Solutions for the New Subject Specialist Librarian

John J. Meier
Science Librarian for Mathematics and Statistics
and U.S. Patent and Trademark Depository Librarian
Physical and Mathematical Sciences Library
Pennsylvania State University

Abstract

This paper examines approaches to reference, collection development, and information literacy taken by a new subject specialist librarian at a large research university. It presents case studies for using various qualitative surveys and quantitative methods, including a collection development survey and information literacy post-assessments. Strategies are presented for tackling the challenges faced by a subject specialist librarian in an unfamiliar field. These efforts led to new services and liaison relationships with user constituencies. Specific services and approaches used are detailed including collection development decisions, information literacy program planning, and outreach programming. Finally, this paper proposes further research and recommends professional development resources.

Introduction

In contemporary academic libraries, the responsibilities of a public service librarian are as diverse as they are numerous. Duties range from the traditional buying of books to selection of electronic resources to outreach through new social networking media. Students, faculty, and research staff expect immediate access to information. Librarians new to the profession, new to an academic library, or new to a particular position face many challenges and may be unfamiliar with the university culture, the library's users, and their colleagues. Finally, they may be unfamiliar with the academic disciplines served by their library and related resources.

Experience or a graduate degree in a related academic discipline can bring greater familiarity with specific information resources. This knowledge can be valuable to librarians working with users in these areas; however, libraries often serve more than one academic discipline. How does a professional librarian without a related subject degree tackle such challenges? This paper suggests looking to professional standards and literature to provide guidelines and following up each new project with documentation for future analysis.

Literature Review

Gary White (1999) conducted a study in which he analyzed academic library position announcements to characterize qualifications and responsibilities of subject specialist librarians. He reviewed business, social sciences, and science librarian job postings in *American Libraries, College & Research Libraries News,* and *the Chronicle of Higher Education* over a nine year period, looking at the number of positions, job titles, salaries, job responsibilities, required skills, and educational requirements. White found that the three most important job tasks were reference, information literacy, and collection development; faculty liaison activities also played an important role.

On a more general level, the *NextGen Librarian's Survival Guide* by Rachel Singer Gordon (2006) provides a number of topics of interest to new library professionals regardless of age. It focuses primarily on entry level jobs, making it most useful for those new to librarianship. *Fundamentals of Collection Development & Management* (Johnson, 2004) provides a baseline of skills in the many aspects of collection development and contains many useful examples of assessment, including a faculty questionnaire.

Stephen Pinfield (2001) discusses the changing nature of subject librarians in academic libraries where traditional roles extend into new areas. He notes much greater focus on the library user and the importance of proactively approaching user groups in formal and informal ways. The traditional job is still present but collection development becomes "advocacy of the collections" while teaching is transformed from simple bibliographic instruction into building "information" and "educational technology" skills. Though Pinfield acknowledges that a subject background is preferable for subject specialists, the reality is that "it is impossible for subject librarians to

have expertise in all of the subjects they are looking after" and that the ability to adapt and learn quickly is the most essential skill. *Building Bridges: Connecting Faculty, Students, and the College Library* (McAdoo, 2010) focuses on the importance of relationships between academic libraries and their constituencies. The book encourages librarians to pour energy into their jobs by expanding existing services and to "be proactive!"

Kara Whatley (2009) provides an overview of the new roles for subject or "liaison librarians" in the era of online information focusing on relationship building and "librarians as middleware." For each of the three traditional core roles affirmed by White and expanded by Pinfield Whatley gives examples of the striking changes that an online environment brings to the approaches and venues for effective activities. Librarians have become "embedded" in course-related instruction and partner with faculty to take part in designing courses and assignments. Finally, Whatley notes that collection development, while diminished in some ways by approval plan ordering, still requires strong relationships with users to create research collections for the future.

There is a large body of literature on assessment of library services in addition to many professional development programs. For a broad overview of assessment, *If You Want to Evaluate Your Library* (Lancaster, 1993) is useful. There are also articles that focus on the areas suggested by Pinfield and Whatley. For example, Lee, Hayden, and MacMillan (2004) assessed the delivery of reference services outside of the library to foster stronger relationships with academic departments. Another means of assessment, particularly useful for library serials subscription decisions, is citation analysis. Smith (1981) gives a balanced portrait of this method and advises how to use it as a factor in collection decisions The *Association of College and Research Libraries (ACRL) Institute for Information Literacy* (2010), which recently added a focus on assessment, is an excellent professional development resource for librarians who want to become effective teachers and instructors.

