IS IT WORKING? ASSESSING THE EFFECTIVENESS OF COMMUNITY COLLEGE INFORMATION LITERACY INSTRUCTION: DEVELOPING APPROPRIATE OUTCOMES AND IMPROVING INSTRUCTION USING THE “FRAMEWORK” AS A GUIDE

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Location: Tacoma, Washington

Enrollment: Nearly 14,000 students enroll at TCC each year (≈ 8000 FTE).

Gender: 61% women, 39% men

Median Age: 25.1

Ethnicity: 41% self-identify as students of color (59% white, 13% African American, 13% Asian/Pacific Islander, 10% Hispanic, 5% Other/Multi-racial)

International students: 519

Students with disabilities: 650

Academic transfer to a 4-year institution: 57%

Workforce training: 21%

Basic skills education: 7%

Pre-college: 15%
In fall 2014, the library conducted an assessment project for LS 101, Introduction to Research. Our goal was to measure how well students are meeting the course learning outcomes (CLOs), identify areas for improvement, and determine if any of the CLOs needed to be refined/changed.

This project supports the Create Learning goal of the TCC Strategic Plan:

*Develop and assess learning outcomes to ensure students transition successfully with the necessary knowledge and skills for further education and responsible citizenship in a global society.*
METHOD

A 30-question pretest and posttest were collaboratively developed by 4 TCC librarians using SurveyMonkey. The questions for both were the same and were developed specifically to address all 7 CLOs for LS 101.

1. Follow a plan for finding information using a variety of electronic and print tools
2. Generate research questions and create a thesis based on the analysis of resources
3. Demonstrate basic use of electronic search strategies, such as Boolean operators and phrase searching
4. Describe the standard criteria that qualify information sources as appropriate to use in academic research projects
5. Describe and collect the elements necessary for a citation in a standard style
6. Incorporate information from research into a written product, using appropriate academic style
7. Identify and explain the differences between major types of information resources (e.g., books, lay periodicals, scholarly journals, wikis, etc.)
METHOD

The pretest was administered at the beginning of Fall 2014, the posttest at the end of Fall 2014, and results were collected by SurveyMonkey. Data analysis was performed by one librarian.

Our goal was for 80% of students to demonstrate attainment of each of the CLOs in the posttest by correctly answering each of the questions.
RESULTS

There were a total of 33 respondents amongst all 3 fall quarter classes (1 hybrid, 2 full online).

The total enrollment for these 3 classes was 64, so over 50% of students participated.
**RESULTS**

Students had varied success with achievement of the CLOs.

<table>
<thead>
<tr>
<th>Skill</th>
<th>CLO</th>
<th>Success rate (Pretest)</th>
<th>Success rate (Posttest)</th>
<th>Gain/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using appropriate databases</td>
<td>1</td>
<td>76.00%</td>
<td>81.82%</td>
<td>5.82%</td>
</tr>
<tr>
<td>Narrowing a broad topic</td>
<td>2</td>
<td>63.33%</td>
<td>79.31%</td>
<td>15.98%</td>
</tr>
<tr>
<td>Identifying an effective research question</td>
<td>2</td>
<td>60.00%</td>
<td>51.75%</td>
<td>8.28%</td>
</tr>
<tr>
<td>Using appropriate keywords</td>
<td>3</td>
<td>80.00%</td>
<td>86.90%</td>
<td>6.90%</td>
</tr>
<tr>
<td>Identifying a phrase search</td>
<td>3</td>
<td>78.79%</td>
<td>90.91%</td>
<td>12.11%</td>
</tr>
<tr>
<td>Using a Boolean operator to narrow a search</td>
<td>3</td>
<td>42.42%</td>
<td>54.55%</td>
<td>12.13%</td>
</tr>
<tr>
<td>Evaluating a Web site</td>
<td>4</td>
<td>63.27%</td>
<td>75.76%</td>
<td>12.49%</td>
</tr>
<tr>
<td>Identifying a citation style</td>
<td>5</td>
<td>33.33%</td>
<td>69.70%</td>
<td>24.25%</td>
</tr>
<tr>
<td>Identifying the journal title within a given citation</td>
<td>5</td>
<td>36.36%</td>
<td>54.55%</td>
<td>18.19%</td>
</tr>
<tr>
<td>Identifying a paraphrase that is not plagiarized</td>
<td>6</td>
<td>26.67%</td>
<td>20.69%</td>
<td>5.98%</td>
</tr>
<tr>
<td>Selecting a newspaper article when it is the best source for a given information need</td>
<td>7</td>
<td>66.67%</td>
<td>69.70%</td>
<td>3.03%</td>
</tr>
<tr>
<td>Selecting a scholarly journal article when it is the best source for a given information need</td>
<td>7</td>
<td>72.73%</td>
<td>72.73%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Finding a scholarly article</td>
<td>4, 7</td>
<td>76.00%</td>
<td>81.82%</td>
<td>11.82%</td>
</tr>
<tr>
<td>Identifying the characteristics of a scholarly article</td>
<td>4, 7</td>
<td>63.27%</td>
<td>75.76%</td>
<td>12.49%</td>
</tr>
</tbody>
</table>

