Adding Up to Success?
Assessing Freshman Skills in Information Literacy

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ECIL 2014
Information Literacy Tutorial

- 74 Sections of First Year Seminar
- Tutorial has 4 parts
- Each part consists of 4 modules + 4 quizzes
- Each part worth a total of 100 points x 4 = 400 points
- 10% of course grade
Access via Blackboard LMS
Tutorial Excerpts
CHECK POINT

Drag the Information Source on the right to the Information Need it fulfills.

**NEED**
- Instant sports scores
- Lengthy summary of what is known about a topic
- Detailed analysis of a specific, complex problem or issue
- Wide range of articles from different journals
- Current regional or local information
- Factual, background information and further readings

**SOURCE**
- NEWSPAPER
- SCHOLARLY JOURNAL ARTICLE
- BOOK OR BOOK CHAPTER
- ENCYCLOPEDIA
- INTERNET
- DATABASE
SCHOLARLY, POPULAR, & TRADE RESOURCES: WHAT'S THE DIFFERENCE?

What's in them? Click on each publication to find out.

SCHOLARLY

PUBLICATION

© University of Illinois Press

POPULAR

PUBLICATION

© Sussex Publishers

TRADE

PUBLICATION

© American Psychological Association
THE PLAGIARISM SPECTRUM

There are many different ways to plagiarize. It is your responsibility to know what constitutes plagiarism so you can avoid it in your assignments. Click on the icons to understand these different types of plagiarism.

- 404 ERROR: Includes inaccurate citations or citations to sources that don't exist.
- CLONE: Submitting another's work, word-for-word, as your own.
- COPY + PASTE
- MASH-UP: Mixes copied material from multiple sources without citation.
- MASH UP
- RECYCLE
- FIND + REPLACE
Which combination of keywords represents the topic "Marketingwine"?

- coffee AND coffee shops
- coffee AND beverages
- coffee AND marketing
- coffee AND community
- coffee AND sales

Correct

Correct! Marketing is a keyword related to advertising.

Continue
Research Question:

*How effective was the tutorial at meeting the information literacy learning outcomes?*
Mixed Methods: Direct Measures

- **Overall averages:**
  Student scores across all 4 tutorial modules and 4 quizzes

- **Individual quiz questions:**
  Ran item analysis in Blackboard
Mixed Methods: Indirect Measures

• Qualtrics survey: Stratified random sample of 300 students (41% response rate)

• Qualtrics survey: All 89 Faculty and Writing Instructors teaching (54% response rate)
Overall Average Scores:

**FYS Info Literacy**

<table>
<thead>
<tr>
<th>Module (across 74 courses)</th>
<th>Quiz (across 69 courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting…</td>
<td>87%</td>
</tr>
<tr>
<td>Types of Info</td>
<td>78%</td>
</tr>
<tr>
<td>Finding &amp; Evaluating</td>
<td>84%</td>
</tr>
<tr>
<td>Using Info Ethically</td>
<td>80%</td>
</tr>
</tbody>
</table>
N (Number of Students out of 1334)

Starting…
Module: 1161
Quiz: 1169

Types of Info
Module: 1111
Quiz: 1140

Finding & Evaluating
Module: 1043
Quiz: 1099

Using Info Ethically
Module: 1094
Quiz: 1093
Student Quiz
RESULTS
COLOR LEGEND for Quiz Scores Handout
FYS Tutorial: Starting Your Assignment (module 1)

Outcome 1: Identify an Information Need
- Recognize as "true" the statement that an encyclopedia is a good place to start your research because it provides a brief description or overview of your topic (96%)
- Identify the information needs in an assignment by listing the action verbs that determine the assignment type and listing the type of information source you are told to use (89.5%)
- Distinguish between a basic report, analytical paper, and persuasive paper based on assignment descriptions (98%)
- Recognize that the "further readings" section of an encyclopedia entry allows you to find additional sources of information on your topic (88.5%)

Outcome 2: Define or Modify the Information Need to Achieve a Manageable Focus
- Recognize a research question that is too narrow (88%)
- Recognize a research question that is too broad (94%)

Outcome 3: Identify Key Concepts and Terms that Describe the Information Need
- Identify the central ideas and keywords from a research topic about alcohol use and GPA in college (99%)
- Choose the best four synonyms for the concept of a "GPA" from a list of ten words or phrases (92%)