Background

After previous experiences at a small branch campus library, including liaison responsibility for all sciences, and then at a larger university as the sole engineering librarian, the author was hired as a subject specialist for mathematics and mathematical statistics at another large research university. A background in engineering and the sciences gave some preparation for such a position, but mathematics is unique. Although it might be said that "the library is their laboratory" (Tucker & Anderson, 2004, p. 8), mathematicians are very specialized, and it can take many years for a librarian to understand all aspects of the discipline. Anderson and Pausch (1993) wrote their seminal work *A Guide to Library Service in Mathematics: The Non-Trivial Mathematics Librarian* "to overcome any 'math anxiety' so that a new librarian could respond creatively and effectively to user needs." Another difficulty for the author in the process of becoming a subject specialist was the closure of the math library, resulting in a new combined physical and mathematical sciences library. While the Math Library only moved across the street, the number of faculty and graduate students visiting declined noticeably during this time.

Approach

In order to take an informed approach to the responsibilities of a liaison librarian it was useful to consult professional standards and guidelines along with any local policies and best practices. Additionally, the experience of colleagues, though less formal, can provide important background information and organizational knowledge. Navigating the new position led to successes and failures. Regardless of the outcome, all experiences improved and helped tailor library services.

Reference

The nature of reference in libraries has changed and with it the *Guidelines for Behavioral Performance of Reference and Information Service Providers*,, published by the Reference and User Services Association (RUSA) from its inception in 1996. Despite moving beyond the traditional reference desk to include email and chat reference, the *Guidelines* have kept a focus on "good communication skills" and stress the importance of a positive user experience in a reference transaction. The concept of embedded librarianship, where a librarian is present in the user's setting, stems from approachability practices such as the need to establish "a 'reference presence' wherever patrons look for it" and a number of guidelines related to "in person" and "follow up" service.

These indicators and other remote reference experiments on campus prompted the use of reference services embedded in the mathematics department (Meier, 2009). The initial time and location chosen for delivering these services preceded a weekly departmental tea,, which in turn preceded a colloquium speaker series. The in conjunction with a colloquium speaker series. Because food and drinks are served, many members of the department stop in to chat and end up staying for the lecture. Librarian "office hours" started one and a half hours prior to the tea time in the same room, offering in-person assistance until the speaker began. Few faculty members and students showed up before the food arrived 30 minutes before the talk, so the time was shortened to one hour. A laptop and wireless network provided access to online library services, email, and information resources. Initially, the, department's wireless network did not allow access to library circulation and acquisitions systems, but eventually this difficulty was resolved. Interactions between faculty and graduate students, during this time and in the library, increased with the physical presence. Additionally, many problems could be addressed on site, including gaining access to electronic journals, difficulties with interlibrary loan requests, and locating specific books in the library catalog.

Collection Development

When approaching collection development, combining a number of quantitative and qualitative methods is appropriate. A survey of library users is one of the first strategies suggested for academic library liaisons by the *Guidelines for Liaison Work in Managing Collections and Services* (ALA, 2001). In collaboration with other liaison librarians, a survey was developed and shared. Utilizing feedback from faculty members in the mathematics department, the group of

librarians removed or clarified questions, resulting in a final version (see Appendix). The survey was distributed by email, resulting in a response rate of 25% and yielding a diverse array of research topics and publishers of interest. Faculty indicated an interest in notification of new book arrivals through email, which became a new outreach service. Although students were not surveyed as part of this study, the questionnaire addressed graduate student research.

In order to make budget decisions during the annual renewal period for library serials, citation analysis was performed on faculty publications. The past three published journal articles of each faculty member in the mathematics department were identified and their cited references retrieved from a licensed citation database. Counting the frequency of journal titles among the citations yielded additional usage data that was combined with electronic journal access information to make selection decisions. It is much easier to determine the top journals than to find those with the lowest usage and citation counts, which made deciding to cancel subscriptions somewhat arbitrary. Faculty were interested to discover the most used journals in their department. Consequently, a "Top Ten" list of journals, produced to meet this need, is now an annual information service.

