

CREATING A LEANER, MEANER DATABASE COLLECTION TO LEVERAGE INSTRUCTION

MARY ANNE ERWIN AND EMILY SCHARF

LITERATURE REVIEW

Most libraries engage in some type of weeding or de-accessioning of print collections and the recent literature has made the case for evaluation of electronic collections as well (Horava, 2010). As information migrates online, it is important to critically examine all library resources to assess your collection (Luther, 2001; Sennyey, 2009). The main assessment technique for electronic resources is vendor-provided database usage statistics (Peters, 2002; Price, 2009). Electronic collection development, like weeding, relies on usage statistics that show how often users login to databases, the number of searches they do, and other data depending on the vendor. These statistics vary widely in their reliability (Luther, 2001). Steele (2008) mentions that there ought to be other criteria for electronic collection evaluation, but does not define any.

In our attempt to evaluate databases at Webster University Library, we looked at how our electronic resources were supporting the curriculum, instead of relying solely on usage statistics. As Bhatt (2006) states, “Quantitative data out of context is not useful for answering [electronic collection development] questions” (p. 24). *Library Journal* does eReviews for subject databases in which librarians explore the interface, holdings, indexes, coverage dates, searchability, and audience (Golderman & Connolly, 2009). Although we did not use these exact measurements, the *Library Journal* eReviews

listed qualitative criteria that were closer to what we wanted to explore. In the following paper, we will lay out criteria and procedure used to evaluate over 150 databases.

INTRODUCTION

Webster University liaison librarians participate in one comprehensive review project annually on a four-year cycle:

- 2010: Database review
- 2011: Weed main collection
- 2012: Journal review
- 2013: Review standing orders and weed reference collection

In addition, ongoing review of all collections is necessary as new products are added and discontinued annually in each collection.

For the database review, we examined core curriculum changes based on accreditation to ensure we had the databases needed to support student and faculty research. We collaborated with faculty to determine what was no longer needed. We also checked for overlap in content within our electronic resources and evaluated how databases were used in instruction. Although we conducted a critical evaluation, we did not have a mandate to cancel subscriptions. To provide additional context for the review process, we will provide examples from Webster’s Walker School of Business.

During the database review, library administration distributed a user satisfaction survey to all Webster user groups. The survey asked users to rate their satisfaction with access

Erwin (Instruction and Liaison Librarian,
Walker School of Business & Technology) and
Scharf (Instruction and Liaison Librarian,
School of Education)
Webster University [St. Louis, MO]

to online library materials and the quality of these resources. Overall, the survey results indicated that the majority of users were satisfied with our databases. This was helpful, but not enough analysis for our needs.

PROCESS AND PROCEDURE

The databases reviewed were subscription databases that were not freely available on the web; for example, we reviewed *Medline with Full Text* but not *PubMed*. The most important part of this, as with any project, was communication. The following tasks were undertaken during the database review. Also included are details for review of new databases, an annual process conducted when funding is available. In 2010, the current and new database reviews were carried out in conjunction with each other.

DATABASE REVIEW TASKS

The authors served as the project managers and completed these tasks, unless otherwise noted.

- Create current database review sheet – see Appendix A
- Divide databases by subject and assign to liaisons and reference librarians; distribute general/multidisciplinary databases to liaisons
- Identify databases whose subscription periods end during review and notify Acquisitions to check with reviewer before renewing
- Schedule visits by major vendors
- Liaisons agree on a rating scale, process and procedures
- Compile vendor and proxy server statistics
- Check consortial pricing for current and new databases
- Liaisons complete a review sheet for each assigned database
- Liaisons and reference librarians note their comments about databases assigned to others on database master list and on review sheets
- Compile database review master list in preparation for liaison meeting
- Provide liaisons with list of databases for possible cancelation
- Update new database evaluation sheet template
- Liaisons trial new databases and invite faculty comment if appropriate

- Liaisons complete evaluation sheets for new databases and transfer pertinent information to new database list
- Liaisons meet to review databases suggested for cancelation and prioritize list of new databases for possible purchase
- Library Management Team makes final decisions on cancelations and new databases

PROCESS AND PROCEDURE CONTINUED

Liaison librarians were each assigned a number of general/multidisciplinary databases to review in addition to their subject databases. The Head of Reference served as the reference liaison and coordinated review activities for the part-time reference librarians. Liaisons were given three months to fill out review sheets because this process required looking at usage data, talking with faculty, assessing collections, looking at full text coverage, attending vendor presentations, weighing pricing, and more. The tasks listed in the previous section do not necessarily follow chronological order. For example, project managers would gather pricing information and usage statistics for the liaisons while they worked on their reviews. Reviewers were given a place to put commentary on others' review sheets, which were accessible to all librarians on a shared network drive.

