The Cataloging of E-Book Readers: A Service Model-Oriented Approach

By Steve Kelley, Carolyn McCallum, and Mary Beth Lock

Abstract

The popularity of E-book readers has exploded over the past several years, and many libraries have begun purchasing and providing access to these devices for our patrons. A large body of academic literature addresses the popularity of e-book readers and the issues involved with purchasing them and licensing material for them, but there is a relatively slim body of literature regarding the cataloging of e-book readers. At present, there is no uniform approach to cataloging e-book readers and libraries are currently employing a number of different methods. This article will describe the approach to cataloging e-book readers adopted at the Z. Smith Reynolds Library of Wake Forest University, which is based on the local service model for e-readers that takes into account how patrons are expected to use the devices, as well as licensing concerns about the use of titles on e-readers. In order to make the devices discoverable for patrons with a minimum of confusion, certain unusual cataloging practices are employed (such as, e-readers are coded as “realia,” but are given a GMD of “electronic resource”). We argue that the RDA code should accommodate e-book readers by creating carrier types that accurately describe these devices in a way that patrons can understand.

Introduction

According to a January 23, 2012 report from the Pew Internet & American Life Project, the number of adults in the U.S. who own e-book readers nearly doubled from mid-December 2011 to early January 2012, jumping from 10% of the adult population to 19%, during the holiday gift-giving season (Rainie, 2012). The popularity of these devices is undeniable, and, unlike some earlier electronic readers, it seems that they are here to stay. As one would expect
with any new bibliographic resource, e-readers are commonly being added to the collections of libraries. However, despite the new popularity of e-readers as library resources, we have not yet developed a universal, or even common, method of cataloging these devices to facilitate patron access and discovery. This article will describe the cataloging method used at the Z. Smith Reynolds Library at Wake Forest University. This cataloging method is based on the service model for e-readers that was developed at WFU, which takes into account how patrons are expected to use the devices, as well as licensing concerns about the use of titles on e-readers.

**Literature Review**

The body of literature regarding the cataloging of electronic book readers is currently very slim. A substantial amount has been written about the cataloging of e-books, but nearly all of it has been about e-books that are remotely accessed, rather than contained on a reader device. The large majority of library literature about e-book readers has been concerned with the patron’s perspective on the usage and usability of e-readers, the popularity of the devices, and licensing issues related to e-book titles on readers.

However, several articles have touched on the practice of cataloging e-book readers. Rodzvilla (2009) briefly discusses three methods of cataloging e-book devices. The first is to catalog only the reader, and to add the titles of e-books on the device in a 500 field of the MARC record. The second method Rodzvilla describes is to separately catalog the device as well as all titles on the device, although he acknowledges that this can result in a great deal of work for cataloging staff. The third method, which he calls the most common, is to not catalog the device at all, but to describe it on the library web site. As this article is concerned with an approach toward the cataloging of e-book readers, we of course will not explore this third method,
however, there are several works in the library literature that discuss the first and second methods described by Rodzvilla.

Neujahr (2011) describes a practice at the University of Nebraska-Omaha that is similar to Rodzvilla’s first method, whereby Kindle devices are cataloged, but the individual titles are not cataloged separately. Instead, circulation staff members add the titles and authors of newly purchased e-books to the bibliographic record for each device in 700 fields. Behler and Lush (2011) detail a similar e-reader cataloging practice at Penn State University Libraries, where each Sony e-book device was cataloged separately and was given an individual name that served as the call number. The titles on each device were noted in the 505 field of the bibliographic record, with the authors noted in the 700 field. Both articles note that these approaches make the titles and authors searchable, as well as the devices themselves.

The practice at Winthrop University described by Mays (2010) corresponds to Rodzvilla’s second method of cataloging e-book readers. At Winthrop, e-readers were cataloged separately and given a name that served as the call number (such as “Kindle E-Book Reader 2”). The 245 title field in the MARC record for each device included a General Material Designation (GMD) of “realia.” The titles on the readers were then cataloged separately and each e-book was assigned the same call number as the device where it could be found. That way, a search in the catalog for the call number of one of the e-book readers would return the records for the device as well as all of the titles on the device. To deal with titles that were loaded on more than one device, the bib record for the title would have multiple item records attached, with each item containing a call number that corresponded to the appropriate device. Mays notes that this system is entirely dependent on reliable communication between e-book purchasers and cataloging staff. If purchasers fail to notify catalogers of new titles that have been bought, the
titles may not be linked to the appropriate e-book reader, or, in the worst case, the titles may not
be in the catalog at all.

