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Watch your language: word choice in library website usability

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Abstract

Many academic libraries conduct extensive user studies when redesigning their websites, considering characteristics such as design features, information architecture, and link and information placement. One of the less studied aspects impacting library website usability is choice of language. This article presents the results of a usability study conducted at a small Canadian academic library that assessed the impact of word choice on user interactions with its library website. The author provides an overview of the relevant literature and explores the role that word choice, especially on a library website's home page, can play in user experience.

Introduction

Academic libraries go to significant lengths to make their websites as relevant as possible to their users, often undergoing frequent redesigns in pursuit of this goal. McGillis and Toms (2001) state that the library website plays a key role as the "virtual public face" of the library, representing the myriad of tools, services, collections, and even people therein (p. 355). Polger (2011) also recognizes the website as the "face" of the library" and argues that users need to be able to access necessary information with ease and that library websites need to be user-centered, current, relevant, and free of jargon (p. 2).

Academic libraries have many online resources that they must facilitate, organize, prioritize, and present in the limited space that is a home page. Library home pages must not only serve as portals containing numerous information resources, but also must cater to various audiences—undergraduate students, distance students, graduate students, faculty and staff—all of whom have diverse levels of familiarity with library resources. For new visitors and those unfamiliar with the website, navigation may be especially difficult. Moreover, certain populations, such as mature learners, may struggle with unfamiliar terms and processes that may hinder their learning and inhibit them from using the services available through the library's website.

There have been a number of studies conducted on the topic of library home page usability in library and information science literature that give attention to a wide array of design issues. However, the topic of language usage on academic library home pages is one that has only received passing mention. This article presents the findings of a user study conducted with students at Mount Saint Vincent University (MSVU)—a small Canadian university—to test the usability of the library's home page and assess how language choice may create barriers. Moreover, the study explored what terms might be more appropriate and helpful to users navigating the website. One of the aims of this study was to obtain a better understanding of students' mental models as they related to the library's website. For the purposes of this study, mental models are considered explanations of one's thought process with respect to how one's interactions with a library website should work. In this study, this relates primarily to how language choices may help or hinder user experience on library home pages.

Research Questions

Using the MSVU Library home page as a testing ground, this study investigated user comprehension of library website language. While the goal was to obtain feedback directly concerning the library's specific home page, much of the information gleaned could more broadly apply to all academic library home pages. The main questions that this study sought to answer were as follows:

- How well do users understand the language on the library home page?
- How well does the vocabulary currently used on the library home page match the phrases or words most commonly associated with the tasks that the users wish to carry out?
- What aspects of language used on the library home page are unfamiliar to users?

In asking these questions, the researcher assumed that many users might not have a good grasp on the language on the library home page. This is because home page content providers and home page users operate from two different frames of reference—in this case, library staff, as the creators and maintainers of the site, already have a certain comfort with the terms being used, whereas the users do not have this same level of familiarity (Cole, Lin, Leide, Large & Beheshti, 2007, p. 2093). That said, those who designed the MSVU Library website also felt like considerable effort had been made to make the language on the home page easy to understand.

Literature Review

The widespread adoption of more user-centered library home pages seems to have begun in the early 2000s. Several user studies were conducted as part of library website redesigns or with the goal of examining usability characteristics across different academic library home pages. Many library home page usability issues have been explored in the literature, such as the presence of particular design elements, the use of white space and the visual presentation of particular design elements, the priority users place on the presence of certain links, and the placement of search features and user behaviours regarding them (Jones & Leonard, 2011; Kasperek, Dorney, Williams, & O'Brien, 2011; McHale, 2008; George, 2005; Swanson & Green, 2011). Polger (2011) also compared librarian and student terminological preferences for library websites (p. 1). Diverse methods were used to assess library website usability from the perspective of students, including surveys, focus groups, and semi-structured interviews. In turn, many of the institutions conducting these studies used the feedback obtained to implement certain features in their website redesigns.

A survey of the literature revealed four common threads related to language choice of library home pages: user behaviour, labelling, use of library-specific terms, and user customization. These themes were found intermingled throughout the literature and are often interrelated and overlap with one another. The first theme, user behaviour, is concerned with how users tend to engage with academic library websites and what researchers have learned from observing these behaviours. Detlor & Lewis (2006) posited that library websites often do not sufficiently meet the information-seeking requirements of many users because of the language barriers they pose (p. 255). The number of choices presented on the home page may also impact its use since users strive to locate the “best option” and may spend less time considering other options on the page (Kasperek et al., 2011, p. 222). Moreover, users expect to find certain features on academic library websites: adequate language, structure, options for specific user groups (such as faculty and students), as well as up-to-date and concise information (Becker & Yannotta, 2013).

If users are unfamiliar with the terminology used on a library website, they may be deterred from using particular features and thus may head in undesirable directions. For instance, although libraries may assume that users do not need explanations for the names of particular library website products, this may create a barrier to that particular resource for users to whom the terminology is foreign (McHale, 2008, p. 142; Hohmann, 2001, p. 55).

Kasperek et al. (2011) argue that the aesthetic experience of the library home page also plays a role in user choices; indeed, through it, libraries communicate that they are reputable and reliable sources of assistance (p. 243). This is reflected in a variety of ways, such as how and where content is placed, how much space is allotted for certain types of content, and which “starting point” resources are recommended to users (Kasperek et al., 2011, p. 242). Swanson and Green (2011) also pointed out that students tend to gravitate towards the search box often prominently featured on library home pages, rather than browsing through links provided to reach their desired

resources (p. 223). Features like search boxes or help links may be users' first choices on library home pages, as these are more familiar elements often included on other websites, while the language used for other site-specific links may not be. The placement of certain features also plays a significant role: Kasperek et al. (2011) argue that the majority of library website users are attracted to resources featured "above the fold" or which are viewable without having to scroll down (p. 221).

