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Rachel L. Edford

University of Central Florida, rachel.edford@ucf.edu

Sandy Avila

University of Central Florida, savila@ucf.edu



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The One Size Does Not Fit All Approach: Case Studies in Modelling Embedded Librarianship

Rachel L. Edford^a and Sandra Avila^b

^a Student Learning & Engagement, University of Central Florida, Orlando, United States of America; ^b Research & Information Services, University of Central Florida, Orlando, United States of America

rachel.edford@ucf.edu, <https://orcid.org/0000-0001-7178-8438>

The One Size Does Not Fit All Approach: Case Studies in Modelling Embedded Librarianship

The pandemic and resulting shift to remote work stressed the importance of distance library services. As librarians explored different modes of engagement, embedded librarianship became increasingly important but also more complicated than before. While there is a wealth of literature on embedded librarianship, few authors agree on how to define it or discuss its specific challenges during the pandemic. This paper will present the experiences of two academic librarians working in different departments at the same institution, informed by the literature; the authors will highlight the complexity of embedded librarianship during this unique time while addressing challenges and offering recommendations.

Keywords: embedded librarianship; academic libraries; subject liaison librarianship; library instruction; case studies; distance library services

Introduction

The COVID pandemic and subsequent shift to remote work underscored the value of distance library services, with many librarians searching for effective ways to engage virtually with their patrons. In particular, academic librarians faced challenges meeting the demands from faculty for a variety of synchronous and asynchronous online instruction options (Ibacache et al., 2021; Norton, 2019). While the embedded model of library instruction is certainly not new, many note that embedded librarianship (EL) became even more important during the pandemic (Strasz, 2021; Chigwada, 2021). In addition to embedded librarianship playing a more prominent role during the pandemic in many institutions, it has also become more complicated for librarians dealing with multiple course modalities during the various phases of the pandemic.

Supporting face-to-face and hybrid classes that were quickly required to pivot online in addition to fully online courses presented new challenges for embedded librarians.

The broad scope and diversity of the professional literature on embedded librarianship reflects its variations in practice. A review of the literature reveals a wide range of definitions and discussions of the duties of an embedded librarian bridging both physical and virtual spaces. Some librarians physically relocate offices to liaison academic departments, while others join the virtual classroom space through a learning management system (LMS) (Shumaker, 2009). The literature spans case studies of specific embedded programs to generalized recommendations for newly embedded librarians. This paper aims to find a middle ground by highlighting different experiences with embedded librarianship during the pandemic shutdown and after the return to campus at the University of Central Florida's John C. Hitt Library, demonstrating that one size does not fit all in the case of EL. Through an exploration of the literature on embedded librarianship and a discussion of case studies from an instruction librarian and a subject liaison librarian from different departments, the authors will address questions related to scalability and sustainability during this unique time and offer recommendations for new and experienced embedded librarians.

Institutional Background

The University of Central Florida (UCF) is a metropolitan university and one of 12 public institutions in the state of Florida. With a current enrollment of 70,406 students as of Fall 2021, UCF is the largest university in the state and one of the largest in the nation (University of Central Florida, 2022). The university is centrally located in Orlando, FL, adjacent to a thriving research park and nearby Cape Canaveral, which is home to a revitalizing space industry where UCF is a partner. In addition, UCF has several campuses and regional locations along with its fully online programs. This

includes the Downtown Campus and the UCF Academic Health Sciences Center at Lake Nona.

With UCF Libraries providing research support to all campuses and locations, the main UCF campus is home to the John C. Hitt Library and the Curriculum Materials Center. The Addition Financial Downtown Campus Library is located at the Downtown Campus, and the Universal Orlando Foundation Library is located on the Rosen College of Hospitality Campus. The UCF Lake Nona Medical Center Campus is home to the Harriet F. Ginsburg Health Sciences Library. At the center of main campus, the John C. Hitt Library is the largest of the UCF libraries at over 24,800 square feet (University of Central Florida Libraries, 2022). At the John C. Hitt Library, there are over 100 library faculty and support personnel across ten departments.