Outcome 5: Evaluate Sources
- Select the item from a list of search results that is most relevant to a given information need or topic (alcoholism and drinking in France) (95%)

Outcome 6: Draw correct conclusions based upon information
- Identify the main finding from an encyclopedia excerpt and correctly list the name of the researcher it references (94.5%)
Select the item from a list of search results that is most relevant to a given information need or topic (alcoholism and drinking in France) (95%)

Identify the scholarly source containing original research from a list of mixed-source search results (95%)

Identify the correct type of source (newspaper) for a specific information need (yesterday’s plane crash) (99%)

Differentiate between a primary, secondary, and tertiary source (66%)

Demonstrate an understanding of the order in which information is produced by correctly ranking, from earliest to latest, the publication date for a group of sources about the same event (75%)

Identify the correct type of publication (trade) for a specific information need (statistics on the soft drink industry) (78%)

Rank the steps of the peer review process in order from first to last (80%)

Identify the source from the Social Sciences branch of knowledge from a list of mixed-discipline search results (66%)

Distinguish characteristics of articles from the Humanities branch of knowledge from a list of mixed-discipline article characteristics related to methodology, structure, purpose, author, and subject (80%)
FYS Tutorial: Finding & Evaluating Information (module 3)

Outcome 1: Evaluate Sources

- Rank the relevance of an item to a given information need using the RADAR (Relevance, Authority, Date, Accuracy, & Rationale) framework (85%)

- Categorize a list of sources by the degree that they represent the following elements of the RADAR framework: authority, date/currency, relevancy, and rationale/bias. (73%)

- Identify the four characteristics describing the scope and functionality of library research databases from a list of characteristics describing either databases or the library catalog (73%)

- Select the appropriate tool (library catalog) for finding a book (98%)

- Demonstrate knowledge of the Library of Congress call number system by locating the correct call number ranges for a list of call numbers (92%)

- Choose the appropriate search strategy of “OR” to broaden a search from a list of five possible search strategies (69%)

- Use the library catalog to search by title and find the call number of a book (97%)

- Identify these search protocols appropriate to the structure of a library catalog: items may be grouped together by subject in order to facilitate browsing; and both keyword searching and controlled vocabulary are search language that could enhance information retrieval (55%)

- Use the journal list to select the database link that will lead to the full text of a given journal (94%)

- Retrieve a book record by author name using the library catalog (94%)

- Understand the Library of Congress classification scheme enough to infer what letter a book’s call number starts with when given a list of sample book titles and the first letter of their call numbers (95%)

Outcome 4: Locate & Access Information
FYS Tutorial: Using Information Ethically (module 4)

Outcome 7: Plagiarism and Information Ethics

- Recognize the correct definition of fair use (73%)
- Distinguish from among five choices the correct example of an item under copyright protection (75%)
- Identify the “journal name” element of an article citation (88%)
- Recognize an incorrect paraphrasing that is too close to the original text (75%)
- Categorize all elements of a book citation correctly (79%)
- Distinguish between a journal article citation, a book citation, and a book chapter citation (98%)
- Identify the mislabeled citation element of a book chapter corresponding to the author (87%)
- Recognize scenarios that constitute plagiarism related to copying ideas and failing to cite; copying and pasting exact sections without quoting; and copying someone else’s term paper (96%)
- Recognize reasons for properly citing sources related to the findability of the citations; credibility; connecting to other scholars; and acknowledging the work of others (84%)
- Identify three types of plagiarism based on their descriptions (submitting another’s word-for-word work as your own; borrowing from your own work without citation; and copying content making only minor word changes without citation (97%))
## Module 2: Low Performing Questions

*All related to Outcome 5: Evaluate Sources*

<table>
<thead>
<tr>
<th>TASK</th>
<th>AVERAGE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiate between a primary, secondary, and tertiary source</td>
<td>66%</td>
</tr>
<tr>
<td>Demonstrate an understanding of the order in which information is produced by correctly ranking, from earliest to latest, the publication date for a group of sources about the same event</td>
<td>75%</td>
</tr>
<tr>
<td>Identify the source from the Social Sciences branch of knowledge from a list of mixed-discipline search results</td>
<td>66%</td>
</tr>
</tbody>
</table>
# Module 3: Low Performing Questions

