Assessing Information Literacy
Faculty and Librarian Collaboration Leads to Student Improvement

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Session Learning Outcomes

Participants will be able to:

1. Develop a model of collaboration between faculty and librarians to foster Information Literacy competence and an integrative approach to assessment

2. Adopt the Association of College and Research Libraries (ACRL) framework as the foundation for student learning and assessment of Information Literacy competency

3. Utilize an on-line Information Literacy Tutorial aligned with ACRL framework to support and enhance classroom instruction for the achievement of competency
What is Information Literacy?

“The ability to locate, evaluate and use effectively needed information” as defined by the American Library Association

Integral to all General Education competencies due to proliferation of information over the past decade
Information Literacy Challenges

Information Literacy Content → Assessment Design → Improvements

Engaging with the ACRL Framework
Collaboration between faculty and librarians

Why Collaborate?

- Ensure expertise in information literacy
- Standardize content across courses
- Increase student and faculty engagement with librarians
- Enable librarians to focus on skills based learning
Outcome of Collaboration

Identify the Framework
- Association of College and Research Libraries (ACRL) Framework
  - Sets standards for Information Literacy in higher education

Select tutorial
- ProQuest’s Research Companion
  - Aligns with ACRL Framework
  - Provides unlimited access to students
  - Supports classroom learning
  - Provides rigor and consistency for student learning
  - Tracks student usage

Assess
- Pre and Post test design
What is the ACRL framework?

- Six concepts central to information literacy
- Identifies knowledge practices and dispositions

Information has value
Information creation as a process
Research as inquiry
Authority is constructed and contextual
Searching is strategic
Scholarship is a conversation
What is Research Companion?

Helps students learn how to **FIND, EVALUATE, and USE** information

Does **NOT** replace library or classroom instruction!
### Population
- Students enrolled in General Education courses mapped to Information Literacy Competency
- Instructors volunteered to have students participate
- Instructors received Research Companion training
- Instructors aligned to course requirements
  - Required or extra credit
  - Independent or integrated with course instruction

### Design
Pre and post test design
- 35 questions represent the 6 frames
- Questions replicated those used in Research Companion Modules
- Questions customized for LCCC student comprehension

### Analysis
- Survey Monkey used to collect data
- Librarian analyzed data
Results
Demographics

Overall Participation: 726 students
Sample size for analysis: 250 students who completed pre and post test and either all or none of the modules

* M Age = 24 years
  Range 16 – 68 years

Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>83.87%</td>
</tr>
<tr>
<td>Latino/Latina</td>
<td>5.65%</td>
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<tr>
<td>African American</td>
<td>4.03%</td>
</tr>
<tr>
<td>Other</td>
<td>3.23%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.42%</td>
</tr>
<tr>
<td>Indian</td>
<td>0.40%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.40%</td>
</tr>
</tbody>
</table>

~ 5% ESL

Gender

- Female: 68.55%
- Male: 29.84%
- Other: 0.40%
- Prefer not to answer: 1.21%

# of Credits Completed at Time of Pretest

<table>
<thead>
<tr>
<th>Credits Completed</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>32.39%</td>
</tr>
<tr>
<td>1-15</td>
<td>26.72%</td>
</tr>
<tr>
<td>16-30</td>
<td>23.48%</td>
</tr>
<tr>
<td>31-45</td>
<td>8.10%</td>
</tr>
<tr>
<td>46-60</td>
<td>9.31%</td>
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</tbody>
</table>
Demographics

Overall Participation by Major

<table>
<thead>
<tr>
<th>Major</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTAL</td>
<td>5</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>7</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>7</td>
</tr>
<tr>
<td>HEALTH &amp; EMS</td>
<td>8</td>
</tr>
<tr>
<td>HOTEL &amp; RESTAURANT MNGT.</td>
<td>12</td>
</tr>
<tr>
<td>COMMUNICATION ARTS</td>
<td>17</td>
</tr>
<tr>
<td>HEALTH &amp; PHYS. ED.</td>
<td>18</td>
</tr>
<tr>
<td>TECH. &amp; TRADE</td>
<td>20</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>21</td>
</tr>
<tr>
<td>CIS</td>
<td>24</td>
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<tr>
<td>NURSING</td>
<td>34</td>
</tr>
<tr>
<td>BUSINESS</td>
<td>42</td>
</tr>
<tr>
<td>SOCIAL SCIENCE &amp; HISTORY</td>
<td>155</td>
</tr>
<tr>
<td>GENERAL &amp; HUMANITIES</td>
<td>356</td>
</tr>
</tbody>
</table>