Several departments at the John C. Hitt Library house reference and instruction librarians who handle a variety of subject-specific instruction, programming, and services. The Student Learning and Engagement Department (SLE) is made up of four faculty librarians who focus on undergraduate general education courses, including one-shot instruction for college composition and student success courses held both face-to-face and online. The Research and Information Services Department (RIS) is home to twelve subject liaison librarians who provide research support to academic programs for undergraduate and graduate areas of study across the main campus, Downtown Campus, and Rosen College.

In this paper, an instruction librarian from SLE, along with a liaison librarian to the sciences from RIS will share four cases spanning the pandemic timeline, beginning with the full campus shutdown in Spring 2020 through the return to campus in Fall 2021. The examples will showcase different levels of experience with EL and different degrees of librarian involvement in courses. The case studies encompass a range of

modalities and instructional approaches, including presenting library instruction to a face-to-face class while on campus, embedding a librarian in the course LMS for a fully online course, to a combination of modalities and approaches that include creating specific research guides and co-producing course assignments with faculty.

Literature review

While case studies, literature reviews, and lists of best practices associated with EL are plentiful in professional literature, the number of resources and diversity of viewpoints can be daunting to any librarian looking to the literature for guidance. Ironically, most agree that embedded librarianship is notoriously difficult to define and that more research is needed to determine its benefits and challenges (Schulte, 2012; Delaney & Bates, 2015; Abrizah et al., 2016). One of the most cited articles on EL is Dewey's 2004 article "The embedded librarian: strategic campus collaborations," which is often credited with introducing the phrase (Almeida & Pollack, 2017). Indeed, Hines (2013) cites 2004 as a watershed year for EL. Dewey (2004) explains the concept of EL using a metaphor comparing embedded journalists from the Iraq war to embedded librarians; both the journalist and librarian seek "a more comprehensive integration of one group with another group" (p. 6). She provides multiple examples of embedded librarianship, discussing how academic librarians and libraries can embed themselves through research partnerships, serve as a site of cultural events, get involved in strategic campus committees, assist with curriculum development, connect with student leaders and groups, participate in fundraising efforts, and offer an active presence on college websites and in learning management systems.

Kearley and Phillips (2004) focus on Dewey's last example and describe a two-part process of making library resources available in online courses by embedding links and interactive tutorials in the LMS while collaborating with teaching faculty. Kearley

and Phillips (2004), like Dewey, highlight integration as a defining feature of EL, but they also add flexibility, in regards to the rapidly changing field of distance education. In 2009, David Shumaker and Mary Tally published “Models of embedded librarianship: final report” which sought to define embedded librarianship in greater detail. Shumaker and Tally (2009) proposed a list of attributes to differentiate EL from “traditional modes of library service” (p. 9), claiming that embedded services are customer-centric, focused on small groups, aim for analysis and synthesis, and are built on trusted advice. The study highlighted the complexity of embedded librarianship and further underscored the challenge of defining EL and its associated duties. In their 2009 article, Kesselman and Watstein echo Shumaker and Tally’s (2009) sentiment that EL is an user centric approach. Kesselman and Watstein (2009) claim that “integration and collaboration” (p. 387) are central features of EL, and they present examples of librarians collaborating with faculty in both online and physical spaces.

Along with the literature describing attributes and activities of embedded librarians, many authors provide lists of best practices. York and Vance (2009) offer advice for librarians actively embedded in an online course management system (CMS). The list includes being familiar with the campus CMS and administrators, providing additional resources beyond the CMS library link, being mindful of workload issues, actively participating in the class, and heavily promoting the embedded librarian services to faculty. Hoffman and Ramin (2010) also present a list of best practices while focusing on the role of librarians, their expected level of involvement, and potential activities. Their list includes collaborating with other librarians and getting support from library administration, working with faculty to determine the librarian’s role and obtain information about the class, planning to stay organized and anticipate busy times, and testing the technology.

