The Idea

A common requirement for students writing research papers in college is a “laundry list” of sources (e.g., an academic journal article; a “popular” article from a magazine or newspaper; a book or book chapter; and a website) they must locate and use in the final paper. In our experience as reference and instruction librarians, students are prone to checking items off these types of lists without really understanding why they are doing so. Absent context, the list simply becomes mechanical and students put forth the minimum effort required to cross items off. We realized that the goal with these “laundry lists” is to encourage students to see new ways of doing research (i.e., besides using natural language searching in Google) and to begin to evaluate which of these options is best in a given situation. In order to make this a more authentic learning experience for them, we thought that it would be better to focus on the experiences (e.g., where/how they search) rather than the items they needed to locate.

Thus, we developed the Research Experiences assignment in order to investigate the following questions:

1. Will students learn better if they are active/in control of their experiences?
2. Will students learn better if they are able to apply the “lessons” to everyday life?

The Context

We believe that research is ubiquitous, and that a variety of research skills and tools are necessary to function in both college and life. An academic database used to find scholarly articles required for a research paper in college is likely not the same place that a student will turn to answer personal or work-related questions (Head, 2012). Therefore we seized the opportunity to introduce our students to a breadth of research experiences in the context of our one-credit class, LIBR 100: Information Research. The Research Experiences worksheet was one of several assignments for our course, which also included in-class activities, reflective writing, and short quizzes; there was not a traditional research paper assigned for LIBR 100. We have used this exercise in our LIBR 100 class twice, first in the fall semester and then the following spring.

The Exercise

We developed 10 research experiences (see Appendix) that, while new to our students, built on familiar skills. As “all new learning requires a foundation of prior knowledge” (Brown, Roediger, & McDaniel, 2014, p. 5), we felt that this would strengthen the opportunities for learning. We reviewed the full list of Research Experiences as a class, providing verbal descriptions and answering questions. Any and all research students did for school, work, or personal use was valid for the Experiences assignment.

For each of the 10 Research Experiences, students responded to a series of six in-depth questions (see Appendix). We designed the questions to address three major aspects of the tasks: documentation (what I did), reflection (why I did it and what worked/didn’t work), and description of affect (how I felt about it). Improving students’ skill at documenting their process is important in and of itself. Too often, students search randomly for information without an eye toward strategy (Head, 2013). Encouraging students to document what they did helps them see that there can be method to the madness. Documentation is also important in order to determine and reflect on one’s strategy, prompting the students to think about why they approached the task in a particular way and try out different approaches if something doesn’t work the first time. Because library anxiety has been identified as both a potential barrier to academic success and an “inherent characteristic” and “integral part of the search process,” addressing students’ affect about each task gave them the space to tell us what they really thought of the activity and sit with feelings of comfort or discomfort for a moment (Malvasi, Rudowsky, & Valencia, 2009; Kuhlthau, 1988, p. 232; 1991, p. 361). By connecting their feelings with the overall experience we hoped that they would begin to understand that the process can be messy and uncomfortable sometimes and that it is okay. We believe that it is important for students to reflect on their feelings, as well as on their skill, with the final question as a particularly important reflection urging students to connect the work they are doing in school with their real-life tasks and experiences.

The Design

The biggest instructional design challenge was the format of the assignment. We had several critical requirements. It needed to: be easy for students to input information, be easy for us to provide individual feedback for each experience and grade the worksheet, and allow students to record the experiences in the order in which they completed them. With the assistance of an Educational
Technologist, we decided on a Google Drive extension called Doctopus. The native features of Doctopus allowed us to centrally manage classroom assignments in Google Drive, grade and make comments, and track student progress and contributions (via time stamp). Using Doctopus, we “handed out” the worksheet by giving each student an individual instance of it in an Excel-like spreadsheet in their personal Google Drive/Doctopus folders. There were technical glitches early on, but these improved with time and practice. In two semesters of using Doctopus for this assignment, only two students opted to complete their Research Experiences on paper (which did not affect how we graded it).

