INFORMATION LITERACY ASSESSMENT

2016/17

Submitted by
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Coordinator of Library Instruction
Introduction:

For the past 11 years the library has been assessing information literacy using a 20-question multiple choice quiz. The questions on the quiz were designed to measure five different learning outcomes selected from the Association of College & Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education.

In the summer of 2016, the ACRL board voted to rescind these standards in favor of the new Framework for Information Literacy for Higher Education. In response, the librarians have spent the past year redesigning their approach to teaching and assessing information literacy so as to keep pace with current practices and align with the new Framework. Of most significance to this report is the development of new student learning competencies inspired by the Framework that will be used to inform their teaching and annual assessment.

In total, there are five student learning competencies, each organized under a categorical theme (see Appendix 1 for full list). Each competency describes a general area of knowledge that will help students focus their learning and faculty, their teaching. Student learning outcomes have been developed for each competency. The Student Learning Competencies (SLCs) are meant to be more or less fixed, whereas the student learning outcomes associated with them are considered flexible and can be modified or added to by librarians and faculty over time.

Methodology

With the SLCs in tow, the librarians took an entirely different approach to information literacy assessment this year. They were granted permission to review a small sample of student work from two different courses:

Sample 1: History 151 provided Work Cited Pages (21 total)
Sample 2: English 101 provided Annotated Bibliographies (14 total)

A rubric was created for each sample. Each rubric was structured against the learning outcomes deemed most appropriate for the assignment type. In order to provide a more precise measuring tool configured to the assignment, a more specific set of performance indicators were developed and each sample scored against those using a four-point scale, with 1 designating minimal skill and 4 indicating the skill was accomplished. In order to be considered proficient the student would have had to score a 3 or a 4 (75% or above).
**History 151:**

Did course have a library instruction: Yes

Artifact for assessment: Work Cited page

Number of artifacts submitted: 21

Assignment description:

1. One primary resource produced during assigned historical era.
2. One scholarly book.
3. One scholarly article

JCC Information Literacy Student Learning Competencies assessed:

**IL SLC 4: Evaluation** - Students will evaluate information using a variety of criteria to determine its value, relevance and accuracy.

**IL SLC 5: Attribution** - Students will demonstrate an understanding of why, when, and how to give proper attribution to original ideas.

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**Breakdown of learning outcomes used to create customized rubric:**

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Performance Indicator used for rubric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IL SLC 4:2</strong> Recognize that authoritative content may be packaged differently and may include sources of all format and media types.</td>
<td>Scholarly Sources: Students will be able to select sources with the appropriate level of authority that fits the assignment parameters and is relevant to the chosen research topic.</td>
</tr>
<tr>
<td><strong>IL SLC 4:3</strong> Recognize different types of authority, such as scholar, subject expertise, professional or special experience (participant in historic event).</td>
<td>Primary Source: Students will be able to select a primary source that fits the assignment parameters</td>
</tr>
<tr>
<td><strong>IL SLC 5:1</strong> Credit original ideas of others through proper citation based on a specified style format.</td>
<td>Citing sources: Students will be able to cite sources correctly and consistently using a referencing style.</td>
</tr>
</tbody>
</table>
Results for each performance indicator:

I. Scholarly Sources

**Performance Indicator:** Students will be able to select sources with the appropriate level of authority that fits the assignment parameters and is relevant to the chosen research topic.

- **Accomplished (4 pts.):** 6 students
- **Competent (3 pts.):** 6 students
- **Developing (2 pts.):** 3 students
- **Minimal (1 pts.):** 6 students

**Conclusion:**
57% of students demonstrated proficiency in selecting sources with the appropriate level of authority fitting the assignment parameters.

**Observations:**
The assignment parameters required one scholarly book and one scholarly article. Only 28% of students managed to fulfill that particular criteria while others did successfully choose two scholarly sources but both were of the same source type, as opposed to having one of each as was required. In other cases students found sources relevant to their research topic but most did not meet the appropriate level of authority required to be scholarly sources.

**Recommendations:**
Continue to emphasize the characteristics of scholarly peer-reviewed articles and scholarly monographs (what they look like physically and electronically) and how to find them in the library databases.