These lists of best practices often acknowledge (directly or indirectly) challenges with embedded librarianship, particularly in terms of scalability and sustainability. These two challenges are discussed in much of the EL literature. Writing specifically about LMS embedded librarianship, Burke and Tumbleson (2013) define sustainability as “how long the service can viably be offered to campus constituents at an acceptable standard of service” (p. 162) and scalability as “how extensive the service is to become on campus” (p. 163). The authors provide recommendations for both individual librarians and those managing an embedded librarian program. Burke and Tumbleson (2013) argue it is vital to consider the level of service offered for courses, set clear expectations for librarian roles with faculty, mentor and train a community of embedded librarians, regularly assess embedded librarian programs, and repurpose learning objects. Sullivan and Porter (2016) also acknowledge challenges librarians face moving from a one-shot instruction model to an embedded librarianship model. They stress that cultivating strong relationships takes time and energy. In addition, they recommend that embedded librarians interact with students as much as possible, focus instruction on what’s important, take careful notes, be open to experimenting, use multiple assessment methods frequently, and be adaptable.

Case Studies

The following case studies present course-specific examples from the perspectives of an instruction librarian from the Student Learning and Engagement Department and a subject liaison librarian from the Research and Information Services Department. The case studies cover two distinct time periods across the COVID-19 pandemic timeline: between March 2020 through August 2021 during the full campus shutdown period and after August 2021 following the return to campus operations. To

provide context for the pandemic case examples, the authors will provide a brief history of embedded librarianship in their respective departments.

Embedded Librarianship Before the COVID-19 Pandemic

Prior to the pandemic, most of the Student Learning and Engagement Department's instruction took the form of face-to-face one-shot sessions for college composition and student success courses. While a few librarians had been embedded in individual sections in the past, there was no formal embedded librarian program or set of guidelines in place. As is the case in many institutions, many faculty teaching these first-year courses were contingent faculty and graduate students; this meant that librarians were often working with new instructors rather than developing sustained relationships with faculty over time. With a small number of librarians working in a department serving a potentially large population of students, the department was hesitant to heavily promote EL due to apprehensions about both scalability and sustainability.

Similarly, scalability and sustainability were also concerns for subject librarians in Research and Information Services. A small number of subject librarians serve many students across multiple departments from upper-level undergraduate to graduate-level courses. Typically, faculty in the liaison departments would request embedded librarian services for specific courses. Subject librarians were usually embedded in LMS (Canvas); they included existing information literacy resources or created new, content-specific modules for course assignments. The modules would be added to a given course, and instructors would assign them asynchronously. Librarians would also work with faculty to lead synchronous library instruction. Other duties included hosting online discussion boards, responding to student research questions through the LMS email, creating course-specific research guides, and creating and grading assignments.

During COVID-19 Pandemic Campus Shutdown

Student Learning and Engagement

With the onset of the pandemic and the movement of classes online, instruction requests for the Student Learning and Engagement Department declined in Spring 2020. While there were still some requests for synchronous online instruction sessions through Zoom, the overall number was significantly lower than in past semesters. In response, SLE librarians explored and publicized alternatives, including embedded librarianship. They updated their video of library instruction options to include embedded librarianship, sent information about library instruction options directly out to faculty, and presented at a composition department meeting early in the Fall 2020 semester. These efforts led to requests for embedded librarians in two composition course sections in Fall 2020, and nine sections in Spring 2021.

The Fall 2020 semester was the instruction librarian's first experience with embedded librarianship. A composition faculty member emailed the librarian in late September after the start of the Fall 2020 semester, indicating that she was interested in having a librarian involved in her class. The faculty member provided an overview of the major research project along with the deadlines for the individual research assignments. The librarian offered examples of what she could offer, including creating a customized LibGuide, creating video demonstrations of search techniques, and adding the librarian to the Canvas course; the faculty member agreed to embed the librarian in two sections of a fully online college composition course, with 25 students per section. Prior to the pandemic, the course had been offered in person. One significant change in the course from pre-pandemic semesters was that the research project focused on the COVID pandemic.

