INTRODUCTION

In recent years, University Library at the University of Rhode Island has strengthened a collaborative relationship with the Department of Writing and Rhetoric that has evolved into a program that greatly benefits students and proves to them the importance of using library resources for their assignments. The URI Library has offered programmatic instruction for first-year writing students since the Writing program began in the 1970s, and with the Department of English before that. As outlined by the Plan for Information Literacy (2006), library instruction has complemented the sessions for URI101, the service course for incoming freshmen; the catalog and major library service points have been the focus of URI101 instruction while finding articles is the topic for WRT100s. Each of the first-year writing courses has at least one assignment with a research component so library instructors help students use the aggregator database, Academic Search Premier to find articles for their assignments.

URI LIBRARIES AND WRITING

Many first-year students take one of the 100-level courses in Writing because they are part of the English Communication core area of the General Education Program and students must take at least three credits “designed specifically to improve written communication skills” (Undergraduate Program Requirements, 2008). The three first-year courses that fulfill this requirement are WRT104 Writing to Inform and Explain (expository writing), WRT105 Forms of College Writing (practice for general education papers), and WRT106 Introduction to Research Writing. Each semester there are typically 40 sections of WRT104 and 10 each of WRT105 and WRT106, and all come to the library for a one-shot session on finding articles for their assignments. The sessions consist of guided demonstrations and time for student practice.

There are two goals for the sessions: students will learn how to retrieve citations to credible articles published in journals and magazines; students will learn how to access those articles through URI Libraries. These goals and the content of the sessions have evolved over the past several years as both the URI Libraries’ information literacy program and the Department of Writing and Rhetoric have gone through many changes as discussed below. Collaboration between library and writing faculty has made those changes work for students.

Several years ago, the library program for writing students began an evolutionary process that is still being implemented. A number of factors have strengthened the relationship between the library and the Writing program. The library instruction program for writing students stabilized with the hiring of a Humanities Librarian who took over the planning and scheduling in 2001. In 2006, URI Libraries formalized all instruction services by creating an instruction unit within the Public Services Department, along with a Head of Instruction Services to concentrate on fulfilling the goals of the library’s information literacy plan. As a group, library instructors evaluated existing instruction efforts and created goals and outcomes for all programs including the writing sessions.

At the same time, the then College Writing Program (which, in 2007, became the Department of Writing and Rhetoric) standardized the syllabi for the three first-year writing courses.

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Since the courses are taught by graduate teaching assistants, adjunct professors, and full-time faculty from lecturers to full professors, the standard syllabi leveled the assessment playing field. It also helped the library settle on a standard instruction plan for the writing library sessions.

The Head of Instruction and the Humanities Librarian began scheduling regular pre and post semester meetings with the Writing director to monitor the sessions and to discuss ways to improve their value. All wanted the sessions to be purposeful instead of just providing generic database instruction, so this small working group discussed ways to tie the library instruction more directly to the assignments. This involved the timing of the sessions as much as anything. The WRT106 research intensive sections were scheduled earlier in the semester while the WRT104 sections were set for later in the semester when their assignments that required research were planned.

The group recognized that if the students had research questions or at least topics for their assignments before they came to the library, a library instructor could more easily tailor the instruction to the assignments. This took some coordination on everyone’s part as writing instructors were asked to forward their class topics to the Humanities Librarian who then forwarded them to the library instructors.

To help students prepare for searching, librarians started experimenting with creating concept maps during the first five to ten minutes of the sessions to show students how they can focus their topics to better fit their assignment’s requirements. Of course, this cut into the time the library instructor would be using for searching or evaluation techniques, so during the coordination meetings the content of the library sessions came up for discussion. The group decided to consider pre and post activities for students in their classrooms so librarians could concentrate more on search strategies and give students enough time to practice in the library. It seemed best to develop a pre-activity and then decide on any follow-up activities at a later date.

**CONCEPT MAPPING PRE-ACTIVITY PILOT**

The concept mapping that librarians demonstrated at the beginning of the sessions seemed the perfect fit for a pre-activity. It would help students organize their topics and create a research question they would bring to the library session to use in their searches. Librarians agreed to create the assignment and the writing director agreed to sell the idea to her instructors noting that she could and would make it mandatory.