This entire assignment comprised 30% of each student’s grade for LIBR 100. Each of the 10 Experiences was worth 3 points: one point for completing the proper task, one point for answering all the questions, and one point for high quality and reflective answers. On occasion, in-class activities were reflected in the Research Experiences, and we recommended students complete the attendant Research Experience as soon as possible. Some of the Research Experiences, like visiting a bookstore, did require students to spend time outside of class.

Results

In the fall, we noticed that many students procrastinated and completed the worksheet at the last minute, leaving little opportunity for librarians to give effective feedback or for students to make subsequent revisions. Therefore, in Spring 2016, we scaffolded the exercise in two ways. We required completion of two Experiences by week 6, for which we provided individual feedback. The full worksheet was due two weeks before the end of the semester (week 13), which allowed students the opportunity to revise their work based on our feedback before the final grading deadline in week 15 (see Figure 1).

While this helped, as some students took advantage of the time to make revisions, others still did not. We are still working out the best way to manage this assignment so that students have the experiences that we intended, and the time to complete them. After two semesters working with students on this assignment, we plan to add a final, culminating reflection on the Research Experiences project as a whole.

In Spring 2016, grades on the Research Experiences assignment were higher than those from Fall 2015. This might be due to the additional scaffolding of this assignment, however there are other factors that may have contributed such as the different population of students (e.g., the Spring class had more non-freshmen).

In an end-of-semester survey, students were asked which class activity or assignment they valued most and which they valued least. In our first semester using it, the Research Experiences assignment was polarizing: a few students thought it was quite valuable, while others ranked it lowest. In semester two, it again had both positive and negative feedback.

Some students commented negatively on the length (too long) and format (somewhat aggravating). Another student failed to see the value in reflecting on their experiences by commenting that it seemed like busy work and was unimportant for their retention of the information. However, there was some favorable feedback. Many students appreciated the Research Experiences for the reasons that we had hoped, expressing that they found value in the opportunity to be exposed to a variety of sources and experiences and to evaluate or test each one; this helped them determine which ones they might use the most in the future.

(10 Research Experiences...Continued on page 7)

Figure 1: Original and Revised Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>2</th>
<th>3</th>
<th>6</th>
<th>13</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2015</td>
<td></td>
<td>Introduction of REs in class</td>
<td></td>
<td></td>
<td>10 REs due for grading</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>Introduction of REs in class</td>
<td>2 REs due for feedback</td>
<td></td>
<td>10 REs completed for feedback</td>
<td>10 REs due for grading</td>
</tr>
</tbody>
</table>
Future Plans

Although some students balked at this activity during our semester-long class, we still believe it is valuable to push students out of their comfort zones when searching for information, and to ask them to think about and reflect on what they are doing and why. Brown, et al. suggest that we are not always the best judges of our own learning (2014, p. 3). Ultimately, then, whether our students liked or disliked the assignment, we believe there was learning, as they were able to complete it. Struggling with an experience provides a valuable lesson for college students (Brown et al, 2014, p. 95). Early evidence leads us to affirm our initial questions: students seem to have benefitted from being in control of their experiences, many found applications to other parts of their lives and, most importantly, students were introduced to a wider variety of sources through authentic exploration.

We plan to continue to use the Research Experiences assignment in our LIBR 100 course, and we will likely continue to tweak it. Our attention has now turned to how we might adapt the Research Experiences for use in a typical “one-shot” library instruction session. We might select one or two relevant Experiences for students to complete during a single class period; alternately, students could work in teams, divide up the 10 Experiences and complete the whole assignment as a class, again likely within a single class period (absent the book store browsing). In either case, students can answer the reflection questions either during the library session or later in the research process. Another possibility is the adoption of the Research Experiences by the classroom instructor over the course of the semester in collaboration with the librarian, providing a sort of “embedded” library assignment that is built upon throughout the semester. There are certainly other ways to adapt this assignment to a one- or two-shot library instruction session and we hope to hear ideas from other librarians how this might be used.

References


Doctopus/Goobric Instructions:  
https://docs.google.com/document/d/1WOhW-WRX5cWw7ayYGrB2pWRt0x0Y7Bk9eExruuR-q5F0g/edit?usp=sharing


Appendix