

Librarians as Partners: Moving from Research Supporters to Research Partners

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Academic libraries have long been discussing the need to remain relevant and demonstrate value to their institutions. This paper explores how academic libraries can expand the concept of embedded librarianship to create research partnerships at universities. Such partnerships will enhance value to the institutional research output, as well as increase the visibility of unique librarian skills and library resources. Using a case study from a public research I university, the author discusses innovative roles for librarians on research teams. Embedding academic librarians fully into the research enterprise recognizes the significant contributions that librarians can make as research partners.

Introduction

Demonstrating the value of libraries in an academic setting has long been a topic of research and comment among librarians. Libraries are in a sustained state of proving their contributions to the academic missions of universities which do not necessarily recognize the broader value of libraries. This trend will most likely continue because of budget decreases and changing perspectives of university administrators who do not prioritize budget requests as highly unless there is an evident connection between the library, enrollment, and student learning outcomes.¹

Embedded librarianship is a recommended approach to showcasing the value of academic librarians outside the library walls. In their 2011 report, *Redefining the Academic Library*, the Educational Advisory Board (EAB), recommended new roles for librarians, including embedded into courses, academic departments, and research teams.² As an organization that “provides best practice research and practical advice”

that is respected by university administrators, the EAB addresses the future of libraries and defines the changes they must make in order to survive in the evolving landscape of higher education.

The 2010 report *The Value of Academic Libraries* has become a widely read and influential piece on what libraries can do to demonstrate their value to university administrations.³ Although not specifically aimed at a discussion of embedded librarianship, the report does, recommend activities related to tracking and increasing library contributions to faculty research productivity.⁴ The recommendations reflect the dominant themes throughout the literature on non-instruction based embedded librarianship. The report states that “although librarian roles are changing, research collaborations between faculty and librarians continue to benefit both partners.”⁵ The report goes on to explain the “essential question” of “How does the library contribute to faculty research productivity (or tenure and promotion decisions.)?”⁶ The traditional concept of

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faculty/librarian research collaboration is considered to be related more to the role librarians can play in the dissemination and management of the faculty member's research, rather than the actual joint creation of research. Carlson and Kneale argue "through embedded librarianship, librarians move from a supporting role into partnerships with their clientele."⁷ However, their article does not expand on potential partnerships that involve actually conducting and creating research; rather they continue the discourse about roles related to data management and documentation management. Even the EAB report, which has a section devoted to embedding subject specialists on research teams, only describes their role as conducting systematic literature reviews for grant proposals and articles, but the librarian role is still represented as assistant rather than partner.⁸

However, embedding can take librarians' contributions to the broadest scope as true research partners rather than just supporters. Course-integration, document and data management, and preservation assistance are important and expanding services academic libraries can and do offer. Yet, librarians are participating as research partners at universities worldwide; however, the variety and frequency of such partnerships are not fully represented in the academic library discourse.

This contributed paper addresses demonstrating the value of libraries through integrating librarians into a university's teaching and research missions by implementing the method of embedded librarianship. First, the definition and application of embedded librarianship is explored. Next, using case study from The University of Kansas (KU), the option of embedding a librarian as a research partner on a college campus, rather than merely a supporter of researcher is used to illustrate the potential expanding roles for academic librarians.

Definition of Embedded Librarianship

Embedded librarianship involves placing, inserting, a librarian in different capacities within non-library departments or centers on a university campus. Dewey describes embedded librarianship as:

a more comprehensive integration of one group to another to the extent that the group seeking to integrate is experiencing and observing, as nearly as possible, the daily life of the primary

group. Embedding requires more direct and purposeful interaction than acting in parallel with another person, group or activity. Overt purposefulness makes embedding an appropriate definition of the most comprehensive collaborations for librarians in the higher education community."⁹

