

The Language of the Michigan State University Libraries Webpage

A Usability Research Project

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Overview

The website for the MSU Libraries is used every day by students and faculty to electronically navigate MSU's enormous collection of books and other scholarly materials. However, some of the administrators responsible for this website feel that some of the language used on the site is confusing for the every day user. In order to make this "librarian lingo" clear for everyone, we began to do research with everyday users of this website in order to identify this unclear language and discover ways by which these problems could be solved.

To do so, we conducted a series of surveys with undergraduate students, student library workers, and graduate students. After meeting with librarians Sue Shultz, Stephanie Perentesis, Kara Gust, and Ranti Junus, we studied the library's site, designed our survey, and began to test our classmates. As our testing went on, we were able to identify trends in people's understanding of the language on the site. The strength of our report lies in the fact that we tested a large group of people who had ranging levels of experience with the language used in the library, the library, and websites in general.

Our goal was to highlight any problematic language that we discovered through our surveys on the website, and come up with a few ideas on how to make it more understandable and easier to use for everyone.

Methods

Tasks

In order to fully investigate the effectiveness of the library website language, we decided to construct a uniform interview questionnaire. The interviews would help us to gauge users knowledge and understanding of the site in order to establish the existence of any ambiguities or other factors that cause confusion with the main page of the site.

Test Facilities

Unfortunately, the interviews could not be conducted in a uniform location due to the complexity in acquiring adequate test participants. This was not a major problem, however, because the average user can access the library home page from any location, thus interview location was not a factor. However, using a computer to conduct all the surveys gave the answers that we received validity, because the users were viewing the site just as they would if they were to use it for every-day tasks.

Participants were tested in nine locations. These locations were as follows:

- The main library- basement instruction room, first floor electronic resource help room
- Bio-medical Physical Science Building Library
- Business Library
- Writing Center- 3rd floor Bessey Hall
- Bessey Hall- room 317
- 4 personal computers

Design of the Survey Tool

The interview was designed using seven pages, in order to supply sufficient space for note taking of the participants' responses.

The language we investigated in our survey included:

- Magic Online Catalog
- Books
- Journals
- Materials on reserve
- Electronic resources
- Indexes to articles
- Research guides
- Services and request forms
- Borrow from other libraries
- Manage your library record
- Course specific guides
- Library Distance Learning Services
- Hours
- About the libraries
- Branches
- Units
- Staff
- Student employment
- Directions
- Policies
- MSU Digital Collections
- Giving to the MSU Libraries
- Need Help
- Ask a librarian
- Ready reference
- Research guides
- ProxyServer
- News and events
- Classes and seminars
- Non-graphic site
- User's ability to distinguish between links and plain text

This design allowed us to get specific responses for each word in each category. The test questions were open ended and designed to not lead or bias the test participants. Namely, we did not want to influence the participants' answers with our ideas as to what language was problematic or confusing.

The questions that were asked are as follows, and refer to each item included in the list above:

1. What do you think this language means?
2. Where do you think this link leads you?
3. Do any of the words, under each category, cause confusion? If so, how and why?
4. Is there any other language you would use to describe what these links lead to that would be more understandable? What words would you use?
5. Can you distinguish between links and plain text? What would make the links vs. text more understandable?
6. What does the "non-graphic site" mean to you? What do you expect to find?

The first four questions were addressed to each individual word. Questions five and six were asked at the conclusion of the test.

Our participants were divided, according to our tests, into three groups. These included undergraduate students, library student employees, and graduate students. This was done due to the groups' varying prior knowledge of the library and the library website.

To view the actual testing instrument, see Appendix A.

Procedure

Upon arrival, participants were informed that they would be participating in a usability test regarding the MSU Library's main web page. They were told that we would be asking a round of questions with no right or wrong answers. It was made clear that they were not being tested for accuracy and/or correctness. It was also reiterated that their responses would be completely anonymous and that their answers would not be held against them in any way.

Participants were shown the webpage and we began to ask the questions stated above. We recorded their responses as given. We also asked the participants if they had any suggestions as to how to revise the language in the site to make it clearer to them. If they had no suggestions, we simply recorded "no idea."