II. Primary Sources

**Performance Indicator:** Students will be able to select a primary source that fits the assignment parameters.

- **Accomplished (4 pts.):** 10 students
- **Competent (3 pts.):** 1 student
- **Developing (2 pts.):** 5 students
- **Minimal (1 pts.):** 5 students

**Conclusion:**
52% of students demonstrated the ability to select an appropriate primary source produced during the correct historical era required by the assignment.

**Observations:**
Students seem to have a basic understanding of the nature of a primary source but struggle with distinguishing between a primary source in its original format and that of a secondary source produced during a later time period that quotes or includes information from an original primary source. This can often be a difficult distinction for students to make where electronic format is concerned.
Recommendations:
Incorporate additional instruction and class activity that would require students to trace the location of a primary source, initially referenced in a secondary source. For example, beginning with a biography of Winston Churchill that quotes from one of his speeches and then demonstrating how one would find an audio clip of the speech in a digital archive.

III. Citing Sources

Performance Indicator: Students will be able to cite sources correctly and consistently using a referencing style.

Accomplished (4 pts.): 0 students
Competent (3 pts.): 9 students
Developing (2 pts.): 7 students
Minimal (1 pts.): 5 students

Conclusion:
About 43% of students demonstrated some level of competency regarding the attribution and citing of sources.

Observations:
The majority of students are struggling to attribute sources correctly. Areas of specific weakness include 1) difficulty identifying the bibliographic information needed to cite a source and 2) composing citations that exhibit significant or major formatting and stylistic errors. In several cases, the sources incorrectly cited came directly from library databases, indicating that students are either not aware of or chose not to use the citation management tool available within the database itself.

Recommendations:
Citing primary sources provides another layer of complexity that might require that more specific instruction be included in instruction. As an alternative, developing an additional section on our citation guide that addresses how to cite primary sources, in print and electronic, would be beneficial. Also, continued emphasis on how to use citation tools within library databases.
Did course have a library instruction: No

Artifact for assessment: Annotated Bibliography

Number of artifacts submitted: 14

Assignment description:

1. Annotated bibliography featuring 10 to 15 sources
2. At least 5 sources must be scholarly

JCC Information Literacy Student Learning Competencies assessed:

IL SLC 2: Inquiry Students will be able to use appropriate discovery methods to define an initial topic and formulate a focused research question.

IL SLC 4: Evaluation Students will evaluate information using a variety of criteria to determine its value, relevance and accuracy.

IL SLC 5: Attribution Students will demonstrate an understanding of why, when, and how to give proper attribution to original ideas.

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>IL SLC 2:4</th>
<th>IL SLC 4:1</th>
<th>IL SLC 4:3</th>
<th>IL SLC 4:4</th>
<th>IL SLC 5:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL SLC 2:4</td>
<td>Seek multiple perspectives during information gathering process</td>
<td>Use indicators of authority, accuracy, objectivity, currency and context to determine the credibility and usefulness of sources.</td>
<td>Recognize different types of authority, such as scholar, subject expertise, professional or special experience (participant in historic event).</td>
<td>Identifies and analyzes different viewpoints in order to cultivate a self-awareness of their own biases and world views.</td>
<td>Credit original ideas of others through proper citation based on a specified style format.</td>
</tr>
<tr>
<td>Performance Indicator used for rubric</td>
<td>Different Viewpoints: Students will select sources representing multiple perspectives.</td>
<td>Scholarly Sources: Students will select scholarly sources from the appropriate disciplines necessary for the chosen research topic. Usefulness: Students will address the usefulness of chosen sources to the research topic.</td>
<td>Authority: Student identifies authority of the author(s) and recognizes if claims were supported by evidence.</td>
<td>Different Viewpoints: Students will select sources representing multiple perspectives.</td>
<td>Citing sources: Students will be able to cite sources correctly and consistently using a referencing style.</td>
</tr>
</tbody>
</table>
Results for each performance indicator:

I. Different Viewpoints

*Performance Indicator:* Students will select sources representing multiple perspectives.

