Notes on Operations

Kindles and Kindle E-Books in an Academic Library

Cataloging and Workflow Challenges

Richard E. Sapon-White

Academic and public libraries have begun to purchase e-book readers and make them available for check-out to their users. The nature of the e-books on these devices necessitates new approaches to workflow for acquisitions and cataloging departments. In addition, the application of cataloging rules and conventions presents a number of difficulties for catalogers. At the Oregon State University Libraries, a pilot project to purchase Kindles, load them with e-books, and make them available for circulation offered an opportunity to explore and understand the various challenges that these electronic resources present for traditional technical services units. The experience resulted in several innovations. A novel workflow largely bypassed the acquisitions unit, shifting purchasing procedures to the circulation unit. Use of the Provider-Neutral E-Monograph MARC Record Guide made most cataloging straightforward, although the lack of adherence to print conventions for some titles made cataloging a time-consuming endeavor. LibraryThing provided an additional avenue of discovery of the Kindle titles for library users.

Richard E. Sapon-White (richard.sapon -white@oregonstate.edu) is Head, Cataloging and Metadata Services, Oregon State University, Corvallis, Oregon.

Whenever new information delivery technologies appear on the market, librarians are drawn to investigate them for their potential interest to library users. One such new technology is the e-book reader. Although portable e-book readers have been available since the RocketBook appeared in 1998, only in the past few years have they been widely accepted by consumers.[1] Forecasted sales of such devices have skyrocketed recently, from 3 million devices in 2009 to 6 million in 2010.[2] Their portability and capacity for storing thousands of books are attractive to readers. As their popularity has grown, thousands of titles have become available for downloading.

The Kindle, a portable e-book reader developed by Amazon and launched in 2007, provided the company with a way of maximizing sales of trade and other publications by catering to the wants of the digital public.[3] Although not the only e-book reader, as of November 2010, 47 percent of e-book reader owners had a Kindle as compared to the iPad (32 percent) and Sony Reader (5 percent).[4] Amazon's Kindle continues to lead in sales, accounting for 59 percent of e-readers shipped in March, 2011.[5]

Libraries have started to purchase e-book readers for circulation to their patrons.[6] As with any new technology, libraries need to examine whether and

how e-books designed for proprietary devices, such as the Kindle, can be accommodated within their current operations and services. The purchase of e-book readers has ramifications for collection development, acquisitions, cataloging, and circulation policies and practices.

In 2009, Oregon State University Libraries (OSUL) decided to conduct a six-month pilot project to see if library users would borrow Kindles preloaded with e-books. Kindles were chosen over other e-readers because of their popularity and the large number of titles available for them. This paper describes the challenges presented by the acquisition and cataloging of e-books for the Kindle, specifically examining the changes to technical services workflow and the difficulties encountered in the application of cataloging rules.

Literature Review

A considerable body of library literature deals with many aspects of e-books, such as licensing issues, e-book implementation in academic libraries, and the use of e-books by students and faculty.[7] In much of this literature, the e-books discussed are aggregations of titles purchased from vendors in package deals and accessible over the Internet.

What few articles do discuss e-readers in academic libraries tend to focus on circulation issues and popularity among users. For example, a literature review by Tees looked at the use of e-book readers at universities, focusing on their use as replacements for textbooks as well as loan policies and the brands of e-book readers being purchased.[8] Similarly, Waterfield surveyed public and academic libraries to assess the degree to which they have purchased e-book readers and made them available to their users.[9] While he found widespread use, his survey focused primarily on circulation

periods, loan policies, and popularity instead of technical services issues.

An appendix to Waterfield's survey does provide the sequence of procedures followed at Suffolk University when an e-book is purchased for the Kindle.[10] Amazon e-mails a receipt to Suffolk University's head of technical services, who then catalogs the e-book for the local integrated library system. The location of each e-book appears in the catalog as "Kindle."

No literature describes the impact of e-book readers on workflow in technical services or specifically addresses the cataloging issues associated with e-books stored on e-book readers.