Also corresponding to Rodzvilla’s second method of cataloging e-readers, is the approach
taken at Oregon State University (Sapon-White, 2012). Much like the practice at Winthrop,
OSU gives all e-book titles a free-text call number with a name that corresponds to the device on
which the title resides. The catalogers use PCC vendor neutral e-monograph records for the titles
on their readers, where possible. When vendor neutral records were not available, copy
catalogers would use records with “Kindle ed.” noted in the edition statement, editing the records
to meet vendor neutral record guidelines. About a quarter of the titles had no e-book record at all
and required original cataloging. This approach represented a great deal of work for cataloging
services staff. Sapon-White notes, like Mays, that there must be consistent and reliable
communication between purchasers and catalogers to guarantee that e-book records are reliably
cataloged.

What we are left with then are two general approaches to the cataloging of e-book readers
( unlike Rodzvilla, I don’t consider his third method of not cataloging e-readers to be an actual
cataloging method): cataloging readers and noting title-level information on the bibliographic
records for the readers, which provides title and author access in the catalog with minimal work;
and fully cataloging the readers and all related titles, which provides a full searching capacity in
the catalog, but requires a great deal of cataloging services work.

Setting

Wake Forest University is a private institution located in Winston-Salem, North Carolina,
with approximately 4,500 undergraduate students and approximately 2,500 graduate students.
Wake Forest follows a collegiate university model, combining the personal attention of a small
liberal arts college with the depth and scope of a research university. The university is served by three libraries, including a medical library, a business and law library, and the Z. Smith Reynolds Library, which provides service to undergraduate programs and graduate programs not served by the other libraries.

The operations discussed in this article are based in the Z. Smith Reynolds Library, which holds approximately 1.4 million print volumes, over 3,000 current print serials, over 20,000 DVDs, films and videos, and nearly 700,000 microfilm units. In addition, the ZSR Library provides access to more than 40,000 electronic serials as well as almost half a million electronic books. The library has a staff of 52 full time employees, with several part-time employees and a number of student workers. Administratively, the staff is organized into six teams: Administration, Reference and Instruction, Access Services, Technology, Special Collections, and Resource Services. The Resource Services Team includes cataloging, monographic and serials acquisitions, and collection development functions, and has a staff of 16 personnel (i.e. 6 professional librarians and 10 paraprofessional staff). Cataloging functions are performed by three professional catalogers, two full-time paraprofessional catalogers, one part-time cataloger, as well as occasional work by three paraprofessional staff with other main duty assignments.

At the time of this writing, the cataloging staff at Wake Forest University (WFU) has not yet begun using RDA elements in our bibliographic records, so the method we describe here will be based on AACR2 rules. We have decided to improve the authority control of our catalog by contracting with a vendor for authority control services, before we begin to work with RDA elements in our catalog records. The catalogers have been studying RDA and planning for implementation, but our first priority has been to get our house in order with regards to authorities, before we begin to use RDA elements in our records.
The stated mission of the Z. Smith Reynolds Library is “to help our students, faculty, and staff succeed.” This simple, but powerful, sentiment permeates all levels of our organization, which means that we take a very service-oriented approach to all of our work (that attitude was a major factor in the Z. Smith Reynolds Library winning the 2011 ACRL Award for Excellence in Academic Libraries). The Resource Services Team embraces the idea that technical service is public service, and aims toward making the library’s resources easily discoverable and useable by our patrons.

Development of E-Book Reader Service Model at WFU

E-Readers were first purchased for use at WFU in the summer of 2010. The library had a small amount of money to spend out of our technology tools budget line and decided to invest the money in purchasing e-readers. This seemed a good, low barrier way to become acquainted with this new and emerging technology. At the time of purchase, we did not have a clear idea of how we would utilize the technology or make it available in our library, and we also did not have a clue what cataloging challenges this might present. We purchased one Kindle, one Nook and one Sony e-reader, wanting to be device neutral and allow for some experimentation, both by us and by our users.