At the initial planning meeting, the liaisons discussed the process for this review and determined how to rate each database. The project managers suggested a 1-5 scale; however, after some discussion, liaisons agreed that there should be no room for ambiguity (i.e., a rating of a 3, which could be considered neutral) and settled on a 1-4 scale. The scale, with examples from business database review summaries, was:

1 = Cancel because ...

Example: Cancel *EIU Viewswire* because much of the full-text content is available in *ABI/Inform*. Interface includes advertisements and citations to content not readily accessible.

2 = Cancel if ...

Example: Cancel *Mergent* if we subscribe to Standard & Poor's *Net Advantage* Business Intelligence Package which contains more comprehensive financial data.

3 = Important, fills niche

Example: *Business & Company Resource Center* is a one-stop database for novice (undergraduate) researchers looking for a company directory; magazine, trade and journal articles; basic financials; investment reports (not found elsewhere in our databases); or industry and market share reports (from Gale print reference books).

4 = Essential

Example: *Business Source Premier*, like other

EBSCO subject databases, is the foundation of business article instruction. Because of full-text article content and open URL resolver integration, we have been able to cancel many print periodicals.

These ratings were meant to separate databases in a meaningful way. One lesson learned in the review was that some subject liaisons rated all their databases as 4s, that is, essential. To encourage further discrimination, the project managers would suggest in the future that liaisons agree to assign only one or two 4 ratings within a subject. For larger subject collections, like business, this would mean only one article and one financial database would be rated essential.

We arranged for visits by three major database vendors (EBSCO, Gale, and ProQuest) as part of this project. We specifically asked vendor representatives to sell us on their platforms. This served as a way for us to think critically about our databases and if we were presenting them to our users in the best interfaces. It also gave the vendors a chance to tell us why we should keep their databases.

Each subject liaison adapted the database review process to work best for him or her. After the librarians had synthesized data from the vendor presentations, usage statistics (if they chose to use them), their faculty members, and other sources; the information was analyzed and relevant data transferred to the database master list (see Appendix B for categories included in this list). All databases receiving scores of 1 or 2 were brought to a liaison meeting for discussion in late April 2010. One purpose of this meeting was for all liaisons, including the reference liaison, to discuss and finalize a list of databases recommended for cancelation. Additionally, at this same meeting, we also prioritized a list of new databases to be purchased with funds reallocated by cancelations and with new budgetary monies requested to support previously under-supported programs. Both these lists went to the Library Management Team for final decisions.

BUSINESS FACULTY & STUDENTS

To show how the review affected a particular part of Webster University, we will examine the business school. In 2008, the Walker School of Business and Technology (WSBT) served over 20,000 students in undergraduate and graduate programs in business, management, math and computer science, and the University's single doctorate, a professional Doctor of Management. Business students accounted for 63% of Webster students and 80% of WSBT students attended classes at extended campus sites or online, making access to reliable electronic resources of paramount importance. The WSBT curriculum was supported by 29 subject-specific databases and numerous multidisciplinary databases with significant business content or applications such as *NetLibrary*, *PsycInfo*, and *Lexis/Nexis Academic's* "Get Company Info."

In order that databases she was recommending for cancelation were evaluated in context, the WSBT liaison chose to present a list of all subject and ancillary databases to the

business school faculty for review. The liaison contacted each faculty member who had initially requested a database that was recommended for cancelation to discuss alternative access to content that was still relevant to the curriculum. To add support for the project, the WSBT Dean's office emailed the list to all full-time faculty, program leads, extended campus directors, and other pertinent support staff, asking them to share it with their constituents.

VENDORS

Vendors can and will renegotiate pricing, so do not be afraid to ask. Anderson (2004) states that the cardinal rule of vendor relations is to be assertive but reasonable. During their presentations, vendors often compared their products to that of a competitor. Based on one vendor's claims and our own in-depth review, we found that we were paying more for a database that we rated as "important" than we were for similar, "essential" databases. We renegotiate our pricing, saving over \$8,000. In another instance, after we canceled a database, the vendor proposed a price reduction. In total, the price offered was one quarter of the original, but the review had confirmed that the content no longer supported research needs.

Database vendors were surprisingly responsive when presented with specific suggestions to improve searching by novice users. For example, an online local business directory required that businesses with family names, e.g., Edward Jones, be entered with the last name first. A redesign of the cross-reference structure and the "name contains" search now allows users to find the company name when entered in either order. By determining how our users actually searched the database, the vendor modifications allowed users to more easily find the information they needed.