Many of the research articles surveyed also identified issues related to the labelling of links on library websites. McHale (2008) reported that users would not click on links labelled with words or phrases that did not carry meaning to them (p. 142). She used the example of the term "catalogue", which is not a familiar term to many users and which immediately creates a barrier, discouraging them from attempting to use it (p. 142). McHale (2008) also noted that users often sought quick answers and quick access to the library's online tools, but were frequently frustrated by how difficult these options were to locate (p. 156).

In a study conducted on the Memorial University Libraries' website, McGillis and Toms (2001) noted that usability study participants were confused by terms like "Unicorn" and "Webcat" that were intended to provide access to library catalogues and journal article indexes (p. 360). Further, Pemberton and Fritzler (2004) cautioned that library jargon should be minimized, especially with new students who are already being inundated with jargon from other sources (p. 155). However, although the distinction between novice users and more experienced users is an important one, Spivey (2000) noted that while seasoned library resource users might be more familiar with library website terminology, they too could often be surprised by the introduction of new databases and platforms.

Many studies also noted the challenges that library-specific language posed for users. For instance, Spivey (2000) advocated for library web page design to be oriented towards novice users. Indeed, words like "reference," "reserves," "periodicals," "special collections," and "citations," often used on library home pages might not resonate with new users (Spivey, 2000). Polger (2011) also reported that the use of acronyms led to student confusion (p. 13). In his study, which compared the language preferences of undergraduate students and librarians, Polger (2011) found that the students preferred short, descriptive, natural words that were part of their everyday language (p. 13).

In their 2005 study, Cobus, Dent, and Ondrusek asked students to explain what the term "database" meant to them as users and found that the students had a difficult time forming a mental model of what a database was. As a result, the researchers were obliged to provide a description of database pages to help guide users (Cobus et al., 2005). It is important to note that factors such as cultural differences and language abilities (for instance, users whose first language is not English) did not display prominently as a consideration in studies such as these. Becker & Yannotta (2013) emphasized the need to clarify what resources might contain when using a broad term such as "database" (p. 13). Even the addition of one word or its substitution for another can have significant implications on user experience. For instance, as Polger (2011) reported, when students were asked to indicate their preferred term to describe the

library's research guides, while 62% preferred the inclusion of the word "guide" as part of the title, there was little consensus regarding which adjective would best describe these guides (p. 13). Thirty-six percent of the respondents preferred "research guides," 10% preferred "subject guides" and 16% preferred "library guides," demonstrating how different words can have distinct connotations for individual users (p. 13). Even though these are terms that users should familiarize themselves with in order to successfully navigate the library's services (i.e., students will need to know "citation" as the commonly used term for documenting sources), unfamiliar words and nebulous terminology can be significant obstacles on library websites, especially for novice users.

Despite the disconnect between the mental models of librarians and library users and the recognition that the use of library jargon creates a barrier, there is little consistency in students' suggestions for alternative language to replace library jargon (Klare & Hobbs, 2011, p. 105). It is important not to make assumptions about users and their knowledge about even basic library concepts. Uninitiated users may bring their own understanding and choice of terminology when approaching library home pages. As Stephan, Cheng, and Young (2006) argue, library home page users "are busy, non-selective, and more interested in finding their resources than in learning how to navigate a convoluted library web site" (p. 36). Similarly, Veldof and Beavers (2001) argue that librarians need to be conscious of the fact that their own mental models do not conform to that of students (p. 18).

Polger (2011) noted that library-centric terms like "interlibrary loan" can often be confusing to students and found that 66% of students preferred language such as "Find/get materials outside CSI/CUNY" (p. 14). This was in keeping with a preference observed throughout Polger's study for task-based language (i.e., "How do I ..." or "Find an article") (p. 4). The way students use the library website is also an important factor. Students may perceive the website as a means to an end—a tool that they use for a specific task (i.e., researching a paper, finding information on citation styles, etc.). Thus, making the accomplishment of that task as easy as possible plays a key role in the usability of the library's website.

User customization emerged as a major theme in this library website usability literature review. The research demonstrated that library websites should be geared not only towards one set of users but to multiple audiences. Liu (2008) proposed a conceptual model wherein library websites are geared toward specific user types, such as graduate students, undergraduate students, faculty, alumni, and visitors (p. 8). With the advent of web technology capable of delivering and customizing content, implementing such a system now is more possible than it was when many of the earlier studies were conducted. Liu (2008) notes further that a focus on a "one-design-for-all" approach fails to recognize users as individuals (p. 8). Indeed, user customization options can allow for institutions to better recognize and accommodate a diversity of users and approaches to an academic library website.

Methodology

This study employed semi-structured interviewing and scenario-based methods. The author elected to perform interviews as they lend themselves well to qualitative, descriptive, in-depth data unique to the individuals, especially when the nature of the data is too complicated to be asked and answered easily (Pickard, 2013, p. 196). As this study sought to capture the mental models and different frameworks from which students may approach the library website, the semi-structured interview method was deemed most appropriate. As Bertrand and Hughes (2005) noted, “interviews allow people to respond on their own terms and within their own linguistic parameters, providing them, and the interviewer with the opportunity to clarify meanings and shared understanding” (as cited in Pickard, 2013, p. 196). Scenario-based testing also allowed users to elaborate on issues that would affect them in common scenarios and thus avoided some of the confines of predefined questions.

The targeted sample for this study was five or six users of the library website. For the purposes of this study, users were considered to be students who had only used the library website several (5-10) times in the course of their programs. Unfortunately, this target was not reached and only four participants were interviewed due to difficulties with participant recruitment. Despite multiple attempts at advertising and promoting the study via email and social media as well as offering an incentive (a gift card), only four participants volunteered. While what was perceived as ample time (three weeks) was dedicated to recruitment, it would perhaps have been more effective to promote the study more robustly at the beginning of the semester. Nevertheless, the data obtained was still very useful and led to some interesting insights that could be incorporated into the library’s website redesign.

