

Moraine Valley Community College Library

Web site Usability Study

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Study Goals

1. Evaluate the ease of use of the current library Web site in order to provide data to use in re-designing the Web site.
2. Evaluate the ease of use of a potential library Web site re-design based on identified trends in peer organizations in order to provide data to use in re-designing the Web site.

Procedure

This study will be a usability study of the library Web site. Usability studies test the design and functionality of a tool, web-based or otherwise. It generally does this by having a group of participants complete a series of tasks using the tool, then recording their responses and the thought processes they undertook to complete the assigned tasks. The results of these exercises are then used by the experimenters to evaluate and make changes to the design or functions of the tool incorporating lessons learned from the study¹

For this particular study, we looked at the previous usability study on the library Web site conducted in 2003. We also examined the Web sites of several community colleges, four-year colleges, and universities to get a feel for design features that we would want to incorporate into a new version of the website. Finally, we have reviewed an older collection of usability studies undertaken by other academic institutions. We will be using a *comparative* approach for this study that compares test results from the current library Web site and the results from a prototype design.

Participants in the study will be asked to use the library Web site or the prototype site to perform a variety of tasks that users might perform during a normal research session. A session moderator will be present to give the questions to students and help with any questions they may have. A session recorder will be present to take notes. The participants' on-screen actions and voice will be recorded using Camtasia screen-capture software. Students will be asked to talk-out-loud during the session to explain where they are clicking.

All user data will be provided a date-code that will remove information that might be used to identify the participant. All data will only be used for internal purposes by library staff members. Participants will be informed of the procedures and asked to sign a consent form at the beginning of the session (see the Consent form at page 4 of this document).

Participants

¹ —Manzari and Trinidad-Christensen (2006). User Centered Design of a Web Site for Library and Information. *Information Technologies and Libraries*. 25:3 pp163-169.

Participants will be Moraine Valley Community College students. We will have 16 participants—8 to test the current Web site and 8 to test the prototype.² The librarians will ask several COM, HIS, and SOC instructors to allow a library staff member to visit class and ask students to participate. With a usability study, no prior knowledge or research experience is required for participants. A usable Web site should function properly with little or no guidance. In exchange for their assistance, we will give them gift certificates to the Moraine Valley Bookstore.

Test Administrators

The usability study will be administered by fulltime and part-time librarians. There will be two trained moderators and two trained recorders. Moderators provide questions and guidance to participants. Recorders take notes on the session and are an extra set of eyes and ears to help interpret data.

Calendar

1. Review previous usability study from 2003: December 2008
2. Update process for current usability study: January 2009-February 2009
3. Submit for human subject approval: March 2009
4. Test the Test with Library Staff: March 2009-April 2009
5. Implement Test: September 2009
6. Compare and analyze results of test: November 2009

Testing the Test

In order to prepare for the actual usability study, the study administrators will “test the test” on library staff members. The goals of this will be to:

1. Confirm test duration.
2. Confirm clarity of questions.
3. Confirm that test space is comfortable and appropriate.
4. Confirm that recording devices function as expected and are not intrusive.
5. Provide moderators and recorder practice

Test Materials

- Laptop with:
 - Access to Web and library Web site.
 - Camtasia Installed and Tested
 - Microphone
 - USB mouse
- Moderator and Recorder Instructions and Tips

² Nielsen (2000) Why you only need to test with 5 users. *Jakob Nielsen's Alertbox*, 2000. <http://www.useit.com/alertbox/20000319.html>

- Moderator Script
- Participant (Demographic) Profile Questionnaire
- Task Questions
- Open Questions
- Data Collection Forms (for Task & Open Questions)

Web sites Reviewed

1. College of DuPage (www.cod.edu/library)
2. Portland Community College (www.pcc.edu/library) click on more features for more search options
3. Carleton College (apps.carleton.edu/campus/library)
4. University of Illinois at Urbana-Champaign (www.library.uiuc.edu)
5. University of Michigan, Ann Arbor (www.lib.umich.edu)
6. Queensborough Public Library (www.queensborough.org) not a school library, but does have a lot of the design features we might wish to incorporate.