REVIEW OF THREE SIMILAR BUSINESS DATABASES

One of the goals of the project was to discover overlap in content between databases. Business is fortunate to have three article databases, though differences in coverage, indexing, and added features make each valuable. Serials Solutions Overlap Analysis indicated that each contained unique full-text titles when compared to all of the library's full-text periodical content.

Completing the "same" search in the three databases helped to convey each one's usefulness to patrons who wanted full-text or academic journal articles. Table 1 shows results of a Boolean keyword search on a timely topic: banking and bailout. Even though the other databases retrieved a greater number of articles and full-text, *Business Source Premier* found more journal articles, which are more suitable for university level research.

Table 1: Keyword Search Results from 3 Business Article Databases

Database	# Hits	# Full-Text (FT)	FT Date Range	# Journal Articles	Notes About Journal Articles
<i>ABI/Inform</i> (ProQuest)	2078	1996	1982-2010	82	Many editorial commentaries rather than scholarly articles; many focused on non-US countries
<i>Business & Company Resource Center</i> (Gale)	1635	1261	1979-2010	14	No journals more current than 2003
<i>Business Source Premier</i> (EBSCO)	1585	883	1983-2010	153	Many 1 page or short commentary pieces. Only 4 of the first 20 "true" journals; i.e. listed references

Note. Analysis by D. Church, February 2010

MARKETING UNDERUTILIZED DATABASES THROUGH INSTRUCTION

The review project was informed by, and continues to inform, instruction. Students, faculty, and other library staff often ask which of the three article databases they should search. The answer, of course, depends on the information needed. The review process jelled anecdotal evidence and practice for the reviewer. When the reference librarians asked for a session covering the most important business databases, the liaison presented the information in Table 2 to show when each database should be used and the special features of each. This chart was also shared with business faculty and staff at a library research demonstration requested by the WSBT Dean.

Table 2: Special Features of Article Databases and When to Use

Database	Special Database Features	Use When...
<i>Business Source Complete</i> upgraded from <i>Business Source Premier</i> fall 2010	<ul style="list-style-type: none"> - Indexes 25,000 periodicals & industry reports - Full-text of 40 "classic journals," e.g. <i>Harvard Business Review</i>, from first issues (1930's) - Ebsco interface is familiar from other subject databases, e.g. <i>PsyInfo</i> - Hidden content <ul style="list-style-type: none"> • <i>TWST: The Wall Street Transcript</i> (canceled) • Harvard Faculty Seminar Series (FSS) videos • Richard K Miller consumer behavior publications 	<ul style="list-style-type: none"> - First for grads (or undergrads) searching for academic, "peer-reviewed" journal research
<i>Business & Company Resource Center</i>	<ul style="list-style-type: none"> - Company directory search default - Trade (industry) publications - Hidden & (former) print content <ul style="list-style-type: none"> • financials & investment reports for public companies • company histories • industry reports • rankings & market share • associations 	<ul style="list-style-type: none"> - First with undergrads (or grads) who need company and/or industry information
<i>ABI/Inform</i> (Proquest)	<ul style="list-style-type: none"> - Classification code searching - <i>Wall Street Journal</i> - Hidden content (direct URLs coming soon) <ul style="list-style-type: none"> • EIU country reports • <i>Hoovers</i> 	<ul style="list-style-type: none"> - Second for grads' (or upper undergrads) article research - Graduate students who want articles about a business or management function (e.g. human resources) and keyword searching is not precise enough

A salient point in the review process was to identify databases that were not being used to their full potential. While

usage statistics show only part of the story, another part may be told by the way in which databases are incorporated into individual and group instruction. WSBT students and faculty at extended campus sites and online may not have the opportunity for in-person instruction. Reference librarians provide individualized instruction and subject liaisons provide tutorials on the website at point of need. In response to the database review, the business liaison queried students in several on-campus library instruction sessions about their knowledge and use of specific databases and search features. These in-person interactions were then translated into the creation of brief instructional videos, which showcased how these databases support teaching and learning. For example, see the *How-to Videos* at <http://library.webster.edu/worldclass/sbtresrchguide.html>.

REVIEW OUTCOMES FOR ALL DATABASES

To complete the process, liaisons forwarded a list of 18 databases to the Library Management Team for final review. These changes and cancelations were approved resulting in \$79,000 in savings, which was reallocated to new databases. Shown in Table 3 are our rationale for cancellations and cost savings.