- **Accomplished (4 pts.):** 0 students
- **Competent (3 pts.):** 5 students
- **Developing (2 pts.):** 9 students
- **Minimal (1 pts.):** 0 students

**Conclusion:**
29% of students demonstrated a proficiency in selecting sources representing multiple perspectives.

**Observations:**
The results here are low but also expected. Avoiding confirmation bias is a critical component to developing strong information literacy. It requires that students adopt a disposition of openness and receptivity to different perspectives and conflicting viewpoints. Students new to research will often find this challenging. Being receptive to conflicting viewpoints can be initially uncomfortable for some students, while others are more focused on seeking out information that confirms a pre-existing opinion because it requires less effort.

**Recommendations:**
This particular skill takes time to develop. One recommendation would be to allow for more emphasis on the *inquiry phase* of research where students can learn how to identify some of their own biases before diving into their focused research topic.

II. Scholarly Sources

*Performance Indicator:* Students will select scholarly sources from the appropriate disciplines necessary for the chosen research topic.

- **Accomplished (4 pts.):** 3 students
- **Competent (3 pts.):** 3 students
- **Developing (2 pts.):** 7 students
- **Minimal (1 pts.):** 1 students

**Conclusion:**
42% of students demonstrated a proficiency in selecting scholarly sources from the appropriate discipline area necessary for the chosen research topic.

**Observations:**
As described by the faculty member for this course, the assignment parameters required students to include at least five *scholarly sources*. This is understood to mean *scholarly peer-reviewed* sources published in academic journals. Most students were successful in finding at least one scholarly peer-reviewed source, but fewer managed to meet the criteria of including five. Although most scholarly articles came from the library databases, there were a few students who managed to find peer-reviewed scholarly articles available on the web through open access journals.
Most students struggling to meet this competency had compiled sources that fell within the criteria for an academic, credible or even authoritative source, but had less success with identifying scholarly peer-reviewed journal articles. A large percentage of these students also tended to rely heavily on opinion or open-based web articles.

**Recommendations:**
Continue to emphasize the characteristics of scholarly peer-reviewed articles (what do they look like physically and electronically) and how to find them in library databases. Where appropriate, discuss the availability of peer-reviewed articles available on the web through open access journals.

**III. Authority**

**Performance Indicator:** Students identifies authority of the author(s) and recognizes if claims are supported by evidence.

- Accomplished (4 pts.): 1 students
- Competent (3 pts.): 4 students
- Developing (2 pts.): 7 students
- Minimal (1 pts.): 2 students

**Conclusion:**
35% of students correctly identified the authority of the author(s) and recognized if any claims by the author were supported by evidence.

**Observations:**
Although locating and recognizing scholarly peer-reviewed articles is one way to ensure students are using authoritative sources, it is also important to recognize that authority is multi-faceted when it comes to locating appropriate sources for any given research topic (ex. scholar, subject expertise, professional or special experience).

A student who understands how to use database filters will be able to locate sources of a specific source type (academic journal, periodical, newspaper), a skill which is ultimately very helpful in identifying a scholarly authority. However, it is necessary for students to pursue evaluating a source beyond this by actually identifying the author/creator of the source, what their credentials are, what kind of authority they represent and whether they back up any claims they have made with evidence.

Students struggled more with this competency than they did with finding scholarly sources. Web sources seemed to be most challenging for them. Students would often emphasize an author’s level authority in their annotation when in reality their credentials were mediocre at best. For example, one student listed an article from WebMD as having been written by a Dr. Laura Martin, when in reality Martin only reviewed the article which was likely written by a freelance staff hired by WebMD. Although the article mentioned a study in an effort to support a claim, no title, author or any other information about when and where the study was published was given.

**Recommendations:**
Emphasize the inquiry phase of research by providing guided worksheets encouraging students to ask questions about who or what profession/discipline would be considered an expert/authority on their chosen topic. As an extension, use a class activity where students are guided through the
process of reading an article in full, asked to identify where claims have been made in the article and whether the author has backed any of those claims up with references or citations.

