The UL Instruction Program has three student learning outcomes:

1. **Students will be able to construct and employ search strategies to locate information effectively.**
2. Students will be able to evaluate the appropriateness (authority, currency, credibility, purpose) of information sources in relation to the information need.
3. Students will be able to synthesize information from a variety of sources in order to create meaning.

For academic year 2014-2015, the library instruction program will focus on assessment of program learning outcome number 1. The type of teaching that faculty librarians do is different from faculty in other programs. Teaching takes places one-on-one via the various reference desks throughout the Libraries and via extended individual research consultation appointments. It is also prompted by program faculty who request that a librarian teach a session during the semester tied to completing a specific research assignment within a course. Some librarians also teach semester-long courses.

The UL instruction program has many challenges when it comes to conducting assessment of student learning outcomes.

- Librarians teach sessions for a wide range of students and disciplines. These include undergraduate courses from first year to capstone as well as for graduate students in masters programs and doctoral programs in most programs offered on campus. Therefore, deciding how to focus a meaningful assessment activity is difficult.
- Librarians are not typically the instructor of record in the sessions they teach. Rather, the majority of their instruction involves teaching a class or two related to a particular information research assignment within someone else’s course. Therefore, librarians are reliant upon the cooperation of program faculty and students with whom they have little sustained contact.

Given the variety of instruction that occurs in the UL Instruction Program, we have decided to focus our formal assessment efforts on one program in which the Library is integrated fairly consistently across many sections. The UL has a long standing relationship with the General Studies Writing program. Though we offer a variety of instruction tools that include tutorials and online research guides, we also offer face-to-face library instruction sessions to students in sections taught by first time Teaching Assistants.
What is it that we want to know?

We want to know if a greater percentage of GSW 1120 students earn a higher grade in the course and if they are able to construct and employ search strategies to locate information more effectively as a consequence of receiving a library instruction session than students who do not receive a library instruction session.

What are the course-specific learning outcomes?

By the time they turn in their Pre-Search Essay assignment, at least 80% of GSW students will be able to:

- Demonstrate use of resources to gain background knowledge on their topic
- Generate appropriate keywords
- Identify at least one relevant library research database in order to find credible, relevant sources for their papers.

What was taught?

We will focus on the pre-search paper assignment in GSW 1120. The following search strategies will be addressed in the pre-search library instruction session.

GSW 1120 Pre-Search Session

I. Introduction (2 mins)
   a. Introduction
   b. Explain learning outcomes: learn about pre-search—what is it and why is it important?

II. Library Site Overview (5 mins)
   a. GSW 1120 LibGuide
   b. Library homepage and resources

III. Pre-Search Explanation (5 mins)
   a. Pre-search is a way to choose, learn about, and narrow down a research topic before you launch into a paper.
   b. Why? You need to read about a topic generally before you dive into writing, getting an overview and learning about things you might not be familiar with to check the viability of the topic and get ideas for words you could search for in a search engine or database in order to get the best information (called “keywords”).

IV. Activity (20 mins)
   a. Social Networking sample topic
      i. Overview of the topic (Wikipedia—Social Networking page)
      ii. Narrowing the topic (Wikipedia Issues section—select social networking and bullying as a topic)
      iii. Generating keywords (synonyms: social networking, social media, bullying, schools, high school, junior high, twitter, facebook, instagram, etc.)
1. After selecting the topic, show the Summon results for (social networking), then (social networking and online bullying), then (social networking and online bullying and junior high), then (facebook and online bullying and junior high) to demonstrate importance of specific keywords and combinations

iv. Research Databases
   1. Search&Find>All Databases>Databases by Subject
   2. How can I find a good database to find articles from here? (by topic subject)

b. “Mommy Wars” (Group work, then we process together)
   i. Overview of the topic (Google, Wikipedia, databases)
   ii. Narrowing the topic (Maybe working mothers and children and academic success)
   iii. Generating keywords (motherhood, career, work, stay-at-home mom, parenting, guilt, mom/mother, women, feminism, working parent, parenting, guilt, children, child, academic success, etc.)
   iv. Finding articles in a database (databases by subject>pick a category, Summon, EBSCO search from homepage, etc.)

V. Questions?

How did we assess that the course learning outcomes have been met?

There are more than 100 sections of GSW 1120 taught by a wide variety of instructors at various stages in their careers. In order to control for the level of experience as a variable, we decided to focus our assessment efforts on students in the sections taught by the newest cohort of GSW instructors hired in the fall of 2013. As a result, the Pre-Search Reflection Sheet created by the librarians (see Appendix A) was given to six of the new instructors to distribute to their students. Three of these instructors incorporated a pre-search library instruction session into their course and three of them did not.

We decided to create a reflection sheet for students to fill out and turn in with their final Pre-Search Paper in order to minimize any burden to the instructors. We recognize that our approach is an indirect measure of student achievement of learning outcomes. Self-perceptions as gathered in a reflection sheet pail compared to being able to examine a student’s paper or to interview them one-on-one. However, pursuit of either of the latter approaches is extremely challenging without sustained and direct access to students and assumes a level of cooperation from GSW instructors.

