Collect or Curate? Open Education Resources and the Future of the School Library Catalog

by MARCIA A. MARDIS

HE WAY TEACHERS plan lessons has changed. In the past, teachers were, for the most part, left to their own devices (including how they collaborated with their school librarians!) to identify and integrate high quality learning resources. Recent federal and state educational initiatives, however, have transformed this learning resource selection from one based on "pull" (e.g., resources gained from colleagues, search engines, and personally preferred websites) to one based on "push" (e.g., resources presented to teachers in the context of a standards and assessments linked student data systems or a specialized digital library).

FUNDAMENTAL CHANGE

This fundamental change in the base of teachers' instructional plans stems from two main forces: 1) common college and career readiness standards based on the Next Generation Science Standards and the Common Core State Standards and 2) standardized testing associated with standards implementation and teacher merit pay. These forces, reflected in the twin imperatives of No Child Left Behind (NCLB) and Race to the Top (RttT), have left many school administrators to make tough decisions about how to shift financial resources to ensure that their teachers can implement high quality instruction as defined by federal guidelines.

Unfortunately, all too often, school administrators have identified school librarians as surplus to their educational goals (Ellerson 2010, 2012). Instead, they have relied upon commercial systems populated with fee-based resources to provide teachers' essential materials base (Maul, et al. 2010, 2011). Some of these systems are being operationalized as digital textbooks that represent collections resources tailored to a specific learning goal.

Many digital textbooks are based on Open Education Resources (OERs), which are "teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others" (Hewlett 2013). According to the U. S. Department of Education, recent estimates reflected an over 10% decline in school librarians over the last five years; school librarians are being eliminated at a time when their expertise in identifying, organizing, maintaining, and promoting (i.e., curating) high quality Open Education Resources (OERs) could provide the content and support upon which teacher and student achievement could be based (2014). Perhaps as a result, compliance with federal encouragements to embrace OERs has been piecemeal and slow (Finnan 2014).

COLLECTION DEVELOPMENT ENVELOPES CURATION

Most school librarians have either taken a course in collection development or have studied it through professional development. Collection development can be defined as a process in which the collection builder (school librarian) creates policies that guide section, ensures that materials are always current and usable, monitors use of the collection and sets goals relating to use, and makes strategic decisions about how the collection should evolve over time. As Joyce Valenza states, among school librarians' collection development tasks are "scouting, identifying relevance, evaluating, classifying, organizing, and presenting aggregated content for a targeted audience" (2012). These activities also comprise curation.

When school librarians engage in curation, they are acting as entrepreneurial and innovative problem solvers (Goldstein and Rodriguez 2012). When school librarians curate a collection of resources around a specific theme or promote resources for a specific purpose, they are translating information to possible solutions for problems in just about any discipline. By actively maintaining and diversifying the collection, school librarians are constantly freshening, reinventing, and injecting expertly selected information into students' and teachers' insurmountable quests for knowledge.

The growing array of resource types demands expertise not only in identifying high quality or trustworthy resources, but also recommending the right resource in both content and format and organizing the resources for discovery. As technology leaders, school librarians often drive schools toward great integration of digital learning and support teachers' professional learning (Everhart, et al. 2011). In school collections, the digital content has probably become just as important as the print materials; the increasing reliance on OERs will only increase the need for the development of a strategy for onsite curation of existing and locally created material (American Association of School Librarians 2009).

Because teachers and students rely on digital resources as well as the devices that convey them, use of uncurated digital learning resources often results in "satisficing" or "good enough" behavior, using resources of uncertain provenance, or inadequately referencing content (Project Tomorrow 2011). Calls in the educational community cite the "great pile of stuff" that is comprised of accessible learning resources to be transformed into "piles of great stuff" (Zia 2009). These "piles of great stuff" need to be current, content rich, authoritative, and effective in communicating learning concepts.

CURATE WITH THE CATALOG

Pinterest? ScoopIt? Tumblr? The library catalog? These are all tools that enable curation. While Del.icio.us or Diigo might be great for tracking resources loved for personal uses, can they be applied to professional workflow? Should time be spent teaching students to use the catalog (but only for books) and reminding them that social curation efforts may not always be accessible, secure, or allow for detailed description effective? The school library catalog is the one tool that most school librarians can use seamlessly, access via the Web for anywhere in or out of the school, and for which they can have a great degree of content control. However, because the time and skill to catalog new resources is not always available, what is needed is a quick, intuitive, accurate way to catalog the websites, images, interactives, videos, and other media found on the Internet for the school community. To meet these needs, my colleagues and I at Florida State University (FSU) developed Web2MARC (http://dl2sl.org/web2marc).