Information Literacy

The survey indicated that there was little interest in library instruction by the mathematics department. Semiannual discussions with administrators in the department confirmed this attitude was confirmed, resulting in very few library instruction sessions in practice. There was no information literacy program established within the department, but approaching individual faculty teaching "First Year Seminar" and "Writing Across the Curriculum" courses succeeded in a number of ways. For the first year experience course, a library tour, online tutorial, and online quiz were used as graded assignments in lieu of class time. Discussions avoided traditional bibliographic instruction and focused on evaluation of information, as in the *Information Literacy Competency Standards for Higher Education* (ALA, 2000). This resulted in an entire class period devoted to the library in the upper level undergraduate writing course. The instructional materials for this course used selected objectives from the *Information Literacy Standards for Science and Engineering/Technology* (ALA, 2006) as educational outcomes.

Library course related instruction sessions and outreach, such as tours, were tracked along with class attendance and, when possible, library staff administered a qualitative survey of student expectations. Both courses showed a dramatic increase in participation from the mathematics department. For the capstone course, the majority of responding students indicated they had had a librarian speak to them, leading to increased confidence in information seeking skills.

In order to establish a more collegial relationship with faculty in the department, participation in regular seminars proved to be key. The library has worked with faculty to create a literary-themed event at a special departmental tea. Along with refreshments, the library brought posters of poetry and new library books, and faculty could check out popular science titles using a laptop. Following this success, the author was invited to give a lecture during a teaching

seminar on the library and the use of books to inspire students to pursue mathematics as a career. The experience increased interactions with teaching faculty and graduate students in the department and fostered a sense of inclusiveness.

Conclusions

While following institutional and professional traditions can be useful to a new librarian, there are benefits to seeking out current professional standards and appropriate assessments in order to move forward. Mistakes and failed attempts at new services can lead to future improvements and success, but only when a record of the experience is kept. Such a record can also be useful for promotion and tenure documentation. It was easier to note successes informally than to document them, but there is no way to share and build upon these feelings or transitory comments. Despite a lack of subject expertise in a particular area, success is possible with attention to guidelines and some initiative.

Recently, statistical tracking software was implemented at all reference services points, including remote reference. Data gathered in this way can be used to compare the viability and level of staffing for each reference service. As mentioned previously, collection development should not be based solely on one metric, such as citation analysis, or on one audience, such as faculty. Thorough evaluation should bring together usage statistics, interviews and user surveys, with strategic purchasing decisions and comparison to other libraries and universities. The qualitative survey of instruction sessions contains a great deal of data that was not aggregated or analyzed. It could provide a more holistic view of teaching successes and areas that require improvement.

Future Research

Each of the qualitative and quantitative approaches used merits improvement, further data collection, and longitudinal analysis. These assessments can be expanded, and there are many more outcomes to be measured. Additionally, this article has only focused on the efforts of a single librarian. In order to reach a conclusion about the professional development and education needs of subject specialist librarians, a study of expectations and experiences of new librarians in the field should be conducted.

References

American Library Association. (2000). *Information Literacy Competency Standards for Higher Education.* Association of College and Research Libraries. http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm

American Library Association. (2001). *Guidelines for liaison work in managing collections and services.* Reference and User Services Association. http://www.ala.org/ala/mgrps/divs/rusa/resources/guidelines/guidelinesliaison.cfm

American Library Association. (2003). *Professional Competencies for Reference and User Services Librarians*. Reference and User Services Association. http://www.ala.org/ala/mgrps/divs/rusa/resources/guidelines/professional.cfm

American Library Association. (2006). *Information Literacy Standards for Science and Engineering/Technology*. Association of College and Research Libraries. http://www.ala.org/ala/mgrps/divs/acrl/standards/infolitscitech.cfm

American Library Association. (2010). *Institute for Information Literacy.* Retrieved March 23, 2010, from http://www.ala.org/ala/mgrps/divs/acrl/issues/infolit/professactivity/iil/welcome.cfm

Anderson, N., & Pausch, L. (Eds.). (1993). *A Guide to Library Service in Mathematics: The Non-Trivial Mathematics Librarian*. Greenwich, CT: Jai Press Inc.

Gordon, R. (2006). *NextGen Librarian's Survival Guide.* Medford, NJ: Information Today.

