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# Building a RefWorks Database of Faculty Publications as a Liaison and Collection Development Tool

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#### Abstract

Using RefWorks, a web-based citation manager, we constructed databases containing the publications of the faculty members for four departments on the St. Paul campus of the University of Minnesota. The goals were to learn more about the research interests in the departments and to have a tool to help inform us when trying to make decisions about book purchases and journal cancellations. A few unexpected challenges were encountered and a number of unexpected benefits emerged.

#### Introduction

The academic public services librarian often performs both reference and collection development duties. At the University of Minnesota-Twin Cities, each librarian is assigned several departments for which she is responsible for collecting materials in all formats to support research and instructional needs. In addition, the librarian supports the department by developing relationships, at the broad and individual level, with faculty and students, to better serve their information needs and promote information literacy (Reference & User Services Association 2001; Mozenter, Sanders, & Welch 2000).

This broad charge requires the librarian to have a strong understanding of the research interests and products of each department she liaisons with. This can be difficult, and the challenges are exacerbated when the librarian has liaison responsibilities that are outside her formal training. Additionally, even a librarian with a strong subject background faces hurdles when newly hired, or when taking on additional liaison responsibilities. As long-experienced librarians retire, new librarians must step into their role, attempting to quickly develop the knowledge and relationships necessary to support their departments. At major research universities departments can be quite large, so that even recognizing faculty by face or name presents an intimidating task, much less developing familiarity with their body of work.

Traditional methods of learning the details about the research interests in a department include obtaining copies of the faculty members' CVs, periodically searching or setting up automatic e-mail alerts in indexes in the field, attending seminars, and interviewing groups or individuals. Documenting this information can be difficult, and so can trying to commit it to memory.

The cross-disciplinary nature of academic research creates additional challenges, as research initiatives intersect traditional definitions and boundaries (Klein 1996). The explosion of academic journals, including the new push of open access models, also provides an ever-increasing body of literature that a good librarian needs to be familiar with.

To aid us in developing the knowledge necessary to liaison with our assigned departments, we have drawn on the capabilities of bibliographic management software. By building databases that allow us to quickly review the body of published work associated with individual faculty, as well as see broad themes and relationships within the research produced, we have developed tools that aid us in our role as librarians supporting the research and teaching missions of our institution. We found, also, that the process of developing these databases had additional, unanticipated, benefits.

## Methods

We selected four departments to include in our project:

- Family Social Science
- Food Science and Nutrition
- Rhetoric
- Social Work

The number of faculty members in a department ranged from 17 to 40.

The first step in developing the faculty publication system was the creation of the RefWorks databases. <u>RefWorks</u> was the obvious choice, since the University of Minnesota has a site license. The program allows multiple databases for each user, as well as single level folders. It also allows one to create a read-only password, facilitating the sharing of information without sacrificing authority control or data integrity, and as a web-based product, access is ubiquitous. Our experience with their customer service was also very positive.

While RefWorks was used for this project other citation managers such as EndNote, Pro-Cite and <u>Reference Manager</u> could be substituted. These other brands are familiar to many librarians,

and while they are not web-based, additional software is available that allows for the easy creation of web pages from the database.

We created a separate database for each department, with an intuitive user name to help identify the content and distinguish it from other databases in the creator's control. Within each database a folder was created for each individual faculty member. Departmental web sites were utilized to verify completeness, spelling of the faculty names, optimally including middle name or initial. These pages were also useful in that they often indicated areas of research for each faculty member. This was especially important when faculty had a common name, diverse areas of research activity, or had recently joined the University. Not surprisingly, many faculty fit several of these descriptions.

Because it is often faculty member's first major publication, and indicates a direction for future work, we began populating the database with dissertations, using Proquest Digital Dissertations. This step could at times be both frustrating and illustrative of issues we would face in other indexes. When searching Proquest Digital Dissertations by author name, we discovered it is important to use the "Advanced" search rather than "Basic." Although the "Basic" interface allows for searching on the author name field, it is a word index, joining the terms with the Boolean "AND," and as such, can have a high 'false hit' rate. That is, it does not distinguish between "James Bryant," "Bryant James," and "James Bryant Miller". The "Advanced" interface does search on the name as entered, allowing more specificity. Nevertheless, names can be surprisingly common, so one may need to make identification on additional factors, such as likely topic, degree-granting school, or date of graduation.

