematic and proactive. Librarians can now pre-select new titles, based not on ILL requests, but rather built upon a profile written by the selector (Fountain & Frederiksen, 2010). Unlike traditional approval plans, the e-book is not purchased at the time of selection. Instead, the purchase is triggered by multiple uses or extended use of a single item based on an agreement reached with the vendor, aggregator, or publisher. Titles are available for the user to choose, but the library is not charged until the book is heavily used. Online access means there is no wait time for the book to become available. Users are often not aware that their use has triggered a purchase.

**Challenges**

A challenge to this model is that libraries that are using patron-driven acquisition models are loading MARC records for e-books they do not yet own into their integrated library systems (ILS). These records are generally imported into the ILS through a batch-load process, in which batches of hundreds to thousands of records are loaded at once. Although there is a great deal written about patron-driven models, very little research has been conducted on their implications for this new technical services workflow. Annie Wu and Anne M. Mitchell identify this need for research in their 2010 case study of e-book batch loads, noting that “patron-driven purchasing is seldom discussed as a cataloging issue, but it has implications for cataloging operations because it straddles individual and batch-record management.” (Wu & Mitchell, 2010) They describe
patron-driven cataloging as a “reverse cataloging process,” in which records are loaded into the system in large batches, and then cataloged more fully after they have been used by a patron.

One problem that arises with adding large batches of bibliographic records to the ILS is the quality control of vendor-supplied metadata. Problems associated with batch loads have been narrowed down to access issues, load issues, and quality issues (Martin & Mundle, 2010). Access issues prevent users from accessing the material and include problems with broken links and missing or incorrect access points. Load issues involve incorrect identifiers being added to the records, making it impossible for the records to be loaded and matched against duplicate records in the local catalog. Record quality issues include outdated MARC fields, unauthorized name, series, and subject headings, and incorrect cataloging of multi-volume sets. Quality issues do not always prevent users from finding the materials but provide information that is confusing and often incorrect.

In their 2009 study, Susan Macicak and Lindsey E. Schell describe their experience with a pay-per-view model for e-books at the University of Texas Libraries, a program that is in many ways similar to patron-driven projects. The records supplied by their vendor for materials that had not yet been selected by their users were very brief. They point out that some librarians in their institution were uncomfortable with the quality of the records, but insist that the catalog quality did not limit their users in finding the records they needed. At the point of purchase, full metadata was supplied (Macicak & Schell, 2009). Vendor-supplied full metadata is a valuable asset in any patron-driven plan, but it does not relieve the cataloger of the process of cataloging. A significant amount of work is necessary to ensure that the records will match and load to the library’s ILS.
Loading large sets of records may also create problems for an institution’s ILS. Some commercial ILSs have limits on the amount of data that can be stored, and surpassing that data limit may have financial repercussions for the library. This is an issue that has not yet been explored in the literature.

According to existing research, the most common reasons for not implementing a patron-driven program are budget, staffing, and workflow (Fountain & Frederickson, 2010). It may come as a surprise to some librarians that staffing and workflow are challenges to overcome when executing a patron-driven program, but in reality patron-driven projects do not lead to less work for the librarians involved. Quite the opposite is true, particularly in regards to technical services.

Aside from the technical services implications, there is some unwillingness among collection development librarians to relinquish the role of selection. It is the selector’s role to support the research and curriculum of their institutions. There is some concern that the books selected by users would not represent the academic mission of the university. It would not be acceptable to fill an entire library with popular works, at the risk of the research collection. At the same time, applying a patron-driven model to multiple research areas could run the risk of one subject area acquiring more resources than another if that area’s users were more active in selecting e-books.

Another area of caution is the extraordinarily fast pace of spending that may be generated by patron-driven models. With limited oversight over when individual titles are selected, some institutions or consortia that have managed to reallocate funding or use end-of-year funding to pursue patron-driven acquisitions find themselves in a situation where additional funding is required to continue the program. Some selectors also worry that patron-driven plans for e-books may put e-books into competition with the budget for print resources.
As publishers are also new players to this model, many require a substantial dollar amount be put into a deposit account for patron-driven plans. For most libraries that are undergoing a difficult budgeting period, allocating extra funds to implement such a model seems unfeasible and undoubtedly brings resistance from library administrators who may question if such a plan will work any better than buying print books.

The E-Book Patron-Driven Pilot at Rutgers: A Case Study

Despite these concerns and outstanding issues, the E-books Working Group at Rutgers University Libraries decided to pursue a patron-driven plan using the math and computer science collections as a pilot. The belief was that building the patron-driven collection on a small scale would allow us to address the technical details before expanding the model to other disciplines. The Computer Science Department has long relied on e-books, so their faculty and students are accustomed to reading electronically.