We began by loading freely available public domain e-book titles from Project Gutenberg onto the devices. We decided to manage collection development by loading titles from the “top 100” from Project Gutenberg’s website onto the e-readers. These first generation e-books were difficult to use and not well formatted for the e-readers, so, to give a more authentic experience of e-book readers to our users, we decided to purchase content to load onto the devices. We had not accounted for a book budget for the e-book readers but, within a few months of the original purchase, a group of interested librarians was given a fund with $500 to purchase newer content
that was still in copyright. After three titles were purchased (one each on the Kindle, Nook and Sony e-reader), it became apparent that we needed to clearly define how we would provide these readers and their content in order to market, support and grow the program.

We formed an ad hoc group that consisted of representatives from the Access Services, Technology, and Reference Services Teams, which was chaired by the Scholarly Communications Librarian, to explore and define the service model. We contacted several institutions to evaluate their models, and participated in a webinar on the emerging uses of e-readers. We found that libraries had adopted a variety of models, including utilizing the “six Kindles to one title” model offered through Amazon, which allows for sharing a title across six Kindles that are owned by individuals within one family. Amazon created this model to make Kindles more attractive to those who frequently share books, and it is meant for “non-commercial” use. While libraries are not inherently “commercial,” neither do they represent a model that could support the definition of a “family,” so we decided not to adopt that model, rather than risk potential licensing problems.

The second model that we examined was one in which libraries put titles on Kindles based on patron requests. In this “on demand” model, patrons can put a hold on a Kindle, and when their number comes up, they are allowed to choose the title they want added to the device. This model is popular, but libraries that use this approach have indicated that a significant amount of money and, perhaps more importantly, a large commitment of staff time was required to support it. This model, likewise, was not appealing due to limitations of funding and the inability to provide ongoing substantial staff support for the project.

Simultaneous to this evaluation of service models, we contacted Amazon (the manufacturer of the Kindle) and scoured the terms of service for all three e-readers to see if
library lending was even supported in the license agreement. It was with some dismay that we discovered an ambivalent attitude among the e-reader companies themselves, who did not expressly deny the right of libraries to lend, but neither would they negotiate a license agreement that would allow us the opportunity to meet our specific user needs. We likewise heard, during the webinar on the subject, of one library that had entered the e-reader market, making a big marketing push for the lending of a certain e-reader. Within a day of their high profile event, a rival e-reader company contacted this library, asking them to make the rival’s e-readers available for checkout as well. This strange circumstance, where e-reader producers are simultaneously ignoring and encouraging the practice of lending e-readers, illustrates how murky the role of e-readers in libraries is.

The task force focused its efforts on conducting a risk/benefit analysis. On the low end of the spectrum of risk (but also lowest service) was discontinuing the practice of lending e-book readers altogether. Option two was to provide only public domain content on the readers and allow patrons to check them out to “experience” them. Higher up the risk/benefit spectrum was to allow for the purchase of titles, but only load each title purchased onto one e-reader. Farther up the spectrum was loading new titles on our readers and sharing content across the same platform. The last model on the spectrum allowed for titles to be loaded across six e-readers, and to create a themed set of readers that share content like “mysteries” or “science fiction.” In the end, we chose the middle road: provide a “one book on one reader” service. We purchased e-reader titles of popular books that we already owned in print in our browsing collection. Our intent was to make the e-readers available to patrons who might want to experiment with the devices to see which device they preferred. In order to increase the likelihood of individuals
trying out all three types, we loaded each volume of two different popular trilogies across all three platforms.

Once we had determined the service model and identified content, it became apparent that we would need to make the e-reader devices discoverable in our library catalog (which we will describe in detail in the next section of this article). Since launching the program, we have purchased additional e-readers of all three types (Nook, Kindle and Sony) to limit the frustration of patrons who may have to wait long periods of time before getting to try out a reader. We have our circulation privileges set to two weeks with the possibility of one two-week renewal.

