

Winter 2007
Wayfinding Study Summary

Suzzallo & Allen Library
University of Washington Library System

Conducted February 9 – February 28, 2007
Lara L. Keffer, Usability Engineer

Executive Summary

Test Logistics

The purpose of this test was to examine how easily patrons can find things they need in the Suzzallo & Allen Library. We evaluated four problem areas by conducting a field study in the Suzzallo & Allen Library:

1. Cues from online to physical space
2. Signage
3. Physical arrangement of collections
4. Helpfulness of staff

The specific questions we wanted to answer were:

1. Is the information found on the web site consistent with what is physically in the library? Does it lead / help patrons to the physical item?
2. Is signage clear and effective?
3. Does the current physical arrangement of the collections help or hinder patrons when they are looking for items?
4. Is library staff available to help patrons who need assistance?

Major Findings

1. Suzzallo & Allen Library Staff

The library staff was extremely helpful to participants. Many participants commented on how helpful and nice librarians and staff were and that they would not have been able to find the items they needed without that help.

2. Suzzallo Periodicals

10 out of 12 participants went to the periodicals stacks to look for a current periodical & 10 out of 12 had to ask for help from the Periodicals Information Desk. Further, none of the participants recognized from the online catalog that a) the periodical they needed was the current issue and b) that current issues are in a separate area from the periodicals stacks.

3. Layout / Organization of Suzzallo Library

Most participants had difficulty finding their way around the 4th floor stacks in Suzzallo, Natural Sciences and Suzzallo Periodicals. In the 4th floor Suzzallo stacks, they were confused by the mix of Dewey and Library of Congress (LOC) call numbers. Some were also confused by how the Dewey call numbers were arranged. The lack of an information desk or staff on this floor also hindered participants because they had questions as to where their items were, but nobody to ask. In Natural Sciences and Suzzallo Periodicals, they were confused by the discrete areas.

4. Signage / Maps in Suzzallo & Allen Library

Some maps and signs were helpful to participants, like the Find It Fast signs near elevators. But other areas didn't have enough signs which ended up confusing them. An

example of this is the lack of enough signs explaining the mix of Dewey and LOC call numbers on the 4th floor stacks in Suzzallo.

Methodology

Participants

The study consisted of 12 participants who were reimbursed for their time with a \$15 gift card from the UW bookstore. They met the following criteria set for this study:

- Over 18 years of age
- Novice physical library users
- Some were users for whom English is a second language
- Mix of undergraduate and graduate students
- Mix of male and female

Breakdown of participants:

- 8 Undergraduate students
- 4 Graduate students
- 5 English as a second language
- 4 Had previously never checked out a book from UW Libraries
- 2 Had previously checked out 1 to 5 books from UW Libraries
- 3 Had previously checked out 5 to 10 books from UW Libraries
- 3 Had previously checked out over 10 books from UW Libraries

Test Environment

12 separate sessions were conducted in the Suzzallo & Allen Libraries. Participants were asked to find items in Natural Sciences, Suzzallo 4th floor stacks and Suzzallo periodicals. The study was facilitated by Lara Keffer and notes were taken by a different library staff person for each session.

Test Design

Users completed a main performance test designed to gather usability data by direct observation. The test session had the following seven sections:

1. Greet the participant and take them to the usability lab.
2. Participant signs the consent form.
3. Orientation. The participant received a short, verbal, scripted introduction and orientation to the test, explaining the purpose and objective of the test. They were assured they are not being evaluated, the library is.
4. Pre-session interview. Each participant answered 5 short questions regarding their usage of the UW libraries.
5. Before beginning their tasks, each participant exited the building and re-entered from a different location.

6. Performance test. The performance test consisted of 3 tasks that the participant performed while being observed. Participants were encouraged to think aloud while looking up and locating the 3 items that made up their tasks.
7. Participant debriefing. Following completion of the 3 tasks, participants were brought once again to the usability lab to answer questions pertaining to subjective perceptions of the usability and of the online catalog and physical space in Suzzallo & Allen Library.

Main Performance Test (test tasks)

Users performed three tasks designed to probe the four areas we wanted to evaluate. Items we requested users find are as follows:

1. **Bibliography of the geology of the Columbia Basin and surrounding areas of Washington with selected references to Columbia Basin geology of Idaho and Oregon**, by Glenda B. Tucker, James G. Rigby

This item was chosen because there are two copies available – one in Natural Sciences Reference and one in Natural Sciences stacks. It addressed such questions as: how will users proceed when given two choices in the same library? Would users be able to differentiate between the two sections in the physical space?