A study on the usage of the Math Library’s print collection was conducted in 2010. Among books published that year, 79% never circulated. Of books that were a few years older (e.g., published in 2006), only 44% had been checked out three times or more. Of the 2006 titles, 41% were never used (see Table 1).

[Insert Table 1 here]

These numbers were alarming because they showed that a large portion of the collection was not highly used. The usage pattern and an internal library survey revealed that despite our efforts and collection expenditure, we had not done enough to provide resources that the users needed.
In addition, a customer satisfaction survey distributed in early 2010 showed that students were demanding to see more professional computing books on topics such as the programming language C#, JavaScript, PHP, Cloud computing, and soon. Computer science librarians have long found it difficult to balance the needs of the users with the university’s curriculum. As a research institution, our goal is to collect academic and scholarly materials. Yet our students must also be fluent in programming languages and popular computer topics to be competitive in the job market.

At this time, vendors began to reduce the minimum purchase amount for patron-driven e-books. Rather than requiring a large lump sum be set aside for payment, the vendor required a small and manageable budget to support the project. The Libraries welcomed this change as we struggled through fiscal constraints. More importantly, the vendor offered selectors a new type of patron-driven model. In addition to creating a profile with various criteria, the selectors would receive a monthly email that contained a list of new titles. Selectors could review this list and choose titles that would be of interest to their users and meet their collection-development policy. This arrangement eliminated the chance of having titles that were too elementary or too specific to a particular field.

The patron-driven plan was particularly appealing to Rutgers University Libraries because of the unique characteristics of our budget cycle. The plan would provide an alternative for the Libraries to exercise greater control over our funding. As a state-funded university, our budget is usually allocated according to a timeframe established by the state. Funds are usually allocated in late November. In order for invoices to be processed before the end of the fiscal year, orders must be completed by mid-March. As a result, selectors are allowed to place orders only within a four-month period. Many materials that are published outside this window may
not be ordered in a timely manner, and some of the books are out of stock by the time the next year’s budget becomes available. Because the patron-driven plan could be charged from a deposit account, it would allow the selectors to choose titles throughout the entire year as they became available.

**A New Workflow**

The patron-driven plan demanded a radically new workflow. In the traditional acquisition of print materials, every item traveled the same basic path: selector to vendor to acquisitions staff to cataloger to user. E-books, on the other hand, are virtual objects. There are no physical books to pass from one player to the next, and there is no trigger to activate each step of the workflow. Catalogers must also adapt to processing batches of hundreds of records at a time rather than cataloging each book individually. The role of users is different as well, in that they do not come in to the process at the end but instead play an active role in selection.

At Rutgers, patron-driven e-books travel the following revised path: vendor to selector to vendor to cataloger to user to vendor to cataloger. The vendor regularly sends the selector a list of available e-book titles that fit into the Libraries’ parameters. Selections are made from that list and sent back to the vendor. The vendor then sends temporary metadata for the selected titles to technical services to load to the ILS, with minimal revisions made. At this point, users discover and select the e-books, and their usage activates a purchase. Every four weeks, the vendor sends reports of purchased e-books to technical services, where staff replaces the temporary records for the purchased e-books with permanent full records.

At the point that the temporary records are loaded into the ILS, the technical services librarian makes only one significant modification. A local note is added to identify the record as temporary and as part of the patron-driven project. When the temporary records are later
replaced with permanent full records, this note is replaced by another local note identifying the record as a permanent selection from the patron-driven project. These notes are added for evaluation purposes and also for the basic purpose of identifying old records so they can be removed from the system and replaced as needed.

It is advisable to have a clear method of identifying records within a particular patron-driven project, but there is room for flexibility regarding where that information is recorded within a single institution. At Rutgers, various MARC fields were reviewed as possible candidates for identifying patron-driven titles. Each MARC field provided certain advantages and disadvantages. The 583 Action Note was considered, but rejected because it was not indexed in the ILS and could not be searched. The process of having a new field indexed would have taken a long time, and the patron-driven projected demanded a tight timeframe. The nonpublic note (x) in the 856 Electronic Location and Access field was also rejected for this reason. Eventually, it was decided that the best note would be the 590 Local Note. The drawbacks of using this note were that it was already used for donor information and other copy-specific information such as signatures, errata, and imperfections. However, it was already indexed in the ILS. Data constants used in the 590 included:

- Vendor supplying the materials
- Selector’s initials
- Discipline/group/project name
- Status (i.e. Selected or Purchased)

In addition to identifying records within this project, it was important to the Libraries to be able to de-dupe or match e-book records to their print counterparts. For the purposes of this project, the selector decided not to purchase e-books that were merely reproductions of print
books already held by Rutgers. In order to filter out books that were already owned, records were matched by their ISBNs as the temporary records were loaded to the catalog.

