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# GCpedia/Wiki Navigation Menu Card Sort Results

Digital Collaboration Division

2017

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## Research Overview

### Executive Summary

The facilitator conducted a session that included questionnaires and a card sort test with 15 cards regarding GCpedia/Wiki navigation menu. The session included a total of 10 participants on Monday, December 4, 2017.

Recommendations include:

- Using the similarly grouped cards to inform related topics.
- Using the 5 overarching categories to inform the overall structure of the navigation menu.
- Defining all menu items and features, to allow users to easily understand and find what they are looking for.

### Test Objective

The aim of this research was to identify users' familiarity, understanding and usefulness of the GCpedia/Wiki navigation menu items and page specific features.

The facilitator sought to uncover an understanding of how users from various backgrounds and roles expected to see content organized on the navigation menu.

The card sort test was conducted to help shape the information architecture by evaluating and reorganizing the structure and removing redundant items.

### Participants

The total number of individuals who participated in the session was 10.

### Methodology

The in-person session was divided into two parts. The facilitator briefed the participants at the beginning and debriefed the participants at the end.

For the first half of the session, the participants worked independently and responded to the questionnaires on their familiarity, understanding and how useful they found of the navigation menu items and page specific features.

For the list of the items and features and their descriptions, please refer to **Table 1 and 2, p. 3-4**. For a complete list of individual responses to questionnaires, please refer to the **Appendix A and B, p. I-XXI**.

For the second half of the session, the facilitator conducted an open card sort where 2 groups of 5 participants organized 15 items into categories that they would expect to find on GCpedia/Wiki navigation menu. They then labeled each category. When consolidating the results, the

participants worked collaboratively as a team to finalize the grouping and labeling of main content areas.

Participants were not required to sort and use all the cards; the unused cards were considered redundant items for the navigation menu.

For the group and final combined card sort results, please refer to **Figures 1-3, p. 7-9**.

### Data Collected

The facilitator collected two forms of data:

- Qualitative: data including participant comments in the questionnaires (Refer to **Appendix A and B, p. I-XXI**) and the card sort (Refer to **Card Sort, p.7-9**).
- Quantitative: data of users' answers to familiarity, correct terminology used and usefulness of the navigation menu items and page specific features from the questionnaires (Refer to **Table 3 and 4, p. 5-6**).

## Questionnaires

### Navigation Menu Items

The following table represents the items that are currently used in GCpedia navigation menu and their descriptions:

Table 1. GCpedia/Wiki navigation menu items and descriptions.

#	Menu items	Descriptions
1	Browse categories	System generated page of all categories created by users
2	Communities	Category: Index of communities that are using GCpedia cross-departmentally
3	Contact us	GCTools contact information
4	Create a book	Creating a book of GCpedia articles in a PDF format
5	FAQ	Frequently asked questions about GCpedia
6	Help	Centre for help related resources
7	Lexiconapedia	Definition of common terms
8	Main Page	GCpedia home page
9	Projects	Category: Index of projects
10	Random page	Random GCpedia page
11	Recent changes	List of the most recent edits made to pages
12	Sandbox	A page designed for testing and experimenting with wiki syntax
13	Special pages	List of pages that have no wikitext, but are generated by the software on demand
14	Tag cloud	A visual representation of categories with text size proportional to category size
15	Upload file	Uploading files to GCpedia

Participants completed a total of 3 questions per each menu item:

1. Are you familiar with this menu item?
  - a. If yes, what is the purpose of this item?
  - b. If no, what do you think is the purpose of this item?
2. Based on the given description, do you think the name of this menu item reflects what it does?
  - a. If no, what name would you suggest?
3. Do you find it useful to have this item in the main navigation menu?
  - a. If yes, please provide your reasoning.
  - b. If no, please provide your reasoning. If not in the navigation menu, where would you look for this item?

## Page Specific Features

The following table represents the page specific features that are currently used in GCpedia navigation menu and their descriptions:

Table 2. GCpedia/Wiki page specific features and descriptions.

