Embedded Records Management: A Case Study Emphasizing the Importance of Community as a Key to Success

Gestion des documents intégrée: Étude de cas qui souligne l'importance de la communauté comme facteur clé de la réussite

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Abstract: Embedded librarianship has become increasingly common; however, this concept has not been widely applied to other information professions. We first survey the literature on embedded librarianship as a model of service delivery with a view to identifying those criteria that are considered essential to its success. Next, we demonstrate how best practices in embedded librarianship can inspire and inform a similar practice in another sector of the information professions, namely records management. We present and evaluate a pilot project where a records manager was embedded within the quality assurance team in the Faculty of Graduate and Postdoctoral Studies at the University of Ottawa. In particular, we consider how community-building efforts contributed to the success of this project.

Keywords: embedded librarianship, embedded records management, community, best practices

Résumé : Bien que la notion de bibliothéconomie intégrée soit de plus en plus connue, cette pratique n'a pas été si bien intégrée dans d'autres métiers de l'information. On présente un survol de la littérature pertinente pour identifier les critères essentiels pour intégrer avec succès un professionnel de l'information. Ensuite, on démontre comment les meilleurs pratiques pour la bibliothéconomie intégrée peuvent inspirer et informer des pratiques semblables dans le domaine de gestion des documents électroniques. Finalement, on présente et évalue un projet pilote afin de déterminer les valeurs ajoutées qui ont découlé de l'intégration d'un gestionnaire de documents électroniques au sein de l'équipe d'assurance qualité à la Faculté des études supérieures et postdoctorales de l'Université d'Ottawa.

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Mots-clés : bibliothéconomie intégrée, gestion des documents intégrée, communauté, meilleurs pratiques

> Community: A feeling of fellowship with others, as a result of sharing common attitudes, interests, and goals
> —*Oxford Dictionary*

Introduction

One of the first mentions of "embedded librarianship" in the literature is by Barbara Dewey (2004, 5), who suggests that the metaphor is inspired by the phenomenon of embedding journalists into various military units during the war in Iraq (2003–11). In explaining the concept, Dewey goes on to note:

> The concept of embedding implies a more comprehensive integration of one group with 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. (6)

In short, what Dewey is intimating is that embedded librarians must become full-fledged members of the communities that they seek to serve, and, indeed, the notion of community has emerged as a cornerstone of successful embedded librarianship. The importance of community to the field of LIS in general has been recognized in the selection of the theme for the forty-fourth Annual Conference of the Canadian Association for Information Science: "Information Science in our Communities: Reflections on our Work and the People, Places and Institutions Around Us."

In this article, we first review the literature on embedded librarianship as a model of service delivery with a view to identifying those criteria that are considered essential to its success, including those that relate to community. Next, we demonstrate how best practices in embedded librarianship can inspire and inform a similar practice in another sector of the information professions, namely records management. In this context, we present and evaluate a case study where a records manager was embedded within the quality assurance team in the Faculty of Graduate and Postdoctoral Studies at the University of Ottawa. In particular, we consider how community-building efforts contributed to the success of this project.

Embedded librarianship: community is at the core

Although it is challenging to come up with a single all-encompassing definition of embedded librarianship, several of the main principles of embedded librarianship have been thoroughly discussed in the literature, including in Matthew Brower's (2011) historical overview of embedded librarianship. David Shumaker (2012, 6) provides a concise, yet representative, summary of these principles, which highlight the fact that community is at the core of embedded librarianship:

- building strong working relationships with others in the community
- aligning with the work and goals of the community
- adopting shared goals with the members of the community
- making customized, highly valued contributions to the community.

As explained by Colbe Galston and colleagues (2012, 47), "the trickiest part of this process [embedding librarians] is perhaps the most powerful: building relationships." By becoming aware of the issues that are important to the community in which they are embedded, librarians can begin to find ways to become part of what that group is working on and use their skill as researchers to inform the discussion and assist the group in achieving their goals and mission. According to Galston and colleagues, it is possible to create a strategic, impactful, relationship-centred embedded experience by following three simple guidelines: show up, pay attention, and stay involved (47).

Meanwhile, Tina Franks (2016, 3) generously shares her experience of a lesson learned with regard to the consequences of not focusing on the community aspect: "I learned that one of my mistakes had been to focus on promoting the collection and databases instead of highlighting the librarian's expertise, education, and experience needed to build successful relationships based on trust and confidence." A similar point is made by Jake Carlson and Ruth Kneale (2011, 167), who state:

> 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.