**Table Key**
- Met 80% benchmark
- Within 5% of 80% benchmark
- Did not meet 80% benchmark, but improved by at least 10%
DISCUSSION

The CLOs that were the most problematic in this assessment were CLOs 2, 6, and 7. Most concerning were CLOs 2 and 6, in which students actually lost ground as a result of having taken the LS 101 class.

Mapping the CLOs to Bloom’s Revised Taxonomy (2001) shows that CLOs 2 and 6 were at the creating level of Bloom’s taxonomy, which is inappropriate for an 100-level, introduction course.

2. Generate research questions and create a thesis based on the analysis of resources
6. Demonstrate basic use of electronic search strategies, Incorporate information from research into a written product, using appropriate academic style
7. Identify and explain the differences between major types of information resources (e.g., books, lay periodicals, scholarly journals, wikis, etc.)
CHANGES IMPLEMENTED

The first step in responding to the data from this assessment was to revise the CLOs.

In making these revisions, we consulted:

- Bloom’s Taxonomy

The [ACRL] Framework … is called a framework intentionally because it is based on a cluster of interconnected core concepts [i.e. threshold concepts], with flexible options for implementation, rather than on a set of standards or learning outcomes, or any prescriptive enumeration of skills. At the heart of this Framework are conceptual understandings that organize many other concepts and ideas about information, research, and scholarship into a coherent whole.
CHANGES IMPLEMENTED

These new CLOs each map to more appropriate levels of Bloom’s for an 100-level, introductory course.

1. Follow a plan for finding information using a variety of electronic and print tools
2. Employ strategic processes of inquiry to guide and refine information needs and search strategies.
3. Demonstrate basic use of electronic search strategies.
4. Describe the purpose of and collect the elements necessary for a citation in a standard style.
5. Develop familiarity with sources of evidence, methods, and modes of discourse.
6. Identify and explain the differences between major types of information resources (e.g., books, lay periodicals, scholarly journals, wikis, etc.) and when and how to use them.
CHANGES IMPLEMENTED

These new CLOs are also all mapped to the Framework.

1. Follow a plan for finding information using a variety of electronic and print tools (Authority is Constructed and Contextual, Information Creation as a Process, Searching as Strategic Exploration)
2. Employ strategic processes of inquiry to guide and refine information needs and search strategies. (Research as Inquiry)
3. Demonstrate basic use of electronic search strategies. (Searching as Strategic Exploration)
4. Describe the purpose of and collect the elements necessary for a citation in a standard style. (Scholarship as Conversation, Information Has Value)
5. Develop familiarity with sources of evidence, methods, and modes of discourse. (Scholarship as Conversation, Information Has Value)
6. Identify and explain the differences between major types of information resources (e.g., books, lay periodicals, scholarly journals, wikis, etc.) and when and how to use them. (Authority is Constructed and Contextual, Information Creation as a Process)
Example:

Before:

• Describe the standard criteria that qualify information sources as appropriate to use in academic research projects

• Identify and explain the differences between major types of information resources (e.g., books, lay periodicals, scholarly journals, wikis, etc.)

Combined:

• Identify and explain the differences between major types of information resources (e.g., books, lay periodicals, scholarly journals, wikis, etc.) and when and how to use them. (Authority is Constructed and Contextual, Information Creation as a Process)
CHANGES IMPLEMENTED

In addition, we are currently in the process of revising the LS 101 curriculum, starting with the assignments and rubrics.

Finally, as a result of this and other assessment projects, we have revised our Program Learning Outcomes (PLOs).


