The limitations of the one-size-fits-all, prix fixe, one-shot library instruction session have long been recognized. Like many academic librarians, those at the University of Wisconsin-Eau Claire struggled with the realization that they were trying to pack too much into a single 50-minute instruction session. They also struggled with the ad hoc inclusion of library instruction in classes dependent on a faculty invitation, which resulted in some students receiving the same introduction to library resources in several classes, while other students received none. Because there is no campus requirement for students to take—or for courses to include—library instruction, librarians could not assume prior knowledge about the library by the students, regardless of the level of the class with which he or she might be meeting. Equally challenging was the ability to effectively assess outcomes of the one-shot library instruction session. Student evaluations were helpful, but provided feedback focused more on the librarian’s performance during the session than on measurable learning outcomes. Faculty evaluations of library sessions were also useful, as they took into account the quality of student research, but the connection between library instruction and the outcomes was often tenuous.

In 2010, UW-Eau Claire’s Center for Excellence in Teaching and Learning (CETL) was in the early stages of experimenting with a model of instruction planning and assessment that focuses on the intense scrutiny of a single lesson, the lesson study. “Lesson study brings together groups of teachers to discuss lessons that they have first jointly planned in great detail and then observed as they unfolded in actual classrooms” (Fernandez, 2002, p. 393). Earlier casual conversations between librarians and the CETL director alerted the director to the challenges librarians face, and he approached librarians about engaging in a lesson study to plan and assess the library one-shot instruction session.

Because faculty teaching English 110, the first year composition course, were heavy users of the library instruction services, they were seen as logical partners in piloting the lesson study method in designing and assessing one-shot library instruction sessions. A lesson study group of four librarians and three composition faculty was formed and the lesson study began.

As a first step, group members familiarized themselves with the concept of lesson study and its application in academic and library settings in particular. Originating in Japanese elementary schools, lesson study made its way into American education practice in the last decade, gaining most attention in the K-12 realm. While slow to catch on in higher education settings, lesson study is beginning to gain traction, particularly in the sciences. A survey of the literature reveals a sampling of lesson studies in libraries, primarily in school libraries. (Kohnen, 2012; Bilyeu, 2009; Stephens, 2011). At the academic library level, lesson study was undertaken by the University of Michigan University Library to plan and assess teaching of its then-new metasearching tool (Desai, Freeland & Frierson, 2007). Librarians from a sister institution in the University of Wisconsin System, UW-La Crosse, collaborated with Communication Studies faculty in conducting a lesson study of library instruction in a required public oral communication
course (Chilton, et al., 2007). Drawing upon the experiences of these library lesson study trailblazers, the UW-Eau Claire team set out to define its own study.

The group members adopted and adapted the lesson study cycle outlined by Lewis, Perry and Marata (see Figure 1). First they defined goals for the lesson. Second they collaboratively planned the lesson in light of the goals. Third, they conducted the lesson and gathered data. Fourth, they reflected on the lesson. Fifth, they revised it, based on data gathered. Finally, they repeated the cycle.

The initial goal-setting stage of the lesson took more time than anticipated. Five weekly meetings were spent identifying and prioritizing goals. Drawing upon established information literacy goals and outcomes, composition course goals, and campus general education goals, the group identified a list of nine desired outcomes for the lesson:

- an awareness of hierarchies of information
- an understanding of differences between keyword and subject heading searching
- the ability to refine searches on basis of results
- an understanding of citation chasing
- an understanding of where to go for different types of sources
- the ability to recognize and demonstrate transferability of search skills
- the ability to replicate searches
- the ability to document successful results
- the ability to access the actual source

In what might arguably be regarded as the most valuable segment of the lesson study process, discussions about what these goals meant, how they might be taught and assessed, the efficacy of teaching them in the time allotted, and how they fit in with the overall first year composition curriculum took place. As a result of these weekly meetings, the group recognized that their expectations for the lesson were unrealistic and unattainable in a single lesson. They decided to drastically pare down the goals for the session, focusing on just two outcomes. Students will be able to:

- determine where to go to search for different types of resources
- recognize and demonstrate transferability of search skills.

