

**Vocabulary Analysis
Of the Canton Public Library Internet Branch**

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Executive Summary

This report details the findings of our vocabulary analysis of the Canton Public Library's Internet Branch. These analyses examine the system of labels and action available on the site, and how they map to the users' mental model of how to accomplish tasks. As a largely text-based website, the vocabulary analysis of the Internet Branch looks at the labels for links and progression of links needed to get to information.

This report draws upon the heuristic analysis that we have previous performed. Primarily, the heuristics "Match system and real world," "consistency and standards," "efficiency of use," and "help users prevent, recognize, diagnose, and recover from errors" have had the greatest influence upon our recommendations, and these findings would not have been out of place in that previous report.

We found many instances successful labeling on the Internet Branch. Though this report does not focus on the successes, we do not wish to minimize the fact that many labels are clear, that much of the catalog works well, etc. Nonetheless, when we found issues on the Internet Branch, they revolved around consistency and matching labels to the real world.

Introduction

The Internet Branch

The Canton Public Library's Internet Branch is an effort to replicate the look and feel of its "bricks and mortar" location in digital form, and supply as much of the functionality of a physical library as possible. The fact that the Internet Branch is referred to as a branch of the main library implies the underlying metaphor of the Internet Branch as a library that was used to design the web site. This metaphor of the web site as a library helps to organize the site and gives the users of the site context by which they can understand the organization of the site. As a result of this effort, the Internet Branch is a huge website, with links to hundreds of other websites providing information on a wide variety of topics.

Previous Reports on the Internet Branch

In previous reports, we have addressed the issue organization and feedback to the user, with regard to the amount of pages and links that must be managed. We indicated the importance of clear organization, letting the user know where he or she is in the website, and informing the user of what options are available.

The Vocabulary Analysis

The vocabulary analysis looks at the relationship between the real world tasks that a user would wish to perform and how they map to the terminology used in the website and the path that the user must follow. For example, a user may wish to see a site map for the Children's Library portion of the Internet Branch. After clicking on "Children's Library" on the main page of the Internet Branch, the user is on the main page of the Children's Library. From there, the user can either click on "Guide to Our Site" to find the sitemap, or click on "Search for Information" and then on "Guide to Our Site." An important element of the vocabulary of a site is the metaphor employed in the interface, if one is used. Linking the interface to something in the real world that the user already understands can aid understanding.

For this report, we reflected upon whether paths like these reflect how users think about the actual tasks that they wish to perform. Do the labels make sense? Does the hierarchy make sense? From these questions, we have arrived at suggestions regarding the Internet Branch.

Vocabulary Analysis

The Home Page

The Canton Public Library's Internet Branch is meant to be an offshoot of the brick and mortar branch of the library that supplements the library's more static information with the dynamic live update of information that is typical of the web. The home page of the site is analogous to the main foyer of the library. It is the first thing the user sees, directs the user to the information they need, and strikes the tone for the user's entire stay at the site.

Metaphor

Because of the high degree of interdependence between the physical branch and the Internet Branch, the most fitting metaphor for the Internet Branch is the Canton Public Library itself. This is seen in the fact that the Internet Branch is divided into sections that correspond to the physical branch's own divisions. On the website itself there is a Teens Place which corresponds to the Teens Place at the physical branch, a Children's Library which corresponds to the physical library's own Children's Library, and of course the catalog, which gives the internet user access to the same interface used by the patrons at the physical library to search the physical library's collection of books.

However, there is only so far that this metaphor can be stretched and in these instances the internet branch needs to deviate from the metaphor linking it with the physical library, as will be seen in the vocabulary analysis.

Vocabulary

Issue: While both the physical branch and the Internet Branch provide the user with content they use to throughout the day such as weather, news, and important information, on the Internet Branch all of this information is packed into one corner of the page and labeled, "Help Me Make it Through the Day", while there is no analogous section in the main branch of the library.