MORAIN VALLEY COMMUNITY COLLEGE LIBRARY CONSENT FORM

Usability Study of the MVCC Library Web Site

We are asking you to participate in a usability study. The purpose of this consent form is to give you the information you will need to help you decide whether or not to be in the study. Please read the form carefully. You may ask questions about the purpose of the study, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the study or this form that is not clear. When all your questions have been answered, you can decide if you want to be in the study or not. This process is called 'informed consent.'

Purpose and Benefits

The purpose of this study is to identify what works and what does not work on the Moraine Valley Community College Library Web site.

Procedures

Participants in the study will be asked to use the Moraine Valley Community College Library Web site to perform a variety of tasks that users might perform during a normal research session. We will record your screen activity, and we will also make a screen capture of your session that includes an audio recording of your voice, so we can go back and study all responses. All screen captures and audio recordings will be kept completely confidential. They will only be viewed by the study administrators and will not be shared with anyone else. This activity should take less than an hour.

Risk, Stress, Discomfort

This study will not expose its participants to risk, stress, or discomfort beyond that normally associated with an Internet surfing experience.

Other Information

The names of individual participants will not be used in the tabulation of the results in order to ensure both anonymity and confidentiality. You are free to refuse to participate in the study and may withdraw at any time.

SUBJECT'S STATEMENT

The study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later on about the research I can ask one of the study team members listed above. I will receive a copy of this consent form.

Signature of Subject

Date

Moderator's Script

(Introduce moderator and recorder when student arrives, then read below out loud. Have copy for student to read along)

The goal of this test is to find out how students find information on the library's Web site. By participating in this study, you are helping us evaluate and improve our site.

I will ask you a series of questions which you will answer by using our Web site. I would like you to think **out loud** when you search the site for answers. This is very important—we are primarily interested in the *reasons* for what you are doing. When you decide to use a link, please tell us, **out loud**, what you are going to click on and why, before you click.

There are no right or wrong answers. We are testing the effectiveness of our site design—this is **not** a test of you. We are interested in learning why students make the choices they do.

Please let me know if you get stuck or something does not make sense. There may be some questions that you will not have time to complete. If you do get stuck, or if you run out of time, don't worry.

The two people who will be in the room during the session are the recorder and me. The recorder will write down important points you bring up while searching the site, and will also act as technical support. Neither of us will be able to answer any questions about the library's site during the session.

We will record your screen activity, and we will also make a screen capture of your session that includes audio and video, so that we can go back and study all responses. All screen captures, audio, and video recordings will be kept completely confidential. They will only be viewed by the study administrators and will not be shared with anyone else. Your name will **not** be used in the tabulation of the results to ensure both anonymity and confidentiality.

Please answer the questions as they are presented, and do not go back to previous questions.

Begin each question by

1. Clicking the red "record" button on the screen, then waiting 3 seconds for the machine to start recording.
2. Reading the question out loud so that it is recorded with your answer
3. Answering the question by speaking out loud. Be sure to talk into the microphone.

If you forget, we will remind you during the test to think **out loud**. When you have answered the questions or you have decided you cannot answer the question, tell me, and I will save the recording. Do tell us when you are finished with each question.

Remember that this is a test of the library's Web site. Things like Google and Yahoo are off limits. We need you to stick to the Moraine Valley web site.

You'll receive your (gift certificate) at the end of the session. Do you have any questions?

Request participant's signature on release form and demographic survey.

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Instructions for Moderator

If necessary, remind the subjects to talk out loud as they work.

Do **not** interfere with their work. Do **not** offer suggestions, hints, etc., and don't "rescue" the subject. If the subject becomes sidetracked outside the library Web site, suggest the subject try the question again.

Never indicate that the subject has made a mistake. If the subject feels that he/she has reached a satisfactory result, even if it is one you do not consider correct, accept this answer and go to the next question. Be aware that your body language and voice inflections can influence results.

Although the subject is limited to 3 minutes per task question, do not tell the subject this. We want to keep the subject as relaxed as possible.

End the subject's work after 3 minutes. Use such phrases as:

"I have learned enough from this question, let's go on to the next one."

"I think you have gone far enough in this search so that you can now go on to the next question."

At the beginning of each question, make sure that they participant begins the Camtasia screen capture program and reads the question.

At the end of the question, remind student to tell the moderator when they are finished with the question.