Cataloging e-books of any variety involves decision making in the application of cataloging rules. Bothmann described for each area of bibliographic description the application of such rules to e-books.[11] In contrast to the Program for Cooperative Cataloging (PCC) approved provider-neutral e-monograph guidelines (discussed below), he considered e-book readers to be direct access devices, much in the same class as CD-ROMs and floppy discs.[12] He made the case for cataloging e-books as unique manifestations rather than facsimiles of their print versions. Bothmann suggested that e-books be classified for purposes of virtual browsing as well as for collection assessment purposes. While detailing the specific cataloging rules well, he did not discuss the kinds of difficulties, many of which concern the challenges of locating basic cataloging data, encountered in the pilot study at OSUL.

Martin and Mundle also addressed the issue of cataloging e-books.[13] Their focus was on the quality control of vendor-supplied bibliographic records for a vendor-specific packaged collection of e-books.

In 2009, the PCC approved the provider-neutral e-monograph guidelines.[14] These guidelines prescribe an approach to cataloging e-monographs when they have multiple distributors.

Usually, the application of standard cataloging rules would result in the creation of multiple bibliographic records with identical data with the exception of the data for the distributor. The provider neutral guidelines advise omitting specific distributor data and instead use the print edition's cataloging data supplemented by additional fields indicating the electronic nature of the work.

Setting

Oregon State University is a land, sea, sun, and space grant institution with approximately 19,000 students and 1,800 faculty. The OSUL holdings include more than 1.4 million volumes, 14,000 serials, and more than 500,000 maps and government documents. A main library and veterinary medicine library on the Corvallis, Oregon, campus are complemented by two branch libraries serving remote facilities of the university.

The libraries acquire approximately 15,000 monographs annually in addition to receiving approximately 5,000 government documents. Approximately 95 percent of the firm-ordered and approval plan monographs have copy on WorldCat (either Library of Congress- or member-contributed) with full-level cataloging including call numbers and subject headings. Most cataloging copy is downloaded in a "fast-cat" process by a paraprofessional, although a shift to shelf-ready books with an accompanying file of bibliographic records is currently underway and will result in moving cataloging functions to the acquisitions unit. Serials are even more likely to have cataloging copy in WorldCat and only rarely require original cataloging. The head of cataloging is the only professional cataloger in the unit, with time split between administering the unit and providing original and complex copy cataloging. The cataloging unit participates in the

PCC's Name Authority Cooperative Program (NACO), Subject Authority Cooperative Program (SACO), and Cooperative Online Serials Program (CONSER). OSUL contributes catalog records to Summit, the union catalog of the Orbis Cascade Alliance (a consortium of academic libraries in the Pacific Northwest).

The OSUL Strategic Plan calls for the libraries to "change the information landscape at OSU by providing faculty and students with the information they require, whenever and wherever they require it."[15] Since 2008, OSUL has been actively acquiring packages of e-books from vendors, primarily in the areas of earth and environmental science, biomedical and health sciences, mathematics, and statistics. This e-book purchasing policy complements one of purchasing e-serials whenever possible as OSUL moves from a primarily print institution to an increasingly mixed print-and-electronic one.

Pilot Project

For this pilot project, a task force was formed in late spring 2009, and charged by the library's administrative management team with developing a workflow and procedures for purchasing, downloading, and cataloging Kindle e-books. The task force also discussed circulation rules, staff training, and promotion of the Kindles on campus. The three task force members represented collection development, public services, and circulation. The task force consulted with cataloging, acquisitions, and circulation personnel to plan workflow for the Kindle titles through those areas.

In the summer of 2009, OSUL purchased six Kindles: five six-inch Kindles, and one larger Kindle DX. The purchase of Kindle e-books began soon afterward, with cataloging of these titles completed by the cataloging unit head. About midway through

the project, after the cataloging unit head had cataloged the first set of fifty-two titles, he trained a paraprofessional in the use of the Kindle and the cataloging of Kindle e-books, including application of the provider-neutral e-monograph guidelines from the PCC.[16] After training, the list of newly purchased titles was sent directly to the paraprofessional for both original and copy cataloging.

OSUL purchased the first set titles before the Kindles were made available for circulation. These included literary classics, popular titles, guides to cities and parks in the Pacific Northwest, study guides for students, style manuals, and introductory works on science. The head of collection development decided to purchase these titles because they would appeal to students and faculty, thus increasing the likelihood of the Kindles' circulation.