Recommendation: Any deviations from the metaphor of the library on the main page are done due to the difficulty of labeling dynamic content in a static content driven metaphor. The goals of the Internet Branch and the physical branch are the same. They are both striving to provide the information the community of Canton Michigan needs to the people of Canton Michigan. However, while they both do this by providing the people of the community to sources of information such as newspapers and books, the Internet Branch has the ability to also link to online sources of this information and to collect this information in various different forms in one place dynamically. For instance, while the main branch offers current news through newspapers, the Internet Branch has chosen to organize this in more of a dynamic fashion than is available with the physical paper and to provide this information with context to information sources that are not readily available to the more static physical branch such as traffic information. This dynamic information accessible by the Internet Branch allows news and information to be incorporated from various sources that could theoretically then be used to help the patrons of the library through their day while in the physical branch this information would for the most part be offered in some form from various sources.

While it is not a bad idea to provide this content in the current manner, perhaps this content could be labeled in a manner more in keeping with the metaphor that drives the rest of the main page, however. For instance, labeling this section “Breaking News” would indicate the dynamic content that is provided while maintaining a closer link to the metaphor that drives the rest of the main page.

Issue: A surprisingly large number of the links on the main page are redundant, especially when you consider the fact that they are also linked to from the site map. For instance, all of the content linked to by the main menu on the left of the page is also linked to by the “quick finder” drop down menus on the right.

Recommendation: The drop down menus on the right are redundant and do not fit the typical usage for drop down menus on the internet. It might be more appropriate to remove these links from the page, especially seeing as how they do not fill any purpose that is not already filled by something else.

Teen Place

Teen Place is one of the large sections of the Internet Branch and, like the Children’s Library, maintains a separate style from the rest of the Internet Branch. The vocabulary used in Teen Place and the organization of the pages is, overall, quite good, and tends to reflect how one would reasonably think to find the information on the pages.

Metaphor

The Teen Place section of the Internet Branch is the metaphorical equivalent of a similar section in the physical branch. The page captures some of the visual elements used in the real Teen Place, and the vocabulary used on the page is clearly meant to capture the language used by actual Teen Place patrons. The metaphor used for this page clearly is that of a teenager entering Teen Place and asking a question such as “What’s up,” with the response being a list of resources to answer that question. Upon examination of the page, and through anecdotal evidence from the user testing we have done previously, it seems that the labels are, overall, evocative of the content they link to.

Vocabulary

Issue: “Tutor Me,” and online service to provide assistance to students, appears in many places, but not under “Homework Help”

Recommendation: The designer should consider why “Tutor Me” receives such prominence. Is it necessary for the link to appear twice on the main page of “Teen Place” and then again on “What’s Up?” Placing the link to “Tutor Me” under “Homework Help” would most closely match the act of getting assistance with homework.

Issue: “What’s Up?” replicates content on other pages and is not completely consistent with what the label indicates.

Recommendation: If “What’s Up?” is to continue, the function of that page should be

developed. Currently, it contains links to two book lists that are replicated on the “Book Lists” page, a link to the “Tutor Me” service, and current events information (at the time of this report, this information was out of date). The page should only include information that is timely and relevant, such as current events, news items (perhaps links to sites with news), etc. Alternatively, the page could be removed, and the current events information could be put on the main page, where there is free space.

Secondary Recommendation: If “Tutor Me” and “What’s Up?” are both removed from the main page, the position of “Library Home” could be changed to either give the link more prominence, or put at either the top or bottom of the page to main consistency with other components of the Internet Branch.

Issue: The user cannot return to the previous page after going to a multimedia collection (contained under “Book Lists”) without using the Back button.

Recommendation: Add a new link or button to the multimedia collections that will allow the user to return to the previous page.

Children’s Library

Like Teen Place, the Children’s Library is a large section of the Internet Branch that employs its own distinct design. There are many pages within the Children’s Library, but the hierarchy is not more than three levels deep, so it does not take long to return to a resource once it is located.

Metaphor

The Children’s Library employs the overt metaphor of a pirate’s treasure map as its means of navigation on its main page. An image of a map fills the page, and the various links are points on the map, using pirate flavored names such as “Navigate the Catalog,” “Current Events Cove,” and “Keys for Parents.” On the next level of pages, the labels no longer employ this metaphor. Although the pirate metaphor is not apt, the page targets children, and the use of a colorful metaphor is understandable.

Vocabulary

Issue: The AskUs service (permitting the user to pose short, factual questions to librarians online) is currently on the “About Our Library” page.

Recommendation: Because this service is not “about the library,” so to speak, it would make more sense to put it on the “Learning Links” page, or perhaps “Search for Information”—in other words, on pages the user would go when performing research.