We unveiled our e-reader project to the campus in the summer of 2011. By the spring of 2012, we recognized a need to alter our model to meet user needs. With the decreasing cost of e-readers, and because we serve young patrons who are likely to recognize the appeal of such devices, we have found that our students and faculty are less interested in borrowing our e-readers with pre-loaded titles, and much more interested in getting titles they can temporarily load onto their own e-readers. WFU’s Task Force on E-readers will soon reconvene to identify the risks and benefits of offering device-specific titles that are downloadable onto patron owned e-readers. The cataloging decisions will not be far behind.

**E-Reader Cataloging Practice**

After the development of the new service model, the task force requested that the Cataloging Librarian for Nonprint Materials create individual bibliographic records for each e-reader. This change reflected a shift from cataloging individual e-titles to cataloging the technology. The task force decided that an e-reader’s brand name and model along with its accession letter would be recorded as the title as well as the call number in the cataloging record for a specific device. For example, *Nook Touch*-A E-book Reader, *Nook Color*-A E-book
Reader, etc. Each part of the title/call number has meaning. For example, the title/call number *Kindle 3-B E-book Reader* represents a 3rd generation *Kindle* device. The task force further decided that e-book titles on each individual device would be included in 740 fields on the bibliographic record for the device to foster keyword, title, and author searching and discovery capabilities, rather than loading individual bibliographic records for each e-title. That is, we have chosen to adopt the first method of cataloging e-book readers described by Rodzvilla, rather than the second method. We were concerned that the more time-consuming method of cataloging each individual e-book title would be difficult to sustain with our somewhat small cataloging staff, and, considering the display limitations of our current public catalog, that this approach would confuse our patrons, who are not yet accustomed to the use of e-book readers (our primary concern was that, if our catalog were to display a title with a note identifying it as a Kindle edition or a Nook edition, our patrons might assume that the e-book title was available for download to their personal devices, rather than available for loan on a pre-loaded device).

To examine how other academic libraries provide access to e-readers, the cataloger reviewed other universities’ online catalogs to find examples of best practices. Specifically, we wanted to see how the fixed field elements (i.e. leader, additional material characteristics in the 006, and general description in the 008) in a MARC bibliographic record were coded, and which specific variable fields were most commonly included. Several libraries’ online catalogs were searched using the keyword *e-reader*. As expected, each library had their own way of cataloging these devices. After viewing various examples, the cataloger created a hybrid e-reader cataloging record utilizing the MARC fields and coding that seemed most logical and that would provide multiple access points to patrons.
The MARC record Leader is comprised of the fixed field elements “Type of Record” (Type) and “Bibliographic Level” (BLvl). We chose to code the Leader as rm. Per OCLC’s Bibliographic Formats and Standards, the code r for type represents “realia,” or a “three-dimensional artifact or naturally occurring object,” a category which includes machines. The bibliographic level m represents a “monograph/item.” The 006 Additional Material Characteristics field is coded as a computer file (m) and the type of file is coded d for document.

During our investigation, we identified one library that coded the Leader with “om” where “o” represents a kit, which is defined as “mixtures of various components issued as a unit and intended primarily for instructional purposes. No one component is identifiable as the predominant component” (OCLC Bibliographic Formats and Standards). This makes sense if one views the e-book reader and its e-book content as dependent components of a set, but the logic does not quite seem applicable to devices like iPads, which have capacities well beyond serving as e-book readers. Another library took a different approach with coding the 006 field. They coded for a nonmusical sound recording (“i” in the 006 field), much in the way an audio book would be coded. This approach is incredibly puzzling, until one considers that most, if not all, e-book readers have audio book capabilities. However, unless the e-book readers are exclusively marketed at the library as audio book readers, this approach does not quite capture the basic nature of the devices described in the cataloging records. These differences in coding suggest that the view of the device and its characteristics are very dependent on the cataloger’s judgment and that no single standard has been developed.