Evolution of embedded librarianship

Early examples of embedded librarianship are primarily found in the context of higher education, and they are most typically associated with distance education or online courses (for example, Matthew and Schroeder 2006) and undergraduate instruction (for example, Hall 2008). However, as the embedded model has become more widely recognized, it has begun to be applied in a wider and more creative range of situations within the library profession. For instance, moving beyond the numerous cases where subject specialist librarians have collaborated with faculty to assist with undergraduate student learning and information literacy, Lin Wu and colleagues (2013) report on a pilot project that takes the concept of embedding much further by integrating health sciences librarians into a graduate-level nursing course to provide in-depth research and writing assistance at the point of need. Meanwhile, Devon Greyson, Soleil Surette, Liz Dennett, and Trish Chatterley (2013) discuss a subset of embedded librarianship that they refer to as research-embedded health librarianship, where librarians are embedded in research groups or teams, specifically in the health sciences.

In another example that moves beyond the conventional situation where subject specialists embed themselves with academic programs to foster awareness of library services and information literacy concepts, Christopher Guder (2010) describes a case of embedded librarianship that is not built around subject specialization. In this instance, Guder reports on an effort underway at one university to embed library services for patrons with disabilities where members of the community are not necessarily affiliated with the same degree program. Meanwhile, Galston and colleagues (2012) report on an experience where public librarians have been embedded in local organizations, including schools, city councils, economic development councils, and women's crisis centres, to carry out community reference. In other words, public librarians are heading out into the community to work closely with groups and conduct onsite reference interviews, as needed, to discover and answer their questions.

In two final examples, Carl Andrews (2015, 6) summarizes several cases where college and university librarians have been embedded in secondary schools to provide research instruction and support as a means of encouraging high school students to develop research skills before they embark on post-secondary education. Dallas Long (2011) reports on an experiment where a librarian is embedded in a university residence hall to serve students where they live. Examples such as these led Kesselman and Watstein (2009, 384) to assert that "explorations of new, embedded roles for librarians in all types of organizations abound as seen in the increase of articles on this topic." Indeed, three recent survey articles by David Shumaker (2011), Stephanie Schulte (2012), and Evgenia Vassilakaki and Valentini Moniarou-Papaconstantinou (2015) confirm that embedded librarianship has now become firmly established throughout various sectors of the library profession. However, a review of the literature of the information professions at large, including the records management literature, reveals that the embedded model does not appear to have taken hold in the information professions beyond librarianship proper (see Bowker and Villamizar 2017). Therefore, we set out to explore whether an embedded model could be usefully adapted and successfully implemented in the field of records management. As a first step, we sought to identify best practices that have emerged in embedded librarianship to use these as a model for designing a successful pilot project in embedded records management.

Identifying best practices and criteria for successful implementation of embedded librarianship

For more than a decade now, practitioners have been experimenting with embedded librarianship. Based on this considerable volume of evidence, several authors have attempted to identify best practices and put forward recommendations for successfully implementing this model, including David Shumaker and Mary Talley (2009), Amy York and Jason Vance (2009), Kelly Heider (2010), Starr Hoffman and Lilly Ramin (2010), and Carl Andrews (2015). From these works, we have extracted eight generalizable criteria that appear to be relevant for successfully embedding an information professional. Note that because our

goal is to adapt this model to embed a records manager, we have focused on criteria that are generalizable to the information professions at large, rather than on those that are highly specific to librarianship (for example, acting as a departmental bibliographer) or to very specialized instances of embedding (for example, being embedded in an online course). The eight generalizable criteria that have been retained are summarized in Table 1.

As we can see from looking at Table 1, many of these criteria for success are directly related to aspects of community building, such as obtaining the buy-in of management, being located in the client group's office, participating in team events, developing shared goals, building trust relationships, and maintaining ties to the LIS community.