#	Page specific features	Descriptions
1	Download as PDF	Generating a GCpedia page in a PDF format
2	Page information	A page of information on the current page
3	Permanent link	A link to a specific version of a wiki page
4	Printable version	Generating a GCpedia page in a printable format
5	Related changes	List of all recent changes in each article linked to the current page
6	What links here	List of the pages that link to (or redirect to) the current page

Participants completed a total of 3 questions per each feature:

1. Are you familiar with this feature?
  - a. If yes, what is the purpose of this feature?
  - b. If no, what do you think is the purpose of this feature?
2. Based on the given description, do you think the name of this feature reflects what it does?
  - a. If no, what name would you suggest?
3. If you were looking for this feature, where would you look for it on the site? Why?

Please note that in order to avoid biasing the responses for both questionnaires, the facilitator guided the participants to answer **Question 1** (*Are you familiar with this menu item/feature*) first before moving on to **Question 2**, where the descriptions were provided for reference. For the copy of the questionnaires used in the session, please refer to the **Appendix E and F, p. XXIV-XXVIII**.

## Summary of Findings

A total of 10 individuals participated in the session. The following tables represent how often the participants answered 'Yes' or 'No' to the questions for each menu item and feature.

The **response ratio** refers to the the ratio of 'Yes' versus 'No' responses that the majority of participants had for all of the menu items.

### Navigation menu items questionnaire

In **Question 1**, the majority of participants responded that they were familiar with 10 out of 15 (67%) menu items prior to seeing their descriptions. This means that the participants have

previously seen, used or knew of these menu items. Generally, participants were unfamiliar with “Communities”, “Lexiconapedia”, “Projects”, “Special pages” and “Tag cloud”.

In **Question 2**, the majority of participants believed that 13 out of 15 (87%) items correctly reflected their corresponding descriptions. Participants found that “Special pages” did not reflect its function. For “Lexiconapedia”, participants were equally distributed in their responses.

In **Question 3**, the majority of participants found it useful to have 8 out of 15 (53%) items in the main navigation menu while “Browse categories”, “Lexiconapedia”, “Projects”, “Sandbox” and “Tag cloud” were not. Participants were equally distributed in their responses for “Communities” and “Contact us”.

Table 3. Participants’ responses to navigation menu items questionnaire.

#	Menu items (n=15)	1. Are you familiar with this menu item?		2. Based on the given description, do you think the name of this menu item reflects what it does?		3. Do you find it useful to have this item in the main navigation menu?	
		Yes	No	Yes	No	Yes	No
1	Browse categories	7	2	7	1	4	6
2	Communities	4	5	6	2	5	5
3	Contact us	8	1	8	0	5	5
4	Create a book	5	4	4	3	7	2
5	FAQ	8	1	8	0	8	2
6	Help	8	1	7	0	8	2
7	Lexiconapedia	1	7	4	4	0	9
8	Main Page	9	0	7	1	9	0
9	Projects	2	7	7	1	0	8
10	Random page	9	0	8	0	5	4
11	Recent changes	7	2	8	0	5	4
12	Sandbox	7	2	6	2	2	7
13	Special pages	3	6	0	8	6	2
14	Tag cloud	4	5	5	2	0	9
15	Upload file	8	1	8	0	8	1
<b>Response ratio</b>		<b>10</b>	<b>5</b>	<b>13</b>	<b>1</b>	<b>8</b>	<b>5</b>

	Higher # of responses
	Equal # of responses


Page specific features questionnaire

In **Question 1**, the majority of participants responded that they were unfamiliar with 4 out of 6 (67%) page specific features prior to seeing their descriptions. They were only familiar with “Download as PDF” and “Printable version” features.

In **Question 2**, the majority of participants believed that all features (100%) correctly reflected their corresponding descriptions.

Table 4. Participants’ responses to page specific features questionnaire.

#	Page specific features (n=6)	1. Are you familiar with this feature?		2. Based on the given description, do you think the name of this feature reflects what it does?	
		Yes	No	Yes	No
1	Download as PDF	8	2	9	1
2	Page information	4	6	9	1
3	Permanent link	2	8	5	4
4	Printable version	8	2	10	0
5	Related changes	2	8	9	1
6	What links here	4	6	9	0
<b>Response ratio</b>		<b>2</b>	<b>4</b>	<b>6</b>	<b>0</b>

 Higher # of responses

The following table represents participants’ responses to **Question 3**. Majority of participants suggested that they would look for “Download as PDF” and “Printable version” in the top right menu, while “Page information”, “Related changes” and “What links here” on either the bottom menu/footer or the left side bar/navigation. Participants also suggested that they would look for “Permanent link” in the left side bar/navigation.

