

Jake Carlson and Ruth Kneale

# Embedded librarianship in the research context

## Navigating new waters

**A**s librarians seek to redefine themselves, the model of embedded librarianship is generating interest as an effective means of applying the knowledge and skills of librarians towards the information challenges of the digital age. Embedded librarianship takes a librarian out of the context of the traditional library and places him or her in an “on-site” setting or situation that enables close coordination and collaboration with researchers or teaching faculty.

The idea behind the embedded librarianship model is to enable librarians to demonstrate their expertise as information specialists and to apply this expertise in ways that will have a direct and deep impact on the research, teaching, or other work being done. Through embedded librarianship, librarians move from a supporting role into partnerships with their clientele, enabling librarians to develop stronger connections and relationships with those they serve.

The model of embedded librarianship has been successfully applied by libraries in several areas. Librarians are employing the embedded librarianship model in their information literacy programs as a means to overcome the limitations of the “one-shot” library instruction class. The University of Rhode Island and the Community College of Vermont, among others, have had librarians joining a classroom either physically or virtually and have reported stronger connections with students as a result.<sup>1</sup>

Other libraries, such as the Welch Medical Library at John Hopkins University, are developing “embedded liaison” programs. Embedded liaison programs situate librarians

within the departments they serve to increase the frequency and depth of librarian-faculty interactions and for librarians to better understand the needs of the faculty through direct observation.<sup>2</sup>

### Embedded librarians in research

Increasingly, librarians at research-based institutions are applying the embedded librarian model in working directly with the faculty they serve as collaborators on research projects or as a integral part of a research team. As an embedded librarian in the research context, a librarian works with researchers more “upstream” in the research process rather than just with the products produced at the end of the research lifecycle: books and journal articles. The nature of these partnerships will be different according to the type of research being done and the needs of the researchers, but they will generally involve the application of the practices and principles of library science directly to the research being done.

An example of embedded librarianship in the research context could be a librarian working with information resources as they are generated over the course of the research, such as data, to prepare them for dissemination beyond the project personnel for re-use by others, or for long-term preservation. Another example could be a librarian designing

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workflows and systems to organize, manage, and deliver project documentation or other needed materials.

Embedded librarianship in a research setting may be project-based or programmatic in nature. The Purdue University Libraries have taken a project-based strategy to embed its librarians. Purdue's approach has been to develop relationships with faculty through identifying their particular research needs pertaining to information resources, data in particular. Librarians then respond to these needs through proposing faculty-librarian collaborations to address these needs and then to help secure funding to support these collaborations. If successful, librarians become partners in the particular research project and have defined responsibilities and activities in it.<sup>3</sup> Projects have a start and an end date and so once the project concludes, so does the librarian's involvement.

Programmatic-based embedded librarianship refers to a librarian hired by an organization on a full-time, ongoing basis. This librarian will have defined functions and responsibilities to support the research activities of the organization. Unlike the project-based approach discussed above, this librarian supports multiple projects within the organization. When a specific project ends, the librarian merely shifts that percentage of their focus to either one of the other existing projects they're working on, or they add a new project to the pile. In many cases, a librarian in this function will appear on the organizational chart as a full solid-line member of the team. The National Solar Observatory has taken this approach with its Advanced Technology Solar Telescope project and employs a librarian full-time as part of the engineering team.

Regardless of the nature of the embedded librarian model employed and the type of research activities librarians seek to engage in, becoming an embedded librarian can be a challenging prospect. Removing yourself from the comfort and

familiarity of the traditional library context into an unfamiliar environment with new responsibilities, although rewarding, can be a daunting task initially. Further complicating the situation are the lack of established approaches or paths to draw from in navigating your own transition into embedded librarianship. With that in mind, the authors, both of whom are established as embedded research librarians, present the following guidance for new embedded librarians or those seeking to become embedded.

### **Advice for the embedded librarian**

- **Be a team player.** As an embedded librarian you will be a part of a team and therefore you must be able to play well with others. In particular, you will need to have an understanding of how the team will operate and perform its duties. This includes not only knowing what your roles and responsibilities are, but also understanding the roles of the other team members and how you will interact with, support, and receive support from them.

- **Secure support from your organization and colleagues.** Working directly with clientele outside of the library is a change not only for the embedded librarian but for his or her library, as well. To be successful you need to solicit the understanding and approval not only of the libraries' administration, who may need to adjust your responsibilities, but your colleagues who may also be affected by your new role. Help them understand that embedding yourself in a team outside of the traditional boundaries of the library is not taking you away from your "day job" so much as redefining it and expanding the influence of the libraries.

- **Have an entrepreneurial mindset.** Knowledge entrepreneurship can be defined as "the ability to recognize or create an opportunity and take action aimed at realizing the innovative knowledge practice or product."<sup>4</sup> Success in the embedded librarian model rests on your ability to

become entrepreneurial in your work as a librarian. Characteristics of an entrepreneurial mindset include being proactive in identifying and pursuing opportunities, through attending university seminars and talking with speakers for example, and being able to “sell yourself” and what you can contribute as a librarian towards new knowledge-based practices or products.