2. **History of the Tory Party 1640-1714**, by Keith Feiling, 1924

This item was chosen because it is in a far-reaching corner of the 4th floor of the Suzzallo stacks and could prove to be a challenge for some participants. It addressed such questions as: Would users have difficulty navigating the physical space on this floor? Would users have difficulty because there is a mix of LOC and Dewey call numbers on this floor?

3. **Harvard Journal of Asiatic Studies, V. 66, N.2, December, 2006**

This item was chosen because it is the current copy of this publication. It addressed questions such as: Would users know where to find the current periodicals section? Would users notice in the online catalog that their item was a current periodical?

Results / Recommendations

Cues From Online to Physical Space

Most results will be followed by a number from 1 to 4. That number represents the severity rating of the result. The ratings are as follows, based on Nielsen's guide:

- 1 = Needs not be fixed unless extra time is available
- 2 = Minor usability problem: fixing this should be given low priority
- 3 = Major usability problem: important to fix, so should be given high priority
- 4 = Usability catastrophe: imperative to fix this problem

Result:

All participants missed the cue in the online catalog that the periodical they were looking for was the current copy. **4**

Recommendation:

Make that cue easier to see by bolding the font on the line that reads, Latest Issues on Display, or making it very apparent which issue is the latest one with a note that the issue is in the display section.

Result:

11 participants missed any notation in the online catalog that there is a display area for current issues. In addition, all participants had to ask at the Periodicals Desk to find where the current issue they were looking for was. **4**

Quote: "Could you make it more obvious in the online catalog about where the current periodicals are?"

Recommendation:

State clearly in the online catalog that there is a display area separate from the Periodicals stacks for current issues of periodicals.

Result:

For participants searching the online catalog for Glendda B. Tucker under author, nothing comes up. The same thing happens when she is paired with James Rigby, her writing partner. Something comes up under Tucker, Glendda B. but it says Glendda B. Tucker is not there while the line above it has a listing for Glendda B. McLucas. But, no mention is made of that listing or the last name change. **4**

Recommendation:

Clear up this search issue on the back end.

Result:

Once they found the item they were looking for in the online catalog, only 3 out of 12 participants used the links to find further information on which library their items were located in and on what floor. And, 2 participants commented that they wished there was somewhere on the library website that they could look up this information. **3**

Quote: "I wonder if the catalog has any maps on it."

Recommendation:

Make it more obvious that this information *is* available in the online catalog. Perhaps a prompt such as: Please click on library name for information and maps.

Result:

2 participants had trouble locating the information about books in the Suzzallo & Allen stacks under, Looking for a Book? on the Hours page. **3**

Recommendation:

Make Looking for a Book? box more noticeable to users.

Result:

1 participant was unsure of which numbers within the online catalog results page to use to find her book. Further, she was unsure of the information he copied down from online catalog and went to a librarian for clarification right after looking up her item. **1**

Recommendation:

Better advertised information seminars / workshops / classes for patrons newer to the library.

Result:

Only 1 of 4 English as a second language (ESL) person had trouble with the online catalog. She went to Web of Knowledge to look up all her items because she thought she remembered being taught that. She spent 5 minutes in the wrong area before returning to the Libraries home page to look there. **1**

Recommendation:

This result is better than expected. Still ESL people might feel more comfortable with better advertised information seminars / workshops / classes.

Qualitative Data Results:

- Participants rated the consistency of the information from the online catalog to the physical space to be **4.58 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.
- Participants rated the consistency of what they saw in the online catalog compared to the what they got in the physical space to be **4.91 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.

Effectiveness of Signage

Most results will be followed by a number from 1 to 4. That number represents the severity rating of the result. The ratings are as follows, based on Nielsen's guide:

- 1 = Needs not be fixed unless extra time is available
- 2 = Minor usability problem: fixing this should be given low priority
- 3 = Major usability problem: important to fix, so should be given high priority
- 4 = Usability catastrophe: imperative to fix this problem

Result:

While waiting for a librarian to return to the Reference Desk from helping another patron, 1 participant noticed the Guide 39. It ended up answering his question and he was able to find the floor / item he needed.

Result:

Many participants used maps throughout the library.

Quote: "I wouldn't have been able to find things without the help of maps."

Quote: "Maps by the stairwells are helpful."

Result:

One item was available in both the Natural Sciences Reference area and the Natural Sciences stacks. 9 participants went to the Natural Sciences Reference area but were looking for the call number for the one in Natural Sciences stacks. **4**

Quote: "Yes there are signs here saying that you are in the Reference section, but they are at knee level. I'm not going to see them there."