Table 5. Question 3: If you were looking for this feature, where would you look for it on the site?

Page specific features	Where?	
Download as PDF	Top right/bar	
Page information	Bottom/footer	Left side bar/navigation
Permanent link	Left side bar/navigation	
Printable version	Top right/bar	
Related changes	Bottom/footer	Left side bar/navigation
What links here	Bottom/footer	Left side bar/navigation



## Card Sort

### Observation

The facilitator conducted an open card sort where 2 groups of 5 participants organized 15 cards into categories that they would expect to find on GCpedia/Wiki navigation menu. Since the page specific features were determined to be essential in the navigation menu, only the general navigation menu items were included in the cards. After the sorting activity, the participants labeled each category. When consolidating the results, the participants worked collaboratively as a team to finalize the grouping and labeling of main content areas.

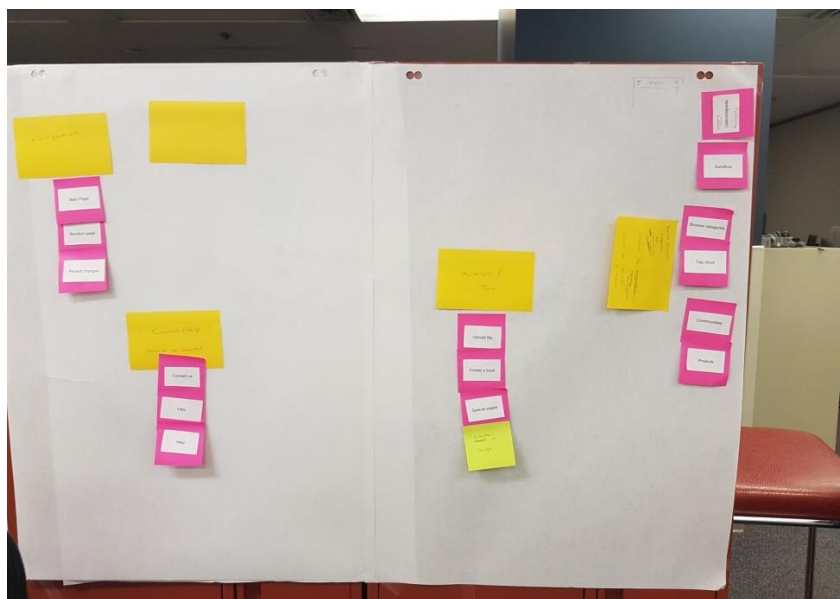


Figure 1. Group 1 card sort.