The librarian was added to the faculty's online course as a non-grading Teaching Assistant (TA). In Fall 2020, there was no "librarian" role created for Canvas, so librarians were typically added as either grading or non-grading TAs, based on their role in the course. The first research assignment was due in early October, so the librarian created a customized LibGuide, based on an existing general course guide. In addition to the guide, the librarian also added a general Library Research discussion board to the course, that included the welcome video and provided students with a space to ask questions. The faculty member posted announcements introducing the librarian to the class and encouraging student participation on the discussion board.

Over the course of the semester, the librarian responded to individual student email questions, answered a few questions posted on the course discussion board, posted relevant videos, and met virtually with students for research consultations. Throughout the course, the librarian checked in with faculty, asking for feedback on materials before publishing them in the LMS and soliciting ideas for additional resources. At the end of the semester, the librarian requested informal feedback from the faculty about suggestions for improvement but did not administer formal surveys to either the faculty member or the students. The faculty member requested the librarian to serve as an embedded librarian in the same course in the following semester of Spring 2021. Unfortunately, the faculty member did not continue as an instructor at the university after Spring 2021, so the relationship was not sustained. While the librarian was able to re-use some of the materials from the course in later courses, other pandemic-specific resources were not able to be repurposed.

Research and Information Services

In contrast, the Science Librarian had worked with her faculty member in the three years prior to the pandemic as an embedded librarian in a face-to-face *Forensic*

Science in the Courtroom class with about 60. When the course moved online in Spring 2021, the faculty requested the librarian to continue in a different role as an embedded librarian. Prior to the pandemic, subject librarians in both science and legal resources presented in-person library instruction in the library; typically, each librarian held their instruction in a separate library classroom, and students would swap rooms when the allotted instruction period was over. When the course moved online, the subject librarians set up Zoom breakout rooms during the synchronous online session, so that students could get equal time learning how to search both sets of resources. Instead of having students swap rooms over Zoom, the librarians swapped instead to simplify the process.

In the Spring 2021 class, getting up to speed on tools and technology played a critical role in the course's success. Unlike some librarians who were forced to quickly learn Zoom or other web-conferencing tools at the start of the pandemic, RIS librarians were already exploring Zoom prior to the move online. The Science Librarian knew how to set up Zoom breakout rooms, use Zoom polling, and work across multiple computer screens and while monitoring the chat function. This multitasking can be difficult to coordinate and often takes months of practice to perfect.

In addition to the synchronous Zoom session, later in the semester, the Science Librarian helped grade an annotated bibliography assignment created with the faculty member two years prior. The embedded librarian was added to the LMS as a grading TA, enabling her to grade and comment on the assignment using a rubric designed by her and the faculty member. The Science Librarian had already created a course-specific LibGuide from when she was first embedded in the course, so she reused that resource and made it available through Canvas. Additionally, she helped judge the final group

presentations, which were based on the library instruction session and annotated bibliography assignment.

This embedded librarianship partnership evolved year after year. For the past five years, the Science Librarian and faculty member met at the end of the semester to debrief about needed updates, changes, and additions to future classes. This informal assessment has occurred each Spring, and there have been many revisions over time. Since the Science Librarian helped the faculty craft research-focused material over the five-year period, the course is now being considered for a Research Intensive (RI) course designation for undergraduate students interested in taking classes with a heavy research focus (Undergraduate Research, 2022). RI courses provide students with the opportunity to actively engage in the research process, get involved with peer research training, and build their portfolio by producing a research deliverable in their class. In RI courses, a librarian usually works closely with the faculty to provide students a gateway into research resources for their course assignments.

Late COVID-19 Pandemic and Return to Campus Operations

Student Learning and Engagement

By the Fall of 2021, UCF had largely returned to pre-COVID status in terms of its in-person, hybrid, and fully online course offerings. As a result, librarians could potentially be providing instruction to a wide range of course modalities. As in the previous year, the SLE Department promoted a wide range of instruction options, including embedded librarianship, to the composition and student success faculty and developed relationships with new programs. In the summer of 2021, the instruction librarian gave a presentation on the available library services and resources to a group of faculty teaching in the leadership development program. The presentation led to a request from a faculty member for an embedded librarian in two sections of an

introductory leadership course with 20 in each section. Historically, the course had been taught in-person but moved online in 2020. Fall 2021 marked the course's return to a face-to-face modality.