Variables

A survey instrument (Appendix A) was developed and incorporated some probing, open-ended questions designed to get participants to elaborate on some of their responses. The instrument was designed to gauge the participants’ comprehension, satisfaction, and degree to which they could relate to the language displayed on the library’s home page. This instrument was tested by colleagues and an instructor as part of a course on information-seeking behavior taught at Dalhousie University’s School of Information Management and was reviewed as part of a research ethics application prior to the study. For the purposes of this study, comprehension was defined as the level to which each participant was able to understand what the link she selected was, including her expectation of where the link might lead her. Satisfaction was measured as the degree to which the link destination met with the expectation the user had when deciding to click on the link. The instrument also assessed the degree to which each participant could relate to the link label, including whether the participant found the label confusing, misleading, or aligned with destination expectations. Additionally, participants were asked to suggest alternate and user-appropriate language that in their opinion would be better understood by a general audience.

Once selected, the participants were invited to take part in a meeting with the researcher, held via Blackboard Collaborate—a virtual classroom platform. The researcher then used the audio recordings of the sessions as the basis for the analysis. During each session, participants shared their screen so that the researcher could view their interactions with the library website. Additionally, participants were encouraged to “think aloud” and explain their thought processes when clicking on certain links or carrying out tasks on the website. The participants were also given an orientation to the research project and provided with an opportunity to ask questions. Each session lasted approximately 30 to 40 minutes and a total of 18 questions were asked to each participant.

Analysis

Data analysis combined aspects of a phenomenological strategy and a constant comparative approach. In the phenomenological approach, the researcher seeks out a detailed understanding of a phenomenon as experienced by an individual—in this instance, each student’s experience with a library website (Pickard, 2013, p. 268). A constant comparative analysis approach was also applied in comparing each piece of datum (in this case, each respondent’s answer to each question) to identify similarities between the various pieces of data. Both approaches were exemplified through the coding techniques applied to the data. Through this analysis, the researcher sought to discover any commonalities or differences in how participants perceived the home page and whether any specific issues emerged that were similar to or distinct from those identified in the literature review.

The audio recordings were used extensively during the coding process. The researcher summarized and transcribed certain responses from the participants into a spreadsheet. The responses were then classified according to themes or criteria identified by the researcher (i.e., use of advanced search features [or lack thereof], library branding, etc.) with responses to specific questions correlated to one another. In some cases, these were just positive or negative responses (i.e., a participant did or did not use the research guides), but sometimes the participants indicated multiple themes within one response (i.e., use of a specific feature, comprehension of a feature, perceived usefulness, etc.), such as in Figure 1 below.

16	Does use the advanced search feature. Can be more specific. Use of Boolean indicators. Saw the value of using the advanced search feature to be specific and narrow down search results.	Q11 – Advanced search feature – use	Q11 – Advanced search feature – comprehension
17	Has used Education guide. Sees Advanced search as eliminating need for any thing else.	Q12 - Subject guides – use	Advanced search techniques
18	Noted specific databases (ERIC). Preferred to use database outside of the guides. Was very loyal to the guide.	Q13- Subject guides – comprehension	
19	No. Has not used the link before. Compared Novanet to advanced search feature.	Q14a1 – Link use	
20	It would be useful. But she would use advanced search feature. Did not realize that Novanet has this feature.	Q14a2 – Usefulness - advanced search feature	Advanced search techniques

Figure 1. Sample coding analysis.

Results

Participant demographics

The participants varied considerably in age, ranging from age 21 to 61. All of the participants were female. Given 74% of the student body is female at MSVU, this is not very surprising (MSVU, 2013). Three of the participants were graduate students, one of whom was enrolled in a Ph.D program (Participant One). The two other participants (Participants Two and Three) were both enrolled in Master’s programs and were approximately halfway to completion. Participant Three was just finishing up her coursework and beginning to embark on work for her thesis, which she alluded to at several points throughout her interview. Participant Four was in the fourth and final year of her undergraduate program. Certain characteristics, such as whether each participant was a distance student, graduate or undergraduate student, or mature student, were also reflected in some of the responses (see Figure 2).

Criteria	Participant 1	Participant 2	Participant 3	Participant 4
Age	61	46	25	21
Gender	Female	Female	Female	Female
Level	Graduate (Ph.D)	Graduate (M.A.)	Graduate (M.A.)	Undergraduate
Field of Study	Education	Education	Child & Youth Study	Public Relations
Status	Full-time	Part-time	Full-time	Full-time
Percentage of program completed	20%	50%	60%	95%
Other characteristics	Mature learner	Mature learner/Distance student	On campus	On campus

Figure 2. Summary of participant demographics.

Use of the Library Website

Of the four respondents, one stated that she used the library website occasionally while the others claimed to use it more frequently (several times per week). When asked to describe their primary reasons for using the website, the responses varied. Participant One, as a distance student, used it to locate readings for her classes as well as to conduct research for non-school-related projects and work. Similarly, Participant Two, who claimed to use the library website less frequently than all users, used the website primarily to locate articles for class assignments and said that she had used it to request a student ID card (a service offered by the MSVU Library). Participant Three generally used the website to locate articles pertinent to her thesis topic and to search for books. Participant Four used the library website for journal articles and online sources (she did not elaborate on what type of online sources these might include). She also mentioned that she used it to check the library's opening hours. Note that while at times participants were asked to elaborate on their responses, the researcher strove to adhere to the questions in the instrument.

When asked about the links or features on the library website that they used the most, the responses were as follows:

Participant 1	Participant 2	Participant 3	Participant 4
“The green search box to search for a specific topic.”	“The main search feature. Some use of the ‘Distance Library Services’ link.”	“Did use the RefWorks link, the search box (usually searching articles and book titles), to look for specific databases (e.g. psycINFO), “... have used it before for APA formatting information but I find the library information difficult to find on this topic and prefer another resource (Purdue OWL)”	Mainly uses the journal articles search, the Subject/Research guides, and the Hours link.

Figure 3. Most used features by participants.

