

Spring 2012 Assessment of Two Library Research/Information Competency Workshops

Background and Assessment Administration

The Information Competency & Curriculum Development Committee planned and implemented pre-and post-assessment instruments for workshop A (Finding books and other library materials in CCSF libraries) and workshop C (Internet and web basics).

Several SLOs from the LI S 1000 course outline were reconciled with the workshop SLO's and these were used to draft items for the pre and post instruments. The following SLOs and corresponding assessment items were identified for each workshop:

SLO for LI S 1000
B. Identify the major online search tools and compare and contrast the reasons to use them for different information and research needs.
F. Conduct effective online searches using a variety of search tools, such as online catalogs, periodical databases, search engines and web search tools using basic and advanced search techniques.

Workshop A: Finding books and other library materials in CCSF libraries

SLO	Questions
1. Describe and contrast the benefits of using online catalogs to find materials in relation to other online search tools	1
2. Develop and conduct effective search strategies within online catalogs	2, 3, 4
3. Interpret, locate and retrieve information, whether a book, video, DVD or e-book	4

Workshop C: Internet and web basics

SLO	Questions
1. Demonstrate basic understanding of Web and Internet concepts	1, 3
2. Demonstrate understanding of differences between subject directories and search engines	2
3. Develop and conduct effective search strategies for subject directories and search engines	3, 4

The pre- and post-assessments for the workshops were administered during the later portion of the spring semester and the early portion of the fall semester both online and in a classroom setting. There was a response rate of 821 for the A workshop and 650 for the C workshop. Students were given the pre-assessment prior to taking the workshop and the post-assessment after completing the workshop

but before doing the assignment. While the response rate was quite good for the pre-assessment, fewer students completed the post assessment; 668 for the A workshop and 558 for the C workshop. We consider the assignment to be part of the workshop experience and we are also considering how we might survey students after its completion. It would be interesting to capture data post-workshop and post assignment.

Findings for Workshop A: Comparing Post- and Pre-Assessments

Below are the data findings for both assessments question by question. The number of students responding varies due to fewer responding to the post assessment.

Question 1: CityCat is the name of CCSF’s online catalog. You can use CityCat to find:

	Pre-assessment (n=821)	Post-Assessment (n=668)
magazine articles	62 (8%)	12 (2%)
websites	67 (8%)	11 (2%)
books	463 (56%)	625 (94%)
Journal articles	90 (11%)	13 (2%)
I don’t know	139 (17%)	7 (0%)

The post assessment shows a 38% increase in the number of students who chose the correct answer and decreases in the number of students who chose incorrect answers.

Question 2: You need to find some books about how future technology might impact education. You do a search in the library catalog by:

	Pre-assessment (n=821)	Post-Assessment (n=668)
author	33 (4%)	10 (1%)
title	40 (5%)	19 (3%)
subject	315 (38%)	295 (44%)
keyword	406 (49%)	339 (51%)
I don’t know	27 (3%)	5 (0%)

The post assessment shows decreases in the number of students who chose the more incorrect answers (author and title). Though the majority of students did select the correct answer (keyword) and significant number of students also chose the subject search as the correct answer. This discovery indicates that the workshop may need more instruction differentiating when to use the Keyword and Subject search options.

Observation: Workshop instructors and the online workshops need to be more explicit and explain several times during the workshop the difference between keyword searching and subject searching.

They should be made aware that Subject Searching is better for broader topics whereas keyword searching is better when it's complex and has multiple concepts.

Question 3: Looking at the full display screen to notice relevant subjects to select can be an effective research strategy to find more material.

	Pre-assessment (n=821)	Post-Assessment (n=668)
true	625 (76%)	563 (76%)
false	88 (11%)	76 (10%)
I don't know	108 (13%)	29 (14%)

There was no statistical difference in student response between the pre- and post-assessment when asked if looking at relevant subject headings was an effective strategy to find more information. There were a high percentage of correct answers in the pre-assessment which may also indicate that the question should be revised

Observation: Workshop instructors and the online workshops need to emphasize the value of subject headings to help students find relevant information.