One resource initially purchased for the Kindles was a blog about Portland, Oregon, with daily updates. The issues surrounding the management of this integrating resource proved insurmountable. Updates required daily downloading, but because they could be downloaded by library users, tracking these daily downloads when the device was checked out would have been impossible. In addition, tracking daily updates on multiple devices was considered onerous. Consequently, the blog subscription was cancelled. Newspapers and other serials available on the Kindle presented similar problems with tracking check-in of issues and so subscriptions for these, although initially considered, were not purchased.

Five Kindles were placed in circulation in November 2009, with one of the six-inch Kindles reserved for use in the cataloging unit so that new titles could be viewed readily. Once the Kindles were advertised as available, they were quickly checked out. Users found and requested already-purchased Kindle titles through the

library's catalog or via a Kindle webpage on the OSUL website. All of the libraries' Kindle titles were available on each Kindle. All Kindles circulated for two weeks with no renewals. One staff member in circulation was designated as the lead for training, monitoring the program, and responding to questions.

During the pilot period, from June through December 2009, cataloging problems were noted as encountered by the cataloging unit head. Other information for this paper was gathered from e-mail correspondence, meeting minutes, and interviews with pilot project staff.

Workflow Changes

In the usual workflow for print monographs (see figure 1), orders are sent to the acquisitions unit for encumbering funds, assigning a purchase order number, placing the order with the vendor or publisher, and creating an order record in the library's catalog. Physical pieces, whether books, DVDs, or CDs, arrive several days to several weeks later. After acquisitions personnel check pieces against invoices, the materials are sent to the cataloging unit. If cataloging copy is available in WorldCat, a library technician 2 downloads a record for the work and edits it. If cataloging copy does not exist, a librarian or library technician 3 creates an original record. After physical processing, the piece is sent to be shelved.

Once the collection development librarian selected Kindle e-books for purchase and passed their titles along to the circulation unit, the workflow developed by the task force differed significantly from that for print books (see figure 2). The basic steps were as follows.

1. Circulation staff purchased the titles from Amazon using a gift card and downloaded the new e-books to each of the Kindles.

2. Circulation staff added the new titles to a LibraryThing collection.
3. Circulation staff notified the cataloging unit as to which titles had been purchased.
4. The cataloging unit completed the cataloging of each title.

Each of these steps is described in greater detail below.

Circulation's Role in Purchasing E-books

Once the collection development librarian had selected e-books for purchase, she provided the titles to the circulation unit. A point person for the project in that unit would then place the order directly with Amazon either via the Kindle reader's wireless connection or using a desktop computer via Amazon's website. When preparing for this step, the task force consulted with other libraries that procure books from Amazon and decided to use gift cards in increments of $250 for making these purchases. Because purchased e-books were immediately downloaded and available to library users, no order records were created in the integrated library system and no purchase orders were generated to request shipment of a selected title from the publisher. A history of purchases on the Amazon website provided a record of these purchases for auditing purposes. Circulation staff notify an office specialist in the library administration when the available amount on the gift card is low. The office specialist can provide a total of expenditures made for Kindle e-books, but does not track the amounts for each title purchased. The role of the circulation unit in this step to the exclusion of acquisitions staff was novel.

One consequence of not having purchase orders in the integrated library system was that library users were not aware of titles that had been ordered, as they would be for firm orders. On the other hand, the time
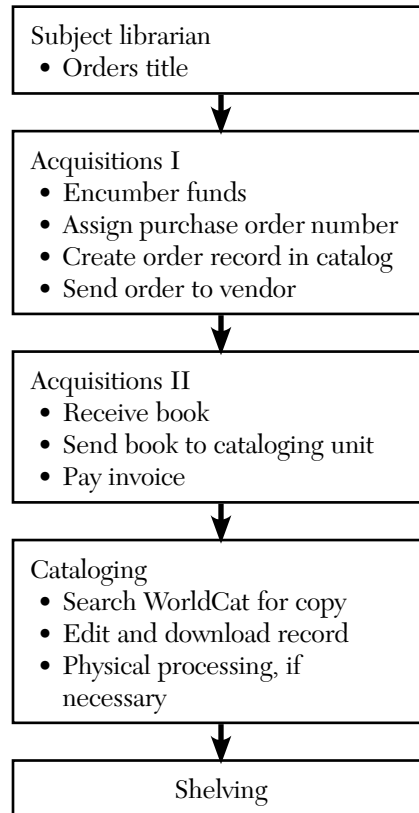

Figure 1. Conventional Workflow

Subject librarian
• Orders title

Acquisitions I
• Encumber funds
• Assign purchase order number
• Create order record in catalog
• Send order to vendor

Acquisitions II
• Receive book
• Send book to cataloging unit
• Pay invoice

Cataloging
• Search WorldCat for copy
• Edit and download record
• Physical processing, if necessary

Shelving

between purchasing a title and the appearance of a bibliographic record for it in the catalog was much shorter than that for print monographs.