IV. Usefulness

**Performance Indicator:** Students will address the usefulness of chosen sources to the research topic.

- **Accomplished (4 pts.):** 4 students
- **Competent (3 pts.):** 6 students
- **Developing (2 pts.):** 3 students
- **Minimal (1 pts.):** 1 students

**Conclusion:**
71% of students effectively addressed the usefulness of their chosen sources to their research topic.

**Observations:**
The majority of students performed very well in this area. Annotations would often include details, such as where the student intended to use the source in their text, identifying what paragraph and what point or argument the source would support or refute.

**Recommendations:**
Continue encouraging the use of annotated bibliographies as an important tool in the research paper writing process. A research journal would be another alternative, where students use a graphic organizer to collect important information about the sources they find, including facts, quotes, names or anything that stands out as useful for their research paper.

V. Citing Sources

**Performance Indicator:** Students will be able to cite sources correctly and consistently using a referencing style.

- **Accomplished (4 pts.):** 0 students
- **Competent (3 pts.):** 7 students
- **Developing (2 pts.):** 6 students
- **Minimal (1 pts.):** 1 students

**Conclusion:**
50% of students cited sources correctly and consistently using a referencing style.

**Observations:**
There were a lot of stylistic errors present. The change over from MLA7 to MLA8 has some students understandably confused, which was evident in several bibliographies where they had combined formatting from both styles. Overall, however, students were successful in identify the necessary bibliographic information needed to cite a source but once it was put together, there were often significant formatting errors.
**Recommendations:**
Achieving a level of proficiency in citation can be a challenge and especially overwhelming for students completely new to research, as many in this course would have been. It would be beneficial to spend some more time on our MLA 8 guide, perhaps providing additional examples of how to cite a variety of different sources. Promoting and demonstrating NoodleTools would also be beneficial. Students often exhibit a level of anxiety and frustration over the task of citing sources, something which a citation management tool like NoodleTools might help alleviate.

**Final comments:**
This report represents an entirely new method of assessment for JCC librarians. Regardless of how students performed, the process of evaluating actual student work has provided a completely new lens for us to view students and provided a much better understanding of how students think about and use information. More so, it has also impressed upon us how beneficial increased collaboration between library and faculty can be. We look forward to taking what we have learned from this assessment and using it to inform our teaching and strengthen our information literacy program.
Appendix I

Information Literacy Student Learning Competencies

IL SLC 1: ACCESS Students will understand the role of the library in college learning and have the ability to access library services and resources

1:1 Recognize the librarians as contacts for information about using library resources for research.
1:2 Locate library facility and service points.
1:3 Locate information about library opening hours, contact information and links to library resources.
1:4 Explain the difference between resources accessed through the library and those found on the open web.
1:5 Explain when turning to library resources would be more beneficial/effective than using the open web and vice-versa
1:6 Navigate to at least one introductory level library tool for topic search
1:7 Navigate to online catalog for simple topic search
1:8 List indicators for differences between books and articles

IL SLC 2: INQUIRY Students will be able to use appropriate discovery methods to define an initial topic and formulate a focused research question.

2:1 Interpret an assignment so as to determine required research parameters
2:2 Use brainstorming, concept mapping or other pre-search methods to identify a topic of interest.
2:3 Explore problems and questions related to their topic as a basis for developing a legitimate research question.
2:4 Seek multiple perspectives during information gathering process.
2:5 Synthesize ideas gathered from multiple resources and develops own point of view based on supportive evidence.
2:6 Analyzes gathered information for conflicting information or gaps in knowledge and formulates additional questions for research to address those weaknesses.

IL SLC 3: SEARCH Students will apply appropriate search strategies to effectively and efficiently locate reliable information related to a topic.

3:1 Break down a research question by identifying key concepts, synonyms and related terms appropriate for a search query.
3:2 Identify interested parties, such as scholar, organization, governments, and industries, who might produce information about a topic and determine how to access that information.
3:3 Match information needs and search strategies to appropriate search tools
3:4 Read a search results page and refines search strategies as necessary, based on search results.
3:5 Use different types of searching language appropriately and effectively apply search techniques such as truncation, phrase searching and database filters.