At WFU, we have chosen to code a number of fixed field elements in the 008 General Description (Visual) field, including: Publication Status, Date 1, Place of Publication, Running Time, Form of Item, Language, and Cataloging Source. Remaining elements in the 008 are
either left blank or coded with the status *No attempt to code*. “Publication Status” is coded *s* for single known date/probable date, and the year in which a generation-specific e-reader device debuted on the market is what is recorded in the “Date 1” element. “Place of Publication” is coded according to where the company that makes the device is located (for example: Kindles are coded *wau* for Washington state). “Running Time” is coded as not applicable, *nnn*. The fixed field element “Form of Item” is coded *s* for electronic, and “Language” is coded *eng* for English, because the instructions and basic menu of the e-book readers use English as the default language. “Cataloging Source” is coded *d* for other, which signifies “that the source of the cataloging data is an organization other than a national bibliographic agency or a participant in a cooperative cataloging program” (*OCLC Bibliographic Formats and Standards*).

The 007 Physical Description Fixed Field was a somewhat problematic field. The 007 is used to record physical characteristics of items that are classified primarily as nonprint materials. We discovered that some catalogers code the 007 in e-reader records, while others do not. When we first began cataloging e-readers, we excluded the 007 from the original records we created. However as we continued to review cataloging records for best practices, we decided that the 007 should be included in newly-created bibliographic records for e-readers, as it is prescribed for electronic resource items in the OCLC Bibliographic Formats and Standards. The records have since been edited, and the 007 is now incorporated into the cataloging workflow.

The following coding values are recorded in the 007 subfields of bibliographic records for e-readers:

‡a  Electronic Resource:  *c*

‡b  Specific material designation (SMD):  *r* – defined as Remote

‡d  Color:  no attempt to code is made
Based on our review of other libraries’ catalog records and from our years of experience cataloging nonprint materials, we decided to record textual information about the e-readers and their individual contents in the following variable fields of the MARC record: 245, 260, 300, 505, 590, 655, 700, 710, and 740 (on which we will elaborate below).

As mentioned previously, an e-reader’s brand name, model information, and accession letter is recorded as the title in the bibliographic record for a specific device, and this information appears in the 245 field (Title Statement). Additionally, the general material designator (GMD) electronic resource follows the title in brackets and is recorded in subfield h. Technically speaking, the GMD electronic resource should only be used for electronic files or file carriers such as discs, not for devices. However, the only other GMD that would be a logical choice to use is realia, which is used by some libraries to describe e-book readers, but we found this term to be problematic. Realia is a specialized term, used by libraries and museums to describe three-dimensional artifacts or naturally-occurring objects, and we believed that this term was specialized jargon that would not be understood by the majority of our patrons. As our main goal was to encourage discovery and use of our e-readers by our patrons, we did not want to use
an obscure, overly technical term like *realia*, choosing instead to go with the technically incorrect GMD *electronic resource*, which we believed would be more intuitively grasped by our patrons.

Publisher information and date of availability are included in the 260 field of the MARC record. For Kindles, place of publication and publisher are noted as *Seattle, WA* and *Amazon*; for Nooks, *United States* and *Barnes & Noble*. The date of availability recorded in subfield c represents the year in which a generation-specific e-reader device debuted on the market. In the 300 field (Physical Description) we note *1 e-reader* in the subfield a, in order to indicate the number of physical pieces, and we note the height of the e-reader in centimeters in subfield c. Material accompanying the e-reader, such as an adapter and sync cord, are recorded in subfield e of the 300 field.

On the bibliographic record for each e-book reader, we record the titles and authors of the e-books on that specific reader in a 505 formatted contents note field. We record each title in a subfield t, with the corresponding author noted in a subfield r. This title and author information is only searchable by keyword. To facilitate title and author searching, we provide controlled access points using 700 fields to record author names and 740 fields to record e-book titles. Thus, if users search for a title that is on an e-book reader, they will retrieve a search result set that includes a record for the specific e-book reader on which the title resides. If we had followed Rodzvilla’s second method of e-book cataloging, our users would retrieve a search result set that includes a record for the book, but they would have to consult the holdings attached to the record to discover that the book resides on an e-book reader.
For the last two specialized fields, we code the 665 field, Genre/Form Index Term, with *Electronic books*, and we note which library fund was used to purchase the e-book titles in a 590 local note field.

