

Picture Perfect: Using Photographic Previews to Enhance Realia Collections for Library Patrons and Staff

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ABSTRACT

Like many academic libraries, the Ferris Library for Information, Technology, and Education (FLITE) acquires a range of materials, including learning objects, to best suit our students' needs. Some of these objects, such as the educational manipulatives and anatomical models, are common to academic libraries but others, such as the tabletop games, are not. After our liaison to the School of Education discovered some accessibility issues with Innovative Interfaces' Media Management module, we decided to examine all three of our realia collections to determine what our goals in providing catalog records and visual representations would be. Once we concluded that we needed photographic previews to both enhance discovery and speed circulation service, choosing processing methods for each collection became much easier. This article will discuss how we created enhanced records for all three realia collections including custom metadata, links to additional materials, and photographic previews.

INTRODUCTION

Ferris State University's full-time enrollment for Fall 2015 was 14,715 students. Of these students, 10,216 are Big Rapids residents and the other 4,499 are either Kendall College of Art and Design students or at other off-campus sites across Michigan.¹ During the 2014-2015 school year, FLITE had 14,647 check-outs including 2,558 check-outs of items in reserves, which is where our realia collections are located.² However, reserves includes other items in addition to these collections, thus making analysis of circulation statistics problematic. Another problem with conducting such an analysis is that the educational manipulative collection already had photographic previews and the tabletop game collection is a pilot project, so there is no clear before and after comparison. We can, however, demonstrate that enhancing the catalog records for our anatomical model collection had an incredibly significant impact, jumping from a handful of check-outs from 2014-2015 to almost 450 in 2016.

LITERATURE REVIEW

Although there are very few libraries using photographic previews for their realia collections, the ones that do described similar limitations with bibliographic records and goals that only

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photographic previews could meet. Most realia collections that warranted this extra effort are either curriculum materials or anatomical models, which is not surprising considering how difficult they are to describe.

As Butler and Kvenild noted in their article on cataloging curriculum materials, “Patrons struggled to identify which game or kit they sought based on the...information in the online catalog,” because “Discovering curriculum materials in the catalog and getting a sense of the item are not easy when using traditional catalog descriptions...”³ As they continue, “The inventory and retrieval problems...were compounded by the fact that existing catalog records were not as descriptive as they should be.”⁴ This was also a problem for our collections because our names and descriptions were often not intuitive or precise. In addition, as Loesch and Deyrup discovered while cataloging their curriculum materials collection, “...there was great inconsistency among the OCLC records regarding the labeling of the format...,”⁵ which was another issue we needed to address. Although the General Material Designation (GMD) has since been rendered obsolete, FLITE continues to use it to highlight certain material. This choice is due to some limitations with our library management system as well as our discovery layer, namely the lack of good mapping or use of the 33X fields. Until this is rectified with a more modern system, we have it found it easier to retain certain GMDs like “sound recording”, “electronic resource”, and “realia”. Thus, we needed to standardize our terms for each collection. Another problem that our predecessors indicated photographic previews might resolve was missing objects or pieces of objects.⁶ This becomes especially important for our tabletop games collection because most of those pieces are very small and too numerous for a piece count upon return.

Fortunately, “Previews...can aid users in making better decisions about potential relevance, and extract gist more accurately and rapidly than traditional hit lists provided by search engines.”⁷ Ideally, a preview will display an appropriate level of information about the object it represents in order “...to support users in making a correct judgement about the relevance of that object to the user’s information need.”⁸ Greene goes further by listing the main roles for previews of which the first two are the most applicable for photographic previews: aiding retrieval and aiding users in quickly making relevance decisions.⁹ For these uses, photographic previews of realia are ideal because users can examine the object without needing to see its details and they expect them to be abstract, not exhaustive, unlike digital surrogates that an archive would use.¹⁰

As Greene also notes, the high-level goal of any preview is to “...communicate the level and scope of objects to users so that comprehension is maximized and disorientation is minimized.”¹¹ A common finding among all the previous projects was that even a single photograph provides more readily comprehensible information than several lines of description. As Moeller states regarding their journal project, “They [previews of each issue's cover] give the researcher or student an immediate idea of the nature of the journal.”¹² He goes further to give the example of an innocuous journal title for a propagandist serial whose political nature is transparent once you view its imagery. From a staff perspective, photographic previews can also easily illustrate the number of

pieces and an object's condition or orientation. This can be very useful in determining whether something is missing or damaged without having to do a time-consuming individual piece count upon check-in. But as Butler and Kvenild discuss, layout within each photograph is key for illustrating missing pieces.¹³