It just so happens that URI Libraries’ credit course, LIB120 Introduction to Information Literacy, uses a concept mapping lesson based on the work of Burkhardt, MacDonald, and Rathemacher (2003). Additionally, the URI Libraries and the URI Graduate School of Library and Information Studies were involved in an IMLS grant creating the PRISM Scholar program (Prism Plus, 2006). PRISM Scholars were library school students who worked in the professional environment of an academic library and were required to complete a scholarly project. Kerry Caparco took on the creation of the concept mapping pre-activity as part of her PRISM plan of study.

The pre-activity has two main components: the concept map and the organizational table designed to narrow the topic. Writing instructors are encouraged to complete this pre-activity in class, but it can stand alone as a self-taught lesson. Instruction, demonstration and practice are included in the four page tutorial and worksheet. Students are to use the concept mapping tool to refine their research topic in order to focus on a manageable aspect of the topic for their assignment.

The second part of the pre-activity is the organizational table. As the student’s concept map begins to take shape, they are instructed to make connections and investigate similar terms for the ideas they have generated through brainstorming about their topic. The goal of the second part of the pre-activity is to write a research question that meets the requirements of the course research assignment(s).

In order to determine if creating a concept map prior to receiving bibliographic instruction improved students’ search results, the collaborators devised a plan to break up the spring semester 2008 writing classes into two groups. Dr. Nedra Reynolds, chair of the newly-formed Department of Writing and Rhetoric, Jim Kinnie, Humanities Librarian and library liaison to the writing department, Mary MacDonald, Head of Instruction at the URI library, and Kerry Caparco, PRISM Scholar, met in September 2007 to discuss the details of designing and implementing a pre-activity.

All agreed to pilot the program in the fall of 2007 with a small amount of Writing classes testing the concept map pre-activity. The Library Public Services Department gave their approval, and in the fall of 2007 Dr. Reynolds assigned the pre-activity to six writing instructors who used the lesson in class prior to attending their scheduled library session. Feedback from these instructors informed any changes needed to the pre-activity prior to a full test during the spring semester of 2008. Librarian Jim Kinnie received anecdotal feedback from Writing instructors via e-mail and most comments were positive, but included recommendations for changes to the sample topic (originally “marijuana” and changed to “smoking”) and less instruction embedded in the exercise. These changes were easily made and the revised assignment was approved by Dr. Reynolds and the Public Services Department prior to the spring 2008 semester. A sample lesson plan, including a link to the tutorial, was posted on the URI Libraries Web site for writing instructors to use (WRT 104/105/106, 2008).

The real pilot began in February 2008 when WRT 104, 105 and 106 classes came to the library for their scheduled library session. The control group and the test group were created based on their section number: odd and even. This allowed for a random, equal distribution of the groups. The test group engaged in the pre-activity prior to coming to the library session and the control group arrived for library instruction without any pre-activity.

When the test group came to the library, students were expected to bring their concept map and research question with them as a search guide. Once the students narrowed their topics in the pre-activity, they retrieved and evaluated sources they
could use in their assignment. Because the concept map was done prior to the library session, the schedule for the test group allowed more time for the students to search, and they were engaged and invested in the outcome of their newly acquired research strategies.

The control group followed the established format for the library sessions: presenting a demonstration outlining the advantages of a concept map, completing a concept map on a hypothetical topic, brainstorming similar terms for a topic, and narrowing it to create a research question. Sample demonstration topics for the concept map and searching the database were arbitrary and depended on the library instructor. This “walk and talk” explanation of moving from concept map to research question was completed during library class time prior to the students’ own searching. The schedule for the control group’s library session was fast-paced and did not leave much time for students to search on their own topic. After the initial demonstration, students were expected to apply the concept map and research question technique to their own topic during and after the session.

**Pilot Program Evaluation**

During each library session all students were asked to complete a double sided worksheet and survey. The worksheet format was similar to the graphic organizer that the test group completed in their pre-activity, but this was the first time the control group would have seen the format and be asked to come up with a topic, research question, related concepts, keywords, synonyms or other related terms. There was no set of written directions for using the worksheet during class and not all worksheets were completed and returned to the librarian. The worksheet/surveys were distributed during the library session to be completed and returned by the end of the session.