<table>
<thead>
<tr>
<th>Outcome 5: Evaluate Sources</th>
<th>Task</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorize a list of sources by the degree that they represent the following elements of the RADAR framework: authority, date/currency, relevancy, and rationale/bias.</td>
<td></td>
<td>73%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome 4: Locate &amp; Access Information</th>
<th>Task</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the four characteristics describing the scope and functionality of library research databases from a list of characteristics describing either databases or the library catalog</td>
<td></td>
<td>73%</td>
</tr>
<tr>
<td>Choose the appropriate search strategy of “OR” to broaden a search from a list of five possible search strategies</td>
<td></td>
<td>69%</td>
</tr>
<tr>
<td>Identify these search protocols appropriate to the structure of a library catalog: items may be grouped together by subject in order to facilitate browsing; and both keyword searching and controlled vocabulary are search language that could enhance information retrieval</td>
<td></td>
<td>55%</td>
</tr>
</tbody>
</table>
## Module 4: Low Performing Questions

*All related to Outcome 5: Plagiarism & Information Ethics*

<table>
<thead>
<tr>
<th>TASK</th>
<th>AVERAGE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize the correct definition of fair use</td>
<td>73%</td>
</tr>
<tr>
<td>Distinguish from among five choices the correct example of an item</td>
<td>75%</td>
</tr>
<tr>
<td>under copyright protection</td>
<td></td>
</tr>
<tr>
<td>Recognize an incorrect paraphrasing that is too close to the original text</td>
<td>75%</td>
</tr>
</tbody>
</table>
The content in the tutorial modules aligned with the required learning outcomes related to information literacy for first year seminar courses.

The content in the tutorial modules was relevant to my course.

Online tutorials are an effective way to incorporate the library in developing my students' information literacy skills.

The tutorial modules were easy to incorporate into my course.

It was easy to use the grade center features in Blackboard (MyLMU Connect) to access student scores for the tutorial modules.

The scores that I received for my students from the interactive exercises and quizzes adequately measured student learning related to the FYS information Literacy learning outcomes.
The sections within the modules were clearly outlined. 3.96
The key points were clearly explained within the modules. 3.81
The tutorial was easy to navigate. 3.63
The level of difficulty within the modules was appropriate for me. 3.58
I had a clear understanding of my progress throughout the modules. 3.51
The tutorial modules were relevant to my First Year Seminar course assignments. 3.48
The tutorial modules were relevant to my other course assignments (not First Year Seminar). 3.47
The quiz questions after each module in myLMU Connect were clear. 3.44
I received useful feedback when I completed the checkpoint and practice exercises. 3.22
Most of the information in the tutorial modules was new to me. 3.06
The amount of time it took me to complete the modules was reasonable. 2.98
I like learning through online tutorials. 2.94
Which Tutorial Topics Were Most Helpful/Valuable?

(Avg. student/faculty scores)

- Plagiarism: 3.59
- Finding useful and appropriate resources, including books and articles: 3.48
- Distinguishing between scholarly vs. popular sources: 3.48
- Distinguishing between primary vs. secondary sources: 3.43
- Citing Sources: 3.4
- Picking out the key concepts and keywords from a research topic: 3.33
- Evaluating information: 3.32
- Defining a research topic/research question: 3.24
# Frequent Student/Faculty Comments

<table>
<thead>
<tr>
<th>COMMENT</th>
<th># OF COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation/Delivery Mechanism/Prefer In Person</td>
<td>28</td>
</tr>
<tr>
<td>Organization/Length/Too long</td>
<td>27 (10)</td>
</tr>
<tr>
<td>Content/More Relevance or Integration/with coursework</td>
<td>11 (13)</td>
</tr>
<tr>
<td>Graded Assessment/Module Grading/Counts too much</td>
<td>11 (3)</td>
</tr>
<tr>
<td>Content/Repetition</td>
<td>10 (10)</td>
</tr>
<tr>
<td>Graded Assessment/Recording/Tech problems</td>
<td>10 (19)</td>
</tr>
</tbody>
</table>
## Additional Student Comments

<table>
<thead>
<tr>
<th>COMMENT</th>
<th># OF COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization/Sections/Make smaller</td>
<td>9</td>
</tr>
<tr>
<td>Organization/Transitions/More reporting</td>
<td>9</td>
</tr>
<tr>
<td>Delivery Mechanism/Multimedia</td>
<td>8</td>
</tr>
<tr>
<td>Content/Repetition/Too much</td>
<td>7</td>
</tr>
<tr>
<td>Graded Assessment/Too hard</td>
<td>7</td>
</tr>
<tr>
<td>Graded Assessment\More transparency</td>
<td>6</td>
</tr>
<tr>
<td>Supplement/Reference Sheet/Key Concepts</td>
<td>6</td>
</tr>
</tbody>
</table>
## Top Technical Problems