In the research summary of the report *Models of Embedded Librarianship*, written for the Special Libraries Association (SLA), Shumaker and Talley set out to define what "embeddedness" means, identify measures of success, and collect data on practices of embedded librarians.¹⁰ Through this research, they developed recommendations for libraries to implement embedded programs. The authors identified characteristics that distinguish embedded librarians from other service providers, including:

- Location within a customer group
- Partial or full funding by a customer group
- Supervision by a non-library manager.¹¹

Both Dewey and Shumaker and Tally define embedded librarians in a more comprehensive sense than much of the traditional literature on the topic. The focus on embedded librarianship within the academic library community has been heavily concentrated on embedding librarians within courses to assist with information literacy instruction at a much more comprehensive level than one-shot instruction sessions permit. Embedding a librarian within a course, whether it is in-person or online, is an essential form of integrated librarianship that assists libraries with demonstrating value. However, embedding should not be limited to involvement of course development and teaching. One of the other valued contributions to the academy is research and this area is ripe for embedding of librarians to actively contribute to the research process and outcomes.

More specific embedding tasks might include integration of librarians on research teams to assist with data management and preservation, as well as managing project documentation.¹² Robinson-Garcia and Torres-Salinas identify five main tasks that a librarian embedded in a research project would have:

- Active mediation
- Dissemination
- Organization and preservation
- Expertise and management
- Visibility and management.¹³

This information management perspective of embedded librarians is one of the more common themes presented in literature that discusses non-instruction focused roles for librarians.

From Supporter to Partner

The idea of being a “partner” in research rather than a “supporter” of research is an area of librarianship that needs further exploration and emphasis. Law argues “librarians now are much less clearly partners in the academic enterprise and much more a provider of services in an increasingly hierarchical relationship.”¹⁴ The concept of being a partner can be interpreted as not only helping researchers succeed in completing and disseminating their research, but it is also contributing to the actual knowledge creation using the specialized knowledge and skills librarians possess. Giesecke, in describing library-faculty collaborations in the digital humanities, observed partnerships developing that resulted in products of original content.¹⁵ In another article addressing the role of libraries in the digital humanities, Vandergrift and Varner write, “reframing the library as a productive place, a creative place engaged in producing and creating something... will open the door to allow the library into the life of the user.”¹⁶ The definition of partnerships should include proactive creation and active engagement in the research process and not simply passive support.

Case Study: Consulting Librarian

In 2012, the KU Libraries developed a strategic plan that was intentionally aligned with The University of Kansas’s strategic plan *Bold Aspirations*.¹⁷ The Libraries’ plan demonstrates its commitment to and vital role in the educational and research mission.¹⁸ Within the KU Libraries’ strategic plan, there are two goals that aim to overtly contribute to the success of the University’s strategic goals of elevating undergraduate education and increasing research productivity. In addition to the more traditional, yet strong information literacy initiatives and subject librarian outreach, the KU Libraries are embedding librarians to further integration into the University’s strategic actions. These embedded positions include course-based participation, digitization consulting, and external appointments in order to confirm and expand its central role in the academic community.

In December 2011 the author, a social sciences librarian at KU, was given a year-long 10% appoint-

ment to the KU Research and Training Center on Independent Living (RTC/CL) as a consulting librarian. The RTC/CL was established in 2011 from a \$4.25 million grant from the National Institute on Disability and Rehabilitation Research (NIDRR) with the purpose to develop programs and policies to expand community-living participation among people with disabilities.¹⁹ The RTC/CL coordinates thirteen core projects and two large systematic scoping literature reviews with research partners around the United States.²⁰

Traditionally, it has been the medical library literature which has discussed librarians being involved in the research process in “clinical librarian” roles. In the health science field, systematic reviews and the corresponding meta-analysis research is an important aspect of the work, and this type of research is also expanding into the social sciences. In an article from *Health Information and Libraries Journal*, the authors explain “as systematic reviews have increased in importance, the science method has become much more sophisticated, calling for greater collaboration between librarians and clinicians.”²¹