Results of Pre-Search Essay Reflection Sheet

A rubric was created in order to grade the Pre-Search Essay Reflection sheets (see Appendix B). Our intent was to grade all Pre-Search Reflection Sheets using the rubric and then to conduct a statistical test to determine if there were statistically significant group differences in rubric scores between those who had the library session and those who did not. Unfortunately we only received Pre-Search Reflection Essay Reflection sheets from students enrolled in three sections of GSW in which the instructor scheduled the library instruction session. We received a total of 56 reflection sheets. Data was examined using four different criteria as noted in Table 1. An examination of those who had received
the Pre-Search library session ONLY indicate that 22% of students did not meet expectations in our analysis of the reflection sheets. Our benchmark was set at 80% suggesting that we fell slightly short (63% + 16%=79%) of our goal for student achievement of learning outcome number one as a result of this particular library instruction session. An examination of the rest of the feedback forms suggest that students who receive some type of assistance from a librarian do better in achieving student learning outcome number one than those who have no intervention from a librarian at all.

Table 1: Results of Pre-Search Essay Reflection Sheets (N=56)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Does Not</th>
<th>Meet</th>
<th>Meets</th>
<th>Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Search Library Session ONLY (n=32)</td>
<td></td>
<td>7 (22%)</td>
<td>20 (63%)</td>
<td>5 (16%)</td>
</tr>
<tr>
<td>Library Interventions in addition to Pre-Search Library Session (n=17)</td>
<td></td>
<td>5 (29%)</td>
<td>10 (59%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>Library Interventions but NOT Pre-Search Library Session (n=4)</td>
<td></td>
<td>1 (25%)</td>
<td>3 (75%)</td>
<td>0</td>
</tr>
<tr>
<td>No Library Intervention of Any Kind (n=3)</td>
<td></td>
<td>3 (67%)</td>
<td>1 (33%)</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note: percentages may exceed 100% due to rounding.*

**Results of Overall Course Grade Comparisons**

Due to the disappointing return rate for the Pre-Search Essay Reflection sheets, we decided to compare overall course grades of students enrolled in all sections of GSW 1120 that had a Pre-Search Essay library instruction session with an equal number of students enrolled in sections of GSW 1120 that did not receive a library instruction session. Again, we focused on only sections taught by the new cohort of GSW instructors. Ideally, a better data point for comparison would have been student grades on the specific Pre-Search Essay assignment. Attempts were made to get access to paper specific grades, but we were not successful due to the fact that the GSW administrative office did not track grades to this level of detail. We were able to access overall grades in the course through staff on campus with Peoplesoft authorization.

An independent-samples t-test was conducted to compare the overall mean grade for students enrolled in GSW 1120 between those who had the library intervention and those who did not. A five point scale was used where 5 was equivalent to an A and 1 was equivalent to an F. There was a significant difference in the overall grades for those with a library intervention ($M=4.12, SD=1.14)$ and those without a library intervention ($M=3.63, SD=1.32$); $t(316)=3.54, p=0.00$. What this means is that students who had a Pre-Search library session earned almost a half a letter grade higher ($MD=.49$) than those who did not have a Pre-Search library session. See Table 2 for descriptive comparisons.
Table 2: Grade Comparisons Between Groups

<table>
<thead>
<tr>
<th>Library Intervention</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>With</td>
<td>159</td>
<td>4.12</td>
<td>1.14</td>
</tr>
<tr>
<td>Without</td>
<td>159</td>
<td>3.63</td>
<td>3.63</td>
</tr>
</tbody>
</table>

**Actions Taken**

Based on the results of this assessment, a library session in this course appears to be a valuable addition to student learning, especially given the difference in overall grade achievement. More direct measures of library learning outcomes should be pursued in the future. Perhaps using a unique identifier to conduct a pre-test before the library session followed by a post-test at the end of the semester would provide a clearer understanding of student learning. Interviews with students or student research logs might be another way to gain insights into student learning.
Appendix A: Pre-search paper reflection sheet

Title of your paper:
__________________________________________________________________________

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you attend a library instruction pre-search session with librarian Rob Snyder?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have you attended any other library instruction sessions for other classes in your time at BGSU?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Did you consult with a librarian or library staff member (other than librarian Rob Snyder) to assist you with the research for this paper?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. How did you get background information about your topic?

5. What is your final Research Thesis Statement for the paper?

6. Explain the process you used to get from Research Question to Research Thesis Statement.

7. Where did you get your information sources for this paper?

8. Which keywords did you use when searching for articles for your paper? (Place a star next to the keywords that you found most useful for your research.)
Appendix B: Rubric for Evaluating Pre-Search Essay

<table>
<thead>
<tr>
<th></th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you attend a library instruction pre-search session with FYE Librarian?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. Have you attended any other library instruction sessions for other classes in your time at BGSU?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Did you consult with a librarian or library staff member other than FYE library to assist you with the research for this paper?</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

The first three questions were used to screen respondents. Only those who answered the questions as indicated by the x’s were included.

<table>
<thead>
<tr>
<th></th>
<th>did not meet</th>
<th>meets</th>
<th>exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How did you get background information about your topic?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. What is your final Research Thesis Statement for the paper?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Explain the process you used to get from Research Question to Research Thesis Statement.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Where did you get your information sources for this paper?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Which keywords did you use when searching for articles for your paper? (Place a star next to the keywords that you found most useful for your research.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Only questions 1, 3, 4 and 5 were scored. Any question that “did not meet” resulted in an overall score of “did not meet”. Any question that received a score of “exceeds” resulted in an overall score of exceeds expectations.