Case study: From embedded librarian to embedded records manager

Institutional context

The University of Ottawa is a large, research-intensive university that operates in both of Canada's official languages (English and French). As of 2015, there were 1,262 regular professors and 42,672 students, including 6,604 graduate students. The university's Faculty of Graduate and Postdoctoral Studies (FGPS) currently has thirty-six full-time employees, and it operates as a centralized body that oversees both the strategic and operational aspects related to graduate studies. However, as part of a major administrative reorganization at the university, the administration of graduate studies is presently being restructured. Strategic tasks will remain in a streamlined central office of graduate studies. Meanwhile, over the course of the year 2016, the majority of the operations-related tasks will be decentralized and transferred to the nine disciplinary faculties (arts, engineering, science, and so on) where the graduate students are pursuing their programs of study. In addition, as part of the restructuring, the task of managing the cyclical review of graduate programs will also be migrated out of the FGPS and into a centralized office. Currently, cyclical reviews for undergraduate and graduate programs are handled separately by different teams in different offices; however, the plan is to consolidate these teams and to create a single centralized office for quality assurance by 2017.

At the FGPS, the principal repository for storing information is a shared network drive, and the information stored there is typically accessed and managed using Windows Explorer. In advance of transferring responsibilities to other units, the FGPS employees began to try to identify documents and other information objects that would also need to be transferred. It quickly became clear, however, that the information management practices being employed at the FGPS are far from being best practices. The classification system in use is "homegrown," and it has evolved in an ad hoc way based on the practices and preferences of the various employees who have worked at the FGPS since it was first established in 1999. Moreover, the access rights are managed at a very high level in a way that is less than optimal.

Table 1: Generalizable criteria and best practices identified in the literature for successfully embedding librarians.

Criteria	Brief description	Source
Support from the organization's leadership	Embedding a librarian is seen as a strategy for strengthening the organization and offering an improved level of service. Greater success was seen in instances where a leader of the client group facilitated the integration of the librarian into the group; this is seen as a tangible sign of the client manager's buy-in to the embedded service.	Andrews 2015; Heider 2010; Hoffman and Ramin 2010; Shumaker and Talley 2009
Funding	In some success stories, the salary of the embedded librarian was paid partially or wholly by the client group rather than by a central service.	Shumaker and Talley 2009
Hiring, management, and supervision	Another practice in successful programs is the engagement of client management in the hiring process and in providing input to the librarian's performance review. Supervision by a member of the client group, rather than by a library manager, was noted as a success factor.	Heider 2010; Andrews 2015; Shumaker and Talley 2009
Physical presence	Though it was not considered absolutely essential for the embedded librarian to be physically located within their client group, many of the success stories did use this model, noting that it facilitated interactions and community building.	Andrews 2015; Heider 2010; Shumaker and Talley 2009
Understanding the work	Successful embedded librarians are reported to have developed a good understanding of the work of the client group. In some cases they also have additional qualifications in the discipline that is of primary concern to their client group. Some success stories report that embedded librarians engage in formal or informal continuing education activities to learn more about their client's core business.	Andrews 2015; Heider 2010; Shumaker and Talley 2009
Participation in the community within the client group, including developing shared goals and participating in their achievement	Building a strong community that fully includes the embedded librarian as a partner member is consistently considered to be among the most important factors for success. In success stories, this relationship- and community-building took various forms, including conventional professional encounters (for example, meeting with members of the client group, as well as with senior managers) but also social bonding opportunities (for example, having lunch with team members, participating in team celebrations).	Andrews 2015; Heider 2010; Shumaker and Talley 2009; York and Vance 2009
Promotion of expertise	In successful examples of embedded librarianship, the librarian did not wait to be asked for assistance; rather he or she asked questions about the group's work and actively spoke up about ways in which he or she could contribute to achieving shared goals.	Andrews 2015; Heider 2010; Hoffman and Ramin 2010; York and Vance 2009
Maintaining ties with the LIS community	A challenge that was observed in the literature was that, in cases where an embedded librarian is focusing on the client group, there is a risk that as ties to clients strengthen, ties to other information professionals will weaken. It was noted that such an outcome is not desirable, but nor is it inevitable if the embedded librarian takes care to retain a strong connection with the LIS community, even while building close relationships with the client group.	Heider 2010; Hoffman and Ramin 2010; Shumaker and Talley 2009