Kindle titles were (and continue to be) ordered in batches of three to seven titles at a time. Circulation staff downloaded all purchased titles onto each of the Kindles, providing users with the full complement of the libraries' Kindle e-books.

Circulation's Role in Resource Discovery

Early on, the task force discussed the discovery methods by which users could find Kindle titles. Although traditional cataloging in the library catalog and WorldCat provide good access, neither of these avenues features an obvious way to see all of the Kindle titles in one list. A user can do a call number search on "Kindle e-books" to
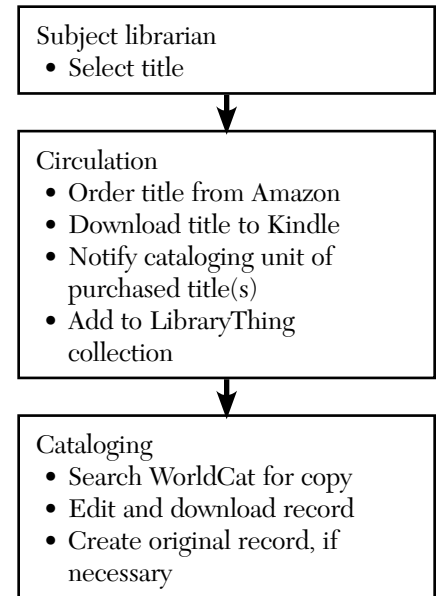

Figure 2. Kindle E-Book Workflow

Subject librarian
• Select title

Circulation
• Order title from Amazon
• Download title to Kindle
• Notify cataloging unit of purchased title(s)
• Add to LibraryThing collection

Cataloging
• Search WorldCat for copy
• Edit and download record
• Create original record, if necessary

retrieve all of the records for the Kindle titles, but most users are unlikely to think of this. Consequently, circulation staff created a LibraryThing collection listing all of the OSUL Kindle titles, initially featuring the collection in a box on the OSUL homepage. The box displayed book covers with links to LibraryThing's website for descriptions of the titles. Following the pilot, the circulation staff worked with the OSUL web team to create a page devoted to the Kindle program (http://osulibrary.oregonstate.edu/kindle) featuring an explanation about what Kindles are, OSUL circulation rules for Kindles, the LibraryThing box, and a link to an online reservation form for the Kindles.

Notifying the Cataloging Unit

To catalog Kindle titles in a timely manner, catalogers needed to be notified once the new titles were downloaded. In the print material workflow, acquisitions staff perform this function by delivering new pieces to the cataloging unit. For the Kindle titles, no such pieces are delivered. Instead, circulation staff send an e-mail message

to the head of cataloging to let him know that new titles had been purchased. However, not having been involved in acquisitions work previously, circulation staff did not realize the significance of this step and did not notify cataloging after every purchase. Early in the pilot project, the cataloger sometimes noticed titles on the Kindle that were not in the latest e-mail message from the circulation staff. The cataloger then would contact the circulation unit to determine whether the new titles actually had been purchased and were ready for cataloging. To improve communication between the units, circulation staff agreed to send lists of newly purchased titles to the appropriate catalogers as soon as purchases were made. This eliminated the need of the cataloging unit to check with circulation about new titles. Nevertheless, because titles were available immediately following purchase, occasionally catalogers noticed the appearance of a new title on a Kindle before notification had been received from the circulation unit.