Following the interviews, we thanked each participant for their time and then recorded our notes into a data chart. Participants in the main library received a small reward from Stephanie Perentesis. However, the participants were unaware of this reward prior to the test so that their responses would not be influenced.

Data Analysis

A chart was created in order to aid in deciphering all of the responses in order to find patterns in user comments. The chart simply contained all of the categories/words that were tested, the question concerning links, as well as the three participant categories, (undergraduate students, library student worker, and graduate students.)

Please see Appendix B to view the chart of all the responses.

All three researchers, together, completed four of the tests. Each researcher did the rest of the tests individually with their respective test participants.

After surveying 20 undergraduate students, 14 student library employees, and 1 graduate student, and after compiling our data, we each examined the chart of data along with each other's notes in order to find common trends in the participant's responses. The numbers in the chart do not reflect the actual number of persons tested (35). This is due to the fact that some participants had multiple responses for each category, while others had no responses.

Examining each other's notes, we identified three main trends. With this in mind, we coded the data according to these guidelines:

- When respondents could not interpret what particular language meant, we underlined their comments, and guesses in red.

- When respondents had multiple definitions for language on the site, we underlined their responses in blue.
- When respondents had adequate understanding for language on the site, we underlined their responses in green.

We choose these colors based on their connotations. Red alerted us to problematic language, blue showed some understanding, however, contradictory, and green identified language that worked for the user.

We also coded outliers in black. These responses went against the average response for each category.

Results

Through our research, we found that the librarians' suspicions were correct. There is some language on the website that the average user finds confusing or ambiguous.

Language

We found three main trends regarding the home page's language. They included:

- Respondents could not interpret what a particular word, or title, referred to
- Respondents had multiple definitions for language on the site
- Respondents had adequate understanding for language on the site

Most of the language fell into the first two trends. These problems are as follows (some will have possible solutions):

- Journals: users often had varying definitions for what a journal is. The main included magazines, periodicals, diaries, and simply no idea. It could be helpful for user's understanding if a short description followed the word journal due to it's differing meaning across users.
- Materials on Reserve: users thought that materials on reserve were either materials professors can reserve for a class, books on hold, books a student can put on hold, materials used for classes in the library, and books that cannot be checked out. Once again, a short description may help. Also, it could be re-titled such as "Materials placed on reserve by Professors," or something just as descriptive.
- Indexes to articles: most users had no clue what this is. This is often not used by most students, so it may not be necessary to list on the homepage. It would be more helpful if it were on the electronic resources page with a description of how and why the indexes to articles would be used.
- Research guides: users did not know what this referred to and most were also confused as to why it was listed twice on the homepage. Users were questioning whether it was the same thing in both locations. It should probably only appear once on the homepage, preferably under "Need Help," and also be listed on the separate electronic resources page.
- Service and Request Forms: this title has confusing wording because it seems as if it says service forms and request forms. The title would work better if termed "Services and Request Forms" to remove this ambiguity.
- Course specific guides: once again, the users seemed to have problems with the word "guide." Most students did not know what this meant because they had

never used a “course specific guide.” Again, we question why this should be on the main page or even under the “service and request forms” category since the other guides are listed elsewhere.