Since the course was face-to-face, the faculty requested the librarian to provide services in both face-to-face and virtual environments. The faculty member emailed the librarian in July, providing time for the librarian and faculty to clarify roles and brainstorm about instructional materials. The librarian created a customized LibGuide for the course, and she was added to the Canvas site in the newly created "librarian" role. The new librarian role, with both a grading and non-grading option, was created in the summer of 2021. Rather than including an online welcome video in the course, the SLE librarian was invited by the faculty to attend an in-person class session early in the semester to introduce herself and explain her role. In October, the faculty member also requested an in-person library instruction session with the librarian in connection with a research assignment. The in-person session was recorded through Zoom and posted in the course LMS.

In the LMS, the faculty member requested multiple discussion boards throughout the modules rather than a single discussion board. The librarian also created resources on APA format, which were included in the modules. Most students requested virtual assistance, through email, discussion boards, or virtual research consultations, but there was one student who requested an in-person session. While no formal survey was administered to the faculty and students, the librarian did contact the faculty for informal feedback. The faculty indicated that, in future semesters, he wanted to administer a pre-test to assess students' research and citation experience and a post-test to measure growth in those areas at the end of the semester.

Research and Information Services

In contrast to the small classes in the instruction librarian's example, the Science Librarian's case study during Spring 2022 was for one section of an *Urban Ecological Field Studies* course with 50 students. As with the forensic science example, the librarian and faculty had worked on this course for four years prior to the pandemic. Pre-pandemic, in the first few weeks of the class, the Science Librarian held an in-person library instruction session providing students with basic information on accessing library resources and setting up research consultations. During the first two years of collaborating, the faculty only requested library instruction. It wasn't until the third year that a course-specific research guide was created and included in the LMS. Each year, the LibGuide was updated, as the student research topics changed, and students were assigned different urban ecological areas around campus to conduct their field study.

In addition to creating a tailored LibGuide, the Science Librarian also offered in-person and Zoom meetings with the student research groups in the first two months of the semester. In these small group meetings, the librarian helped students find useful and relevant resources starting with the course research guide and then demonstrating advanced database searches, interlibrary loan requests, and other strategies. In addition to this group time, the faculty member and librarian arranged for the class to meet in the library multiple times over the semester. The librarian visited those face-to-face class sessions to answer questions and provide guidance while students were searching on library computers. This class time helped students feel comfortable asking all kinds of questions, like where to locate relevant grey literature and what databases to search. Since the full return to campus in Spring of 2022, the number of in-person class meetings in the library has increased from previous semesters. Three times a week for

over the course of ten weeks, the Science Librarian opens and locks up the instruction rooms after the sessions. This has created time and location constraints that the librarian had not considered ahead of time. The experience demonstrates that such a model is not sustainable in future semesters.

After three years of working with the faculty to develop library-focused resource support and serving as an embedded librarian, the faculty member requested to have the course designated as a Research Intensive (RI) Course. The course was successfully granted the Research Intensive Course Designation in 2021. This designation requires close collaboration between faculty and librarians. Without the librarian's support, this kind of designation would not be easily granted.

Recommendations

The range of factors in the case studies, including the librarians' level of involvement in courses, the length of time librarians and faculty collaborated on a course, the course modality, and number of students, demonstrate how many variations of embedded librarianship can occur even at a single institution. Rather than providing a list of specific recommendations in this section, we will highlight three common areas based on our case studies. When starting or continuing a journey in embedded librarianship, librarians should consider planning, communication, and technology. While these areas are not exclusive to embedded librarianship, they are necessary parts of any successful embedded librarian venture.

Planning

Both the instruction and subject liaison librarian presented experiences with variable preparation times, and the amount of time certainly impacts the level and quality of service that can be provided. Consequently, it is vital to get as much

information as possible from the faculty as soon as possible to start planning. While a librarian could teach a face-to-face, one-shot session with little preparation, that is not the case with embedded librarianship. Some important questions to ask about the course before accepting any request include how many sections are being requested, how many students per section, how often is the course offered, what is the course modality, how many and what type of research assignments are included, and what are the due dates of those assignments.