Have you received information literacy instruction or library instruction prior to attending LCCC?

- Yes: 26%
- No: 50%
- Unsure: 24%
Pre and Post Test Analysis

On average, students scored 8.77 points higher on the post-test.

Note: $t(249)=9.426$, $p<.001$. Pre-test $M=54.25$ ($SD=12.32$) and Post-test $M=63.02$ ($SD=16.92$).
Did Research Companion make a difference?

Note: $F(1, 248) = 19.90$, $p < .001$. 
Authority Is Constructed And Contextual

When you're evaluating specific articles, you should consider those articles purely on their own terms, independent of the kind of periodical they appear in.

A. TRUE
B. FALSE ✓

Note: $F(1,247) = 9.07, p<.001.$
When would you likely turn to non-scholarly periodicals (magazines, newspapers, etc.) in your research?

A. When you want information about a current trend or event  ✔
B. When you want to read detailed arguments from the most respected scholars in your field
C. When you want editorials with opinions that are wholly data driven
D. When you want to read articles whose authors are paid by state or federal governmental agencies

Note: $F(1,247) = 8.78, p<.005$. 

Information Creation as a Process
Which of the following is not true of citations?

A. They can appear in the main body of the paper.
B. They mitigate the need for original thought. ✗
C. They help your readers track down your sources.
D. They help you avoid unintentionally plagiarizing.

Note: $F(1,247) = 12.84, p<.001.$
Scholarship as Conversation

Which of the following statements are typically not true of scientific studies?

A. They analyze large amounts of data.
B. The scientists who conduct them are skilled at distinguishing between data that is evidence of a claim and evidence that is merely consistent with it.
C. If they're published in a scholarly journal, then the findings are not subject to reinterpretation. ✗
D. They are generally extremely reliable but still open to revision and correction.

Note: $F(1,246) = 5.39, p<.05$.  

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Pre-test Post-test
No RC RC

47.32% 43.74% 56.53% 45.60%
Searching as Strategic Exploration

Which of the following search queries would you expect to return the greatest number of search results?

A. [terrorism AND warfare]
B. [terrorism OR warfare] ✔
C. [terrorism AND chemical warfare]
D. [terrorism OR chemical warfare]

Note: $F(1,248) = 2.15, p=.14$; No significance.
Research as Inquiry

Which of the following statements applies to statistics?

A. They are a critical part of any argument.
B. Analyzing them could lead you to discover that your initial impressions were wrong. ✓
C. Unlike quotations, they are impossible to manipulate.
D. They are fairly worthless—you can prove anything with statistics.

Note: $F(1,248) = 3.57, p = .06$; No significance but trending
Conclusions

Research Companion made a difference

Competency

Students who completed all nine modules

Students who completed no modules

Students did not achieve minimal competency of 70%
## Next Steps for Improvement

<table>
<thead>
<tr>
<th>Teaching and Learning</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>Revise mapping of Information Literacy Competency to General Education courses</td>
<td>Tutorials and assessment implemented in Spring 2017 in upper level courses providing opportunities for student application and practice</td>
</tr>
</tbody>
</table>
| Identify Research Companion modules appropriate for specific General Education courses  
  a. Beginning  
  b. Developing  
  c. Mastery | Tutorial and assessment implemented in Fall 2017 in Psychology Program capstone course to capture program major competency |
| Require implementation by faculty teaching courses mapped to competency |  |
| Require mastery within majors |  |
Questions or Comments?

Thank you and please remember to complete your evaluation!