IL SLC 4: EVALUATION Students will evaluate information using a variety of criteria to determine its value, relevance and accuracy.

4:1 Use indicators of authority, accuracy, objectivity, currency and context to determine the credibility and usefulness of sources.
4:2 Recognize that authoritative content may be packaged differently and may include sources of all media types.
4:3 Recognize different types of authority, such as scholar, subject expertise, professional or special experience (participant in historic event).
4:4 Identifies and analyzes different viewpoints in order to cultivate a self-awareness of their own biases and world views.
4:5 Recognize the implications of information formats that contain static or dynamic information.
4:6 Articulating the purposes of various types of information as well as their distinguishing characteristics.
4:7 Understand the increasingly social nature of the information ecosystem where authorities actively connect with one another and sources develop over time.
4:8 Critically evaluates contributions made by others in a participatory information environment.

IL SLC 5: ATTRIBUTION Students will demonstrate an understanding of why, when, and how to give proper attribution to original ideas.

5:1 Credit original ideas of others through proper citation based on a specified style format.
5:2 Exhibit proper use of paraphrasing, citations, footnotes in written work.
5:3 Recognize what constitutes plagiarism and how to avoid intentional and unintentional plagiarism.
5:4 Recognize when it is necessary to seek permission before using information or original work by others.
5:5 Articulate the purpose and distinguishing characteristics of copyright, fair use, open access, and the public domain.
Appendix II

History 151

<table>
<thead>
<tr>
<th>SCHOLARLY SOURCES</th>
<th>PRIMARY SOURCE</th>
</tr>
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<tbody>
<tr>
<td><strong>Students</strong></td>
<td><strong>Students</strong></td>
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<tr>
<td>0</td>
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<td>5</td>
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<td>30</td>
<td>30</td>
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</tbody>
</table>

- **SCHOLARLY SOURCES**
  - Accomplished: 6
  - Competent: 6
  - Developing: 3
  - Minimal: 6

- **PRIMARY SOURCE**
  - Accomplished: 10
  - Competent: 1
  - Developing: 5
  - Minimal: 5

<table>
<thead>
<tr>
<th>CITING SOURCES</th>
<th><strong>Total percentage of students Competent and Accomplished</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td><strong>Primary Source</strong>&lt;br&gt;<strong>Scholarly Sources</strong>&lt;br&gt;Citing Sources</td>
</tr>
<tr>
<td>0</td>
<td>0% 52%&lt;br&gt;57% 42%</td>
</tr>
<tr>
<td>5</td>
<td>20% 57%&lt;br&gt;57% 42%</td>
</tr>
<tr>
<td>10</td>
<td>40% 52%&lt;br&gt;57% 42%</td>
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<tr>
<td>15</td>
<td>60% 52%&lt;br&gt;57% 42%</td>
</tr>
<tr>
<td>20</td>
<td>80% 52%&lt;br&gt;57% 42%</td>
</tr>
</tbody>
</table>

- **CITING SOURCES**
  - Competent: 9
  - Developing: 7
  - Minimal: 5

- **Total percentage of students Competent and Accomplished**
  - Primary Source: 52%
  - Scholarly Sources: 57%
  - Citing Sources: 42%

How students scored on all 3 performance indicators combined:

<table>
<thead>
<tr>
<th>Performance</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplished/Competent</td>
<td>38%</td>
</tr>
<tr>
<td>Developing/Minimal</td>
<td>61%</td>
</tr>
</tbody>
</table>
Appendix III

English 101

Different Viewpoints

SCHOLARLY SOURCES

USEFULNESS

AUTHORITY

CITING SOURCES

TOTAL STUDENTS

ACCOMPLISHED OR

COMPETENT

DIFFERENT

VIEWPOINTS

SCHOLARLY

SOURCES

AUTHORITY

USEFULNESS

CITING

SOURCES
How students scored in all 5 performance indicators

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHIEVED/COMPETENT</td>
<td>22%</td>
</tr>
<tr>
<td>DEVELOPING/MINIMAL</td>
<td>78%</td>
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