<table>
<thead>
<tr>
<th>Category</th>
<th>Specifics</th>
<th># of Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Loading</td>
<td>Questions; examples; drop-down menus; videos; quizzes; searches; slow wifi</td>
<td>28</td>
</tr>
<tr>
<td>Crashing</td>
<td>Includes freezing; timing out; refreshing; quitting; lost wifi</td>
<td>27</td>
</tr>
<tr>
<td>Not Saving</td>
<td>Doesn't save progress; goes back to beginning</td>
<td>22</td>
</tr>
<tr>
<td>Multiple Browsers</td>
<td>Doesn't work on all browsers</td>
<td>11</td>
</tr>
</tbody>
</table>
Blackboard/MyLMU Connect Problems

- Grade center miscalculations
- Too many scores
- Confusing weights
- Hard to reset
- Hard to access
Integration With Coursework

**Discussed tutorial content in class (student view)**
- Yes: 62%
- No: 38%

**Discussed tutorial content in class (faculty view)**
- Yes: 85%
- No: 15%
How Did You Fulfill The **10% Information Literacy Requirement** For Your Course?

- Online Only 60%
- Online & In Person 40%
What Tutorial Topics Were Most Often Discussed In Class?  
*(Avg. student/faculty combined score)*

- **84,5%** Citing Sources
- **77,5%** Finding useful and appropriate resources, including books and articles
- **76,5%** Plagiarism
- **71,5%** Defining a research topic/research question
- **68,0%** Evaluating information
- **66,0%** Distinguishing between scholarly vs. popular sources
- **56,5%** Distinguishing between primary vs. secondary sources
- **51,5%** Getting help from a librarian
- **46,0%** Picking out the key concepts and keywords from a research topic/research question
- **34,5%** Recognizing that scholarly research varies across the 3 main disciplines
# Supplemental Assignments Used

<table>
<thead>
<tr>
<th>ASSIGNMENT OR ACTIVITY</th>
<th># OF MENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Paper</td>
<td>14</td>
</tr>
<tr>
<td>Annotated Bibliography</td>
<td>11</td>
</tr>
<tr>
<td>Source Comparison</td>
<td>3</td>
</tr>
<tr>
<td>Blog</td>
<td>2</td>
</tr>
<tr>
<td>Peer Review</td>
<td>2</td>
</tr>
<tr>
<td>Find Material in Library</td>
<td>1</td>
</tr>
<tr>
<td>Citations on Board</td>
<td>1</td>
</tr>
<tr>
<td>Class Reading List</td>
<td>1</td>
</tr>
<tr>
<td>Book Review</td>
<td>1</td>
</tr>
</tbody>
</table>
How Far Apart Were Tutorial Due Dates?

- Spread throughout the semester: 52%
- All modules due the first month: 30%
- All modules due at the end of the semester: 9%
- Other: 8%
2014

Improvements

• Break down content into smaller, shorter chunks [5 modules]

• Offer workarounds for student technical problems with the grade center [printable certificates]

• Greater transparency in scoring [for both instructors and students]
2014
Improvements

• Add summary of key points for each section that students can print
• Sight-impaired version of tutorial will be available
• Assess “problem areas”
2014 Improvements

- Encourage more integration of content into FYS course [embed assignment or activity suggestions into tutorial]
- Create a “Handbook” for faculty with supporting materials
- Offer option of having student scores emailed from the Library
Integrate New ACRL Framework for Information Literacy for Higher Education

A study was published recently in the peer-reviewed journal Proceedings of the National Academy of Sciences of the United States of America that claimed to test how people's moods were affected by what they saw on their Facebook feeds. The researchers analyzed the Facebook feeds of over 700,000 Facebook users without their knowledge. The researchers claimed that the alteration of these news feeds resulted in emotional changes in Facebook users, stating in the paper, "results suggest that the emotions expressed by friends, via online social networks, influence our own moods."

This study has proven to be controversial and has generated much discussion in scholarly spaces. Take a look at how some scholars are responding to this study. Click on each scholar to view a response to this study.
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