Johnson, P. (2004). *Fundamentals of Collection Development & Management.* Chicago, IL: American Library Association.

Lancaster, F. (1993). *If You Want to Evaluate Your Library*. Champaign, IL: University of Illinois.

Lee, J., Hayden, K., & MacMillan, D. (2004). "I Wouldn't Have Asked for Help if I had to go to the Library": Reference Services On Site. *Issues in Science and Technology Librarianship, 41* (Fall 2004). http://www.istl.org/04-fall/article2.html

McAdoo, M. (2010). *Building Bridges: Connecting Faculty, Students, and the College Library*. Chicago, IL: ALA Editions.

Meier, J. (2009). What if you build it and they don't come? Promoting Library Services for Scientific Information Workflow *Special Libraries Association All Sciences Poster Session.* Washington, D.C. June 16, 2009. http://www.personal.psu.edu/jjm38/blogs/meier/2009/04/what-if-you-build-it-and-they.html

Pinfield, S. (2001). The changing role of subject librarians in academic libraries. *Journal of Librarianship and Information Science, 33*(1), 32-38. doi:10.1177/096100060103300104

Smith, L. (1981). Citation Analysis. *Library Trends, 30*(1), 83-106.

Tucker, M., & Anderson, N. (2004). *Guide to Information Sources in Mathematics and Statistics*. Westport, CT: Libraries Unlimited.

Whatley, K. (2009). "New roles of liaison librarians: a liaison's perspective." *Research Library Issues,* no. 265. http://www.arl.org/bm~doc/rli-265-whatley.pdf

White, G. (1999). Academic Subject Specialist Positions in the United States: A Content Analysis of Announcements from 1990 through 1998. *The Journal of Academic Librarianship, 25*(5), 372-382. doi:10.1016/S0099-1333(99)80056-1

Appendix

Faculty Interest Survey

1. Name

2. Primary Department

3. Other Departments or Programs

4. Address (campus mail)

5. Office Address

6. Fax

7. Email Address

8. Please describe your current and future research and teaching areas of interest. Be as specific as possible regarding geographic coverage, historic periods, etc.

9. Please describe any additional topics that your students are researching.

10. Please list those organizations or publishers whose materials you find particularly useful to your research or teaching.

11. Which special types of materials are important to your research (in addition to books and journals)? *Check all that apply.*

- Conference proceedings

- Electronic resources

- Maps

- Microforms

- Statistical data

- Technical reports

- Working papers

- Other, please specify

12. Does the existing Libraries collection adequately support your needs? Please describe any areas needing improvement.

13. Are you interested in having a subject librarian in your discipline offer library instruction to your students?

14. Would you like to be informed of current library acquisitions, events, and other information?

15. How do you prefer to be contacted?

- Email

- Campus Mail

Subject Specialists. Make an appointment with an expert in your field of study to discuss your project and receive customized research support, advice, and resources. These specialists are also responsible for building and maintaining U-M Library's collections within their respective disciplines, and work closely with faculty and students to meet current and anticipated research and teaching needs. - Choose - Arts Business Engineering General Information Sources Government, Politics & Law Health Sciences Humanities International Studies News & Current Events Science Social Sciences. Ar A cataloging librarian's job description is different from institution to institution, depending on specific needs. During my career as a librarian and, in particular, as a supervisor, I interviewed many candidates for the position of cataloging librarian. Few were prepared to answer the question, "What are the essential qualities of a successful cataloging librarian?" The most popular response given was "detail oriented." While the very nature of working as a cataloging librarian requires comfort in managing detailed tasks, there exist many more qualities essential to an effective and efficient cataloging librarian. The following ten qualities will help you achieve success in cataloging. 1. Competence. The Future for the Subject Specialist Reference Librarian New Library World Whether a reference librarian needs a good subject background to 8The Changing Nature of Work in Academic Libraries. Oct 2001. 48-52. John Rodwell. Rodwell, John "dDinosaur or dynamo?" The Future for the Subject Specialist Reference Librarian. New Library World, 102 (2001): 48–52. Whether a reference librarian needs a good subject background to 8. Lynch Beverly P. & Kimberley Robles Smith, "The Changing Nature of Work in Academic Libraries," College and Research Libraries 61 (September 2001): 414 – 415.