We searched our institution's library catalog, to discover books and 'analytic' records for book chapters and special journal issues. We also searched databases that cover a broad range of topics, such as OCLC WorldCat, Current Contents and Expanded Academic Index.

We then chose the main databases for each department, selecting on the basis of size, dates of coverage and topicality. Additional databases were searched selectively when an author was not well indexed by the initially selected databases. This often reflected a specialized or cross-disciplinary area of research. For example, the work of a Social Work faculty member who works extensively with clinical depression may be better indexed in MEDLINE and PsycINFO than Social Work Abstracts and Sociological Abstracts.

Each author was also searched in the ISI Web of Science family of databases: *Science Citation Index Expanded, Social Sciences Citation Index,* and *Arts & Humanities Citation Index.* Because the advantages of simultaneously searching all the databases (sensitivity) vs. only one (specificity) depended on the uniqueness of the researcher's name and the interdisciplinary nature of the work, we varied the method as necessary.

### **Positive Outcomes**

Beyond the main goal of building a useful resource for individual liaison and collection development activities, creating a RefWorks database which includes the publications of the

faculty members in the departments for which one serves as a liaison can have a number of positive outcomes.

In an age where librarians do very few mediated searches for users, the act of searching various indexes for a faculty member's work provides a much deeper understanding of the literature of their field and where it is indexed. Food Science and Technology Abstracts yielded fewer articles than anticipated for the Food Science and Nutrition faculty, and SciFinder had many more. ComAbstracts also provided a smaller number of citations to articles from the Rhetoric faculty than expected.

Compiling a list of someone else's publications tells a rich story about their academic life, and provides a view of their professional career that might be hard for a librarian to discover through the brief and infrequent interactions that can be typical. It was especially interesting to see the Ph.D. dissertation topics of some more senior faculty members, and to wonder what forces had driven the changes in their research interests over the years. Knowing a bit about their earlier areas of emphasis is good to know from a collection standpoint, and hopefully the knowledge of their research interests, current and former, will help build stronger relationships between the librarian and the faculty member. This could come through conversation, by alerting individuals to new materials in their specific area, or by using pertinent examples when addressing groups.

When librarians possess technical skills that can be shared with faculty, staff and students, such as knowledge of RefWorks, it reflects well on the library. If librarians are seen as potential partners in web-based projects, especially those that involve literature and/or organizational skills, that is indeed a positive outcome for the library.

Another added benefit of the project was enhancing each librarian's skills in both the searching of indexes and the use of RefWorks. Up to 15 indexes were searched per department, from up to 10 different vendors. Both authors serve as RefWorks trainers, and the experience of creating or importing records from multiple sources and manipulating them within RefWorks was excellent practice.

#### Challenges

The project had three main challenges -- the time needed to build the initial databases, the idiosyncrasies of individual indexes, and the concern about the literature that is missed by only searching commercial indexes to which access is available.

The time invested in searching multiple indexes for the faculty members in each of four departments was not insignificant, and more than the authors anticipated. Annual updates should be much less work, by using saved searches and skipping indexes that were not productive in the initial run.

In some cases, because of the way the index is structured, even excellent search strategies will not yield all of the articles by a given author. For example, MEDLINE limits the author field to the first 5 authors, while Science Citation Index Expanded has no limit. In fact, we discovered one article with 373 authors (Abbott et al. 2004). This proved to also be problematic for

RefWorks, which balked at the 179th name. Although RefWorks allows many fields to include up to one gigabyte of information, others are limited to 255 characters. Some indexes only include an author's last name and initials, making definitive identification difficult.

Though the University of Minnesota has access to over 200 bibliographic indexes, it was never assumed that the coverage for any individual faculty member would be comprehensive. Although they are covered in a few indexes, the following literature types were probably not located by many of the searches:

- Book chapters
- Government documents
- Electronic-only journals
- Conference papers
- Other grey literature

Since the goal was not to build a complete list of publications for each person, but to get a more concrete idea of their research interests, these omissions seem acceptable to us. It was acknowledged that focusing on journal articles and books meant that the very latest work might not be included, since it may be one to two years after the work is first introduced in a conference paper or presentation until it appears in the journal or book literature.

### Conclusions

By building RefWorks databases of the publications of the faculty members in several departments, we were able to fulfill our goals of becoming familiar with their research interests as well as creating a personal tool for use in our collection development work. Although it took more time than expected and we know that the coverage is not comprehensive, we feel it was worth the effort, and the number of unexpected positive outcomes was an added bonus.

### References

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