The respondents also were asked to identify the areas of the home page that they tended to ignore. The participants pointed out several areas (see Figure 4). The most commonly identified “ignored areas” included links to the Archives, the Library News blog, the Twitter feed, and some of the Favourites links. Two of the participants noted that they are off-campus (distance) students, which influenced their interest in these areas since certain features like the events and the blog would have little relevance to them. Participant Four pointed out various links that she claimed to have very little familiarity with (or interest in) that were listed on the Favourites menu (Document Delivery, Reserves, Citation and RefWorks, Copyright, and Mount E-Commons [institutional repository]).

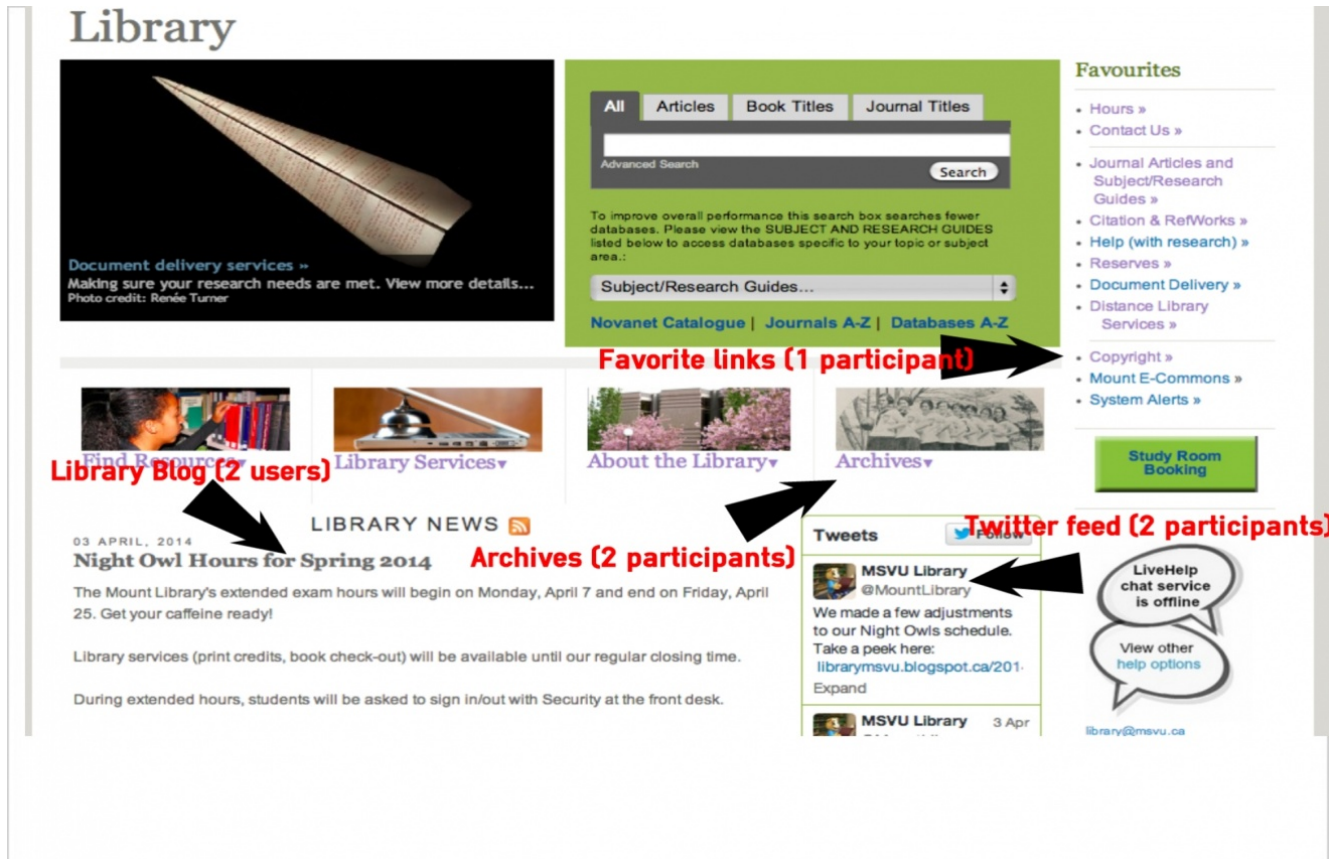


Figure 4. Areas of the MSVU Library home page ignored by users.

Home page Search Features

Each participant was asked about her comprehension of each of the search options presented to her on the home page search box. Each participant's responses were coded to indicate where they demonstrated full comprehension, some comprehension, or no comprehension of how each search box feature worked in tandem with keywords entered. The results were as follows:

Feature	Participant 1	Participant 2	Participant 3	Participant 4
All	Comprehension of Function	Comprehension of Function	Comprehension of Function	Comprehension of Function
Articles	Some Comprehension of Function	Comprehension of Function	Some comprehension of Function	Non-comprehension of Function
Book Titles	Some Comprehension of Function	Comprehension of Function	Comprehension of Function	Non-comprehension of Function
Journal Titles	Comprehension of Function	Comprehension of Function	Non-use/Non-comprehension of Function	Comprehension of Function

Figure 5. Comprehension of search options.

Only one of the four participants reported using the advanced search feature. As noted, this participant had a natural inclination towards advanced search features so she tended to use it frequently. Another participant reported that she did not use it because she had used it before and found it did not work for her situation. The other two participants had not used it and had difficulty locating it due to its lack of prominence and small font. The advanced search feature's poor visibility may also partly explain why certain users did not use it.

When asked about drop-down box (located in the lower half of the home page search box) that features a list of subject/research guides, two of the four participants reported that they had used it before. While most respondents understood the purpose of the list, they were also confused because the Favourites menu also contained a link to "Journal Articles and Subject/Research Guides." This response revealed details about the respondents' mental models of the library website. One participant even noted that she had always used the link under the Favourites menu since she had been instructed to do so earlier on by a librarian. This was particularly interesting and suggests that the impact of instruction on a library user's ability to navigate a library website is a topic deserving of further study. That said, it was not immediately clear from the participants' responses whether their comprehension was based on an outside influence (i.e., being instructed to navigate to the research guide) or based on their own ability to parse the label.

