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Evaluation:

Library Compass

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Evaluation: http://ccnmtl.columbia.edu/projects/evaluations/librarycompass.pdf

Abstract

During 2003, the Center for New Media Teaching and Learning and Columbia University Libraries collaborated in the design and development of Library Compass. The goal of the Library Compass environment is to help students develop and enhance their academic research skills so that they can take advantage of the vast range of intellectual resources available to them at Columbia University.

As part of the design and development process, we evaluated the effectiveness of the environment in order to identify its strengths and the areas that may require improvement. To assess Library Compass, we developed an instrument that consisted of two parts: part 1 asked students to conduct a search for resources at the library using the assistance of Library Compass; part 2 consisted of a set of questions that addressed students' experience using Library Compass. Six first year students were individually interviewed for about one hour and fifteen minutes each. The interviews were conducted around a computer workstation in Butler 306 in order to easily observe students interactions with the environment. Interviews were tape recorded and later transcribed for analysis.

The following findings emerged from this evaluation. First, students seemed to have misleading expectations about the Finding section. They either expected it to work as CLIO (Columbia Libraries Information Online) or as a search engine. Expecting this, they did not understand how this section could help them find the resources they were looking for. Students also reported that, by the close of their freshman year, they were already familiar with many of the resources introduced in Library Compass. They strongly stressed, however, that Library Compass is a very useful resource for first year students at the very beginning of their academic career at the University. Students found the Evaluating and Documenting sections very good resources. From a usability perspective, students found the navigation of Library Compass clear and easy. However, we observed specific usability issues that require improvements such as the format and layout of links and the location of the toolkit.

The purpose of this report is to introduce and describe the major findings that emerged from the evaluation of library compass and to suggest next steps.

(Support data for the evaluation can be found in separate appendices. Please contact CCNMTL, should you wish access to this information.)

I. Students' Characteristics

In order to interpret the findings introduced below, it is important to describe the experiences with and knowledge of library research of the six interviewed students:

- They all were at the end of their University Writing (UW) core requirement course and have all had an introduction to library research either from their UW instructor or a reference librarian in a training session at Butler.
- All the students were familiar with the reference services provided by librarians in Butler.
- Students were not familiar with the online reference assistance (chat, email) provided by librarians through LibraryWeb.

II. Summary Findings

PART I: Usefulness Issues¹

Question 1

What effect does working with Library Compass have on students' understanding of the academic research process? Do students gain new academic research strategies through working with Library Compass?

The six students interviewed reported that, by the close of their freshman year, they were already familiar with many of the resources introduced in Library Compass. They all strongly stressed, however, that Library Compass is a very useful resource for first year students at the very beginning of their academic career at the university. They found Library Compass to be appropriate for more novice students with no experience doing research at CU Libraries.

When asked in which context using Library Compass would be more helpful for students, they identified the following settings:

- In orientation week of freshman year.
- In University Writing classes as an assigned homework to be discussed in class.
- In first semester courses as an assigned homework to be discussed in class.

Question 2

What aspects of Library Compass do students find more helpful / less helpful for developing their academic research skills?

Most of the students mentioned three features of Library Compass as being the most helpful ones in learning about library research:

- The representation of the research process by phases (the four Library Compass Points): the way in which the research process is presented provides an overview of the intellectual tasks involved in planning, searching, evaluating, and documenting the research. Students found this organization helpful for identifying where they are in the research process and planning their next steps.
- . *The evaluation and documenting sections*: Students stressed the importance of these two sections as sources of valuable information (especially the section on documentation). They found these sections useful for avoiding errors and mistakes in the presentation of their papers.
- . *The glossary of terms*: Students found it useful to clarify specific notions that they (or others) don't quite know and about which they usually feel too embarrassed to ask.

The majority of the students identified the following two related issues as working against the helpfulness of the "Finding" section:

¹ By "usefulness" we refer to the specific ways in which LC helps (or not) students to learn/enhance their academic research skills.

- Misleading expectations about the Finding section: students expected the "Finding" section to work as a "searching" place. They either expected it to work as CLIO or as a search engine. Expecting this, they did not understand how this section could help them find the resources they were looking for². Therefore, they skimmed through the section, explored what information it contained, jumped to CLIO (their already known strategy), and began searching. Once in CLIO, they rarely came back to Library Compass.
- Lack of specificity of the information provided in the "Finding" section: when students realized that Library Compass was meant to give them ideas for their searches, they felt frustrated with the level of specificity of the information included in the "Finding" section. The following quote from one of the students is illustrative of this frustration:

Student #5: "Like when you click in databases it takes you back to Columbia University Library website, and I didn't know if this was going to take me to another page that had all the information or if it was just ... I don't know. I didn't think it was confusing, I mean, I still think it was sort of frustrated, once I was in Columbia again and I was like 'well, great...' I think what it would be helpful are tips: 'If your search strategy is not working, try doing this.'"