For example, as of September 2015, the shared drive contained over 180,000 files, which were (loosely) organized into eleven different levels of folders. In addition, no naming conventions had been established or applied. Instead, individuals developed their own cryptic naming systems, and this situation was exacerbated by the fact that some employees named files and folders in English, while others used French. Therefore, looking for information often required two separate searches—one using English terms and one using French terms. Along with the lack of naming conventions, there was also a lack of version control. This resulted in oddly named files such as "Self-study-FinalFinalFinal.doc" or a series of files where subsequent readers simply appended their initials to the filename after making modifications to produce documents with names such as "Itinerary-JJ-MU.doc." A further challenge was that, instead of storing personal information in their own folders on a separate drive provided for this purpose, some employees stored this information on the shared drive. Therefore, when searching for information, it was necessary to navigate past folders with names such as "Requests from Downstairs" or "Varia." Finally, access rights were managed at the level of the highest folder only, meaning that once a user was given access to the main FGPS folder, they had access to all the subfolders and files within it. While no sensitive information is stored here, it is nonetheless debatable whether all employees should be given access to all files.

Seeking expert help

Although the FGPS has a small information technology team, its members are not information management (IM) specialists, and they are not responsible for IM-related tasks overall. Similarly, the university's central information technology unit, which includes the Office of the Chief Information Officer, comprises mainly computer specialists, rather than IM specialists. Their primary mandate is to leverage information technologies to provide solutions. While technology may contribute to improving IM practices at the FGPS, it cannot provide a comprehensive solution. Rather, it will be necessary to incorporate additional elements, such as a well thought out classification system, naming conventions, version control, an access rights management strategy, a retention schedule, and training in best practices.

The University Archives does have a mandate to promote and support sound IM practices. However, it employs only two archivists and a single records analyst to serve the entire university community; this includes assisting with the management of both electronic and physical information objects. While the records analyst was able to provide some general information, such as a very high-level document classification scheme and records retention schedule used at the university, he was unable to provide the FGPS with personalized service, such as a needs analysis, design of a customized classification scheme and naming conventions, advice on access rights management, or training in best practices for document management. He did, however, indicate that the university did sometimes employ consultants to provide IM support.

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The responsibility for identifying an appropriate solution was assigned to the vice-dean of the FGPS who is also a professor whose area of specialization is natural language processing. Because of this, she holds a cross-appointment between the School of Translation and Interpretation and the School of Information Studies. Therefore, while she is not an IM expert, she nonetheless has a broad familiarity with the LIS literature. As a result, she was familiar with the general concept of "embedded librarianship." Consequently, when exploring the options available for acquiring expert help to address the FGPS's IM-related needs, she did some further reading and also engaged in conversation with LIS specialists in her network.

As suggested by the records analyst at the University Archives, the most obvious possibility was to hire a consultant. The consulting model is well known and offers several advantages. Shumaker (2012, 16) provides an excellent description of consultant librarians, noting that they typically offer mobility, proactivity, energy, and focus. They come to the client's location and engage with the team. They function as specialized role players with a unique expertise—in this case, information analysis and management—that the client needs to achieve certain objectives. They focus their energy on a team and are able to spot information problems that others on the team may not recognize. Consultants are in a position to come up with solutions that are crafted to the special needs of the team, and they establish relationships that last for the duration of the engagement. The consulting model certainly offers many benefits, but one of its most significant drawbacks is that consultants are typically viewed as specialized role players, not as full members of the team. The consultant contributes advice—and sometimes solutions—but in a limited sphere bounded by preconceived ideas of the consultant's expertise. The consultant may not develop a strong knowledge of the team's work and may not feel a responsibility for overall team outcomes. Not viewed as a true member of the team, the consultant is only asked for advice in situations where the team members feel they need specialized expertise.

To overcome some of these drawbacks, Shumaker (2012, 16–17) recommended hiring an embedded librarian rather than a consultant. The embedded librarian would contribute to a team or an organization through customized, specialized, value-added information management and analysis. Embedded librarianship, when fully developed, embraces a strong, ongoing working relationship between the librarian, team leaders, and other team members, along with a sense of shared responsibility among all for outcomes and achievements. The embedded librarian develops a sophisticated understanding of the team's domain. Although the embedded librarian does not acquire the same level of domain expertise as the other team members, the sophisticated understanding nonetheless enables the librarian to become much more effective at customizing information solutions and adding value. The embedded librarian often contributes novel and useful insights and solutions to team problems that go beyond the expected bounds of the librarian's role. The embedded librarian combines proactivity and energy with strong working relationships, close alignment with team goals

and objectives, shared responsibility for outcomes, and full membership in the team. Martin Kesselman and Sarah Watstein (2009, 387) similarly describe embeddedness as intensive integration into the client group, where team members have multiple opportunities to interact with the librarian. They go on to note that integration and collaboration, which are central to the role and function of embedded librarians, also represent values advanced by embedded librarianship (395). In short, what these authors are essentially describing is the creation of a community, which the online *Oxford Dictionary* defines as "a feeling of fellowship with others, as a result of sharing common attitudes, interests, and goals."[1]