Cataloging

Before the cataloging unit began its work on the Kindle e-books, the task force made a number of decisions that affected their catalog records. Early on, the task force investigated how other libraries cataloged Kindles and Kindle e-books. The Eastern Shores Library System in Sheboygan, Michigan, chose to create records for each of the devices they had purchased, with fiction and nonfiction titles on separate Kindles. The catalog record for each device listed the titles stored on it, allowing for title access in the system's catalog. This method allowed for title access only in the local system and did not utilize WorldCat and its ability to provide widespread access to a library's holdings. Stanford University similarly cataloged the device, but no evidence could be found of how the titles

could be searched in their catalog. North Carolina State University created original records for each Kindle title, adding an edition statement of "Kindle ed." Titles were not classified; instead, a call number of "KINDLE E-BOOK READER #" was assigned (where "#" represented the number of the device). Because multiple titles are on each device, a single call number is used for several titles.

The task force decided, on the advice of the head of the cataloging unit, to provide full cataloging for each title purchased to allow access by title, authors or editors, and subject headings, if any, via the local catalog, WorldCat, and Summit. Because titles were stored on the e-readers, with the Kindles kept at the circulation desk, these e-books did not need a Library of Congress Classification call number for location purposes. Instead, all of the Kindle works were assigned a local free-text call number (MARC field 099) of "Kindle eBook." Library staff could then quickly find all Kindle e-book titles by doing a call number search for "Kindle eBook" in the library's catalog. Library users were directed to the circulation desk of the Valley Library (the OSUL main library and the only facility with Kindles) for all of the Kindle titles by a location display of "Valley Circulation."

As titles were received from circulation staff, the head of cataloging searched each one in WorldCat to determine whether a bibliographic record for the e-book was available. If no usable record was found, the unit head would create an original one. This was the case for approximately a third of the titles in the pilot study. If a usable record existed, the unit head would pass along the titles and e-reader to a paraprofessional for copy cataloging. (As mentioned previously, the paraprofessional took over all cataloging midway through the pilot.) Once OSUL's holdings symbol was added to the WorldCat record, the Kindle titles could conceivably be requested

for interlibrary loan (ILL) either via WorldCat or through Summit, the Orbis Cascade Alliance union catalog. OSUL chose not to allow interlibrary lending of the Kindles. Although the pilot study task force and head of cataloging initially sought a way of suppressing the Kindle records from Summit and WorldCat to avoid ILL requests, they decided it was simpler to reject the few incoming loan requests when they were made.

Using PCC Vendor Neutral E-Monograph Guidelines

Just as OSUL began purchasing Kindles, the PCC released its provider-neutral e-book cataloging guidelines.[17] Adopting the PCC guidelines meant that original records could be readily derived from those for print editions with only a few MARC fields added to reflect the electronic nature of the manifestation. These fields included the physical description for electronic resources (MARC field 007), additional material characteristics (MARC field 006), the general material designation "electronic resource" (MARC field 245, subfield h), and a source of description note (MARC field 588). This greatly increased the speed at which such records could be created if the original paper edition could be identified. Only three out of the forty-six titles (7 percent) published since 2001 lacked sufficient information to identify the print edition on which the Kindle version was based. For older titles, such as nineteenth century classics, identifying the original print edition was difficult and often impossible. This problem is discussed in greater detail later.

A second issue that arose in applying the provider-neutral e-monograph guidelines was deciding if they applied to e-monographs housed in a physical device. The guidelines were originally written to apply to remotely accessible e-monographs, not e-monographs that were encoded on physical media

such as CD-ROMs. The Kindle titles fell into a middle ground, where the e-monographs are downloaded from a remote site but are used on a physical device. Despite this ambiguity, OSUL decided to apply the guidelines to the Kindle titles. Midway through the pilot project, in September 2010, an FAQ on the PCC site explicitly stated that the provider neutral e-monograph guidelines could be applied to e-reader monographs.[18]

Copy Cataloging

While the PCC guidelines simplified cataloging at OSUL, records compliant with those guidelines were not necessarily available for all of the Kindle e-books that OSUL was purchasing. For almost 75 percent of the e-books, multiple records were retrieved in WorldCat. In choosing a record, preference was given to one that was provider-neutral. If none existed, as was often the case, a record with an edition statement of "Kindle ed." was usually found. Although such records did not conform to the provider-neutral guidelines, as a practical matter, they was used with little editing to speed the process of cataloging. These "Kindle ed." records may be merged with guideline-compliant records at some point in the future. If such merges happen, the local bibliographic record in OSUL's database should be replaced, although currently OSUL does not subscribe to any bibliographic updating service. If cataloging copy was retrieved for an e-book that was neither vendor-neutral nor had the "Kindle ed." edition statement, the most complete record was used and adapted using the PCC guidelines.