We use a Google Docs spreadsheet to keep track of barcodes associated with the e-readers and their accompanying equipment (i.e. adapter, sync cord). Email account addresses and serial numbers of each individual device are documented as well. We copy the barcode number(s) and serial number into the item record(s) for each device cataloged. When new e-readers are purchased, the member of our staff who manages our collection of circulating technology devices (including tracking usage statistics) updates the spreadsheet and notifies the cataloger, who then creates original cataloging records for the new devices.

A second Google Docs spreadsheet is employed to track e-title purchases, their individual costs, and the assigned names of all library owned e-readers, so we can track which e-book titles are on which e-book reader. The Director of Access Services created this document, and when she updates it with newly purchased e-titles, she notifies the cataloger. The cataloger then updates the appropriate e-reader cataloging record by adding title and author information to the contents note (i.e. 505 field) and inserts added name and title entries (i.e. 700 and 740 fields respectively).

Various library departments play key roles in the purchasing, housing, data keeping, reporting, and cataloging of these devices and their contents. A well-planned and periodically reviewed workflow and timely communication from all parties involved is essential for accurate representation of e-book readers in the library’s catalog and greater efficiency in workflow, thereby ensuring continued access to the ever-growing electronic collection of the library.

**Conclusion**
As we can see, the rules and practices for cataloging e-book readers are somewhat in flux. The uncertainty of how to describe these new resources is reminiscent of the confusion that accompanied the emergence of e-journals in the 1990s. Debates raged (and may still flare up) between serials catalogers over the use of the single record approach (with both print and e-versions on the same record) or the multiple record approach (with print and e-versions on separate records) for cataloging journals. Similarly, there were substantially differing methods used to catalog websites and loose-leaf updating publications before the advent of the continuing resource format. We believe that e-readers are now in a similar position, not clearly fitting into a neat category that is easy for catalogers to use and for our patrons to understand.

Some institutions, such as Oregon State University, have looked to the provider-neutral e-monograph guidelines provided by the Program for Cooperative Cataloging for guidance in how to catalog e-book titles (Sapon-White, 2012), but these guidelines are not applicable to cataloging e-reader devices as physical objects. They can be treated as realia, but this is an overly technical designation for devices that are becoming increasingly commonplace.

The approach described in this article, using the *electronic resource* GMD, is an attempt to negotiate the problem of cataloging e-readers, but we realize that this is a stopgap solution. WFU is presently using *AACR2* cataloging rules, but we fully intend to move to *RDA* in the next year or two. We believe that many other libraries are in this situation as well. The *AACR2* code is no longer being revised, so there is absolutely no reason for anyone to petition for creating a new GMD for e-book readers. In the long term, we will need to look to the *RDA* code to accommodate our needs for cataloging e-readers, but even *RDA* is lacking on this front, at present. *RDA* replaces the general material designators with media types and carrier types, but there is no carrier type that is a good fit for e-book readers. An e-book reader can be given a
carrier type of “object” or be given an “other” category, but these are not very descriptive terms. Furthermore, there is no carrier type that truly describes separately cataloged e-book titles. The types for computer carriers include physical items, such as discs and tapes, and online resources, but do not include computer files that are loaded onto a device (RDA, 3.3.1.3). RDA should be revised to include carrier types that clearly describe both e-readers and e-titles.

The cataloging method described in this article is based on how we believe our users will use the e-book readers in our collection. The service model we have developed for our e-readers is based on the idea of promoting the use of the devices as more important than the content on the devices, with the idea of making our patrons more comfortable with using e-readers. However, we fully anticipate that as our patrons become more comfortable with e-readers, and as the licensing and use guidelines of e-titles change, that we will have to revisit our cataloging method. We may well move to the approach of fully cataloging e-book titles in the future. Furthermore, we believe that the development of RDA (particularly changes to the carrier types) will influence how we catalog our e-readers. Our present method is an attempt to deal with a quickly changing and somewhat confusing environment. In the absence of well-established, canonical cataloging rules, we have developed a system that makes sense for our library and our users. Whether other libraries use a cataloging method that is similar to ours or not, we advocate that they use a method that works for their patrons and their needs, during this time of change.

References