After doing additional reading and speaking with some librarians at the university who had experience working in an embedded situation, the vice-dean determined that the concept of embedded librarianship could most likely be adapted to other information professions—in this case, records management—and that an embedded records manager might be better [sb] to meet the evolving needs of the FGPS better [ha] would a consultant. Accordingly, the vice-dean prepared a business case and pitched the idea of engaging an embedded records manager to the senior management team at the FGPS, which in addition to the vice-dean comprises the dean, the associate dean, the chief administrative officer, and the assistant registrar (graduate studies). Essentially, the elements used as the foundation for the business case were those criteria for success that were identified in the literature and that have already been summarized in Table 1. Furthermore, it was emphasized that additional benefits could be anticipated if an embedded model were adopted, given that embedded professionals frequently contribute innovative and valuable insights and solutions to team problems that go beyond the expected bounds of their primary role (Shumaker 2012, 17).

From embedded librarian to embedded records manager: Modelling success

The FGPS senior management team approved the idea in principle, and, in particular, they agreed to a test in the form of a four-month pilot project where the records manager would be embedded within the quality assurance (QA) team, which is supervised by the vice-dean. As noted above, as part of the restructuring of the FGPS, the responsibilities of the QA team would be among those to be transferred out of the FGPS and to a new central office of quality assurance. In addition to the vice-dean, the QA team has two full-time employees: a director and a coordinator. Together, the QA team is responsible for managing the cyclical reviews of each of the 185 graduate programs offered by the university. These reviews are required by the province of Ontario, and each program is reviewed on an eight-year cycle. Overall, the work of the QA team is largely one of project management, and, as part of this work, a wide range of information objects are produced and gathered, including agendas and minutes for the Graduate Program Evaluation Committee meetings, schedules for the cyclical reviews, self-study documents, statistics about applications, admissions, and registrations, research funding received by professors, information about cooperative work placements, a summary of the library's support for each graduate

program, post-graduation employment information, reviewers' reports, unit responses, final assessment reports, executive summaries, correspondence, itineraries for on-site visits, templates, guides, workshop presentations, governance and policy documents, to name just a few. Moreover, the work of the university's QA team is subject to a periodic audit by the provincial quality assurance council, so it is essential that relevant information objects be appropriately retained, organized, and managed (Goff 2013).

Once the decision had been made to engage an embedded records manager, the FGPS took steps to set the project up for success. Referring once again to the eight generalizable criteria that had been identified in the literature, the FGPS responded to those criteria as outlined in Table 2. To begin, the FGPS funded the position, and the vice-dean agreed to act as a project champion and as the hiring and supervising manager. The candidate who was hired has an undergraduate degree in business as well as a graduate diploma in management. He also has several years of experience working as a business analyst, including an eight-month, full-time cooperative work term at Canada's bilingual Library of Parliament, which was completed as part of his Master of Information Studies degree at the University of Ottawa. Once hired, the embedded records manager was installed in the same office as the rest of the QA team, and he was fully involved in the professional and social activities organized by the QA team and the FGPS at large. As part of the team, he gained a sophisticated understanding of the institutional quality assurance process, and he contributed expertise in records management and beyond while still retaining active ties to the wider LIS sphere. As illustrated in more detail in Table 2, building and maintaining relationships at various levels was a key to the project's success. This included integrating fully into the host team in the QA office, maintaining the trust of the FGPS management team and employees, establishing credibility at a broader institutional level through partnerships with external project stakeholders and maintaining ties to the LIS community.

