

Column: Material – Mind – Method: On the Teaching of Reference
Teaching the Catalog as a Reference Tool

Teaching an introductory reference course is challenging. We cover a wide range of content: explaining sources beyond students' everyday use of Google and Wikipedia; introducing the role of communication, including the reference interview, in handling reference queries; and practicing search strategies. Additionally, our approach to teaching should demonstrate good practices such as incorporating active learning techniques to create a shared learning space.

The traditional approach to covering sources within a graduate reference course is to introduce them by reference type: dictionaries, encyclopedias, directories, almanacs and other handbooks, biographical sources, geographical sources, indexes and databases, bibliographic sources, and government documents. Students engage in sources through reading a standard text, "handling" the sources on their own, and using these sources to complete specific assignments.

Many of the assignments that my students complete allow each student to explore specific reference sources on his or her own and also with other students. Classmates prepare simulated reference questions for each other that are tailored to be answered by specific resources, thus directing each other to examine the *Handbook of Texas*, automobile blue books, and a multitude of Merck manuals. For years, my students would organize into teams and then introduce the rest of the class to one database in depth, designing a handout to accompany this presentation. Their coverage of the database was uniformly structured with students first introducing two questions that their audience should be able to answer after listening to their presentation. Presenters then focused on specifics of the database:

- Scope and coverage
- Purpose of the database
- Subject area(s) covered
- Number of publications covered
- Type(s) of publications covered
- Type(s) of publications not covered

- Depth of indexing
- Types of searches, such as basic and advanced searches, and indicating the default search type
- Searching tips, including Boolean operators
- Strengths and weaknesses
- Uses
- Other databases or electronic resources covering this subject area
- Special features

More recently, however, students have prepared their presentations to cover key resources—including one database—on a specific subject area such as tiny houses, urban gardens, or swing dancing. This subject-based approach offers variety to the database-by-database presentation and permits students to explore topics that interest them.

In both of these assignments—the simulated reference queries and the database/resources panel presentation—students demonstrate usage of their university library’s website. This demonstration often involves linking to the website’s home page and then proceeding, step by step, to the database. Throughout the semester we also make references in class to other features of the library’s website, such as noting the “Ask a Librarian” services, locating citation management software, and pointing to the location of selected reference sources. Sometimes we also challenge the organization of resources in the catalog such as questioning when online encyclopedias are listed with databases.

Still, I feel that I have not yet effectively incorporated use of the library’s catalog as a true reference tool into the course assignments and discussion. Like other reference sources, the catalog is created as a series of discrete files organized by anticipated audience needs, including resources for students and faculty.

Therefore, even a glance at the advanced search option in our library’s catalog illustrates that the catalog is an important source for teaching phrase searching, truncation, Boolean searching, proximity searching, and field or command searching. The standard reference text books also advocate

for using the catalog in reference education. For example, Cassell and Hiremath recommend the top three reference sources that beginning reference librarians can use to develop competent search skills: (1) the library's catalog; (2) databases; and (3) the Internet (Cassell & Hiremath, 2011). Other authors illustrate how nuanced use of the catalog adds technique to reference skills, such as how understanding Library of Congress subject subdivisions (e.g., "moral and ethical aspects" or "social life and customs") can improve keyword searches (Kornegay, Buchanan, & Morgan, 2005).

In considering the potential of teaching the use of the catalog as a tool for reference, I have invited Greg Hardin, Reference Librarian at Texas Woman's University (TWU), to contribute to this discussion, below.

The textbook used for my Reference course when I was in library school was William A. Katz's *Introduction to Reference Work*. Katz argues that when the library catalog is properly used, it enables users to find books, government documents, media, and other materials by any given author, title, or subject. According to Katz (1997), the catalog "is a primary resource for reference librarians," who must "understand not only the general aspects of the catalog but also its many peculiarities" (p. 13).

In many ways, the catalog has changed drastically since that time. We have seen advances in technology that allow library users to easily and seamlessly search across the print, electronic, and database holdings of their library. In other ways, not much has changed at all, even since the times of the old card catalog. The catalog still serves its original purposes of establishing authority and control, and of providing library users access points through the title, author, and subject of a work. Given this continuity of purpose and access points, it is still essential that reference librarians understand the catalog, peculiarities and all.