Question 4: You've done a search in the library catalog and you find the perfect book. Your next step is to find a book on the shelves by:

	Pre-assessment (n=821)	Post-Assessment (n=668)
call number	491 (60%)	577 (86%)
title	42 (5%)	14 (2%)
author	66 (8%)	21 (3%)
ISBN	149 (18%)	43 (6%)
I don't know	73 (9%)	13 (2%)

Findings for Workshop C: Comparing Post- and Pre-Assessments

Below are the data findings for both assessments question by question. The number of students responding varies due to fewer responding to the post assessment.

Question 1: The "invisible web" is:

	Pre-assessment (n=650)	Post-Assessment (n=558)
what you find using a search engine	86 (13%)	104 (19%)
A webpage that you can't usually find with a search engine or subject directory	344 (53%)	410 (73%)

what you find using subject directories	44 (7%)	31 (6%)
I don't know	176 (27%)	12 (2%)

Question 2: For your biology class your instructor has asked you to find two good quality, reliable, evaluated web sites. You use a:

	Pre-assessment (n=650)	Post-Assessment (n=558)
search engine	179 (28%)	45 (8%)
library database	287 (44%)	201 (36%)
subject directory	63 (10%)	244 (44%)
metasearch engine	64 (10%)	50 (9%)
I don't know	64 (10%)	11 (1%)

The response from the post-assessment showed a 34% improvement rate from the pre-assessment in terms of recognizing that subject directories are a good place to find reliable, evaluated web sites. However, students are still confusing library databases with web resources as there was very little statistical difference between the pre- (44%) and post-assessment (36%).

Observation: The terminology 'library database' may have thrown students off on this question and skewed the results. Workshop instructors need to be more explicit about subject directories and why to use them over a general web search. Instructors also need to make clear the difference between subscription library databases and web resources.

Question 3: .GOV and .ORG are examples of:

	Pre-assessment (n=650)	Post-Assessment (n=558)
file names	23 (4%)	6 (1%)
top level domain names	256 (39%)	322 (58%)
folders	13 (2%)	4 (0%)
domain names	310 (48%)	213 (38%)
I don't know	48 (7%)	14 (3%)

Confusion exists between the terms top level domain names and domain names. If librarians find this knowledge pertinent, more effort needs to be placed on teaching internet concepts/definitions. Emphasis in our workshops should perhaps be on another aspect of reading web addresses for initial evaluation of web resources.

Observation: This difference between top-level domain and domaine might be unimportant. The goal is for students to understand that a .com stands for a commercial site, .edu stands for an educational site,

and .org is for non-profit organizations and that these designations can help them evaluate the reliability of the site.

Question 4: You want to limit your search results to sources from educational sources. Choose the best way to do this from the list below:

	Pre-assessment (n=650)	Post-Assessment (n=558)
type education in the search box along with your search terms	76 (12%)	19 (3%)
type your search terms, scan the results and only look at educational sources	112 (17%)	12 (2%)
type your search terms and enter site:edu	381 (59%)	512 (92%)
I don't know	81 (12%)	15 (3%)

Limiting by domain is taught sufficiently. 59% of the students answered the pre-assessment correctly and this jumped to 92% in the post assessment. This shows that this learned concept is relevant to students.

Plans for Improvement:

We will use the results of the assessments to improve our workshops both in-class and online. Specifically, for Workshop A we need to:

- 1) Improve student awareness of when best to use subject versus keyword searching.
- 2) Emphasize the utility of looking at subject headings when viewing a bibliographic record in an online catalog.

Specifically, for Workshop C we need to:

- 1) Consider emphasizing some other aspect of reading Web Address for initial evaluation of web resources rather than recognizing the distinction between domain and top-level domains.
- 2) Emphasize the fact that library periodical databases are NOT a good source for finding reliable, evaluated web sites.

The pre- and post-assessments have been highly useful for gathering data on whether students are learning core concepts in our online and in-class workshops. Looking at our results we see several that need to be emphasized or more clearly presented. In addition, some ideas presented in our workshops may be considered not essential such as domain versus top-level domains. In addition, the assessment provides thought for more careful crafting of questions where common-sense may lead students to a high percentage of correct answers in the pre-assessment (Workshop A, item 3).