Original Cataloging

For a quarter of the Kindle e-books, no copy was found and an original record needed to be created. The process of cataloging the Kindle titles raised several difficult issues. The absence of

traditional printed book conventions, such as title pages and page numbers, and the lack of publication and edition information for many Kindle e-books made creating quality bibliographic records challenging.

One of the first steps in cataloging is to select a chief source of information so that the cataloger can transcribe the bibliographic data found there. For electronic resources, the *Anglo-American Cataloguing Rules, 2nd ed.* (*AACR2*) rule 9.0B1 states that the resource itself is the chief source, taking formally presented evidence from a title screen or other parts of the resource.[19] Similarly, *Resource Description and Access* (*RDA*) 2.2.2.2 states that if the resource consists of images of pages, the preferred source of information is the image of the title page.[20] Because Kindle e-books are, in most cases, electronic versions of print books, one might reasonably expect to find a title page with title, author, and publication data. Although many Kindle e-books have a "cover" and a title page that may show the title and the name of the author, other bibliographic data, such as the edition, name of the publisher, place and date of publication, or ISBN may be missing. For example, the Kindle version of *The Complete Charles Dickens Collection* has no title page. It opens with a table of contents listing each title in the collection. No publishing data are provided anywhere in the e-book itself.

When such information is not available from the resource itself, *AACR2* 9.0B1 allows the cataloger to take it from online documentation about the resource.[21] (*RDA* rule 2.2.2.2 states the preferred source can be another source.)[22] For Kindle e-books, users can connect to Amazon's website via a wireless connection to find more information about the e-book. The website often will contain data such as the publisher's name or ISBN. While these data are useful when present, the website does not consistently

provide all of the necessary cataloging data. For example, Amazon's website records that the Kindle version of *The Complete Charles Dickens Collection* was published March 31, 2009, but no publisher is listed nor is an ISBN given. The editions of the individual titles that make up this collection are not listed on either the website or in the e-book itself.

The nature of Kindle e-books presents additional challenges for fully cataloging these works because they differ from both conventional print resources as well as other electronic resources. For example, in coding the MARC field 007 (Physical Description Fixed Field (Electronic Resource)), the cataloger must determine how to code subfield $b (specific material designation). The Kindle titles are not in a physical format, although they exist on a physical device in electronic format. They are not exactly remotely accessible either because OSUL was working only with those Kindle works that have already been downloaded to the device. Only code "z" (Other) is therefore appropriate.

Ascertaining the "extent of item" (i.e., MARC 300 (Physical Description Area), subfield $a, which gives the number and specific material designation of the units of the item being described) for the Kindle e-books is impossible. The PCC provider-neutral e-monograph guidelines state that, if available, the pagination of the resource should be included in parentheses following "1 online resource."[23] Because Kindles present e-books on pages, with device buttons for navigating to the next or previous page, one might think that the extent of item could be easily determined. All Kindle e-books, however, are without traditional pagination; in its place, the Kindle provides a location code at the bottom of each page for navigation. These location codes are not static; they change if the user adjusts the font size. Because of this, no pagination is available for recording and the

generic "1 online resource" is recorded unqualified. When copy cataloging such a title using the provider-neutral e-monograph guidelines, the pagination is deleted from the MARC 300 field, if it is present.

Because publication information may be missing from the Kindle version of a printed work, identifying the original edition of a title can be difficult. This is especially true for public domain titles, such as the many literary classics that Amazon makes available for the Kindle. For example, the Kindle version of *Jane Eyre*, illustrated by F. H. Townsend, has no edition statement on the "cover" or on the table of contents page, which is the title page substitute in this case. The table of contents provides the title, author, illustrator, and the company that converted the text to electronic form. No date of publication is recorded for either the electronic version or the original print edition. Paging ahead, however, one finds that the prefatory matter includes a "note to the third edition" dated April 13, 1848. This date is not sufficient to identify the edition. A search of WorldCat for *Jane Eyre* published in 1848 retrieved editions published by at least ten different publishers in the United States and England. The edition illustrated by F. H. Townsend, however, was published in 1897. This fact can be determined by searching WorldCat for the illustrator's name. If checking the webpage on Amazon for the Kindle edition of *Jane Eyre*, a cataloger would discover the number of pages in the print edition and the date of publication of the Kindle version, but no indication as to which print edition had been digitized. In sum, the process of determining the original print edition can be time-consuming for titles that have appeared in many editions. The lack of publication information and print conventions may not trouble many users, but they do present difficulties for catalogers and scholars who require more detailed information.