The other concepts, it was decided, would be taught in prerequisite activities preceding the lesson or they would be embedded as discussion points, but not assessed, as part of the lesson. In ensuing meetings, the group designed the lesson, which included a brief introduction and demonstration by the librarian, followed by an exercise in which students worked in pairs to brainstorm keywords and search for sources on their partners’ topics. They would document their keywords and search results on a brief activity sheet. The session would conclude with a discussion. It was hoped that by having students search on their partners’ topics rather than their own, the students would focus on the research process and would then be able to demonstrate transferability of research skills when moving from searching for a partner’s topic to searching on their own. Further, the partner activity would bring in another perspective, generating additional keywords and alternative approaches to a topic. The activity left the decision of what kind of source to find up to the student. It was hoped that the students would demonstrate an understanding of different types of source to find up to the student. It was hoped that the students would demonstrate an understanding of different types of resources by making an intentional selection. The concluding discussion was meant to highlight search strategies and pitfalls, using examples from the students’ experiences, thereby shifting content that had traditionally been delivered in lecture format by the librarian, to a more organic and discovery-focused phase of the lesson.

With the lesson plan finalized, the lesson study was scheduled. A librarian from the team was identified to teach the session. The other group members were situated throughout the classroom, where they could observe student behaviors and computer screens and hear student interactions. They recorded detailed observations during the session. After the session, student activity sheets were collected and analyzed, and students completed surveys and shared impressions of the session in focus groups.

In evaluating the assessment results, the group identified weaknesses and strengths of the lesson plan. Student behavior and feedback suggested that though the librarian-led demonstration portion of the lesson was reduced from what had traditionally been the norm, it was still too long. Student search results suggested that they did not make particularly good or intentional choices in deciding to search the catalog or journal article databases. All observers agreed that the post-exercise discussion was a very successful part of the lesson. Students were engaged and participative. The librarian was able to embed many of the concepts from the original nine goals into the discussion, and students seemed receptive to them. The group moved to the next stage of the lesson study process, which was the revision of the lesson based on assessment data and observations. A second iteration of the lesson was run with a different librarian and a different composition class. As with the first, the revised lesson was observed and assessed, and the lesson study cycle continues.

What emerged from the lesson study pilot was not an ideal lesson plan. Rather, it was the beginning of a process of continuous improvement. Most importantly, it has engendered a culture of collaboration among the members of the lesson study team. Concurrent with the lesson study process was the revision of the first year writing curriculum. As a result of the lesson study collaboration, composition faculty invited librarians to participate in the revision of the writing curriculum to integrate information literacy components. The lesson study discussions
formed the basis of that integration, and the lesson study lesson plan provided a model on which to build.

Word of the lesson study collaboration got out, largely through the intentional efforts of the CETL director, and faculty from other departments became interested in doing something similar. Science faculty were interested in collaborating on a library lesson study as were faculty from the College of Nursing. What immediately became apparent is that the long and sometimes arduous process of developing and revising a pilot library instruction session did not yield a lesson plan that could be peddled from department to department. Librarians who had participated in the first lesson study could not simply present to faculty in other disciplines a prix fixe menu -- that is, a single meal made up of predetermined items -- that would please the distinct palates of other faculty. Unique research needs, practices, priorities, and professional cultures necessitated a menu of options from which to choose, as well as a willingness to expand the menu as needed.

Though librarians could not serve up an established lesson plan, they were able—as a result of their experience in the first lesson study—to come to the table with ideas and talking points to realistically establish goals and plan the menu. They were able to provide a list of examples to initiate the discussion and prioritization of goals. They were able to more confidently and efficiently move the faculty from thinking of a single library session as the sole purveyor of a laundry list of information literacy goals and move toward a discussion of realistic expectations and supplemental methods for delivering content.