WEB2MARC

Whether a school librarian starts with one of the many records already available or creates a new one with a known URL, Web2MARC enables quick assignment of media type, keywords, call numbers, controlled subject headings, and, excitingly, Common Core State Standards (CCSS) and Next

Using Web2MARC

Web2MARC (http://dl2lsl.org/web2marc) was developed as a way to allow school librarians to quickly and easily generate machine-readable catalog (MARC) records for their library catalogs. Here's a graphical overview of the main functions of the tool.



This example will use the link to a video in the National Geographic online video collection called Teachers' Domain. The video is named *Stuck in the Mud.* As the illustration below shows, the tool's interface is straightforward and only requires the user to paste the Uniform Resource Locator (URL) for the video into the record search box to generate a record.

All Records CATEGORIES	p://channel.nationalgeographic.com/wild/caught-in-the-act/videos/stuck-in-the-mud/?source=searchvideo				Create Record
	Select All	SEARCH RESULTS		Select A1	
000 - Computer science, information & general works					
100 - Philosophy and psychology					
100 - Religion					
100 - Social sciences					
100 - Language					
100 - Science					
600 - Technology					
700 - Arts and recreation					
100 - Literature					
J00 - History, geography, and biography					

Once a user clicks the Create Record button, Web2MARC "scrapes" content from the URL's webpage and populates a MARC record. The record is then displayed to the user for editing. Users can edit the description of the resource to fit local needs, add CCSS and NGSS, keywords, and use the Assist tool to add a Dewey Decimal Call Number. Library of Congress (LC) legal subjects headings can also be assigned through a "suggest" function that completes terms that the user types with LC subject headings. The picture below depicts the record edit screen.



Once the record is edited, the user can then view and export the MARC record, as the image below shows.



Check out an overview of how Web2MARC works at Teacher Tube (http://teachertube.com/embedFLV.php?pg=video_ 274171). Generation Science Standards (NGSS). The technology behind Web2MARC "scrapes" pertinent information from the webpage that contains the object and maps it to MARC fields seamlessly. Our CCSS and NGSS tools are an easy way to search and match a resource to a standard right inside the MARC (i.e., machine readable catalog record, the standard format of most library catalog systems) record. And because the cataloger will have seen the description of a resource and examined it closely, true alignment, not just keyword "aboutness" matching happens in Web2MARC.

Although Web2MARC can be used to create MARC records for resources in any curriculum area, given our national focus on science, technology, engineering, and mathematics (STEM) education, Web2MARC is pre-populated with records that describe high quality multimedia for STEM learning from producers like PBS LearningMedia (http://www.pbslearningmedia.org/), the National Science Digital Library (NSDL) (http://nsdl.org), and the National Library of Virtual Manipulatives (http://nlvm.usu.edu/).

A MARC record created in Web2MARC can be output individually, or for site users who create a free account. It can be saved and downloaded in a batch to be imported in any online catalog that uses MARC records (emphasis on any because Web2MARC users have successfully imported Web2MARC records in every open source and commercial catalog system currently used in school libraries).

The ability to build upon these wonderful resources with the school librarian's expertise in teaching, instructional partnering, and program leadership can help to establish how the school librarian can ensure that STEM learning is infused with the digital literacy components necessary for students to be successful in school and beyond. Best of all, it's already optimized for the iPad and iPhone. School librarians can curate from home, on the couch!

Now that we've got the tool in a solid production state, we are planning for ways to continue moving forward— Resource Description and Access (RDA) compatibility, more controlled vocabularies, and a Library of Congress classification version are just some of the items on our "To Do" list. Of course, training modules and workshops are a key part of our development and outreach.

By keeping resources in two or more places, students don't always understand how resources comprise a collection or how print and digital reinforce to transmit messages in various formats. In short, the school library catalog can be a vehicle for promoting interdisciplinary connections and multimodal fluency. And, in a time when a key aspect of curation is the standards link, a tool that enables quick, easy, and accurate standards assignments is well suited to learning resource curation.

School librarianship may be a bellwether for issues that will soon face digital learning as a whole (Mardis 2009). By understanding, embracing, promoting, and preparing students to undertake the important and entrepreneurial role of curator of OERs as well as other instructional materials in schools, librarians can stay at the center of contributing to their schools' success.

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