Recommendation:

Place more signs in Natural Sciences Reference area alerting patrons to what section of the library they are in, and place them at eye level. Possibly have other signs in that area telling patrons where that library's stacks are. Do the same for the stacks section of that library.

Result:

1 participant missed the signs in Natural Sciences (ground floor) that say that the second half of that library's stacks is upstairs. **4**

Recommendation:

Place more signs in Natural Sciences stacks areas alerting patrons to where the rest of that section is, and place them at eye level. Or, combine those stacks on one floor.

Result:

1 participant was confused when going down stair 19 in Allen South because he was coming down from the 3rd floor where the sign on the stairs reads "Book Stacks Q-Z". Then getting to 2nd floor, sign reads Book Stacks "A-PH," which still makes sense. But, when he got to the 1st floor, the sign read, "Stacks QE-Z" which seemed to him to be going way out of order. This was because he missed the header above QE-Z that read "Natural Sciences Stacks." **3**

Recommendation:

Make signs on stair 19 in Allen South clearer so when patrons are coming down from upper floors & encounter a sign on the 1st floor that says "Stacks QE-Z" when the sign on the floor ABOVE it said "Book Stacks A-PH," they realize that the sign on the 1st floor refers to the Natural Sciences stacks & not general stacks.

Result:

Because there was no sign to alert him, a participant became confused when using the main stairs in Allen South to go from the 1st floor to the 4th floor because the stairs end at the 3rd floor. **4**

Quote: "There should be a sign here letting people know where to find the stairs [to the 4th floor]."

Recommendation:

Place a sign there to alert the patron to the fact that the stairs end there because there is no 4th floor in that section of Allen and direct them to the nearest stairs / the quickest way to the 4th floor.

Result:

1 participant was confused as to which section of library is Allen & which is Suzzallo. **3**

Recommendation:

Create better or more signs alerting patrons as to when they will leave one building and enter another.

Result:

Microfiche machines on Suzzallo 1st floor might not be used to their full potential because patrons don't know how to operate them. **2**

Quote: "The microfiche machines are cool but intimidating. If there were simple directions on the side, it'd be much easier."

Recommendation:

Place signage on or near microfiche machines explaining operational directions.

Result:

2 participants were confused by the triangular number signs on the ends of the shelves on Suzzallo 4th floor. Confusion arose because the number on the sign did not always match the sign below it that noted the call numbers on the shelf. **2**

Recommendation:

Update triangular signs on the ends of bookshelves on 4th floor Suzzallo (with reshelving, they might not always match up perfectly anymore). Or, change the signs to read, for instance, 3000s instead of 3000. Then things are more covered when things shift a little.

Result:

2 participants were confused as to if a) Allen had a 4th floor and b) if they could get to the Allen 4th floor by taking elevator in the Allen South lobby. **1**

Recommendation:

Put better signage in that lobby and in other places telling patrons which parts of Allen have how many floors and how they can get there from where they are.

Result:

1 participant was under the impression, from the signs, that coffee with a lid is not allowed in the libraries when actually, it is allowed. **1**

Recommendation:

Change signs to reflect that.

Qualitative Data Results:

- Participants rated the amount of their usage of signs as **4.38 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.
- Participants rated the effectiveness of the signs to be **4 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.

Physical Arrangement of the Collections

Most results will be followed by a number from 1 to 4. That number represents the severity rating of the result. The ratings are as follows, based on Nielsen's guide:

- 1 = Needs not be fixed unless extra time is available
- 2 = Minor usability problem: fixing this should be given low priority
- 3 = Major usability problem: important to fix, so should be given high priority
- 4 = Usability catastrophe: imperative to fix this problem

Result:

When using the library on their own, 5 participants noted that they place holds on books so they do not have to look for the item themselves.

Recommendation:

In following the recommendations in this report, the library will hopefully be seen as an easier place to get around and find things. From there, patron's practice of placing items on hold might decrease.

Result:

11 participants missed in Suzzallo Periodicals that there is a display area for current issues so they looked in the periodicals stacks for their item. In addition, all participants had to ask at the Periodicals Desk to find where the current issue they were looking for was. **4**

Recommendation:

Place signs pointing to the periodicals display area. Or, all periodicals, older and current could be placed on the same shelf so as to eliminate the Current Periodicals area. Lastly, as is the practice in Natural Sciences Periodicals stacks, there could be alerts placed within the periodicals stacks stating that the patron can find the current issue in the display area.