The science lesson study group comprised faculty from chemistry, geography and anthropology, biology, physics and astronomy, and the library. Using the ambitious list of goals generated by the English lesson study group as a starting point for discussion, this group developed goals and a lesson plan that took quite a different shape than that of the English lesson study group. Early discussions revealed that faculty assumed their students came to them with much more library instruction under their belts than was the case. Faculty began to recognize and internalize the idea that if they wanted their students to use information in the sciences effectively and appropriately, it was incumbent upon them to integrate information literacy into the curriculum rather than assuming the students were gaining these skills elsewhere. The discussions also compelled faculty to update their own skills in accessing the ever-changing array of information sources available, and they requested that the librarian provide them with a library instruction session of their own. This session brought home the idea of how much can—and cannot--realistically be covered in a 50-minute library class. This group identified six desired outcomes for their lesson. These outcomes were more process-oriented than the overarching goals selected by the English group. Specifically, at the end of the lesson, they wanted their students to be able to:

- Select an appropriate database
- Conduct a search in the database
- Refine the search to improve results
- Select an article
- Use EndNote Web to save an article citation
- Find the full text version of the article

The science lesson study group adapted the prerequisite idea from the pilot English lesson study and identified concepts to which students would be introduced through activities prior to the lesson. Specifically, students would come to the library session having been introduced to hierarchies of information in their field; they would have set up an EndNote Web account and know what it is; and they would have generated a list of keywords to use in researching their topic or question.

Like its list of desired outcomes, the science lesson plan took a much more process-oriented form than that developed for English 110. Whereas the English 110 lesson study group designed an activity with minimally-defined steps and intentionally avoided developing a detailed step-by-step activity sheet, the science lesson study group opted for a very detailed activity sheet that walked the students through the research process in clearly-defined steps. The lengthy methodical approach to the activity sheet preferred by the scientists had been rejected by the English faculty who viewed it as too much busy work. Conversely, the open-ended activity sheet preferred by the English faculty was seen as too unstructured and imprecise by the scientists. Whereas the English 110 lesson introduced students to the library catalog and databases, the science study looked only at article databases, with a focus on scholarly, primary sources. These variations in preferences reflect the unique research processes, standards and cultural practices in different disciplines.

The nursing faculty brought yet another dimension to the lesson study. Professionally committed to the concept of evidence-based practice, in which health professionals base decisions on the best research available, nursing faculty had a well-articulated commitment to information literacy concepts and a natural framework in which to infuse library instruction. Evidence based practice relies on acute understanding of different types of information sources and ranks them in hierarchies to indicate their relative strength in informing clinical decision-making.

The nursing lesson study, building on the previous library lessons studies, was the most ambitious. It moved beyond the one-shot model and included the development and study of four library lessons integrated in progressive stages throughout the nursing curriculum. The overall goal of the Nursing/Library Lesson Study is that students will be able to retrieve various levels of scholarly information and apply or evaluate its usefulness to clinical practice. The goals of the four lessons are that students will be able to demonstrate:

- understanding of nursing information structure and literature
• effective search strategies to retrieve one scholarly piece of evidence from CINAHL to support their clinical question.
• advanced search strategies to select high quality pieces of evidence to support their clinical questions
• use of “best practice” evidence to evaluate nursing practice in the clinical setting.

The nursing series of lesson studies—a multi-year process—is still in progress and working through its initial cycle. Already it is providing a model for integration of information literacy instruction at the programmatic level.

The burgeoning interest in library lesson studies on campus is occurring at the same time that the university is re-envisioning its liberal education goals with an increased commitment to integrative teaching and learning. Lesson study is proving to be a model for collaboration and intentionality in integrating information literacy concepts into the curriculum. It does so in a manner that respects and reflects the unique values, practices and preferences of those who come to the table.

References

Figure 1: The lesson study cycle (Adapted from Lewis, Perry & Murata, 2006, p. 4).