Evaluation of the pilot project

If we were to evaluate the project in a conventional way by simply assessing whether the information management needs of the QA team had been met, then the pilot project can surely be considered a success. The number of active files stored on the shared drive has been reduced by approximately 50 percent, with duplicates and draft versions of documents being deleted and inactive files being archived. In addition, the number of levels of folders has been reduced from eleven to five. A naming convention, which includes a method of indicating versions, has been developed and applied. The QA team members have been trained on the new system, and an access rights management plan has been developed and implemented. Moreover, the project was completed on time and on budget. Of course, it is highly likely that similar results could have been achieved by hiring a consultant. Therefore, in the context of this project, which has a focus on community, it is more meaningful to evaluate whether there were any added benefits as a result of embedding a records manager within the QA team.

Table 2: Criteria for successfully embedding information professionals and examples of actions taken to address these criteria in the pilot project.

Criteria	Steps taken to set up the embedded records manager pilot project for success
Support from the organization's leadership	• The FGPS senior management team supported the concept of embedding a records manager in the QA team. • The vice-dean acted as champion for the information management project and helped to integrate the embedded records manager (for example, by making introductions, securing resources). • The embedded records manager meets bi-monthly with the FGPS senior management team to provide updates on the project.
Funding	• The embedded records manager position is fully funded by the FGPS and not by a central service, thus, the FGPS is invested in its success.
Hiring, management, and supervision	• The hiring was done by the FGPS. • The embedded records manager reports to the vice-dean of the FGPS, who is also responsible for performance reviews.
Physical presence	• The embedded records manager has a desk in the same pod as the other three members of the QA team.
Understanding the work	• The embedded records manager began his task by conducting a series of information-gathering interviews with members of the FGPS to learn about their jobs and information management needs. • The embedded records manager meets regularly with the QA team and has demonstrated an increased understanding of their work by helping them with tasks such as process mapping. • Much of the work carried out by the QA team is essentially project management, and the embedded records manager has a graduate qualification in management in addition to a Master of Information Studies degree. • The embedded records manager has participated in workshops on different aspects of university business offered by the university's Centre for Organizational Development and Learning.
Participation in the community within the client group, including developing shared goals and participating in their achievement	• The embedded records manager attends a weekly QA team meeting. • The embedded records manager also attends other meetings, such as the general FGPS staff meetings, where he receives a broader exposure to the overall business of the FGPS. • The embedded records manager meets bi-monthly with the senior management team to provide project updates. • The embedded records manager participates regularly in informal and formal social events (for example, coffee breaks and lunches with team members, holiday party).
Promotion of expertise	• The records manager's expertise in areas outside the specific domain of records management (for example, in data visualization, data analysis, knowledge of university archival policies, understanding of knowledge transfer processes) was promoted and volunteered.
Maintaining ties with the LIS community	• At the suggestion of the embedded records manager, several information professionals were included as external stakeholders in the project, including the records analyst from the University Archives, a representative from the Office of the Chief Information Officer, and two professors from the School of Information Studies who specialize in information management and knowledge organization. • The FGPS supported professional development opportunities for the embedded records manager that were linked to the information profession (for example, participation in the annual Information Management Days conference organized by the local ARMA chapter and in the annual conference of the Canadian Association for Information Science)

We recall that the principles of embedded librarianship, as summarized by Shumaker (2012, 6), include building strong working relationships with others in the community, adopting shared goals with the members of the community, and making customized, highly valued contributions to the community. One clear benefit to hiring an embedded employee rather than a consultant was the fact that as an employee the records manager was motivated, and also empowered, to invest in learning about the organizational culture as part of his job. For instance, the University of Ottawa has a Centre for Organizational Development and Learning (CODL) that offers employees a wide range of workshops, such as the "University at a Glance" and "Success as an Administrative Employee," which help to inform participants about the organizational culture of the institution. The embedded records manager participated in the CODL workshops as well as in a range of FGPS activities as outlined previously (for example, the QA team meetings, the all-staff FGPS meetings, social and team-building events). This contributed to the embedded records manager's ability to develop horizontal trust-based relationships within the FGPS and the university. He was—and was seen to be—a peer who had a shared understanding of the organizational culture as well as a shared interest in the success of the institution. This status as a trusted peer also made it easier for the embedded records manager to develop relationships with colleagues from other units at the university and to involve them in the project. For example, he invited several colleagues from outside the FGPS to act as external stakeholders in the project, including the records analyst from the University Archives, a representative from the Office of the Chief Information Officer, and two professors from the School of Information Studies. Their participation not only brought in additional expertise, but it also helped to increase the credibility and the visibility of the project and to underline the value of good records management practices for the institution. Our experience supports an observation made by Tina Franks (2016, 1) that "discipline expertise is a valuable commodity, but librarians who fail to build trust with constituents may struggle to engage them." The peer status of the embedded records manager facilitated the development of ongoing relationships across the institution.