Result:

5 participants were confused by the layout of the stacks on 4th floor of Suzzallo and at least 2 wandered around for 5 minutes trying to find what they needed. For some the arrangement was a big hindrance to finding what they needed. Things that confused them included the change from LOC to Dewey call numbers, and the lack of enough signage. **4**

Quote: "I wish there were better signs to direct me to the lower numbers on this floor."

Quote: "I'm trying to find a pattern to the numbering system. It seems to go up in alphabetical order. The call number scheme doesn't make sense."

Quote: "I'm lost."

Quote: "The book I was looking for started with a number but the first thing I saw were letters. 300 is way back there but there are no signs here showing me that."

Recommendation:

Finish up as quickly as possible the change over from Dewey to LC on that and any other floors that are being changed over. Also, place more signs showing patrons where call numbers are located. Lastly, create signs explaining that the floor has both LOC and Dewey call numbers on it and where they can expect to find them. These signs should be placed in

various places on the floor, within the stacks, by floor entrances, and where patrons exit the stairwells and elevator to enter the floor.

Result:

Participants looked for an information desk of on 4th floor of Suzzallo stacks. It was the same case for computers and they missed the one computer on the floor. Numerous times they had to go to another floor to find help / information or a computer. **3**

Quote: “It doesn’t seem like I could really get help up here. I would have to go downstairs to get help.”

Quote: “There should be a staff person upstairs so patrons don’t need to go back downstairs.”

Quote: “I would like to see more catalog terminals on the upper floors.”

Recommendation:

Add an information desk or more roving staff. Move the computer terminal on this floor to a more visible spot for all and/or add signs on other areas of the floor alerting patrons to the fact that there is a computer on the floor.

Result:

Do patrons miss books on some of the floors because of the arrangement of the computers? **2**

Quote: “It’s hard for me to find books because all I ever see in the library is computers.”

Recommendation:

Possible rearrangement of computers, or creation of signage pointing patrons to areas with books beyond computer terminals.

Qualitative Data Results:

- Participants rated the layout of the library to be **3.28 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.
- Participants rated finding things in the library, overall, to be **3.87 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.
- Participants rated their future need to ask a librarian / staff member for help in finding things in the library to be **3.83 out of 5** on a scale of 1 to 5, 1 being the worst and 5 the best.

Helpfulness of Library Staff

Most results will be followed by a number from 1 to 4. That number represents the severity rating of the result. The ratings are as follows, based on Nielsen's guide:

- 1 = Needs not be fixed unless extra time is available
- 2 = Minor usability problem: fixing this should be given low priority
- 3 = Major usability problem: important to fix, so should be given high priority
- 4 = Usability catastrophe: imperative to fix this problem

Result:

All participants found the librarians and staff to be very helpful and knowledgeable.

Quote: "She was very helpful."

Quote: "It's really helpful to go to the Information Desk & ask questions. It showed me the process I need to take."

Quote: "There's no way I would have been able to figure this out by myself. He was very polite, I'd do that (ask) again."

Result:

All librarians and staff offered participants the Guide 39 bookmark and / or maps of the building to aid them in getting around.

Quote: "I like this guide."

Result:

A Natural Sciences reference librarian helped a participant find her way between Natural Sciences Reference and Natural Sciences stacks and personally took her to the area her item was located in Reference.

Result:

A librarian in Natural Sciences Reference pointed out to a participant that the item he was looking for was available in Reference but could not be checked out and that there was a copy available for checkout in the Natural Sciences stacks.

Result:

A participant asked a student stacks assistant on 4th floor of Suzzallo where the journals are and the student replied, "Go to the libraries website, it should be listed there." 1

Recommendation:

Better arm the student assistants with the information they need to help patrons. This was an isolated incident.

Result:

A participant asked a Periodicals librarian where an item was and the librarian did not show her what he was doing on the computer. 1

Recommendation:

Remind librarians and staff to show patrons how they find information on the computer. This was the only time this happened.

Summary of Post-Testing User Comments / Observations

The information below is comments the participants made.

Participant 1

“It’s kind of confusing going from Allen north to south.”

“I used the signs as a guideline to find the books. I also used the signs on the sides of shelves with the range of numbers.”

“The online catalog helped me locate things.”

“The people [in the library] were very helpful.”

Participant 2

“The way the library was set up was confusing. I couldn’t have found things without help from the staff.”

“The library was not very organized. It was just dumb luck that I found my first item.”

“I did notice the periodical sign but the rest were not very noticeable. I had to hunt them out.”