Unfortunately, aside from a few small projects mentioned in Butler and Kvenild's article, there are not many examples of photographic previews for realia collections currently being used by academic libraries. One reason might be software limitations. Innovative's Media Management module is still unique among ILS/LMS software in that most vendors either provide a separate digital repository for special collections digital surrogates or they incorporate images into the catalog using third party software like Syndetic Solutions™. Another reason for the lack of photographic previews within catalogs may simply be the rarity of realia in academic libraries. Every library certainly has a few unique pieces, like a skeleton for the pre-medical students, but often not enough to consider them an entire collection much less a complex enough collection to warrant the extra effort to create photographic previews of each item. At FLITE, we had already crossed that threshold of complexity. Therefore, this article will start by discussing our educational manipulative collection, which provided the basis for how we would catalog and process the tabletop games and anatomical models.

Educational Manipulative Collection

Our first foray into creating photographic previews was completed by the previous Cataloger with over 300 items cataloged in 2004 and another 30-40 added to the collection over the next decade. Unlike the other realia collections, the educational manipulatives were cataloged using Innovative's Course Reserves module, so no attempt was made to find or create OCLC records. Nevertheless, the minimal metadata is very consistent across the collection, which supports Greene's recommendation "...that it was important to define a set of consistent attributes at the high level of the collection if any effective browsing across the collections was to be provided."¹⁴ In our case, we rely on a combination of the GMD ([realia]), a custom call number prefix (TOYS Box #), and a limited amount of local subject headings as shown below with "Manipulatives" as the common subject for the entire collection.

690 = (d) Current local subject headings in use as of 12/3/15:

Art.	Infant/Toddler.
Block props.	Magnets.
Boards.	Manipulatives.
Cognitive.	Music.
Discovery Box.	Oversize books.
Discovery.	Posters.
Dramatics.	Puppets.
Finger Puppets.	Story apron.
Flannel Board.	Story props.
Gross Motor.	Woodworking.

Due to the nature of descriptive metadata, photographic previews of the educational manipulatives made logical sense because “The images...are not the content. They are the metadata, the description of the materials.”¹⁵ As Moeller describes, Innovative’s Media Management module links images and many other file types directly to bibliographic records without requiring users to click an additional link unless they want to view a larger image of a thumbnail.¹⁶ Similar to Butler and Kvenild’s project, all of our photos were 900 pixels wide by 600 pixels tall, which is slightly smaller than their default width of 1000 pixels.¹⁷ One advantage of using the Media Management module is its ability to automatically create thumbnails 185 pixels wide by 85 pixels tall. A bigger advantage is that the images are hosted on the same server that runs our catalog, which allows us to freely distribute the images in an intuitive manner (thumbnails instead of links) without having to worry about authentication to a shared folder from off-campus, unlike our PDF files.

Unfortunately, our liaison to the School of Education recently discovered some accessibility issues with Media Management that forced us to consider whether we should change the embedded photographic previews to external links. The most significant of these problems is simply the language of the proprietary viewer software. Because it is written in Java, if you click on a thumbnail for a larger image, many browsers, like Chrome, will not run it and those that will often require a security exception to do so. We have attempted to ameliorate some of these issues by providing an FAQ entry on which browsers are best for viewing these images and how to add a security exception for our website, but unless or until Innovative rewrites this software in a different language, these accessibility issues will persist because Java is being phased out of many browsers. Butler and Kvenild also noted its slow response time compared to their own server.¹⁸

Another issue they mentioned was that the thumbnails would not be visible in their consortial catalog, so they needed to add links in the 856 field for these users.¹⁹ This is less of an issue for us because we do not contribute any of our realia records to our consortia catalog, but Moeller’s concern that in general “...enhancements involving scanned images...will not be easily shared with other libraries,”²⁰ is entirely valid. Unlike OCLC records, there is no way to share attached or embedded images as part of the metadata and not the content. Contrariwise, Butler and Kvenild’s concerns regarding catalog migration are very pertinent because we are considering moving to a new LMS within the next few years.²¹ Although we acknowledge that “Utilizing 856 tags is an indirect method of accessing the images, as users must take the initiative to follow the links,” we will eventually have to move and link our photographic previews to ensure accessibility after migration.²²

Tabletop Game Collection

Unlike the educational manipulatives, the majority of the tabletop game collection was previously cataloged in OCLC, so finding good bibliographic records was easy. Once downloaded, we decided to add a unique GMD ([game]), custom call number prefix (BOARD GAME Box #), and local subject heading “Tabletop games”. However, our Emerging Technologies Librarian who coordinated this

pilot project felt that the single subject heading was not descriptive enough. So he gave us a spreadsheet with more specific subject headings such as “Deck Building”, “Historical”, and “Resource Management” that we added as genre/form subject headings in the 655_4 field. He also suggested that we add links to the rule books, which we did using the 856 field and the link text “connect to rule book (PDF)”.