The participants' personal frames of reference and mental models also played a role in other ways. One participant attributed her difficulty with the drop-down box option to her status as a mature learner: "As an older learner, it was somewhat overwhelming to me. Anyone returning to school might find that a bit challenging," she commented. Another participant noted that she simply did not bother with it because of her preference for advanced search features, so she preferred to just go directly to databases with which

she was familiar. A third participant noted her outright confusion because she was accustomed to accessing the guides through the Favourites menu. Several of the participants agreed that having both the drop-down list and the link under the Favourites menu was somewhat redundant and likely to lead to user confusion.

Next, participants were asked about their use of three alternative search links located below the “Subject/Research Guides” drop-down list: “Novanet Catalogue,” “Journals A-Z,” and “Databases A-Z.” Respondents were asked about their use of each resource and subsequently their comprehension of each resource’s usefulness and purpose. With regards to use, their responses were as follows:

Link	Participant 1	Participant 2	Participant 3	Participant 4
Novanet Catalogue	Has not used	Has not used	Has not used	Has used
Journals A-Z	Has not used	Has not used	Has not used	Has not used
Databases A-Z	Has not used	Has not used	Has used (minimally)	Has used

Figure 6. Use of alternative search links.

With regards to the perceived usefulness of the resource that they were led to (respondents were asked to click the link and look at the resource), three out of four did not seem to comprehend what the Novanet catalogue was, indicating that they were not sure where the link would bring them, nor what its relevance was to them. Others, such as the distance students not living in Nova Scotia, did not see an immediate need for it.

When asked whether they perceived the Novanet catalogue to be useful, the participants, of course were limited since most of them had not used it before. Once given an opportunity to explore the catalogue, some respondents were better able to comprehend the purpose of the resource. The Novanet label clearly impeded the participants’ interpretation of where the link would lead them and what purpose it served.

Two of the participants (Participants Three and Four) indicated that the resource would be useful to them and although they had heard of some of the functions of the Novanet catalogue before (i.e., being able to order books from other university libraries in Nova Scotia), they had not really used it. The two other participants reiterated that, as distance students, the resource had little usefulness to them, although they acknowledged the resource could have been useful had they been on-campus students. One participant noted that, as a mature learner, she found the search tools off-putting, as they did not fit her typical search habits—such as searching via Google—but was learning to use them.

Similar findings were found for the “Journals A-Z” and “Databases A-Z” links. Although most participants had not used either link, they expressed seeing the value of these tools. Participant Two commented: “It makes sense now that I clicked it, but I don’t think that anything that would’ve drawn me to click there without you pointing it out to me. When I look at where it is and where I went, it makes sense.” Participant Two also suggested that the “Journals A-Z” link be relabelled “Journals and Journal Articles” to show users that they could obtain both from the resource.

Task-based component

In this component of the interview, participants were asked to complete two task-based scenarios (Appendix A). The first task required the students to use the library home page to find information about the Modern Language Association (MLA) citation style. The second task required the participants to locate how they would order a book from another library. For the latter task, the goal was for the students to locate the “Document Delivery” link—a task they could accomplish in several ways from the library home page. Below is how the participants fared:

Task 1	Participant 1	Participant 2	Participant 3	Participant 4
Task 1:	Successfully completed task.	Successfully completed task.	Unsuccessful.	Successfully completed task.
Task 2:	Successfully completed task.	Successfully completed task.	Unsuccessful.	Unsuccessful.

Figure 7. Completion of task-based component.

Again, the mental models of the participants came out when they were questioned about the approaches they took to the first task. Participant One noted that the term “citation” was very unfamiliar to her and that she had only encountered it recently as she had returned to university after a significant time away. Interestingly, she claimed, “I don’t think I ever used the word *citation* in my life before this year.” She associated the term “citation” with a resource where she might go to obtain more information on a topic, rather than with instructional information on formatting citations according to particular citation styles. As alternative language, she suggested the library consider a drop-down box with a “How to” menu, with one of the options being how to format one’s references according to specific citation styles. Participant Two’s views on this task were in strong contrast to Participant One. She insisted that “citation” was a universally understood term. However, she also acknowledged that the term might be unfamiliar to first-year university students.

Participant Three’s experience with the task was like that of Participant One, except that she demonstrated significant confusion and was ultimately unable to complete the task. Participant Three attempted another approach and selected the research guides to try

to find the answer. She noted her confusion centered around the pairing of RefWorks with the citations links as well as the library website's use of the term "guide". Being familiar with RefWorks, she expected to be led to a tool that would assist her in organizing her references. As she stated: "The word 'guides' is very misleading . . . I would have thought there would be a guide. When seeing RefWorks, I thought I was going to see a site that is going to organize my references and not really figure out how to cite them. It was the word 'guide' that drew my attention." In suggesting alternative language, she offered the following:

If nothing else, I would change the word 'guides'—find something else for that. Because for me 'guides,' that says tutorial. Like something that's gonna help me like 'OK, this is how I cite' . . . RefWorks threw me off.

Participant Four expressed no difficulty with the task but did suggest the link label be changed to "Citation Styles and RefWorks" to indicate that information could be found on multiple citation styles.

For the second task-based question, the participants expressed more difficulty with the language used, especially with the term "Document Delivery." Participant One commented:

Document Delivery initially sounds a little 'lawyer-ish' . . . because I went to law school so I picture somebody knocking on your door and serving you with documents. . . . I think of a document as a couple of sheets of paper or something that you have to sign.

From the participants' responses, it was evident that the term "Document Delivery" did not adequately express that this service was intended for obtaining books and articles external to Nova Scotia. Participant One also did not select the "Document Delivery" link available on the home page. Rather, perhaps due to her status as a distance student, she initially selected "Distance Library Services" and located the means to carry out the task on a separate page.