Instructions for Recorder

Make a note of each question's start time.

Notify the Moderator at the 3 minute mark.

Make a note of each question's stop time (whether the subject found an answer, ran out of time, or gave up in frustration).

Even though we will be recording screen activity, make notes of:

- The answer found by subject.
- How long it took to find the answer.
- How many paths/clicks to the answer.
- Number of incorrect choices (where mistakes occur).
- What users choose first (and why).
- Whether users identify the proper resource for the task.

Instructions for Moderator and Recorder

After the session is over and the subject has left, spend 15 minutes discussing the session and record the results of this discussion. The object is to cover the session highlights to help later evaluation. These highlights should include where the subject made mistakes or experienced confusion, and the tasks the subject successfully complete

Moraine Valley Community College Web Usage Study
Subject Questionnaire

1. Gender:

- Male Female

2. Age:

- 17 & Under 18-22 23-28 29-45 46 & Older

3. Student Status:

- Part Time Full Time

4. Area of Study:

- Transfer Career Programs Non-Credit Other_____ (please specify)

5. Have you ever attended a class on how to use Moraine's library?

- Yes No Don't Know

6. How much experience do you have using the Internet?

- None I use it rarely I use it occasionally I use it often I'm an expert

7. How easy do you find it to locate information on the Web?

- Extremely Somewhat Somewhat Extremely Don't Know
Difficult Difficult Easy Easy

8. How much experience do you have using the Moraine Library Web site?

- None I use it rarely I use it occasionally I use it often I'm an expert

9. How much experience do you have using a computer?

- None I use it rarely I use it occasionally I use it often I'm an expert

10. What type of computer do you use?

- Windows/PC Apple Linux/Unix Other_____ (please specify) Don't Know

Subject ID: _____

Date: _____

Moderator: _____

Recorder: _____

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Data Collection Forms

Subject ID: _____

Date: _____

Time: *Start:*_____ *Stop:*_____

Moderator: _____

Recorder: _____

Question 1: Does the library own the book *I know why the Caged Bird Sings* by Maya Angelou?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 2: You realize that you forgot to return a library book on time, and you will have to return it a few days after the due date. Where on the site can you find what the fines are for overdue books?

Time Started:
Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 3: You are at home doing research for a sociology paper, and you would like to ask a librarian for help. Where would you look for information on how to contact a librarian for help?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 4: You want to see if you have any items currently checked out. Where would you go to check?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 5: Your Biology 111 teacher told you she put a book on reserve for your class to use. Where would you go to learn what materials are on reserve for BIO 111?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 6: Please find a book on global warming.

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 7: You need to find an article on lung cancer for a class project. How would you find one?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 8: Your COL 101 instructor told you that you can get extra credit for attending lectures and events on campus. Is the library holding any special events in the Fall semester?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 9: Your study group is planning to meet at 2pm in the library next Saturday. Is the library open at that time?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 10: You need the book *Millennium* by Hakim Bey for a class project, but you discover that our library does not have a copy. Where on the site would you go to request a copy from another library?

Time Started:
Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 11: Your nursing instructor told you that you can read the journal *Nursing News* on the library Web site. Find the most recent online issue.

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 12: Where on the library's site would you find a research guide (a list of books, articles and Web links) that would help you start your art history research?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 13: You'd like to use your home computer to search the databases of magazine and journal articles offered by the library. Where on the site would you go to find the instructions for doing this?

Time Started:
Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Question 14: You need to cite an article from an online source using the APA format. Where can you learn how to do this on the library site?

Time Started:

Time Stopped:

Indicate what the subject did:

Browsing (include path):

Search Tools Used:

Search Terms Used:

Was an Answer Found? Yes No

Was the answer correct? Yes No

Describe issues/problems

Open Questions *(note several of these need to be cut, but we will wait until after we test the test)*

Open questions intended to solicit the subject's overall impression of the site. Be aware of the time. although we will still be recording audio during this part of the test, the recorder should record as much as possible of the subject's replies.

Question 1: What are the most helpful features of the library's site?

Question 2: What did you find the most confusing?

Question 3: Question #7 asked you to find an article on lung cancer. What could we do on the site to make it easier to answer this question?

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Subject Identification Key:

Subject Name

Subject ID