The library catalog was originally a tool created by experts for experts, but the catalog has moved from being very librarian-centric to being more user-centered. Over the past fifteen years,

traditional online catalogs have been integrated first with federated search systems, then with next-generation catalogs (NGC), and finally with web scale discovery (WSD) systems (Nagy, 2011).

The catalog's most recent incarnation, web scale discovery, can be described as "a large vendor-supplied index of all kinds of materials coupled with a simple interface, giving patrons the ability to search across a library's entire collection quickly and easily" (Hoy, 2011, p. 324). The central index is the collection of preharvested and processed metadata that comprises the searchable content while the discovery layer comprises the user interface and search system for discovering, displaying, and interacting with the content (Hoepfner, 2012).

The single search box of the web scale discovery system does what it is designed to do: simplify discovery. A library user can put a word or concept into the box and will usually come up with something relevant, using little effort. Often, they can even locate and read an article or eBook directly through the system, without leaving their seat.

Although catalogs are advertised as easier to use than ever before, they are actually more complex, have more features to navigate, and usually yield many more results. It is therefore not surprising that, regardless of whether they are using EBSCO Discovery Service, Summon, Google Scholar, or conventional library resources, "students exhibited a marked inability to effectively evaluate sources and a heavy reliance on default search settings" (Asher, Duke & Wilson, 2013). When looking at how a web scale discovery system (specifically Summon) impacted reference question complexity, Meredith (2013) additionally found that Summon had little impact on the distribution of complex questions received by reference librarians through virtual reference service.

Because of these challenges in using WSD systems, users will continue to need assistance from knowledgeable reference librarians. In order to appropriately use the catalog as a tool for reference, librarians need to know as much as they can about their catalog. Does it support basic and advanced searches? Does it allow for keyword, author, title, subject, and call number searches? Will it

accommodate browsing, as in subject heading browsing? What types of limiters, expanders, and facets are available to help the user further refine their search?

One key piece of advice for students learning to use the catalog as a reference tool would be to learn both what Library of Congress subject subdivisions are and how to use them efficiently.

Subdivisions help the reference librarian perform keyword searches that can yield helpful results.

Current students in a reference course may be able to see the value of subdivisions through simply knowing that they exist and through having some practice in leveraging subdivisions' use in searches.

Although students can access 66 pages of free-floating subdivisions as part of the Library of Congress' Subject Cataloging Manual (at <http://www.loc.gov/aba/publications/FreeSHM/H1095.pdf>), it may be

more productive to begin with the list of 25 high-performance subdivisions identified by Becky

Kornegay, Heidi Buchanan, and Hiddy Morgan in their article "Amazing, Magic Searches!" (2005). For a

more in-depth look at useful subdivisions, easily arranged by topical chapters, their later book *Magic*

Search: Getting the Best Results (Kornegay, Buchanan, & Morgan, 2009) is very helpful.

Additionally, current students in a reference course may find it helpful to examine the URL of the catalog or system that they are using or evaluating. The URL usually provides a clue as to what the vendor of the system may be. With the vendor information, a student can go to the vendor website to find further technical information, search tip sheets, and sometimes instructional videos. With in-depth help information from the vendor, a librarian can leverage the way that the catalog works in order to produce optimal search results.

Students wanting more comprehensive information on library automation should visit Marshall Breeding's Library Technology Guides [librarytechnology.org]. These guides contain a wealth of content information on Integrated Library Systems, ILS trends, Library Automation Companies, and Discovery Products, as well as a unique history of library automation presented through a graphical depiction of mergers and acquisitions.

While cataloging standards such as MARC may be slow to change, catalogs will still continue to evolve, change, morph, adapt, and be integrated in increasingly complex systems. One need look no further than Google Books [books.google.com] (with over 30 million volumes), the Hathi Trust [hathitrust.org] (over 11 million volumes), and the Digital Public Library of America [dp.la] (over 5.4 million records) in order to see that the catalog will continue to change. Yet with Google Books, Hathi Trust, and the DPLA all using LC subject headings, current students in library school will still require the expert searching skills needed to do what librarians traditionally think of when we say, “search the catalog.”

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