Like systematic and meta-analyses reviews, where clinical librarians have been utilized routinely, systematic scoping reviews represent a scientifically rigorous method of gathering, organizing, and summarizing published literature. The more commonly recognized “systematic review” seeks to answer questions about the effectiveness of a specific intervention or influence of a specific variable on an outcome. Often data from the identified literature are re-analyzed to produce a single quantitative summary statistic such as a measure of effect size. These systematic reviews are often referred to as “meta-analyses.”²²

A systematic review is a type of review research that involves applying the scientific method to literature reviews. *The Cochrane Handbook for Systematic Reviews of Interventions* identifies the key elements of a systematic review:

- a clearly stated set of objectives with pre-defined eligibility criteria for studies;
- an explicit, reproducible methodology;
- a systematic search that attempts to identify all studies that would meet the eligibility criteria;
- an assessment of the validity of the findings of the included studies, for example through the assessment of risk of bias; and

- a systematic presentation, and synthesis, of the characteristics and findings of the included studies.²³

Systematic *scoping* reviews (SSRs), the focus of the case study presented here, have the goal of providing a broad picture of the existing scientific literature on a topic—what has been covered and what gaps need to be filled. SSRs can often be used as a first step to narrow in on a more focused research question appropriate for a systematic review. Arksey and O'Malley outline a basic methodological framework for SSRs:

- Identify the research question—these are broad in nature and are often determined with input from an expert panel.
- Identify relevant studies—this deciding on a search strategy, time span, and language.
- Study selection—once studies are identified, reviewing them for inclusion or exclusion.
- Collating, summarizing, and reporting results—provide an overview of the breadth of the literature rather than a synthesis.
- Consultation (optional)—researchers, consumers, and stakeholders can suggest additional references and insights.²⁴

The KU-based project updated a previously conducted review and completed a new systematic scoping review. The updated review was a two-year extension of an SSR conducted by the Disability Rehabilitation Research Project (DRRP) on Health Disparities for the years 2000-2009 to examine disparities in clinical preventive service utilization among people with disabilities (REF) The KU project updated current literature (2010-2011) The second review was an original systematic scoping review of the literature on risk factors for institutionalization of people with disabilities. Both SSR projects were completed with oversight by an advisory panel with the goal to impartially assess the literature and identify gaps in knowledge.”²⁵

Role of the Librarian

Librarians are not always included in scoping reviews. However, librarians can play an integral role in this type of research because of their specialized skills and knowledge related to literature searching, as well as database content and searching features. In a review of the role of clinical librarians in systematic review projects, researchers found:

- Searching is a critical part of conducting systematic reviews;

- Comprehensive searching for all relevant studies & documentation of explicit strategies are essential steps;
- Librarian is a key player in systematic review team.²⁶

The role of the librarian can include several components. One of the most important tasks is translating the operational definitions of the concepts and topics being investigated into robust search strategies. This is a time consuming task and involves running test searches and communicating results with the research team to ensure that the search strategies are retrieving the desired target literature. There are reliability checks implemented at this stage by pre-identifying articles that are already located in the literature and should be retrieved from searches. Developing the search strategy goes beyond simply identifying search terms. It also includes the identification of when to search by keywords, subject terms, MESH terms, as well as when to use wildcard operators. In addition, as was the case with the SSR 2 project, it was necessary for the librarian to “translate” previously conducted searches to different database platforms than were used in the original search because of differing library access (ex: Ovid Medline to PubMed). This is an aspect of systematic review extension projects in which a librarian can provide very specialized expertise and skills because of their detailed knowledge of differences among database platforms. Finally, the librarian must document in detail every step of the search process, including exact search terms and number of results per search in a search log. The careful recording of searches is necessary to ensure that they can be replicated by other researchers. Particularly for any type of systematic review where the goal is to maintain a summary of the most current scientific literature, the ability to accurately replicate search strategies for updates is essential. Here, the unique expertise of the academic librarian is unparalleled for negotiating the complexities of various search strategies.