Both Participant Three and Four took similar paths to try to achieve this task, noting that they would first refer to the catalogue. While this task could have been carried through the main search feature, there were also some prominently placed links available on the home page. Neither Participants Three nor Four saw the home page as offering relevant links that would enable them to carry out this task. Participant Four commented that "Document Delivery" made sense to her only after it had been pointed out to her.

Several of the participants suggested alternative labelling or techniques to help improve this option for users. Participant One again emphasized a "How to" drop-down menu, which could include an option to request a book. Participant Two noted her familiarity with the term "Interlibrary Loan" and thought that might make more sense to users. She also suggested including mouse-over options for labelled links such as "Document Delivery" that could give users a brief synopsis of the service's purpose. Participant Three did not offer an explicit alternative but suggested making it clear that the material

being ordered would come from outside of Nova Scotia and that the service was distinct from the Novanet book-ordering service. Participant Four did not offer an alternative but, similarly to Participant Three, noted that the link had to be more descriptive and emphasize that material could be ordered from outside the immediate MSVU Library system.

Open-ended question component

For the final open-ended question component, the participants were asked to comment more generally on their experience with the website and share any suggestions they might have. One interesting outcome of this component was that the respondents did not identify the library as a preferred source for certain types of information. Two participants (Participants Three and Four) noted that they sought citation style information outside of the library website. Participant Three stated: "Especially with undergrad students, I feel like APA and MLA styles should be right here [on the library website]. Because everybody I know goes to Purdue OWL." Similarly, Participant Four said: "I think for the most part, I usually just use it to research for journal articles and stuff. If I have any questions about citations I just use Google."

Two respondents indicated that the MSVU Library website was "not the worst" and that they did find some aspects of it clearer in comparison to other library websites. Participant One reiterated her desire for a "How to" menu that would give users quick access and instructions to carry out specific tasks on the library website. These tasks, such as ordering books, finding books and articles, and formatting references, were mentioned throughout the interview. Participant Two repeated that, as a distance student, a lot of the website was not pertinent to her. She also noticed the link to "System Alerts" and suggested it be clarified to indicate "Library System Alerts" to differentiate it from similar links found elsewhere on the MSVU's main website. Participant Four also restated the need to make the advanced search link more prominent. Participant Three shared some apt sentiments about the website and its use of language, stating:

It's no different than any other library website I've encountered because they all have their niches . . . their strengths and their weaknesses. This isn't the most difficult one I've navigated. If you were to make it more clear how to go about ordering books or articles outside the province. Because I wasn't aware that you could even do that. Like the news here is very small. I very seldom scroll down. Doesn't look at news. I don't really get a lot from your Twitter.

Discussion

All respondents confirmed that their primary reason for using the website was to search for resources. This would likely come as no surprise to the library, but it is interesting that it is one of the only uses mentioned. Some of the anticipated uses (such as to find citation information) were not given by the respondents, perhaps indicating that the library is not the preferred source for this type of information. The participants' unfamiliarity with many sections of the website did also indicate that little time was spent

exploring the home page and learning about the site's various features. Even though participants showed good comprehension of several of the other search tools (such as the "Novanet Catalogue," "Journals A-Z," and "Databases A-Z"), this overall lack of familiarity with the website demonstrates students' tendencies to focus on searching rather than on browsing. Similarly, in the task-based component of the interview, the participants often sought what they perceived to be the best and quickest option for carrying out the task, rather than considering and exploring the different options available. This phenomenon aligns with the findings of several studies outlined in the literature review (Veldof & Beavers, 2001; Stephan et al., 2006; Kasperek et al., 2011).

The interplay of design features with the labelling of certain links also came out in this study. In keeping with Kasperek et al.'s study (2011), the participants tended to ignore areas that were "below the fold." The participants suggested that their reasons for ignoring certain areas of the library's website were tied to their student status or type (i.e., distance student vs. on-campus student) as well as the perceived lack of relevance of these areas to their interests. The distance students, in particular, noted the irrelevance of the news blog and the Twitter feed. Even though these resources might advertise items of importance to them, the participants assumed they were only applicable to on-campus users. The Favourites menu and the Archives link also held little appeal to the distance students as they did not seem to relate to their primary reasons for using the website. Indeed, the prominence of the search feature on the library website's home page accorded with the priorities established by the participants (i.e., searching for resources) (George, 2005; Swanson & Green, 2011; McHale, 2008).

The mental models and the varied preferences of the different types of users were recurring themes throughout the participants' responses. This was the case for several other services, including the Novanet catalogue, which the distance student participants indicated that they had little use for as out-of-province students. However, this is not quite true, as the catalogue provides access to many electronic books that could be used by distance patrons. This is an important issue for the library to take notice of, especially as the availability of e-books grows. Advertising branded services, such as the Novanet catalogue, could have little to no meaning to users who only have a limited understanding of what the service entails (McGillis & Toms, 2001; McHale, 2008).

Striking a balance between accommodating power users and novice users of the library can be difficult but it is still necessary. In fact, when redesigning its website several years ago, the MSVU Library made the decision to maintain a link to the Novanet catalogue by placing it prominently next to the search feature on the home page. As an established brand, experienced users of the library would have expected to easily access the Novanet catalogue from the library home page and so removing it would have been a disservice to more seasoned users. The trade-off was that the link could prove confusing to new visitors, as they would lack familiarity with the MSVU Library catalogue. One way to address this issue could be to provide a link to the term in a glossary. As noted, this could also be helpful for other terms, such as "Citation" and "Document Delivery." For example, the University of New Brunswick has compiled a glossary of the "library jargon" terms found on their website (University of New Brunswick Libraries, 2017).

