Assessing and Expanding Information Literacy Skills with Online Instructional Modules

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1st Data Collection
Summer 2015
International Graduate Students
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International Graduate Students
What, How, & Who

• What We Asked:
  • Two internally developed instruments were utilized to collect data:
    1) the Information Literacy Assessment (ILA); and,
    2) the Students' Perceptions of their Information Literacy Skills Questionnaire (SPIL-Q).

  • The ILA and SPIL-Q were combined into one survey instrument.

• How & Who We Asked:
  • The survey instrument was delivered electronically to 932 international graduate business students.
Survey Instruments

• **Information Literacy Assessment (ILA)**
  - Consisted of multiple-choice questions on six assessment topics:
    1) Develop a Topic
    2) Locate Information
    3) Access Information
    4) Evaluate Information
    5) Write
    6) Cite
  - The questions for each topic followed the Association of College and Research Libraries (ACRL)'s five standards for information literate students.
  - Each standard correlated directly to a topic – i.e. Develop a Topic questions addressed ACRL standard #1, with the exception of standard #5 which the IL team separated into two assessment topics (#5-Write and #6-Cite).
  - To ensure inter-rater reliability, two library staff members, an English faculty member, two college staff members, and four undergraduate library student workers reviewed the ILA instrument and tested it for question clarity, terminology, and format.
The following personal details were collected (which were gathered after students answered a question in which they agreed to participate in the study):

- First and Last Name
- College email address
- Age range
- Gender
- Current major or program concentration(s)
SPIL-Q

Students were then asked to what extent they agreed with the following six statements:

1. I feel I have the skills necessary to select a relevant topic for any written papers required in my graduate classes at the College.

2. I feel I have the skills necessary to locate relevant research on my chosen research topic using a variety of resources, including the Library, online databases, and online resources.

3. I feel I have the skills necessary to select appropriate keywords, Boolean searching, and connector words to find relevant research when searching online databases and websites.

4. I feel I have the skills necessary to evaluate reference resources for relevance to my topic and accuracy of content.

5. I feel I have the skills necessary to write my research papers. I am familiar with note taking and outlining as methods to help layout the structure of my papers.

6. I understand the difference between paraphrasing and quoting authors. I know when I should paraphrase an author versus when I should quote, and I am comfortable using both methods when referencing existing work.
You are being asked to participate in a research study about graduate students' information literacy skills. Your participation includes the completion of this survey, which includes questions about how you feel about your current information literacy skills, as well as questions about various information literacy topics, including developing a topic, locating information, accessing information, evaluating information, writing your research paper, and citing while writing a research paper.

Completing this survey is not required for your current graduate class at Goldey-Beacom College and it will not impact any of your current course grades. Data collected in this survey may be shared with unidentifiable information - i.e. your name and identifying characteristics about you will not be shared - in articles, presentations, or public forums.

Clicking on the "agree" button below indicates that you voluntarily agree to participate. If you do not wish to participate, please click on the "disagree" button below.

GBC Graduate Students Information Literacy Survey
International Graduate Students
Response Rate & Findings

• Response Rate:
  • One hundred and seventy-two or 18.5% of the potential international graduate business student population during Summer 2015 responded to the survey.

• Results demonstrated that the widest discrepancy in results existed between students' perceptions of their own skills (as assessed by the SPIL-Q instrument) and their actual skills as assessed by the ILA instrument.

• Students’ overall average score on the IL test instrument was 53%.

• Students scored the most poorly on the ILA topic Evaluate Information.
  • 73% believed that they had adequate skills regarding this topic.
  • The average test score on this topic was the lowest of all topics, 44%.
Our findings:

Comparison of ILA Tested Knowledge Versus Student Perceptions of Skills in ACRL Topic Areas of International Graduate Students, Summer 2015

N=172

<table>
<thead>
<tr>
<th>Rank</th>
<th>Topic</th>
<th>Students’ ILA Tested Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DEVELOP A TOPIC</td>
<td>53%</td>
</tr>
<tr>
<td>2</td>
<td>LOCATE INFORMATION</td>
<td>53%</td>
</tr>
<tr>
<td>3</td>
<td>ACCESS INFORMATION</td>
<td>49%</td>
</tr>
<tr>
<td>4</td>
<td>EVALUATE INFORMATION</td>
<td>44%</td>
</tr>
<tr>
<td>5</td>
<td>WRITE</td>
<td>55%</td>
</tr>
<tr>
<td>6</td>
<td>CITE</td>
<td>61%</td>
</tr>
</tbody>
</table>

Second data collection
Fall 2015
Undergraduate and graduate
domestic and international
students
Survey Distribution

The IL team combined two personally-developed questionnaires, the ILA and SPIL-Q instruments, into one survey, and distributed it in two phases to the entire college’s student population (n=1,851) of undergraduate and graduate (domestic and international) students.
Tools

Phase 1: Google Forms &
Phase 2: Office Mix
Delivery – Phase 1

The survey was delivered during the first half of the Fall 2015 semester to 1,851 undergraduate and graduate students (domestic and international) who were enrolled at the time of survey distribution in fifteen-week or eight-week courses.

The survey was designed using Google Forms and Flubaroo and distributed via e-mail. Flubaroo—a free add-on to Google Forms—was utilized to score students’ responses to the ILA questions. The survey response rate was 15%, with 294 students responding.
Delivery- Phase 2

The updates and design changes made to the instruments utilized in the Phase 2 collection, in conjunction with the instructional training modules, were made with the intent of creating an all-encompassing data collection and instructional training solution.

The Phase 2 research model of stand-alone modules surveyed students on what they thought they knew about a particular IL concept area (SPIL-Q), then transitioned smoothly into providing instructional training on the same IL concept, and finally assessed what students now knew post-training (ILA).
The Tool We Used in Phase 2 and Why?

Office Mix was selected to design and deploy Phase 2 as opposed to the College’s Learning Management System (LMS) as it provided the ability to create stand-alone modules that surveyed students (opinion responses), provided instructional training, and assessed questions (correct/incorrect) all from within the same module. The College’s LMS does not provide the same functionality.
Module scores, Fall 2015

ILA Tested Knowledge in posttest

N=33

Graduate students passing standard

Undergraduate students passing standard
Scores from pretest versus scores from modules, Fall 2015

Score comparison between pretest and modules

Graduate students passing standard

Undergraduate students passing standard

Pre-test Score  Module Score

Develop a topic  67%  100%
Locate information  56%  98%
Access information  48%  100%
Evaluate information  46%  98%
Write  74%  99%
Cite  75%  95%
Average Time Students Spent in Each Module within Office Mix

<table>
<thead>
<tr>
<th>Duration of Module (mins)</th>
<th>Average Time Spent (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>5.6</td>
</tr>
<tr>
<td>5.3</td>
<td>4.8</td>
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<tr>
<td>7.3</td>
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<td>11</td>
<td>5.6</td>
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<tr>
<td>14.7</td>
<td>9</td>
</tr>
<tr>
<td>15.35</td>
<td>9</td>
</tr>
</tbody>
</table>
Create

Record your lecture or presentation from within PowerPoint
Office Mix Resources

- Microsoft's Office Mix website: [https://mix.office.com](https://mix.office.com)
- Office Mix supports closed captioning
  - See this Knowledge Base Article: [Office Mix Closed Captions](https://support.office.com/en-us/article/office-mix-closed-captions-6a82d2ef-7e84-404b-b41c-3987f4f0f704)
  - Try this free tool to create your caption file: [Subtitle Edit](https://subtitleedit.com/)
Research Resources


*Our article includes all questions utilized in our study in the appendix.*
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