The reverse side of the worksheet contained a survey which was brought to the students’ attention approximately five minutes before the end of the session. The survey is a series of three questions with responses indicated on a Likert scale. No prescribed instructions were given by the writing instructors or the librarians regarding filling out the survey. Not all surveys were returned, and those that were returned were not always completed. If the library and writing department should choose to repeat a student survey, then written instructions on how to complete the survey should be offered.

The survey side asked how successful the students were in: 1) developing a research question on their topic, 2) narrowing or broadening key concepts of their question through synonyms and related terms, and 3) retrieving relevant information to answer their research question. The survey results measured how successful the students felt about their search strategies, and the worksheet revealed how successful they were with creating a research question and determining keywords and synonyms for the search terms.

There were 56 sections of WRT 104, 105 and 106 scheduled for library instruction. Each section had 22 students and approximately two-thirds (66%) of the surveys were returned completed. Overall, the results indicated that students felt successful in identifying keywords in their research question, narrowing or broadening their topic with similar terms, and finding sources that will help answer their research question. A majority of both the test group and control group “agreed” or “agreed strongly” to all three questions. There was little difference (less than 1%) between the control group and the test group for question 1 and 2, but there was a slight difference for question 3 (approximately 3%). See Table 1 for these results. Just one caveat: the survey results only reflect students’ own assessment of their skill level.

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<thead>
<tr>
<th>Questions</th>
<th>Answered “Strongly Agree” or “Agree”</th>
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<tbody>
<tr>
<td></td>
<td>Test Group</td>
</tr>
<tr>
<td>1. I was able to identify key concepts and keywords from my Research Question.</td>
<td>93.1%</td>
</tr>
<tr>
<td>2. I was able to narrow or broaden my search for information by using synonyms and other related terms</td>
<td>88.4%</td>
</tr>
<tr>
<td>3. Using my search terms and synonyms from above, I was able to find sources that I think will help answer my Research Question.</td>
<td>90.6%</td>
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A sample of the worksheets was extracted from the group of responses and each was evaluated to measure accuracy and completeness. Although it was not required to fill in the worksheet, students were directed to use it as a guide as they searched Academic Search Premier. The outcome of the worksheet evaluation was intended to show whether or not the search strategies and skills that were demonstrated during library instruction were being practiced by the students. Overall, the analysis of this sample suggests that there is no significant difference in performing search related tasks between those who completed a pre-activity and those students who did not.

The true outcome is ultimately based on the work that the students produce and the quality of research that supports their writing, and librarians do not have access to this information. However, the survey and worksheet are indicators that students feel confident and understand the research process to get them the articles they need. More research needs to be conducted on how students evaluate and choose articles for their writing, and how they incorporate scholarly findings into their work.

An informal online survey of the writing instructors in the 2009 spring semester shows that most agreed the pre-activity helped students focus on a manageable aspect of their topic and that their students wrote research questions that met the requirements of the assignment. However, fewer agreed that their assignments showed the influence of the pre-activity (see Table 2), which makes sense, as it follows the results of the earlier student survey. Overall, the comments in the survey showed strong support for the library instruction program.

**Conclusion**

This evolutionary process of collaboration between URI Libraries and the Department of Writing and Rhetoric continues. Future plans include working with writing faculty for further adjustment of the pre-activity and discussions about the introduction of a follow-up classroom activity or additional visits to the library. This program has proved to be a success because both the Department of Writing and Rhetoric and the URI Libraries are committed to working together to improve the academic lives of their students.

**BIBLIOGRAPHY**


<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither A nor D</th>
<th>Disagree</th>
</tr>
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<tbody>
<tr>
<td>1. My students successfully used the concept mapping pre-activity to focus on a manageable aspect of the topic for their assignment.</td>
<td>33.3%</td>
<td>50.0%</td>
<td>16.7%</td>
<td></td>
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<td>2. My students wrote research questions that meet the requirements of the course research assignment(s).</td>
<td>37.5%</td>
<td>58.3%</td>
<td>4.2%</td>
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<td>3. Student assignments reflected the influence of the concept mapping pre-activity.</td>
<td>26.1%</td>
<td>34.8%</td>
<td>30.4%</td>
<td>8.7%</td>
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