Finding language that is generic enough for all users to understand is difficult to do in the small space of a library home page. Indeed, even widely understood words can have different meanings to different users. When asked about the “Articles” search option on the library search feature, the undergraduate student participant thought that the articles search was searching non-scholarly materials and attributed the term “Articles” to magazines and other non-scholarly publications, which is neither the case nor the intention of this search feature. This is a difficult issue to address because the library’s catalogue does return non-scholarly resources in its results (e.g., magazines, popular sources). However, many students, perceiving the library as a trusted source for scholarly resources, would hope that most of the results would be scholarly. To change the text to “Scholarly Articles” would be misleading, but “Articles” may continue to suggest to users that they are searching non-scholarly materials. In contrast, this same view was not shared by the graduate student participants, who understood that this feature did search for scholarly articles.

The problematic use of library-centric terms came up several times during the study. In particular, “Document Delivery” and “Citation” confused most of the participants. The mitigated response from the study’s diverse group of participants also showed that these terms would not appeal to a broad range of student users. The need to avoid library-centric terms to ensure a better user comprehension coincides with the findings of Hohmann (2001), Polger (2011), and McHale (2008). While the terms mentioned above were generally thought to be easy to understand and associate with common library services, they originated from the mental models of librarians and library staff and ultimately did not align with the mental models of the website’s users.

It is interesting that one participant recommended the use of task-based language (i.e., having a basic “How do I...” menu) on the library’s home page, as it is consistent with Polger’s (2011) findings (p. 13). However, one wonders whether this approach would be suitable for returning users, who might not want to be instructed repeatedly on how to accomplish specific tasks each time they visit the website. Moreover, it might be misleading to provide users only one way to accomplish certain tasks when many exist. It seems a balance must be struck between the user experience needs of new and more seasoned visitors to the website. A compromise could be to provide multiple links that would enable users to carry out specific tasks while still including “How do I” or “I want to” menus.

The respondents’ student status (i.e., mature student, distance student, graduate student, etc.) also factored into their information-seeking behaviour and interactions with the library website. This suggests that the library should take its different user groups into consideration when labelling or branding particular tasks, services, or features on its website.

A surprising outcome of this study was the discovery that three of the links listed in the main search area (“Novanet Catalogue,” “Journals A-Z,” and “Databases A-Z”) were not highly used. Some respondents initially did not understand the purpose of these links, but all of them saw their potential relevance to their studies once their purposes were explained and they had spent some time exploring the links. For instance, when

discussing the “Journals A-Z” link, Participant Three expressed that this feature “pigeon-hole[d]” her and that she did not use it because she found it limited her searches (despite this not being the goal of the feature) and did not fit with her existing search habits. This type of user interaction with the website also showed how reluctant the respondents were to adjust their search behaviour. In a way, this study compelled the participants to spend more time discovering and appreciating the features of the library website, rather than simply using it for an explicit task (i.e., looking for a book or particular information). However, it is evident that the library must work to better expose its services and tools to users and encourage exploration of its website. This involves not only not making the home page less “intimidating” to users but also effectively informing them of the plethora of different research-related tasks that can be accomplished. Indeed, the library home page and the language it uses plays a significant role in the successful marketing of the library and its services.

The study also revealed that the library website was not always the preferred source of information. While the library (and its staff) may view itself as an authoritative source, this does not seem to match with user practices and preferences. Moreover, library websites do not always explicitly market themselves as trustworthy sources of information. This concept echoes Kasperek et al.’s (2011) argument that the library home page plays a role in how libraries present themselves as reputable and reliable sources of information. Although the MSVU Library strives to provide extensive and current citation information through several different guides, two of the participants specifically mentioned turning to outside sources for this information (Google and Purdue OWL). This is somewhat problematic as, in addition to demonstrating that the library is not perceived as necessarily reliable, other online resources are not necessarily more reliable and may become out-of-date or contain errors. The participants’ comments furthermore suggested that finding citation information on the library website was difficult because of some of the terminology used. Although outside the scope of this study, the preferences and search habits of students with regards to citation information would be an interesting topic for further study.

The study also revealed that it might be important to consider the impact of instruction on library website use and search habits. Participants mentioned that they were “taught” to use the library website, in some instances by a librarian, in others possibly by a faculty member or a friend. While exploring this topic in depth was outside the scope of this study, it could have important implications. For example, within the MSVU Library, librarians involved in instruction could develop a common approach to teach students how to use the library website. At present, each librarian employs his or her own approach, which may impact consistency and student comprehension. If users are taught to use certain features in specific ways, they may retain these habits throughout their time at university; it is also possible that they will seek out similar options when encountering other academic library websites.

Limitations

Despite the insightful results obtained, this study had several limitations. First, the sample size of four participants was very small and cannot be considered

representative of the broad range of student perspectives. Interviewing more participants would have enhanced the outcomes of this study but was not plausible given the limited time frame. Additionally, the researcher had hoped to interview more undergraduate students as they constitute the largest student population at MSVU. However, only one undergraduate student came forward and agreed to participate, despite multiple attempts at recruitment. Furthermore, the one undergraduate student that was interviewed was a senior student in her final year. The researcher would have liked the opportunity to interview a first-year undergraduate student to obtain the perspective of a novice library website user.

Although the participants were clearly told that their ability was not being tested during the study, it is possible that their knowledge of being observed impacted their regular searching and browsing behaviour. Moreover, due to a potential power dynamic between student and librarian, participants may have given responses they thought the librarian would want to hear during the interview. Indeed, observing the interactions of users with the library website in a less structured environment might be a suitable avenue for future study.

Conclusion

Polger (2011) aptly captured the importance of clear language use for library websites by stating:

The library's website provides many functions. It is a marketing and communications tool, a current awareness resource, a learning tool, and an information gateway. If librarians are expected to be excellent communicators at the reference desk and in the classroom, then the library website should complement the work of a librarian. (p.13)

This study supports the argument that language can indeed act as a barrier to users of academic library websites. Uniquely, these results demonstrate some characteristics of students' mental models among mature students and distance students in comparison to students who study on campus. As the search feature was among the most commonly used by participants, it was clear that some of the language used did not always match up to the participants' understanding. Some of the participants offered very helpful suggestions for improving these features and these suggestions were brought to the attention of those responsible for the future library website redesign. The library could also consider to what extent the featuring of the blog and Twitter feed on the library home page enriches user experience. It is possible that these features could occupy less space on the home page to allow for more links to relevant research resources or "How do I..." menus. Moreover, data gleaned from sources like Google Analytics could give the redesign team further insight on highlighting or remarketing some of these features.