- **Accept risk.** Putting yourself out there and working in new environments involves taking risks, not only for you but for your organization. There will be times, such as applying for a grant, when a great deal of time and effort may be required without a guaranteed return on investment. However, even in cases where the risk does not pay off directly, your involvement may lead to indirect benefits, such as better relationships with faculty. Determining what your and your organization’s risk tolerance is will be an important activity and could directly impact your effectiveness. Remember that risk is necessary for change.

- **Translate library science to other disciplines.** Librarians are adept at translation. In reference work, librarians ascertain a patron’s needs and then translate these needs into the language of the relevant information ecology in order to connect patrons to appropriate sources. Embedded librarianship requires you to apply this skill in new ways. Very few people have a real understanding of what librarians do, outside of working with books and journals. A key component of becoming an embedded librarian is being able to explain your knowledge, skills, and expertise to others in ways that are relevant and meaningful to them and their situation. This is no small task and may take much time, effort, and repetition.

- **Build trusted relationships.** At its most basic level, the embedded librarianship model rests on the interplay of talking and listening with the researchers that you serve, with an emphasis on teaching and learning from each other. The primary objectives behind talking/listening/teach-

ing/learning are not only to construct an understanding of researcher needs and librarian capabilities, but to build trusted relationships. Researchers need to be able to get to know you and what you can do so that they will come to trust you and see you as a valued colleague and resource. You in turn need to get to know the researcher and trust that he or she will support you and your work in your research collaborations.

- **Move outside of your comfort zone.** The traditional library environment is composed of numerous practices and workflows that have endured for a long, long time (even as we repurpose them for the digital age); it is familiar and comfortable. Embedded librarianship requires that you leave the relative comfort and safety of this environment and venture into unfamiliar territory. In navigating these uncharted waters, do not be afraid to ask for help when you need it. It also helps to develop a network of trusted colleagues to confer with when things are uncertain. In addition, remember that this may not only be outside of your comfort zones, but out of our faculty’s as well. The rapidly changing nature of research in the 21st century means that faculty are also confronting new and unfamiliar situations themselves. Keep in mind that you have skills and a perspective that your collaborators likely do not possess themselves, and that this is valuable.

- **Don’t just think, but act outside of the box.** At this point most librarians recognize the need to re-examine our roles at our institutions and adapt our work to a new age of research and scholarship. The challenge of course is to actually go beyond mere recognition and to move forward with actual change on the ground. And, while good planning is important, ultimately the actions taken by you and your library in pursuing opportunities for embedding librarians will count more than words.

## Conclusion

In today’s research environments, librar-

ians are challenged to demonstrate their connections to the mission of their institution. The embedded librarian model offers the potential for librarians to apply their knowledge and expertise in new ways that can influence the value proposition of librarians.

As embedded librarianship in the research context is still an emerging model, the pathways to engagement and the criteria for success are not yet fully defined, though efforts are being made to do so.<sup>5</sup> The barriers may seem daunting, but surmounting the challenges of becoming embedded can be extremely beneficial to the skill sets of librarians, as well as leading to a circle of fulfillment between librarians, research personnel, and upper management.

Embedded librarianship is a powerful way to show the impact that librarians can and do have beyond the traditional functions of the library, and why librarians are needed now more than ever.

## Notes

1. Victoria Matthew and Ann Schroeder, "The Embedded Librarian Program: Faculty and Librarians Partner to Embed Personalized Library Assistance into Online Courses." *EDUCAUSE Quarterly* 29, no. 4 (2006): 61–65; Karen M. Ramsay and Jim Kinnie, "The Embedded Librarian: Getting out There Via Technology to Help Students Where They Learn," *Library Journal* 131, no. 6 (2006): 34–35.
2. Steve Kolowich, "Embedded Librarians" *Inside Higher Ed* June 9, 2010, [www.insidehighered.com/news/2010/06/09/hopkins](http://www.insidehighered.com/news/2010/06/09/hopkins) (accessed February 16, 2011).
3. D. Scott Brandt, "Librarians as Partners in E-Research: Purdue University Libraries Promote Collaboration," *C&RL News* 68, no. 6 (2007): 365–7, 96.
4. Knowledge Entrepreneur, "Are you a Knowledge entrepreneur?" [www.knowledgeentrepreneur.com/](http://www.knowledgeentrepreneur.com/) (accessed February 16, 2011).
5. David Shumaker and Mary Talley, "Models of Embedded Librarianship: A Research Summary," *Information Outlook* 14, no. 1 (2010): 27–35. **ZZ**

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\* *Sci Transl Med* 22 December 2010:  
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