Issue: The Children’s Library is about three levels deep (a typical path is Children’s Page > “Fun & Games” > “Games”). The third level of pages under “Explore Michigan” do not utilize the banner to return to the second level (unlike “Fun & Games” or “Learning Links”). Instead, the user must click on the link “Return to Michigan page.”

Recommendation: The first solution is to maintain links to all of the pages in the

Children's Library in a banner along the top or side of the pages (like in Teen Place). Another solution is to give the link on the third level of "Explore Michigan" pages greater prominence and change their label to "Return to Explore Michigan," in order to maintain consistency.

Issue: The links on the main page of the Children's Library are not descriptive.

Recommendation: The textual links along the right side of the page could be appended to include brief descriptions of their content. A more visually interesting solution would be to incorporate the technique used on the main page of the Internet Branch to explain the links along the left side of the page.

Issue: Links are replicated throughout the Children's Library. For example, there is a link to "Explore Michigan" on the main page, and a link titled "Michigan" under "Learning Links." Both lead to the same page.

Recommendation: The Children's Library should be reviewed so that labeling of links is consistent through the entire site. As a result, users will know that they will not get any new information when they see a link on subsequent occasions. In the long run, it could be a good idea to revise the layout of the Children's Library to minimize the replication of links, to prevent the user from getting used to inefficient paths to information.

Issue: "Children's Program Guide" appears under "About our Library" instead of "Current Events Cove."

Recommendation: This link should be moved to "Current Events Cove," because the program guide is a resource that is timely, whereas "About our Library" implies information about the institution itself.

Catalog and My Account

These two elements of the interface feature more complex interaction than anywhere else on the site. On most pages of the Internet Branch, the user's actions are restricted to reading and clicking on links. Here, the Internet Branch uses text fields and buttons, and the user does not simply click through a page, but can stay with it until a task is done.

Metaphor Analysis

One would think that the Web Catalog of Canton Public Library would use the metaphor of the traditional card catalog—indeed, some terminology is the same. However, online catalogs have replaced paper based card catalogs as the catalog users typically use in the real world. A large number of patrons, particularly young ones, have never use a card catalog before. Online catalogs also are capable of more than the traditional catalog. It is not necessary for the Web Catalog to imitate a card catalog—it is a distinct entity.

My Account is the online version of the membership package patrons receive when they first came to Canton Public Library registration desk. The package includes a membership card on which they fill in their contact information and a booklet about the

library including its loan policies and services. My Account, however, will display patron information dynamically. Each update of patron information will directly modify the patron database, instead of filling another contact information change form. As a result, the metaphor is weak and is not vital to use of My Account.

Object/Action Analysis

The object/action analysis table in the appendix provides a comparison between the actions and objects in patrons' language and in the Graphic User Interface design language for the *Web Catalog* and *My Account*. It provides a check for consistency and ease with which the interface can be understood. We discuss findings based upon this analysis in the next subsection, as well as the results of the vocabulary analysis of this section.

Whether the Web Catalog and My Account are easy to use or not is determined by the continuity between what the patrons think the labels mean and the actual meaning of these labels. It is frustrating for the patrons when they are trying to find the information they need and have to guess what ambiguous labels mean. In our object/action analysis, we are trying to analyze whether the labels and buttons match what is on users' mind and provide recommendations for improvement.

Findings

Issue: Although instructions for how to do different types of searches are informative, the buttons in the search results page lack description. It would be helpful, particularly for new users, if there are description of the labels somewhere in the *Web Catalog* and *My Account*, perhaps on the same pages as what they describe.

Recommendation: There are two ways to solve this issue. First, a page with description of the buttons and their usage will provide reference to users when they are not sure of the buttons functions (perhaps a page similar to the catalog help page in Children's Library). An image can be used to illustrate all the buttons in the *Web Catalog*. A second solution would be to recode the HTML for the buttons so that it will display a description of the button when mouse pointer rolls over it.

Issues: Some labels for buttons are either not well worded or do not match their functions. For instance, in *My Account*, the label for the login button *Display Patron Record for Person Name Above* is unnecessarily long, even though it is very descriptive. For other labels such as *Start Over*, *Return to Browse*, *Patron Record*, *Search as Words* and *Export saved records*, the labels do not reflect their functions.