In general, the literature on embedded services documents an evolution in the level and nature of services provided by professionals in these roles. As pointed out by Shumaker (2012, 12), "embedded librarians transcend service because they become partners." As a partner, the information professional is fully engaged and is a member of a team whose members are mutually responsible for the overall outcome. It is different from a service relationship, and it is what happens when embedded relationships are fully developed. By being a fully integrated team member, the embedded records manager was in a position to truly understand the work carried out by the team. The team as a whole had a shared series of goals, and all members, including the embedded records manager, contributed to their achievement. For example, as part of the process of learning about the cyclical review process managed by the QA team, the records manager helped them to analyze and map the process more clearly.

This highlighted several inefficiencies, which the team could then work to correct (for example, doing some tasks in a different order, streamlining overlapping tasks, reallocating responsibilities among team members). Franks (2016, 7) suggests that "we [librarians] need to become embedded in our constituents' workflow so we can become an integrated part of the project process." The insights and expertise in process mapping provided by the records manager greatly assisted the team with their overall goal of managing the cyclical review process more efficiently. As evidence, we can point to the fact that that the time required to complete the first stage of a cyclical review, which is the development and approval of a program's self-study report, has been reduced from an average of seventeen months in 2011–12 to an average of thirteen months in 2015–16.

To give another illustration, it was mentioned previously that in the absence of any formal guidance, members of the FGPS had been inconsistent in their use of English and French when naming information objects. In working closely with the QA team, and in taking the time to fully understand the organizational culture, the embedded records manager was able to propose a solution that was manageable and that also reflected the spirit of bilingualism that is at the core of the University of Ottawa: the folder structure is now named in French, while the files are named in English. While language can be a very sensitive issue, this respectful solution was readily accepted by both the English- and the French-speaking colleagues at the FGPS because the embedded records manager had formed trusted relations within the community and had taken the time to understand their values.

In a related example, as the embedded records manager worked with the QA team to develop file-naming conventions, he was also able to alert the other team members to terminological inconsistencies that appeared in their documentation. As a result, the entire QA team, including the records manager, examined their terminology more closely and worked to develop a glossary and style guide. Now, the documents produced by the team are more consistent, and communications with the team's stakeholders, which include the academic units whose programs are under review, the Ontario Universities Council on Quality Assurance, and the provincial government are clearer and thus generate fewer questions for the team to answer or clarify. Moreover, the bilingual glossary has also been adopted by the university's Language Services Unit, which is responsible for translation services at the university. As Canada's only fully bilingual university, the University of Ottawa has a unique organizational culture in which linguistic duality plays a distinctive role. An external consultant would undoubtedly find it more challenging to navigate this unique, yet vital, aspect of the organizational culture than did the embedded records manager, who was fully immersed in it. Thus, the presence of the embedded records manager contributed to improved linguistic practices that benefited the university community at large, which was an unanticipated, but highly appreciated, added benefit.

The provision of customized training—both formal and informal—was another benefit of having the records manager embedded within the team. Not

only did he provide formal workshops to teach team members how to use the new classification system and to apply the new naming conventions, he was also available to answer questions "on-the-fly" as they came up. This was helpful because questions frequently arose not during the workshops themselves but later as the team members tried to implement new practices. In some cases, the questions that team members raised led to refinements in the system as part of an ongoing and iterative process. This outcome would likely have been harder to achieve using an external consultant, who may simply have delivered a training workshop at the end of the project before moving on to another engagement.

It was noted previously that in several of the more successful examples of embedded librarianship described in the literature, the librarian did not wait to be asked for assistance. Rather he or she asked questions about the group's work and actively spoke up about ways in which he or she could contribute to achieving shared goals. The embedded records manager likewise adopted this type of proactive stance and sought out ways to contribute that went beyond the prescribed task of creating and implementing an electronic document and records management system (EDRMS). For instance, he was able to help other team members become more proficient users of some of their office software (for example, Excel, Windows file manager). In addition, he used his knowledge of databases and filters to help a team member conduct research more effectively. He was also able to share his knowledge of data visualization techniques and tools, which allowed other team members to learn about them and to integrate them into some of their documents and products. While a consultant may have possessed these skills, it is unlikely that either the consultant or the QA team would have thought to work together in these ways. Rather, it was only as a result of the strong relationship that (1) these opportunities presented themselves and (2) all team members felt comfortable pursuing them.