Another potential role of librarians is the identification of the most appropriate combination of databases to search. There is very little reported in either the scoping review literature or library literature on how databases are selected for reviews. It appears that they are often selected based on researcher preference or knowledge of specific databases. However, for the KU project, the librarian designed a method for selecting databases that applied the same evidence-

based decision-making as the search strategies. The first step was to identify articles and journals that should be covered in the relevant databases. Next, Ulrich's Periodical Database was searched to identify which databases indexed the selected journals. These were all recorded in an Excel spreadsheet, and the databases were chosen based on the most comprehensive but non-duplicative coverage possible.

Once the databases were selected and the search strategies finalized, the librarian executed the searches. All results were then exported into EndNote files where duplicates were removed. The project manager then began the multi-stage review process of the results. As a member of the research team, the librarian is contributing to the methodology sections of the manuscripts reporting the results of the reviews. Finally, the librarian participated in the project advisory panel meetings.

The contributions of the librarian described above improved the quality of the search results. While researchers are trained in research methods and have experience with literature searches, few are trained in how to properly access all the potentially relevant sources of information. After having worked with a librarian on searches for two SSRs, it is apparent that researchers likely grossly overestimate the accuracy and thoroughness of their searches. In fact, it is not uncommon to delegate these tasks to graduate research assistants. The current case study illustrates the need for researchers to appreciate the value and expertise of librarians to their projects and to begin to create line items in their budgets for libraries.

Benefit to Libraries and Librarian

Being integrated into a research team is an invaluable experience for any academic librarian. While libraries discuss the need to support research centers and grant funded projects, it is difficult to understand how such projects are carried out without being a part of the process. The librarian will gain knowledge and experience not only about the research center but also about working collaboratively on a grant-funded project. As the need for more external funding arises for academic researchers, there will be an increased necessity for these types of projects and centers. KU Libraries does not currently have a formalized liaison program to campus research centers. The experience of actually working within a center gave the KU librarian a working knowledge of how grant funded centers function

differently than traditional academic departments, and with this perspective, KU the Libraries can begin tailoring library outreach activities and services to these potential research partners.

The involvement in a research project can also assist libraries with understanding the evolving research trends at a university. For example, the KU project demonstrates the increasing use of scoping reviews as a form of research and the increased emphasis on community involved research. It also revealed the broad scope of research related to those living with disabilities that the Libraries may not have been previously aware of since they are not technically part of standard academic department operations. Also, developing an understanding of how research centers function at a university can help libraries improve services and communication with these important but not always emphasized library users. Research centers can utilize different library services beyond scholarly research, including citation management software training which was included as part of the project with RTC/CL, reinforcing the important role of information management services that libraries provide. The libraries also internally benefit from having librarians involved in campus research projects because librarians embedded in research increase their knowledge and expertise with social science research methods and with specific content areas (e.g., threats to institutionalization for people with disabilities). At KU Libraries, librarians have faculty status and are required to maintain a program of scholarly research. Collaborating with university scientists allows librarians new opportunities for improving research methodologies for library-related research.

Conclusion

In looking towards the future of academic libraries, it will be increasingly important for libraries to demonstrate their value to universities beyond historically core library services: one-shot instruction sessions, collection development, and reference services that still adhere to the traditional departmental-based liaison programs. This case study illustrates how librarians can become more visible and integrated into university communities as partners in research and demonstrating a more comprehensive view and emphasis on embedded librarianship. The case study presented in this paper can now be used as an example when contacting additional KU academic depart-

ments and research centers about pursuing potential partnerships. There is now documented evidence on the important contributions librarians can make to knowledge creation and knowledge dissemination. By moving beyond traditional research support, libraries can truly become integrated into a university and demonstrate their inherent value.

Notes

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