The mental models of different types of students (undergraduate, graduate, distance, off-campus) were one of the recurring themes throughout this study. Students appeared to quickly assess (sometimes incorrectly) what tools on the library home page they

perceived were relevant to them. In the task-based component of the study, relevant features that would help students to carry out tasks were often missed.

Developing a task-based menu could also be helpful for newer visitors to learn how to use the library website to their advantage. However, such an approach might not suit all user groups. Power users with advanced knowledge of library tools and resources should still be accommodated. A middle ground could be to provide a glossary or explanation for library-specific terms to ensure that users can more easily integrate these words into their vocabularies and understanding.

Of course, not all user groups will be satisfied with changes the library makes to its website. For example, when redesigning the website several years ago, it was decided to keep the name “Novanet Catalogue” as this was a feature familiar to faculty and more seasoned users. The library still must consider its power users who have expectations too. Removing certain links in favour of making a website more user-friendly may, in fact, hinder users who have grown accustomed to using the website in a particular way. That said, “user-friendly” may be the route that the library has to go if it hopes to attract more users as well as accommodate incoming students.

The use of library-centric language was evident on the MSVU Library website. Although the library attempted to part with the name of products (i.e., Novanet Catalogue), the use of terms such as “Document Delivery” and “Citation” was still employed. Library-specific terms such as “Subject Specialists”, “Subject Liaisons,” and “Libguides” are also problematic, while broader terms like “Research” might be more appropriate to connect with users (Becker & Yannotta, 2013; Conrad & Alvarez, 2016). The findings of this study confirmed the difficulty that students have when faced with such terms as well as their reluctance to explore these functions further when unsure of their purpose. The participants suggested alternative terms that could be used that would be more descriptive as well as different approaches that might be appealing to more users.

This study also revealed that the library website must employ new methods of attracting users and directing them appropriately if it is to be seen as an authoritative and accessible source for research-related information. This may be a matter of making the library website more searchable, as students noted a preference for searching for specific information, rather than having to browse to find desired information. Currently, the library is reviewing the “Ask Us” tool, based on the LibAnswers platform, to see if its searchable question-and-answer style guide may help students locate information on how to perform certain tasks that would otherwise be featured on the library website.

This study allowed the researcher to glean many insights that can be used to develop a more user-centric home page and ultimately help the library and the patron come closer to speaking the same language.

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Appendix A – Survey Instrument

Demographic information

1. Please indicate your age
2. Please indicate your gender
3. What program are you enrolled in?
4. What is your status (full-time/part-time)?
5. How far along are you in your program (estimate)?

Library website

6. First of all, could you tell me your experience with the MSVU Library website by selecting one of the following choices.

- Have never used it
- Have used it occasionally
- Have used it frequently
- Use it very frequently

7. In your own words, what do you mainly use the MSVU Library website for?

8. If you use the website regularly, what are a few of the links or the features that you would use most on the library website. Please limit yourself to 3 or 4.

[The participants will be instructed to show the researcher by interacting with the screen as they explain themselves]

9. Take a few moments and have a look at the website. Are there areas that you tend to ignore altogether when you visit the library home page?

Next, I'm going to walk you through the library web page and ask you about specific links and areas and about your thoughts on these specific parts.

10. Ok, let's look at the first area—the search bar. There are four tabs—“All,” “Articles,” “Book Titles,” and “Journal Titles,” These are links that are used in conjunction with typing search terms in the search box. Can you please explain to me what you think each of these options does when you use them along with typing in your search term?

11. Do you ever use the advanced search feature? If not, why?

12. Now look below where you'll see a drop-down box that reads “please make a selection.” Click on the little down arrow to the right of the box to see what options are presented. Have you used these links before? Where do they lead you?

13. Try clicking on some to see where they lead you. Is this where you expected these links might lead you, why or why not?

14. Now notice the three links below that read: Novanet Catalogue, Journals A-Z, and Databases A-Z.

Click on each link. Describe to me what you see on the screen that the link leads you to:

- Have you ever clicked on this link before?

- Would this resource be useful to you?
- Think about how the link was presented? Is this where you expected the link to lead you?

Task-based component

In this next phase, I'm going to present you with several scenarios and I would like you to walk me through the steps you would take for carrying out the tasks using the Library website.

15. For the first scenario, you're doing an essay for an English class and your professor is requiring you to format your paper and references in Modern Language Association (MLA) style. Please show me how you would locate information on the MLA style using the library home page. Please go slowly and just indicate where you decide that you will be clicking as I will be asking you questions as you progress through the scenario.

- a) Tell me where you think the link will lead you. In other words, what information do you think will be provided to you on the page that the link leads to?
- b) Did the information provided on the page linked to match up to your expectations of where the link would lead you? Is the language used for the link clear?
- c) Do you have any other comments about the link? Are there any alternative terms you might use to describe the link that are different from the link provided?

16. You have the name of a book, but after much searching, you've found that you will have to order it from another library. Using the library home page, please navigate to an option that you think will give you the ability to carry out this task. Again, please verbalize your process and move slowly as I will be asking you questions about the decisions you make as you move along.

a) Tell me where you think the link will lead you. In other words, what information do you think will be provided to you on the page that the link leads to?

b) Did the information provided on the page linked to match up to your expectations of where the link would lead you? Is the language used for the link clear?

c) Do you have any other comments about the link? Are there any alternative terms you might use to describe the link that are different from the link provided?

17. We've just walked through several scenarios. Can you think of your own scenarios that you may have encountered before that the library home page does not provide a clear way for you to complete certain tasks, either based on language currently provided on the library home page, or perhaps some links that are not there at all?

18. Do you have any further comments you would like to make about the language used on the library website?