- Library Distance Learning Services: no one had any clue what this is and there were multiple guesses as to what the LDLS was. After our research, by clicking onto this page, we still have no understanding as to what it is since the actual site itself is vague.
- Units: most users, besides the student workers, were unsure as to what units referred to. They were confused as to how units were different than branches. Our suggestion is to re-title it “units in the libraries” to give a better understanding.
- MSU Digital Collections: some student workers were the only ones who knew what this was. Common users thought that this referred to electronic resources or had no clue. It was also questioned why it was in “about the libraries” category. It is our understanding that it is a specific unit of the library and thus should be identified as such due to the fact that no other specific units are listed under this category.
- Ready Reference: users in all three categories did not know what this is. We suggest a better description of this service, since the words “ready reference” have no common meaning. It was also suggested that this is a very helpful feature and possibly should be promoted more prominently on the main page.
- ProxyServer: no undergraduate student that we surveyed knew what this was or why it would be used. The description below is inadequate and provides confusion itself. This is partly due to the fact that there is a period where a comma should be. A better description may be most helpful.
- News and Events: many students did not realize that these news and events pertained only to the library, as they thought they were campus-wide. Simply adding “in the library” to the language would make it clear.
- Classes and Seminars: students did not know that the library offered instructional classes and thus thought this referred to university classes or guest speakers. Adding “offered by the library” could make this section more understandable.
- Non-graphic site: most people understood the language, but some felt that it referred to the site being viewed, and didn’t recognize it as a link to the non-graphic site. One student commented that placing this at the bottom of the page would alleviate the problem of having students viewing it a title for the page. It was also suggested that making the link read, “click here for non-graphic site” would clear up the problem and solidify the fact that it is a link.

Links

We also found trends regarding the understanding of the links on the page. These included:

- Respondents having no problem discerning between links and plain text
- Respondents having problem with the lack of consistency between links and plain text

When addressing the problems that people had with the links, many different suggestions were offered including:

- The color scheme is confusing—why are some links purple and others black?

- Many did not know that “search this site” was a link, and saw it as a title or heading for the right side of the page, if they noticed it at all. It was suggested that adding a search box next to it would solve this problem.
- Users also do not like how the cursor did not always change from an arrow to a hand, which is a standard element on most web pages.
- Some users did not know that the headings on the left were links.
- Most students simply wanted consistency across the page regarding links because they could then learn the pattern and notice all of the links. (Some people could not find all of the links on this page.)
- Some users thought that the links were fine and commented that they liked how the links turned red when the cursor was placed over them.

Other comments and suggestions were:

- Users commented that there is too much on the page and the page should be simplified. This could be accomplished by using most of the space to feature the elements most commonly used by students.
- Users would like explanations for ambiguous words or features that are not commonly used.
- At the very bottom of the page, there is an extra space between opportunity/affirmative action that should be removed.
- Some of the e-mail addresses on the bottom of the page are not links, while others are.

Conclusion

Based on the information we gathered from our survey, and our analysis of that data, we can make the following suggestions on how to make the MSU Main Libraries website more understandable:

1. In the language describing each of the links, more description, rather than terms, which are ambiguous to the common user, is needed. Users would have an easier time understanding this site if they could understand what they can accomplish by clicking on each link. (the most problematic language is highlighted above in the section labeled “Results”)
2. The categories/links should be reorganized according to their importance or their frequency of use. This will increase the usability by improving the visual understanding of the site and the flow of the information presented in the site.
3. A uniform method and presentation of navigation is needed on the homepage. This includes the visual appearance of links and the appearance of the cursor as it touches a link. In short, links need to be made more distinguishable from plain text on the site, and their placement needs to be more consistent. All links should appear in the same format, and all plain text should be comparable. In terms of the cursor, it should change from an arrow to a hand when placed over links, but not over plain text, in order to make it clear which are, indeed, links.

Appendix A

Interviewing/Survey Questions

1. What do you think this language means?
2. Where do you think this link leads you?
3. Do any of the words, under each category, cause confusion? If so, how and why?
4. Is there any other language you would use to describe what these links lead to that would be more understandable? What words would you use?

****address each word under every category****

5. Can you distinguish between links and plain text? What would make the links vs. text more understandable?
6. What does the "non-graphic site" mean to you? What do you expect to find?