Table 3: Number of Databases Sent to Library Management Team for Final Review

Reviewers' Rating	Number of Databases	Savings / Reallocation
1 – Cancel because no longer supports curriculum	11	\$35,000
2 – Cancel if liaisons agree	1	\$5,000
2 – Cancel if replace with new database	3	\$20,000
Renegotiated contract and identified consortium savings	3	\$19,000
	18 of 152 (11.8%)	\$79,000

CONCLUSION

Comparing and contrasting our current databases on more than just usage statistics gave us a new appreciation for the depth and breadth of resources that support our University's curricula. Seeking input from both internal and external constituents improved our communication and continues to impact instruction in meaningful ways. While our library had no mandate to cancel databases or reduce expenditures, we found it helpful to rate our databases using a "what if" scenario. As formats and access change, it becomes more important for libraries to critically evaluate all resources as part of normal workflow. We are now several steps closer to resolution of possible future budgetary constraints, no matter when they may occur.

REFERENCES

- Anderson, R. (2004) *Buying and contracting for resources and services*. New York: Neal-Schuman.
- Bhatt, A. (2006). Assessing e-collections when every e-resource has its reader, every reader has his/her e-resource, and e-resources are ever growing. *Against the Grain*, November, 24-28, 30.
- Golderman, G., & Connolly, B. (2009). Getting down to business. *Library Journal*, 134(1), S16-S22.
- Horava, T. (2010). Challenges and possibilities for collection management in a digital age. *Library Resources & Technical Services*, 54(3), 142-152.
- Luther, J. (2001). *White paper on electronic journal usage statistics*. Council on Library and Information Resources, Washington, D.C. Retrieved from: <http://www.clir.org/pubs/reports/pub94/pub94.pdf>
- Peters, T. A. (2002). What's the use? The value of e-resource usage statistics. *New Library World*, 103(1172/1193), 39-47.
- Price, A. C. (2009). How to make a dollar out of fifteen cents: Tips for electronic collection development. *Collection Building*, 28(1), 31-34.
- Sennyey, P., Ross, L., & Mills, C. (2009). Exploring the future of academic libraries: A definitional approach. *Journal of Academic Librarianship*, 35(3), 252-259.
- Steele, K. (2008). Are budget limitations real? Perspective, perceptions and a plan. *The Bottom Line: Managing Library Finances*, 21(3), 85-87.

APPENDIX A:
CURRENT DATABASE REVIEW SHEET

Please review your assigned databases using this sheet. The bold headings are areas to examine, followed by questions/things to look at that may help you determine your database rating.

Database title:

Vendor:

Price:

Your name/initials:

Date document completed:

History

Have we added this in the last two years? Y N

Was this recommended by a faculty member?

Content/Interface/Search:

What type of data does this database store? Financial, full text articles, indexing, etc.

Ease of use; appearance (e.g. ads, links to vendor store, etc.)

Search capabilities, ease, functionality, special features

Compare (overlap or differentiation) to current database(s), for example Serial Solutions overlap to determine unique titles (optional as a justification).

Have we canceled print content because of this database?

Usage

How have you used this database (teaching, ref desk, research for others or yourself, etc)?

Would you recommend this to students or faculty?

If not, what would you recommend instead?

Vendor stats and proxy server stats:

Do you think this database is underutilized? Can it be remedied with marketing or other means?

Technical set up and ongoing issues:

Access limitations (e.g. small number of simultaneous users, CD-ROM, etc):

Integration into federated search, ILL, Article Linker, MARC records

Final Recommendation:

Should we keep this? Y or N

Rate this database 1 2 3 4

1=Cancel 2=Questionable, Cancel If _____ 3=Important, Fills Niche 4=Essential

Why did you pick the rating you did/why should we keep or cancel this database? Write a justification for management team (a sentence or two).

Comments from other reviewers:

APPENDIX B:
CATEGORIES IN DATABASE MASTER LIST EXCEL SPREADSHEET

- | | |
|---|--|
| 1. Database name | 10. Subscription end date |
| 2. Vendor | 11. OK to renew early? |
| 3. Liaison (reviewer) | 12. Explanation for cancelation/keep |
| 4. 2008 proxy server stats | 13. Reviewer's rating (1-4) |
| 5. 2009 proxy server stats | 14. Link to review sheet (Word document) |
| 6. 2009 pricing | 15. Liaison meeting rating |
| 7. Check with... (other liaisons, faculty, etc). A field where other librarians could comment on the database | 16. Savings (\$) |
| 8. In federated search now? | 17. Notes (miscellaneous information that might not fit elsewhere) |
| 9. Scoped in federated search? | |