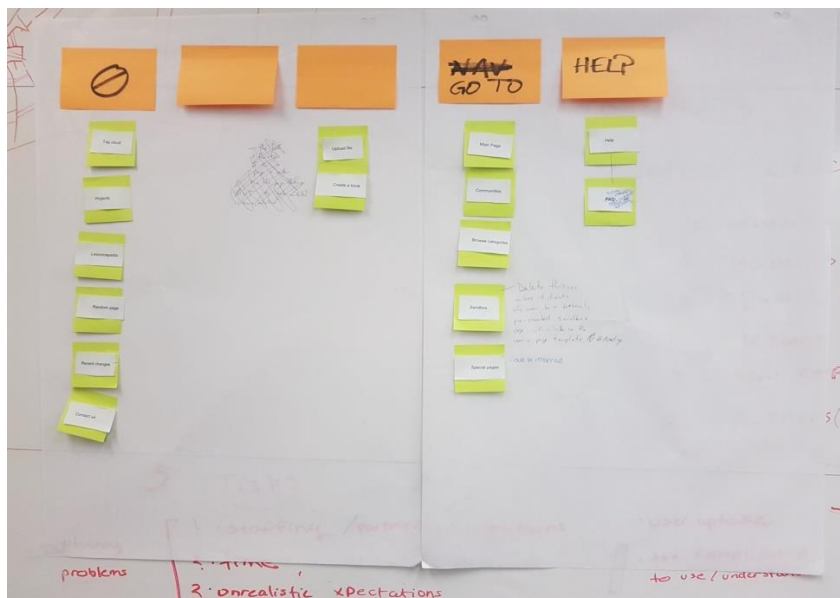
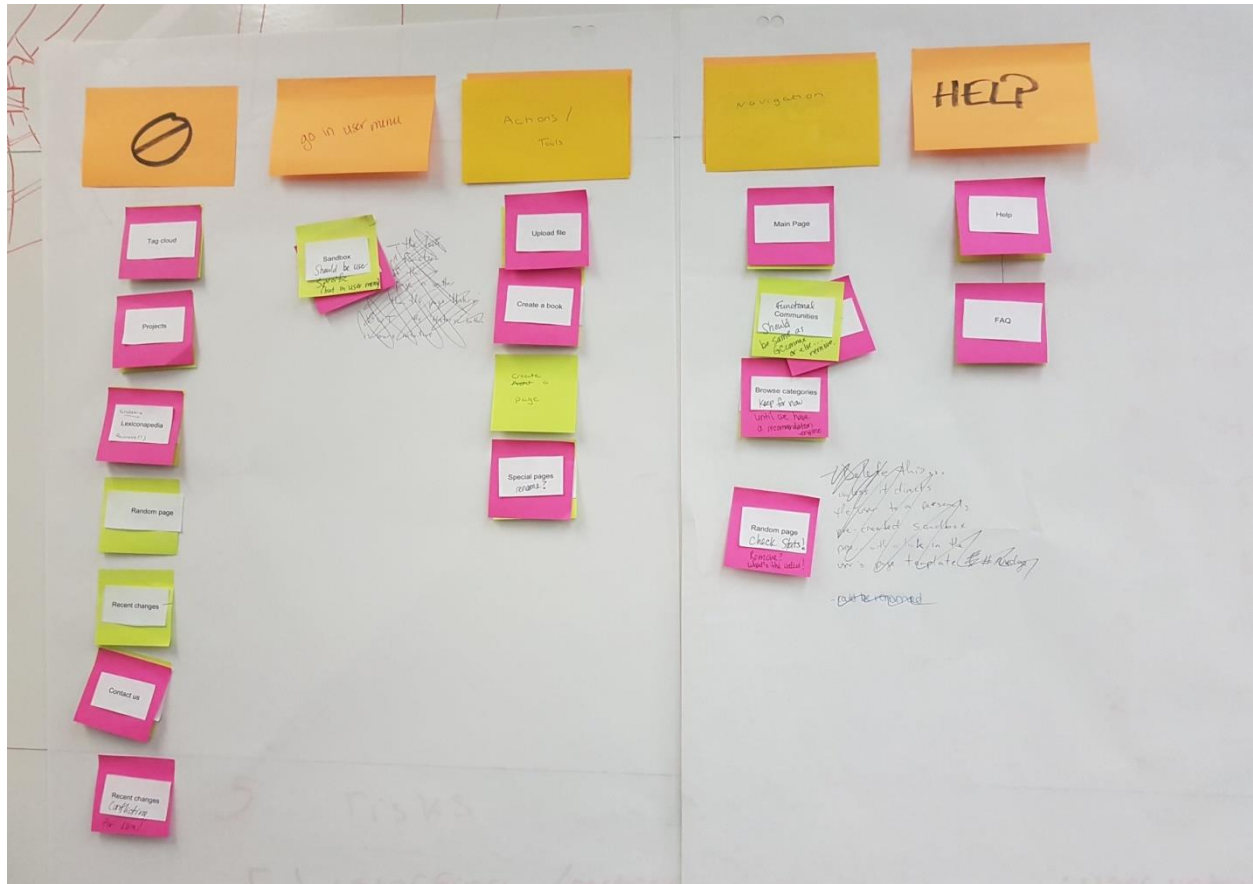


Figure 2. Group 2 card sort.

Both Group 1 and 2 had similar mental models when sorting the cards. They both agreed that the “Upload file” and “Create a book” menu items belonged under the “Actions/Tools” category, the menu items “Help” and “FAQ” belonged under the “Help” category, and the “Main page” and “Communities” menu items belonged under the “Navigation” category.