Each of the following terms were addressed for each question:

- Magic Online Catalog
- Books
- Journals
- Materials on reserve
- Electronic resources
- Indexes to articles
- Research guides
- Services and request forms
- Borrow from other libraries
- Manage your library record
- Course specific guides
- Library Distance Learning Services
- Hours
- About the libraries
- Branches
- Units
- Staff
- Student employment
- Directions
- Policies
- MSU Digital Collections
- Giving to the MSU Libraries
- Need Help
- Ask a librarian
- Ready reference
- Research guides
- ProxyServer
- News and events
- Classes and seminars
- Non-graphic site
- User's ability to distinguish between links and plain text

Appendix B

Data Chart with participants' responses recorded

| | Undergraduate Students | Student Library Employees | Graduate Students |
|-----------------------------|---|---|---------------------------------------|
| Magic Online Catalog | -how to find books that are in the library (15) -search by subject, author, title, etc. (3) | -wouldn't know to go here to look for books w/o prior knowledge of what it was (1) -find specific books (1) -online version of the card catalog (9) -materials in building (5) | -how to find books in the library (1) |
| Books | -books that are in the library | -books | -books |
| Journals | -magazines (10) -academic journals (1) -don't know (5) -like a diary (3) -identify more, list what journals are -articles (2) -periodicals (1) | -author's record of something they wrote, like a diary (1) -newspapers, magazines (7) -periodicals (9) -2 West (1) -more personal than reference materials -scholarly journals by subject/topic (1) -academic magazine (1) -a review (1) -item you can't take out (1) -a collection of articles you can't take out (1) | |
| Materials on Reserve | -prof. saves stuff for a class (6) -books on hold (6) -you (student) can put books on hold (10) -card catalog link (1) -what people have on reserve (1) -books that are already checked out (1) -stuff that can't leave the library (1) | -something being held (1) -profs put materials here for classes to use (4) -books that are in high demand (1) -student can reserve (1) -what the library holds on reserve, can't check out (4) -can check these out for two hours (3) | |
| Electronic Resources | -books in library -online (12) -research articles online (6) -how to use electronics, like computers (5) -full texts that are | -materials found online (4) -a computer, anything online (1) -electronic versions online of periodicals (6) -has URL on articles (1) | |

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| | <ul style="list-style-type: none"> available online (1) -same thing as magic (1) | <ul style="list-style-type: none"> -list under heading isn't adequate, give more detail/examples -how to search for books, search engine (3) -aide to materials (1) -books published on the web (1) | |
| Indexes to articles | <ul style="list-style-type: none"> -way to find an article (1) -listed alphabetically, by subject or keyword (1) -list of articles (2) -no clue, what is this? (12) -table of contents (1) -possibly indexes, a database, a list of articles, and/or look for a list of information (1) | <ul style="list-style-type: none"> -keyword to a subject matter search (1) -index for specific article, page numbers (1) -list of articles by subject (2) -help you find a specific article (1) -summary of an article (1) -help find articles by authors or titles (1) -don't know (6) -find journals website (1) | <ul style="list-style-type: none"> -something like Proquest or and index in the back of a book (1) |
| Research Guides | <ul style="list-style-type: none"> -what is this (13) -helps you research info (1) -like a help book on how to research (2) -find online articles or abstracts (1) -like a web search (1) | <ul style="list-style-type: none"> -no clue (2) -how to research (8) -helps you research (2) -gives you topics (1) -these are online journals (1) -search engines (2) | <ul style="list-style-type: none"> -find online articles or abstracts (1) |
| Service and Request Forms | <ul style="list-style-type: none"> -when you can't find something, look here -request a book to be sent from another library -no clue (1) | <ul style="list-style-type: none"> -no clue -mostly for instructors (1) -request a book that is checked out (1) -request a book from another library (2) | <ul style="list-style-type: none"> -(remove borrow and manage and replace them with nouns so the list flows better, noun, noun, ect..) (1) |
| Borrow from other libraries | <ul style="list-style-type: none"> -search other libraries (18) | <ul style="list-style-type: none"> -search other libraries (7) -borrow from somewhere else (9) -how does this work? (1) -borrow from other branches on campus (1) | <ul style="list-style-type: none"> -get books from other libraries (1) |
| Manage your library record | <ul style="list-style-type: none"> -check your account -what books you have checked out (17) | <ul style="list-style-type: none"> -what you have checked out (2) -fines (8) -renew books (1) | <ul style="list-style-type: none"> -check your account status (1) |
| Course specific guides | <ul style="list-style-type: none"> -no clue (13) -info on a courses (2) -guide to the subject (2) | <ul style="list-style-type: none"> -no clue (2) -guide for a course or specific topic (1) | <ul style="list-style-type: none"> -what are they (1) |