Because tabletop games are commercial products, finding images online was also easy. At first, we had some concerns about copyright, but we are not reselling these products or using the image as a replacement for the item. So, we concurred with Butler and Kvenild that “...the images in our project fall under copyright fair use.”²³ Another plus to using commercial images is that we could use more than one to show various aspects of setup and play. The downside to this benefit is image sizes and content photographed varied widely, so we used our best judgement in creating labels and tried to keep them as consistent as possible. To ensure consistency across the collection, we decided that the first image should always be the top of the game’s box labeled “Box Cover” or “Box Cover – Front” if there was a “Box Cover – Back” image. (We only displayed the back of the box cover if there was significant information about the game printed on it.) Then we added up to five additional images showing parts of the game like “Card Examples”, “Game Pieces”, and “Game Set-up”. Overall, this number of images worked very well in both Encore’s Attached Media Viewer and the Classic Catalog/Web OPAC, but there is a slight duplication in images by Syndetic Solutions™ for a few games. This results in a larger version of the box top image displaying to the right of the title and above the smaller thumbnails of images we added using Media Management.

In regards to piece counts, we presumed that we would need photographic previews to aid in piece counting upon return of a tabletop game. However, our Emerging Technologies Librarian assured us that because we are an educational institution, we could contact the vendor for free replacement pieces at any time. He also emphasized that unlike the educational manipulatives or the anatomical models, this was a pilot collection, so extensive processing would not be a good investment of our labor. Fortunately, the anatomical model collection would require images for piece counts as well as several other cataloging customizations to increase discoverability and speed circulation.

Anatomical Model Collection

Similar to our educational manipulative collection, but not nearly as extensive, our anatomical model collection has been a part of FLITE since its inception. Unlike the manipulatives, which are used primarily by the early childhood education students, the anatomical models support a range of allied health programs including but not limited to dental hygiene, radiology, and nursing. The majority of our two dozen models were purchased in the 20th century and, like the manipulatives, the majority were cataloged using Innovative’s Course Reserves module. Unfortunately, none of these records were very descriptive, some being so poor as to be merely a title like “Jawbones” and a barcode. So, the first task was to match objects with OCLC records. Fortunately, this task



became easier once we discovered that it was easier to match the object to the vendor's catalog image and then search OCLC by vendor model name or number than it is to decipher written descriptions if you do not know human anatomy. Once good bibliographic records were downloaded, we decided to add one of three GMDs depending on the type of model ([model], [chart], or [flash card]), a custom call number prefix (MODEL #), and one or more of the local subject headings shown below.

690 = (d) Anatomy model. Anatomy models.	Anatomy chart. Anatomy charts.
Dental hygiene model. Dental hygiene models.	Dental model. Dental models.

Technically, all dental models could be used as anatomical models, but not vice versa. Therefore, the common subject headings for the collection are "Anatomy model" and "Anatomy models". To make things easier to shelve, retrieve, and inventory, we also designed numeric ranges for the call numbers, as shown below, so we would know what type of model we should expect when referring to a specific model number.

099 = (c) MODEL #00X following this hierarchy:

001-099	Anatomical Charts and Flash Cards
100-199	Articulated Skeletons
200-299	Disarticulated Skeletons and Bone Kits
300-399	Organs
400-499	Skulls (anatomical and dental hygiene)
500-599	Other Dental Models (dental studies, dental decks)

We also scanned and linked PDFs of the heavily worn model keys with the link text "connect to key PDF" before washing and rehousing all the models. Once they were clean, they were ready for their shoot with Ferris State University's Media Production team.

Due to winter break, Media Production was able to shoot the majority of the collection fairly quickly. They returned to us high-resolution TIFFs the same size as those for the manipulatives, 900 pixels by 600 pixels. In case of Java viewer failure, we requested that there be one top-level image that showcases exactly what the model contains with images of individual pieces or drawers as the succeeding images. For example, our disarticulated skeletons are housed in small plastic carts with three drawers in each cart. Therefore, the first image would be a shot of all the pieces of the disarticulated skeleton and the second image would be the contents of the top drawer, the third image the contents of the middle drawer, and the last image the contents of the bottom drawer. In this specific example, we re-used the images that we posted in the catalog

record by pasting them on top of the cart to show circulation staff what to expect in each drawer upon check-in. Overall, photographic previews for this collection appear to be working very well for both catalog users and circulation staff “...to inform users about size, extent, and availability of collections or objects.”²⁴ In fact, they have been working so well for this collection that usage has increased exponentially compared to previous years.