One interesting challenge presented by the vendor was that they catalog multi-volume sets separately by volume. They do so because some of their customers may purchase only one or several volumes of a multi-volume set. This contradicts AACR2 Rule 2.5B16, “Give the number of volumes of a printed monograph in more than one physical volume,” and RDA Rule 3.4.5.16, “If the resource consists of more than one volume, record the extent by giving the number of volumes and the term volume.” For the sake of simplicity, it was decided to accept inconsistency in the catalog and not merge the records until all volumes of a set were purchased. For the temporary records, merging multiple volumes proved to be too time-consuming and problematic.

When to edit the records is one of the most difficult questions to face in a patron-driven project. Editing every record as it is loaded is too time-consuming for temporary records that represent titles that are not yet owned. At Rutgers, the process is expedited by allowing the unmodified vendor records to sit in the catalog temporarily. Permanent records are edited at the point of purchase. These records receive authority control and are reviewed to ensure access and bibliographic quality.

After deciding when to edit the records, catalogers must decide how to edit them. This is not only true of records for patron-driven e-books, but for electronic resource record sets overall. The records must be reflective of the electronic resource and not the print resource. Often vendors claim they include metadata in the price of their package, but in reality they are only supplying records for print resources with a link to an online version.
If a library is uploading their records to OCLC, then those records should always follow the recommendations outlined in the *Program of Cooperative Cataloging (PCC) Provider-neutral E-Monograph MARC Record Guide* (Culbertson, 2010). The guide was developed in 2009 and updated in 2010 to establish best practices for e-book cataloging and to reduce the mass of duplicate e-book records that had been loaded to OCLC. Rather than treating e-books as reproductions of print, which forces a new MARC record be created for every publisher or provider, the PCC recommends e-books be linked to their print counterparts through use of the MARC 776 field, Additional Physical Form Entry. When evaluating metadata supplied by e-book vendors, it is important for catalogers from participating OCLC libraries to ask that the vendors follow the provider-neutral guidelines. If the vendor does not follow the guidelines, then modifications must be made to the records by the cataloger before the records are loaded to OCLC.

If necessary, changes should be made to e-book records to suit local bibliographic processes. Institutions that load e-book packages from various providers may wish to indicate the provider in a public (|z) note in the MARC 856 Electronic Location and Access field. Access restrictions can also be recorded in a local note. Classification of e-books is encouraged by the *Provider-neutral e-monograph MARC record guide* but not required (Culbertson, 2010). Some vendors may be willing to add local notes to the records included in their purchase. This is something to address in negotiations for the patron-driven project. Librarians should also communicate with the vendor regarding record quality. If the vendor is repeating the same cataloging error or not following standards, this must be addressed. After all, libraries are customers, and it is to the vendors’ benefit to make their catalog records as attractive as possible to as many customers as possible.
Results

When the patron-driven e-book project was launched in May 2010, Rutgers University Libraries made the decision not to publicize it as a new service. We wanted to encourage true usage of the e-book titles to be able to evaluate the project’s progress. In September 2010, when library orientations were offered to new graduate students in the computer science and mathematics departments, the students were informed about our efforts to strengthen the e-book collection, particularly in the area of professional computing. The students still had no knowledge that when they clicked on an e-book link and clicked on the “Open now” button, they were actually participating in the selection and acquisition of e-books for the libraries.

Throughout the pilot project, we held frequent conference calls with the vendor. When we reviewed the project in late September, there was concern that the e-book titles had not generated enough usage. We questioned whether our profile was too selective. However, as we were debating if we should change the parameters of the collection profile, usage of the titles increased. By mid-fall 2010, there was definitely a strong demand for the e-books. Other than the usual monthly addition of new titles, there was no need to expand the profile to include more titles from which the patrons could choose (see Table 2).

[Insert Table 2 here]

As of May 2011, there were 752 MARC records loaded into Rutgers’ ILS. Out of 771 titles, 92 titles (12%) were accessed at least a predetermined number of times and were purchased. Based on the usage statistics, we have learned the ratio of titles selected to the number of titles finally purchased by the users should be around 9:1. If there are too many titles in the pool from which the users can choose, the funding may be spent too quickly. On the other hand, if there are not enough titles in the pool, the users would not be able to find the titles that
would be of interest to them. We have also experienced the obvious quiet period between May 2010 and September 2010 when most classes are not in session. The e-books were used during the summer of 2010, but usage did not reach the critical point that we had to purchase the titles. As the students started attending classes in the fall of 2010, the usage began to increase. The decision was made to leave the rest of the temporary MARC records in our library catalog. Many books are used only after their reviews become available. Removing the records from our library catalog prematurely would prevent our users from accessing those titles when they became popular. A review of the usage of those titles will take place in two to three years. By then, we can decide to remove never or seldom-used titles from our library catalog. This process will be similar to weeding a print collection (see Table 3).