As the trusted relationship developed between the embedded records manager and the wider FGPS team, he came to be viewed not simply as a records manager but also as an information specialist who could assist the FGPS on a broader scale. For instance, as part of wider conversations, the embedded records manager helped the senior management team to realize that in addition to transferring existing electronic documents to other units as part of the restructuring process, it was important to consider other means of transferring knowledge as well. He proposed a knowledge transfer plan to ensure that "need to know" information held by key employees was documented or passed on through cross-training rather than being lost during the restructuring (Anderson 2014).

As it became clear that the embedded records manager could advise and assist with a wider range of information issues, he was asked to take on a leadership role that went beyond the initial EDRMS project. For instance, although the dean's executive assistant was named as the FGPS's principal point of contact for liaising with the University Archives, she readily admitted that her understanding of issues and requirements surrounding retention and disposition policies and document transfer were incomplete. She was very willing to have

the liaison role removed from her portfolio and assigned instead to the embedded records manager. He, in turn, worked more actively with the University Archives and helped to appropriately sort, transfer, and/or destroy a significant backlog of paper files at the FGPS. Through pro-active efforts such as these, the embedded records manager helped to instil and promote a culture of knowledge preservation and transfer at the FGPS.

Perhaps the most convincing evidence of the success of this four-month pilot project is the fact that, at its completion, the records manager was invited to remain at the FGPS for an additional year so that he could continue his work on several fronts. Specifically, once the pilot project with the QA team was complete, he went on to begin working with other sectors within the FGPS to extend the EDRMS. Several factors, all with their roots in community building, were instrumental in achieving this outcome. The fact that the records manager had already participated in FGPS-wide activities, both professional and social, meant that he had already begun laying the foundations for relationships with these other sectors. Moreover, the positive experiences of the QA team that were spread by worth of mouth helped to allay any uncertainties that might have existed among those employees who did not fully understand information management and who had expressed some concerns about having their files reorganized or renamed. The positive relationship that had been forged with the senior management, and the vice-dean's work as project champion, also helped to garner buy-in from the wider community.

Another concrete way in which the value of the embedded records manager's contribution to the FGPS community was recognized was through the FGPS's active support—both morally and financially—in helping the embedded records manager to maintain ties with the LIS community. Greyson, Surette, Dennett, and Chatterley (2013) comment specifically on the fact that isolation from LIS colleagues, including a lack of peer feedback and mentoring, was universally identified as a challenge by the thirty-nine respondents to their survey on research-embedded health librarianship in Canada. However, the embedded records manager at the FGPS sought to combat this by actively involving external stakeholders (for example, the records analyst from the University Archives, professors from the School of Information Studies) in the project. In addition, the FGPS provided time and some professional development funds that allowed the embedded records manager to participate in activities such as an ARMA International conference and the annual conference of the Canadian Association for Information Science.

Concluding remarks

To the best of our knowledge, no other unit on campus has an embedded records manager. However, the literature outlining various libraries' experiences with embedded librarianship was both inspiring and instructive, and it afforded us an opportunity to consider how we might adapt this model to successfully embed a records manager within the FGPS. We fully support the following notion that is prevalent throughout the literature: a strong community is the key to a

successful experience both for the information professional and for the team into which they are embedded. Based on our experience, we see the embedded service model as one that promotes high trust, close collaboration, and shared responsibility for outcomes. It produces a community where the information professional is considered to be a partner and where he or she can make a variety of sophisticated, value-added contributions over and above standard professional information services. Moreover, we agree with Shumaker and Talley's (2009, 45) observation that the embedded service model has a strong foundation and potential staying power.

Cassandra Kvenild and Kaijsa Calkins (2011, ix) proclaim: "There is so much more to the story of embedded librarianship yet to be written." We consider our own pilot project with an embedded records manager to have been highly successful, and we hope this discussion has contributed a meaningful chapter to the story of embedded information professionals and the value of community.

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Note

1 *Oxford Dictionary*, https://www.oxforddictionaries.com/ (accessed 5 January 2017).

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