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| | -link to course explanations (1) | -recommended books by prof. (1) -help you in a course (1) -directs you in a specific direction for a particular course (1) -books, etc for a class (2) -prof reserves stuff for class (3) -course syllabus (1) -summary of course (1) -specific articles for a class, a form that has what you need for a course (1) -search for books from specific courses (1) | |
| Library Distance Learning Services | -no clue (18) -services for the disabled (2) | -no clue (9) -how far the library is from you (1) -borrow books from off campus, have them shipped to you (2) -help you can get from the library (1) -request to buy a new book (1) -apply for volunteer work (1) -off campus tutoring (1) - learn from far away (1) | -what are they (1) |
| Hours | -hours the library is open (18) | -hours the library is open (14) | -(add this section to about the libraries) (1) |
| About the Libraries | -info about the library (13) -what it is (4) -where to find things (3) | -what is in the library (9) -what the library is (5) -administrative links (1) -info about collections (1) -history of library (2) | |
| Branches | -different kinds of libraries (14) -on or off campus buildings libraries that are a part of MSU (1) -different areas of the library (2) -different MSU libraries on campus | -other library buildings on campus (9) -outside of main building (1) | |
| Units | -don't know (13) -different areas of the library itself (2) -what are they and | -different areas of the library (7) -different topics (2) -parts/departments of | -what are they (1) |

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| | shouldn't they just be branches (1) | library (1) -no clue (5) -place you could drop off books (1) | |
| Staff | -library staff (17) -why is this on the site? | -librarians (1) -library staff (7) -how to contact staff (3) -find a staff member (1) | -library staff (1) |
| Student Employment | -how students can get a job at the library (17) | -jobs for students at library (9) -link to e-pay role | -jobs available for students at the library (1) |
| Directions | -how to get to the library (12) -how to use the library (4) -directions within and to the library (1) | -how to get to the library (5) -map (9) | -directions to where (specify) (1) |
| Policies | -rules for checking stuff out (10) -rules for what you can do in the library (3) -don't know (6) | -policy for checking materials out (4) -rules inside the library-conduct (2) -regulations (1) -don't know (1) | - policies for what (1) |
| MSU Digital Collections | -no clue (14) -online journals or articles? (1) -how is this different than electronic resources? (5) -books on the internet (1) -how to use digital resources (2) | -movies, dvds, cds (8) -audio, books on tape (1) -new media (6) -digital library (1) -digital = equipment -camcorders, projectors -no clue -rename, "new media" or "multimedia resources" -special holdings? -stuff you can get online -microfilms (1) -items you need an electronic device to view (1) | -(why are they in this category) (1) |
| Giving to the MSU Libraries | -donating to library (17) -books, money, time - this shouldn't be here (1) | -donating books, money to library (8) -how to donate and why (1) -what is the mission? (4) -place to give donations (1) | -donating to the library (1) |
| Need Help? | -help if you can't find something (16) | -help if you can't find something (9) -info desk, where to go for help (1) | -help options at the library (1) |
| Ask a librarian | -email to librarian (14) -links by topics (3) | -FAQ (6) -email to librarian (10) | -email a librarian (1) |