Brief Records

Six of the Kindle e-books purchased for the pilot project provided no authors, edition statements, or publishers and no print equivalents could be found on searching WorldCat. For these, short catalog records were created that appear only in the local catalog and were not contributed to WorldCat. The short records consist of the title, at least one subject heading, and the generic "Kindle eBook" call number. With such little data to identify the works, the cataloging unit head decided that the resulting bibliographic record was of dubious value.

End of Pilot and Future Research

The pilot project concluded two months after the Kindles were made available for circulation. The response by OSU students, faculty, and staff was immediate; all of the Kindles were checked out within the first day. By January 9, 2010, the Kindles had circulated ten times with 110 user requests waiting in the queue. At that point, the library administration decided to purchase an additional twelve Kindles to handle the great interest in these devices and reduce the backlog of holds being placed by users, primarily students. Throughout the pilot and continuing to the present, OSUL allows users to purchase Kindle e-books for the library's devices, up to a $20 limit. This fact may contribute to the popularity of the Kindles at OSU.

If e-readers become a more prevalent service offered by academic libraries, further investigations into the changes and challenges that they bring to technical services units, including both acquisitions and cataloging, would be informative. These might include studies that quantify the time saved by the application of the PCC vendor neutral e-monograph guidelines or the application of *RDA* to the cataloging of works for e-readers.

Conclusion

OSUL's experience with acquiring and cataloging e-books on the Kindle has highlighted how these information resources differ from conventional print resources as well as other electronic works. Staff have had to make changes to the traditional workflow to accommodate these titles. Catalogers have grappled with scant or elusive bibliographic information as well as coping with applying cataloging rules to these e-resources.

Traditional library workflows needed to be adjusted significantly. While OSUL has become accustomed to the blurred line between acquisitions and cataloging, the incorporation of the circulation department into technical processing produced a radical departure from past workflows. Good communication between the departments helped to resolve some initial confusion and improve this workflow.

Another radical change to workflow occurred within the acquisitions unit. Acquisitions staff have traditionally handled the issuing of purchase orders, for both print and electronic formats, transmitting these to the book vendor and, if necessary, sending claims for unfilled orders. None of these steps occurs in the workflow for the Kindle e-books, resulting in a great savings of time and effort. The acquisitions unit is now excluded from the acquisition of these particular library resources and does not maintain any kind of accounting trail for them. Order documentation on the Amazon website via the gift card account will make the auditing of these purchases much different from a traditional audit.

The greatest challenge in cataloging Kindle e-books was not so much the application of cataloging rules, but locating the necessary bibliographic data. The need to search for this data in the work itself or on the Amazon website made cataloging less-efficient

and very time-consuming because the cataloger must search in several places before concluding that the data do not exist. The Kindle e-books' lack of print book conventions, including title pages and publication information, presented an additional obstacle to quality cataloging. In more traditional media, scarce bibliographic data would allow the swift creation of a relatively skeletal bibliographic record.

On the other hand, accelerating the cataloging process is possible using the guidelines for provider-neutral e-monograph records, allowing for the derivation of records from those for print versions. Once a cataloger selects a print record, the number of edits required is small and provider-specific information is avoided. Most of the works purchased by OSUL for its Kindles were recent popular works with readily identifiable publication data; the speed at which they could be cataloged helped offset the extensive time consumed by cataloging the works for which such data were difficult to ascertain. A time study could help determine how much time it takes to catalog a Kindle work as compared to other versions in print or on another electronic platform.

E-book readers are still a relatively new phenomenon and, as with many new technologies, come with a variety of proprietary platforms and standards. OSUL's experience with Kindles offers one approach to integrating these new devices into libraries. Despite obstacles, OSUL staff succeeded in creating a new workflow for these resources and ensuring quality cataloging.

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