Moreover, librarians must also ask themselves how much time they have to dedicate to a course; this will affect the level of service they can provide. It is important to devote enough time and resources to the embedded experience while also leaving room for one's other duties and projects. This is often easier said than done, as it can be difficult to gauge the amount of time required for a particular course beforehand. An embedded librarian in the third or fourth year of working with the same faculty member may realize that a current level of service is not sustainable; they may need to scale back to a less hands-on model. Keeping a careful record of how much time one spends on a course and saving copies of all materials created, including email or announcement templates, can help with future planning. When possible, create materials or templates that can be used in other classes or for other purposes.

Communication

The case studies also demonstrate the importance of communication between librarians and faculty before, during, and after an embedded experience. In the instruction librarian's example, when establishing new relationships, librarians must clearly explain to potential partners what an embedded librarian can do to assist students and faculty. One shouldn't assume that faculty already know what an embedded librarian is. The Science Librarian's cases show how strong communication strengthens

faculty partnerships over extended periods of time. What started out as just a one-shot instruction request, developed into the Science Librarian creating and grading assignments and providing multiple types of instructional support.

Such a partnership does take time to cultivate, and one key aspect of this is open communication between librarians and faculty. This starts with a frank conversation about the librarian's role in the course and the process for creating, posting, and grading materials to avoid confusion for the librarian, faculty, and the students. Keep in mind that even though some faculty may prefer the convenience of email-only communication, that may not be the most effective way to work out complex and important issues regarding roles and expectations. A common practice shared in the case studies was the librarian checking in with the faculty at the end of the semester to solicit feedback for improvement. Whether librarians decide to use an informal assessment method like this or a more formal method, being open to feedback is key to developing and sustaining the relationship.

Technology

While technology plays a role in just about every librarian's duties, it is especially critical for embedded librarians. In the cases of LMS embedded librarianship shared earlier, fulfilling that role would be impossible without knowledge of the LMS and its tools. Understanding the various roles and permissions for each role in the LMS will also help the faculty and librarians when determining the embedded librarian's duties, including building content and grading assignments. Setting up and moderating online discussion boards, creating and embedding customized research guides, and making and adding short videos in the LMS are common tasks of embedded librarians. Librarians who are familiar with the technology are better able to use the technology to their benefit. For example, managing the notification settings in the LMS can assist with

scalability. Most systems allow users to customize notifications to specific discussion boards or assignments, so that users are not overwhelmed with unnecessary communications. Creating short, auto-graded quizzes that can be used in multiple courses also helps with scalability and sustainability.

As an embedded librarian, it's important to carve out time for professional development training on technology skills and platforms. Consider what technology programs and skills might be needed to create, deploy, and maintain resources while paying close attention to current trends. In the forensic science example, the librarian was already familiar with Zoom prior to the pandemic, and this knowledge proved invaluable once courses pivoted online. Others who followed timely updates from the Springshare products, like LibWizard for creating online quizzes inside of LibGuides, were yet another step ahead when creating online modules for specific courses.

Conclusion

As the literature on embedded librarianship attests, EL comes in many different shapes and sizes. Historically, it has proved difficult to clearly define, and the pandemic only increased its complexity. One of the features of embedded librarianship of meeting patrons where they are has become more difficult over the last two years, particularly for academic librarians attempting to provide instructional support to students in multiple course modalities. The flexibility of the embedded librarian model has proved useful in such times. As the case studies demonstrated, different levels of librarian involvement, from embedding research guides, hosting a discussion board, and grading course assignments, are required to meet the various needs of faculty and students. However, concerns about the sustainability and scalability of embedded librarian programs persist. While there is no one set of recommendations that will apply to all cases of embedded librarianship or alleviate all concerns, careful planning, clear and

frequent communication, and using technology to one's advantage can all be helpful tools for new and experienced embedded librarians. As academic library services move to become more user-centric and accommodate on-campus as well as distance users, embedded librarianship will continue to refine the roles of librarians.

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