Recommendation: The short answer to this type of problem is rewording the labels to match their functions in users' words. In order to achieve this purpose, designer has to come up with a list of possible labels for each button. Then they could conduct a survey to let user decide which one is the best fit for function of the button and easy to understand. Here is a list of suggested labels:

Current Label	Suggested Label
<i>Display patron record for person name above</i>	Login
<i>Start Over</i>	Web Catalog Home
<i>Return to Browse</i>	Back to List
<i>Patron Record</i>	Account Info
<i>Search as Words</i>	Keyword Search
<i>Export saved records</i>	View Saved Records
<i>Locate in results</i>	Locate record Number or Jump to
<i>Extended Display</i>	Records in Detail

Issue: Labels are not consistent for buttons with same type of function. For instance, “Start Over,” “Library Catalog,” “Web Catalog,” “Canton Public Library Catalog” and “the Catalog” all mean “Web Catalog”. “Kids Page” and “Children’s Library” mean the same. “CPL Home,” “Home” and “Library Home” will get you to Internet Branch homepage.

Recommendation: This type of problems is usually easy to fix. Designer for one section of the Internet Branch should check labels in other sections to make sure they are consistent.

Issue: Some labels are misleading and redundant. For instance, in “My Account,” “Logout” and “Return to Main Search Menu” are displayed when the user didn’t log in to their account yet. On the top of the My Account page, it says “Canton Public Library Web Catalog.” Under “Modify Personal Information,” patrons can not update their address, even though they can change their phone number and email address.

Recommendation: These problems are not as urgent as the previous ones. In addition to modifying the label wording, what one can do is make sure a label reflects the state of the page. The designer could code the page so that certain labels will only be displayed when the status has changed, and also make sure functions for each button are complete.

Conclusion

Overall, the issues that we have discussed tend point toward a couple of underlying themes: Consistency and clarity in labeling. We identified other opportunities for improvement, but those two areas are the most likely to impede use and would have the greatest effect upon the user experience.

These themes fit with our findings in previous reports. We have referred to consistency in every previous set of recommendations. Clear labels and feedback to the user are part of the same concept, in that they are both aspects of letting users know what is possible. It is our hope that our recommendations across these reports complement each other and can be used together to improve the Internet Branch.

For a long term strategy, our recommendation is to re-examine the entire Internet Branch with these themes in mind, and to consider these issues when adding any new content. We referred to an effective technique in the conclusion of the user testing report: Card sorting. A great deal of input for any future revisions could be gleaned from enlisting users to sort a set of cards, representing all of the content of the Internet Branch, in whatever way they feel makes the most sense—and unhindered by the existing structure.

Appendix: Metaphor Analysis

	Branch	Catalog	Teen's Place	Children's Page	Help Me Make it Through the Day
The Internet Branch	The use of the term branch initiates the metaphor that links the Internet Branch with the physical library and determines that the pages web site itself are going to be organized like a library.	Extends to the web the metaphor initiated by the conversion of the card based catalog to the digital form.	Mirrors the organization of the physical branch and helps to create the metaphor of the Internet Branch as an extension of the physical branch.	Mirrors the organization of the physical branch and helps to create the metaphor of the Internet Branch as an extension of the physical branch.	Parallels the physical branch's mission to provide the Canton community with the information that community needs with the online version of newspapers and magazines.
The Physical Branch	Establishes the context for the metaphor. Positive Mapping: The metaphor is powerful and clearly presents the intent of the library to use the Internet Branch as a tool to promote the mission of the physical library.	Original metaphor based on the physical card based catalog. Positive Mapping: Allows the same ease of use as the physical card catalog.	Divides the library by audience. Positive Mapping: Presents the same look and feel as the physical Teen's Place. Negative Mapping: While there is overlap, the internet Teen's Place has a different content than the physical Teen's Place, and an organizational scheme based associated with that content that doesn't exist in the physical branch.	Divides the library by audience. Positive Mapping: Presents a whimsical feel similar to that of the physical Children's Library Negative Mapping: Utilizes a map metaphor not utilized in the physical branch.	Provides current information to the Canton community through the use of newspapers and magazines Positive Mapping: Presents current information in a fashion similar to that of the physical branch Negative Mapping: There is no clear parallel to Help Me Make it Through the Day in the physical branch.