“It’s too much, too big. It’s so hard to find things here. But I know the staff is doing what it can.”

“I found things in the online catalog easily but finding the books was hard.”

Participant 3

“I would like to be able to click on a call number to get a map to exactly where the item is.”

“It was not obvious to me that the periodical I needed was in a different area than the periodicals stacks.”

Regarding finding things in the library: “There is a learning curve. It’s a matter of how much time you want to spend, that’s the issue.”

He gave his overall experience a 4 out of 5 because he had “Plenty of help. I would consider it difficult if I never found one of my items.”

Participant 4

“If there was an information sheet with what the letters & numbers mean & some categorization of what was in which library, it might improve my experience. And maybe have training during student orientation.”

"I usually run into a problem with at least one that I check out," so she asks a librarian for help every time she goes to the library.

"The website never helps me that much. I can usually find the call number but that's as far as I go. There doesn't seem to be a whole lot of correlation besides the call number," on why she rated consistency between web and physical to be a 2 out of 5.

"The articles are hard to find. The books in Odegaard are all on the top floor. In Suzzallo & Allen, they are harder to find."

Rated overall finding of items to be a 3 out of 5 because, "It would have been extremely difficult to do myself because of the randomness of the categories."

Rated using the signs as a 5 out of 5. But rated the signs themselves as a 4 because, "The signs pointing to the different areas were good, but the signs pointing to the actual book location weren't."

Participant 5

"Finding things today was a 5 out of 5 because there were a lot of info clerks, lots of people to get help from and many signs indicating the specific location."

"The signs were clear, people were nice & knowledgeable & computer systems were nice."

"I wonder if the catalog has any maps on it."

Participant 6

"As a first timer, this was not difficult."

"The layout between Suzzallo & Allen was confusing."

"I would have rated the experience a 5 out of 5 but I was confused on the first item between Natural Sciences Reference & regular stacks."

Participant 7

"The organization / layout of the library can be improved."

"On [lib guide 39], I'd like it if it said which wing things were in and what the call numbers mean."

"Signs should be placed where people look – eye level, on walls. There should be more signs when I enter a new area."

"I would like to see 'Library Troubleshooting' on the website & in a paper pamphlet."

“Sometimes I don’t know exactly what I need and then I don’t know how to start. That’s when I need the library and am also most averse to using it.”

Participant 8

“I’ll eventually find things I need, although it might be a longer process.”

“There should be a staff person upstairs so patrons don’t need to go back downstairs.”

“There should be some more maps on the walls. The book mark guide is not enough.”

“It was on the website but I didn’t know what the things it said meant,” referring to a journal she looked up.

Participant 9

“Things were pretty well-marked, the online maps were good & the people who I asked were very helpful.”

“It didn’t seem hard to find things but I don’t think it (the layout) facilitated it either,” referring to the organization / layout of the library.

“Could you make it more obvious in the online catalog about where the current periodicals are?”

“I would easily ask for things when I can’t find them.”

Participant 10

“There doesn’t seem to be logic to how the Suzzallo & Allen Library is laid out.”

“Online, it’s easy to see where, in which library, the item I need is.”

Participant 11

“I like the use of color, the orange dot & the highlighting on the signs and maps.”

“I really like the ability to click on the library name & find out information about it. Using other libraries, new to me, is easy because of the information on the website about it.”

“The maps helped me find where to go. Except for finding the journal.”

Participant 12

“It would be perfect if the signs would say, “You are entering Allen North or you are entering Allen South.”

“I used the signs several times & they helped me locate items.”

“There are a lot of methods for finding things – website, librarians, signs – the whole system is easy to use.”

Lessons Learned (efficiencies for the next wayfinding study)

These are personal reflections on the improving the usability testing process for future tests.

1. The team felt that English as Second Language patrons might have a hard time with the LOC and Dewey systems but that turned out not to be the case. Cultural issues were a small issue for one participant from Croatia. In Croatia, she said, people are not shy about asking for help. But her view of America is that everyone is interested in doing things independently. Therefore, she was initially hesitant to ask the staff for help.
2. Using a map of the whole floor, rather than one for each section of the floor, is the simplest way to go to trace the participant's steps. This is something the facilitator can and should do as the note taker would not be able to juggle taking notes and tracing the participant's path on a map.
3. Definitely DO NOT alert the librarians and staff that you will be conducting a wayfinding study; it provides for more realistic results if they don't feel they're "on."
4. A wayfinding study is very, very similar to a traditional usability test. Everything from planning to execution to writing the report can follow traditional usability testing guidelines.