To sum up, once students realized that the "Finding" section was not a "search engine," they expected more specific information about the search task at hand. When asked to describe what they meant by "specific information," they referred to tips and strategies that go beyond describing the resources.

PART II: Usability Issues³

Question 1

Does the organization of the site help students to identify and locate what might be useful to them?

The majority of students found that the navigation was clear and straightforward. They all praised the general navigation organization by Compass Points [Planning, Finding, Evaluating, Documenting.] All the students indicated that the site was easy to use. Only two issues came up as a source of possible confusion:

- 1. Lack of guiding information in the home page: two students expressed that they were a little confused at the very starting point of working with LC since the information provided in the home page does not explain clearly enough what to do next and how Library Compass relates to Library Web. This confusion may be related to the misleading expectations introduced in the previous section of this report.
- 2. Confusing links layout: although only one student mentioned this issue, observation data provides evidence of some confusion generated by the current formatting of the links, specifically bold (both gray and green) fonts seem to be confused with links and students kept clicking on them without realizing that links are neither bold, nor underlined in Library Compass.

Question 2

How do students "read"/interact with Library Compass content?

The majority of students found the Library Compass text appropriate in terms of quantity and organization. They acknowledge that breaking up the content in smaller sections helped them go through the text. Only one student found the amount of text in Library Compass overwhelming.

² Students were given the following task to explore with the aid of Library Compass: "Where and how would you search in the library for the history of Morningside Heights and Columbia University? Consider that your professor may want to see your research supported by various types of sources of information."

³ By "usability" we refer to the specific features of Library Compass design and their effects on students' opportunities to learn.

Many students praised the option to go back to the top of the page placed at the end of each section and suggested that this should also be included at the end of each subsection. In addition, students preferred scrolling down the text than having to go through different pages.

In general, students approached the text by exploring its content, skimming it for useful information, and selecting links to visit. No one engaged in a "linear" reading.

Finally, students found working with multiple windows (i.e.: Library Compass and CLIO) easy and manageable.

Question 3

Do students find and use the resources included in Library Compass to support their learning?

About the toolkit:

None of the students visited or even acknowledged the presence of the toolkit without promptings. It was necessary to call their attention to it in order to discuss students' opinions about the sources available to them. Once they saw the toolkit and explored its content, they found it interesting and useful.

About "Test your knowledge":

Students found this section useful in order to think about what they knew and what they should know. They stressed the importance of placing it at the very beginning of the Library Compass experience. Placing "Test your knowledge" at the very beginning of the environment would establish expectations and perceptions of the purposes of Library Compass.

About the videos:

None of the students watched the videos. When they were asked to watch them, they found them interesting but not particularly useful, as the following quote illustrates:

Student #5: [About why she wouldn't watch the videos] "Because I would think... 'Well, that's not going to help me' I would think that this is going to be more like 'oh, look how great Mr. Bob is' instead of he is going to have tips. And even if this was a choice between reading the interview or watching it on video, I would still pick reading it because in that way I could skim through it instead of having to watch the whole video."

III. Implications and Next Steps

Following are specific suggestions to address some of the issues introduced above:

CONTEXT OF USE

- Partner with University Writing instructors to support their efforts to introduce students to library research:
 - Meet instructors to discuss LC and gather their feedback.
 - Plan with instructors possible ways of introducing LC in their sections.
- Partner with reference librarians to plan ways to introduce LC in their orientation sessions in Butler.
- Introduce LC to Columbia College orientation staff and first year students' academic advisors.
- Identify two prospective faculty partners from first year courses that might be interested in shaping Library Compass around one of their course assignments (all the students found this possibility to be extremely useful.)

CLARIFICATION OF PURPOSES AND EXPECTATIONS

Re-write the introduction to Library Compass to better explain the purposes and features of the

project so as to establish learners' expectations.

• Change the current location of "Test your knowledge" to be the very first page students see once inside Library Compass. This may also clarify the purposes of the project.

CONTENT: LEVEL OF SPECIFICITY

- Use the input from UW instructors to create specific examples and "tips" for UW students, and eventually customize LC activities to their research assignment.
- Redesign when and how students are re-directed to CLIO or other databases and create more precise and specific intermediate information. This intermediate information might be presented as a list of possible situations in which students may find themselves (i.e.: "I don't know where to find a specific journal article." or "Why should I care about using journal articles?") The answers to these possible questions/situations should include one very specific example that guides students through the process of solving the situation.
- Delete the activities, which will be eventually replaced by course specific questions and examples within the text.

SITE STRUCTURE AND NAVIGATION

- Have Library Compass organized only around HUMANITIES (as opposed to requiring students choose between HUMANITIES and SOCIAL SCIENCES). If the project is going to be assigned in University Writing (or any other course), then we should consider having entry points to Library Compass organized around course titles.
- Clarify the identification of links.
- Make the TOOLKIT always visible as one scrolls down the text.
- Place the VIDEOS in the introduction page.