**Figure 3.** Combined card sort.

The following table represents the final results for combined card sort.

**Table 6.** Combined groups.

Actions/Tools	Help	Navigation	Go in User menu	Remove
Upload file	Help	Main Page	Sandbox	Tag cloud
Create a book	FAQ	Communities		Projects
Create a page*		Browse categories		Lexiconapedia
Special pages		Random page		Random page
				Recent changes
				Contact us

## Participant Comments

1. **\*Create a page** – A user-created card, where the participants agreed that it is important to have this item in addition to Create a book. This is due to the fact that most participants wanted a quick and easy way to create a new GCpedia page.
2. **Special pages** – Participants wanted to suggest a different name for this card
3. **Communities** – Rename to "Functional Communities" because it should be consistent with GCconnex.
4. **Browse categories** – Keep for now until we have a recommendation engine.
5. **Random page** – Check the stats, remove, what's the value?
6. **Sandbox** – Should be user specific, therefore in the user menu.
7. **Lexiconapedia** – Can be replaced by glossary.
8. **Recent changes** – Conflicting because it shows recent changes for all of GCpedia.
9. **Contact us** – Should be combined with Help and FAQ.

## Recommendations

### Five Overarching Categories

Based on user feedback and the card sort, the following overarching categories and information architecture for the GCpedia/Wiki navigation menu have been proposed:

- Navigation
  - Main page
  - Functional communities (previously: Communities)
  - Browse categories
  - Random page
- Help
  - Help
  - FAQ
- Actions/Tools
  - Create a page (new feature)
  - Upload a file
  - Book creator (previously: Create a book)
  - Special pages
- PDF/Print
  - Download as PDF
  - Printable version
- Page Information
  - About page (previously: Page information)
  - Statistics
  - Related changes
  - Permanent link
  - What links here

### Further Recommendations

1. **Hover+text definitions** – All menu items and features will include hover+text descriptions, allowing users to easily understand and find what they are looking for. Each menu item would link to a page that will include an introductory paragraph explaining the purpose of, or information on, the page.
2. **Sandbox** – Will change to become a link to a user-specific sandbox as opposed to a generic sandbox used by all, and will now be placed in the user menu (as a personal sandbox).
3. **Browse categories** – Will be kept until we have fully implemented the recommendation search engine.
4. **Random page** – Although we could not retrieve statistics to support usefulness of this feature, we have determined that this item was a fun and valuable addition to the navigation menu. It provides users with an option to explore a random GCpedia page that they may not have discovered by themselves otherwise. This menu item will not only

provide users another way of navigating GCpedia but can also promote pages that are less exposed.

5. **Contact us** – Will be combined with Help and FAQ.
6. **Statistics** – Refers to a page for obtaining statistics about the current page (i.e., page views). It will be added under “Page Information”.
7. **PDF/Print and Page Information** – These categories will include page-specific features. Due to current circumstances, time-constraints and limitations, we will keep these in the left navigation menu for now. We will look at moving these items in a more appropriate area on the page based on user feedback (e.g., top right menu bar in a hamburger or drop-down menu, etc.) as part of a the GCTools rebuild project currently underway.

### Future Considerations

Card sorting is a good way to get initial insights into users' mental model of an information space. For the GCpedia/Wiki navigation menu, it generated a good starting point for the information architecture. The following suggestions are a few things we would like to consider for future studies.

Testing for future iterations of the navigation menu should include at least 15 participants in order to achieve a stable picture of the users' preferred structure and to accommodate variability in different individuals' mental models.

Concurrent in-person group session for the card sort was excellent for working collaboratively in a team and for quickly bringing about grouping and labeling of main content areas. However, it is possible that group dynamics may have come into play during the session. For future iterations, we may consider one on one in-person sessions or remote, computer-based sessions that require participants to work independently. In addition to the card sorting, we may also consider conducting usability testing of wireframes to further refine the structure of the GCpedia/Wiki navigation menu.

By understanding users' mental models and vocabulary they use to describe different concepts, the GCTools team could further improve the GCpedia/Wiki navigation menu so that it is intuitive, efficient, and easy to use, ultimately enhancing the overall user experience.

## References

GCpedia (2017). <https://gcpedia.gc.ca>

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## Appendices

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