[Insert Table 3 here]

At the time of writing this article, Rutgers University Libraries are considering a larger scale patron-driven plan. As the competition for patron-driven models intensifies, many e-book vendors have modified their requirements to become more favorable to libraries. As users became accustomed to accessing journal contents on different platforms, they are also learning to view e-books on different platforms. We therefore are in the process of investigating different vendors and their licensing requirements in the hopes of seeking more favorable terms for the libraries and our users.

Lessons Learned

Unlike print monographs, the e-book selection process is closely tied to vendor options (Anson & Connell, 2009). The landscape for collection development is constantly evolving, and the content of the book is no longer the most important factor for librarians to purchase a title.
Many factors, including DRMs, usability of the platforms, cost of titles, and availability of archival copies such as Portico and LOCKSS play important roles in our decision-making process. When acquiring and providing access to electronic resources, it is important to consider archiving options in case the vendor goes out of business and perpetual access was guaranteed at time of purchase.

With the lack of a standard purchase agreement for e-books, each vendor contract must be reviewed carefully, and the terms must be examined closely. The issue of defining the “use” of e-books varies from one vendor to another. One may define the “use” of an e-book as a click generated by a user when the user clicks on a button to open the full-text of the e-book. When this kind of use reaches a pre-determined number, the library is required to purchase the title. Another vendor, however, may have a very different requirement; for example, one single user clicks on ten pages of the same book, the library is required to purchase the title. In some cases, as soon as a user clicks the “print” or “download” icon, the library is responsible for the purchase of the book. There is no single standard licensing agreement for e-books, as the vendors and publishers are exploring different ways to meet the needs of the libraries and secure their revenue at the same time.

Since the advent of electronic resources, the licensing agreement is no longer boilerplate. It involves negotiation and clarification of terms in the license. Fortunately, there are a number of institutions that have participated in patron-driven models. Interviewing the librarians who were in charge of the program not only helped us understand the terminology involved, but also helped us prepare the details for the licensing. When we negotiated the terms of our license, we
wanted to ensure that the terms would continue to apply when we expanded our plan to other subject areas.

Librarians who are interested in experimenting with a new model of collection development can always start on a small scale. Issues related to workflow can be resolved in a quick manner without putting the entire collection at risk. Reviewing usage statistics not only helps to monitor the expenditure of the model but also helps to detect any hidden inconsistencies. Most importantly, the success of a patron-driven plan relies on close collaboration between the cataloger and the selector. Patron-driven plans may be “driven” by our users, but they still require the close involvement and intervention of librarians to run smoothly.
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Table 1: Circulation Statistics of Mathematical Sciences Library Collection (2006-2010) as of January 2011

<table>
<thead>
<tr>
<th>Year of Publication</th>
<th>number of items</th>
<th>Circulated 1 to 2 times</th>
<th>1 to 2 times (%)</th>
<th>Never circulated</th>
<th>0 times (%)</th>
<th>Circulated 3 times or more</th>
<th>3 times or more (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>202</td>
<td>30</td>
<td>15%</td>
<td>159</td>
<td>79%</td>
<td>13</td>
<td>6%</td>
</tr>
<tr>
<td>2009</td>
<td>296</td>
<td>50</td>
<td>17%</td>
<td>205</td>
<td>69%</td>
<td>41</td>
<td>14%</td>
</tr>
<tr>
<td>2008</td>
<td>414</td>
<td>68</td>
<td>16%</td>
<td>195</td>
<td>47%</td>
<td>151</td>
<td>36%</td>
</tr>
<tr>
<td>2007</td>
<td>471</td>
<td>74</td>
<td>16%</td>
<td>209</td>
<td>44%</td>
<td>188</td>
<td>40%</td>
</tr>
<tr>
<td>2006</td>
<td>592</td>
<td>92</td>
<td>16%</td>
<td>240</td>
<td>41%</td>
<td>260</td>
<td>44%</td>
</tr>
</tbody>
</table>

Table 2: Usage Statistics

<table>
<thead>
<tr>
<th>Total number of titles provided by MyiLibrary (May 2010 – March 2011)</th>
<th>Number of titles selected by the librarian (May 2010 – March 2011)</th>
<th>Number of titles paid by Rutgers University Libraries (May 2010 – April 2011)</th>
<th>Expected number of titles to be purchased by Rutgers University Libraries (by June 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1307</td>
<td>771</td>
<td>92</td>
<td>Approximately 93</td>
</tr>
</tbody>
</table>
Table 3: Number of Titles Purchased via Rutgers' Patron-Driven Plan
References


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