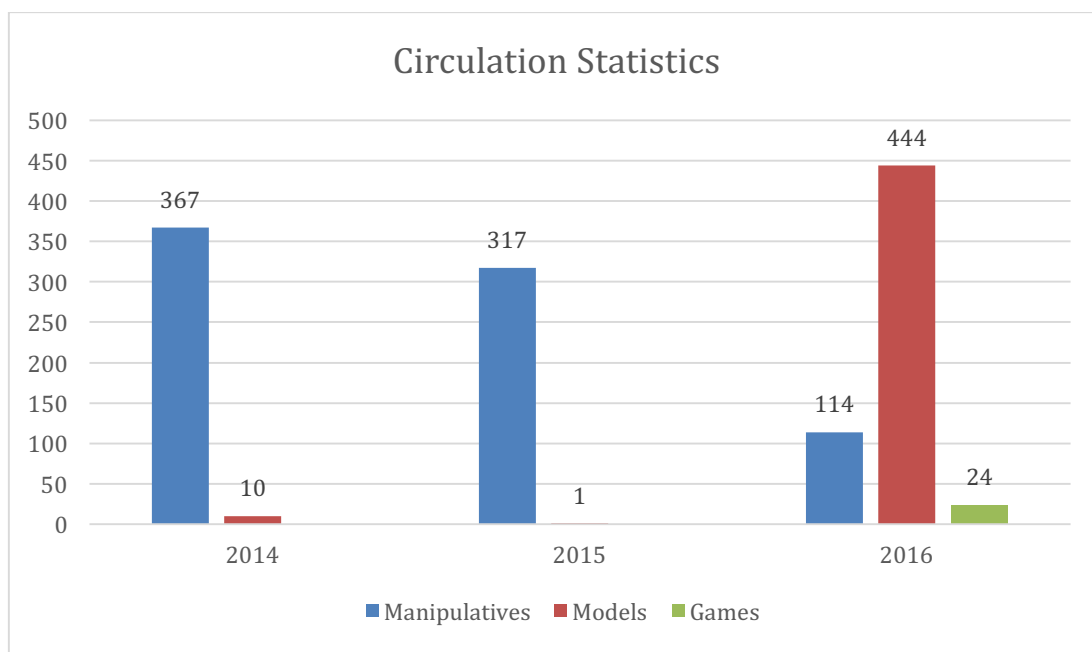


Figure 1. Circulation Statistics 2014-2016

CONCLUSIONS AND FUTURE DIRECTIONS

Although we implemented photographic previews for three realia collections, we could not define any standard workflow for the process beyond correcting or downloading the metadata first and adding the images second. Part of this is due to our working primarily with legacy collections because we often discovered issues, like the model keys, while working through another issue. The other part is due to the nuances involved in processing realia in general. Even with good, readily available catalog records like those for the tabletop games, time still had to be spent separating, organizing, and rehousing game pieces as well as hunting down useful images. Unfortunately, any type of realia processing, even if it is just textual description, is much more time-consuming than the majority of academic library cataloging. Adding in the extra steps to create, upload, and link a photographic preview can nearly double that labor investment. Notwithstanding, as Butler and Kvenild advocate “...not supplying images as metadata for items that most need them (i.e. kits, games, and models) is to make them nearly irretrievable. Providing bare-bones traditional metadata for these items is analogous to delegating them to the backlog shelves of yesteryear.”²⁵

Unfortunately, neither the library management system nor the third-party catalog enhancement market currently provides a good solution to this problem. Considering how great an impact photographic previews have had in the online retail market, this lack of technical support is surprising. Yes, Syndetic Solutions™ is a great product for cover images and tables of content for books. However, once you go beyond traditional resources, there is a great need to allow institutions to submit their own images as part of catalog record enhancement and not to serve as separate digital surrogates in a digital repository. This could be done either within the library management system, like the Media Management module, or as an option for catalog enhancement where libraries could add images to either a shared database or their own database using standard identifiers on a third-party platform like Syndetics™.

Further research on photographic previews is also sorely needed. As of this writing, we only have a handful of case studies and some guiding philosophy on the use of previews. Consultation with internet retailers and literature on online marketing might be more applicable than library science research to evaluate their impact, but research into their direct impact vs. textual descriptions on catalog use would be ideal.

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