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| | -info desk location (1) | -online conversation w/librarian (1) -what desk to go to for help (1) -forum (1) -chat room (1) -message board (1) | |
| Ready reference | -no clue (15) -library related questions (1) -FAQ (2) -numbers in library, what topics are where, what call numbers refer to (1) -like charts already put together, the periodic table, conversions, etc. (1) -fast service or maybe a research tool (1) -how to do reference, because its under "need help" (1) | -no clue (4) -easier way to find FAQ on problems/subjects in library (1) -index for reference books (1) -refer you to a specific area (1) -email link to reference desk and reference desk phone number (1) -different types of references like open and closed (1) -easy access to material, links that you can use from any computer without actually having to physically search the library (1) -list of reference books (2) -like MAGIC (2) | -just found out what this is and it is really cool. maybe make a bigger deal about this section because it is so helpful (1) |
| Research Guides | -how is this different than the link above? (10) -no clue (1) -for what (1) -why is it here again and capitalized this time (1) | -how to find something -more general than link above that just pertained to electronic resources (4) -same link as the one below electronic resources (8) -type in question, and get info you need (1) -research topic or idea (1) -no clue (2) | -why is it stated again (1) |
| ProxyServer | -what is this (17) -server the library is on (1) -something about IP addresses (1) -why off campus, what is this (1) -have to be a student/staff member to go here (1) | -no clue (8) -server the library uses (1) -off campus resources you can use (1) -access to library database from off campus location (6) -materials that aren't at the library (1) -access to the faculty and students, why is | -obtain off campus materials (the popup that appears when you leave the cursor over the link has the same information except with a comma instead of a period) (1) |

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| | | <p>this here? (1)</p> <ul style="list-style-type: none"> -log on under MSU IP (1) -get info from other libraries (1) -administrative server, make changes to the web page (1) -search engine of some sort (1) | |
| News and Events | <ul style="list-style-type: none"> -link to the State News (1) -news on campus(11) -library news and events (7) -re-word so you know its news about the library | <ul style="list-style-type: none"> -stuff that's happening in the library (10) -events that the library holds (2) -some news about what's happening on campus (2) -monthly newsletter (1) -calendar of stuff going on at library (3) -university and local news | -news and events in the library (1) |
| Classes and Seminars | <ul style="list-style-type: none"> -guest speakers for a class (12) -classes held in the library, about anything (8) -why would there be classes in the library? -wasn't aware the library had classes (1) -things going on in the library(1) | <ul style="list-style-type: none"> -classes held here (1) -classes given by library about the library (5) -don't think it's classes that have to deal with the library (2) -writing center stuff (1) -classes on how to use the library (6) -speakers (2) -student life classes (1) -don't know (2) -on campus classes and seminars (1) | -in the library, about the library, give some indication of what they are, possible advertise them in the changing window (1) |
| Non-graphic site | <ul style="list-style-type: none"> -no picture site (14) -is it a link? (5) -thought it meant this version was the non-graphic site, it looked like a title (3) -didn't recognize as a link (1) | <ul style="list-style-type: none"> -didn't know it was a link (3) -label/title for the site (5) -link to text only site (10) -easier to load for those with dial-up, slower connections (3) | -thought it meant this site, put on bottom to avoid people confusing it as a title (1) |
| Links versus Plain Text | <ul style="list-style-type: none"> -the color scheme is confusing (4) -why are some purple and some black (6) -didn't know "search this site" was a link, didn't notice it, looked like it was the title for section (7) -links are fine (2) | <ul style="list-style-type: none"> -links are good (3) -why do certain words change color (1) -why doesn't the mouse change so you know it's a link (3) -like how links turn red when you hold the mouse over it (4) -didn't know the | -not consistent, either make all the words underneath links or none at all (create a site map and add a search box next to search this site to avoid confusion) (1) |

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| | <ul style="list-style-type: none"> -the cursor doesn't change from a arrow to a hand (2) | <ul style="list-style-type: none"> changing area on the left was a link -search this site is unclear that it's a link (6) -put a box after the search the site -left side does not look like links at all -maybe make them a different color (2) -descriptions shouldn't be linked because the heading link should take you there (1) | |
| <p>Other comments/suggestions</p> | <ul style="list-style-type: none"> -too much on the page -more important to list the things people regularly use -give explanations for stuff like ready reference -the site is ugly -make use of the search -create a uniform way of distinguishing links | <ul style="list-style-type: none"> -why is the IRS thing on there, why would students need this -organize info better -give better descriptions of things that are unknown, like MSU digital collections -explain how and WHY you would use the various resources -explain what things are like LDLS -move "search this site" so it doesn't look like a heading -give more detailed explanations under links, not just confusing words | <ul style="list-style-type: none"> -there is a space between opportunity/ affirmative on the bottom of the page that should not be there |