Wisconsin Dairy Council

Heuristic Evaluation

Assignment: [Heuristic Evaluation for Websites Report](#)

Researchers

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Company

 Wisconsin Dairy Council http://www.wisconsindairycouncil.com/

Background & Objectives

The Wisconsin Dairy Council website was created to increase sales and consumption of dairy products, through marketing its nutritional and economic value.

In order for the Wisconsin Dairy Council to achieve its goals, the user has to be able to successfully navigate the website and complete tasks.

In the Heuristic Evaluation, experts will determine successes and challenges of the current website according to Jakob Nielsen's Heuristic Principles. Once that information is obtained, the project can move forward and User Testing can begin.

Procedure and Materials

Heuristic Evaluation is a common usability testing method. A panel of experts will test the website's interface and report on the compliance with the recognized usability principles-heuristics, as laid out by Jakob Nielsen.

The team has laid out "User Scenarios" for the experts to test. Within each User Scenario, there are two tasks for the expert to undertake.

As the experts attempt to complete the tasks, they will rate the usability using Nielsen's 0-4 Rating Scale.

Severity Ratings for Usability Problems

by **JAKOB NIELSEN** on January 1, 1995

0 = I don't agree that this is a usability problem at all

1 = Cosmetic problem only: need not be fixed unless extra time is available on project

2 = Minor usability problem: fixing this should be given low priority

3 = Major usability problem: important to fix, so should be given high priority

4 = Usability catastrophe: imperative to fix this before product can be released

The researchers will take detailed notes on their findings, and how compliant the website is with each of the Usability Heuristics.

After the researchers perform their individual evaluations, their findings will be discussed, debated, and combined to create a general conclusion. Their ratings will be averaged together.

From this point, the team will be able to begin User Testing.

Assessment Criteria

The panel of experts will be assessing the website using the 10 Usability Heuristics for User Interface Design, as written by Jakob Nielsen.

10 Usability Heuristics for User Interface Design

by **JAKOB NIELSEN** on January 1, 1995

1. Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

2. Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

3. User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

4. Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow [platform conventions](#).

5. Error prevention

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

(Read full [article on preventing user errors](#).)

6. Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

(Read full article on [recognition vs. recall in UX](#).)

7. Flexibility and efficiency of use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

8. Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

9. Help users recognize, diagnose, and recover from errors

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

10. Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

User Scenario A

User is a Physical Education teacher who is trying to give students accurate nutritional information on dairy products. They would like to procure educational materials they can give students to enhance their curriculum.

User Task 1 (PDF)

a. User will go to site http://www.wisconsindairycouncil.com/

b. Navigate to free educational material catalog

c. Find the document labeled "Milk From Cow to You - Handout (1st Grade)

d. Open the PDF

User Task 2 (Cart)

a. User will go to site http://www.wisconsindairycouncil.com/

b. Navigate to educational material catalog

c. Add 30 Dairy Snack Bar Recipe Bookmarks and 1 Growing a Healthy Wisconsin

Poster to your shopping cart

d. View your shopping cart and delete the Poster from your cart

e. Navigate to the home page

f. View the items in your cart

User Scenario B

User is a dairy-loving parent whose child wants to enter into dairy contests. As the child's meal planner, the user seeks comparative nutritional information on dairy products.

User Task 1 (Nutrition)

a. User will go to site http://www.wisconsindairycouncil.com/

b. Go to Health & Nutrition page

c. Find chocolate milk comparison tool

d. Compare nutritional data of energy drink to chocolate milk

User Task 2 (Contest)

a. User will go to site http://www.wisconsindairycouncil.com/

b. They will go to the fuel up to play60 page

c. Go to contests

d. Find contest rules

Researcher 1: Shunta McDavid

User Scenario A

User is a Physical Education teacher who is trying to give students accurate nutritional information on dairy products. They would like to procure educational materials they can give students to enhance their curriculum.

Heuristic Principle	PDF	Score (0-4)	Cart	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	A breadcrumb appears after you have gone into a main nav item and selected a sub category.	0	The cart needs to show up once you have added something. There is no indication that anything was added.	3
Match between system and the real world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?	Item titles with different colors usually imply they can be clicked on to go to a detail page.	2	Resume shopping (in checkout) should not be on the bottom right. Submit should be on the right, being on the left implies going back (things on the left usually go back, things on the right go forward).	2
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	This did not seem to be an issue.	0	No undo when updating a cart to 0.	2

Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	The information seemed consistent with the rest of the site. I was expecting the icons of the items to open up to the pdf instead of a larger picture.	1	There is an "add to cart", so in the cart it seems like there should be a "remove from cart" or "delete". Strange that not all items can be put into the cart.	3
Error prevention Are problems being prevented?	Search bars provide appropriate feedback if something does not exist.	0	If you accidentally remove quantity in the checkout page and update, your item will be deleted.	2
Recognition rather than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	It was not difficult to find the pdf.	0	User has to remember where the checkout button is and how to get to it. It is not in an obvious place.	3
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	There wasn't much of this but for this type of site it did not seem to be a large issue. The drop downs in the nav can slightly speed up navigation.	0	There wasn't much of this but for this type of site it did not seem to be a large issue. The drop downs in the nav can slightly speed up navigation.	0
Aesthetic and minimalist design Do dialogues only contain relevant information?	Site is mostly just an informational resource; not a whole lot of useless information on each page.	1	The shopping cart is difficult to use but the other interactions are fairly simple.	2

Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	I didn't notice any error messages.	0	I didn't notice any error messages.	0
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	Finding things is relatively easy, if you cannot find something the search bar is always available.	0	Finding things is relatively easy, if you cannot find something the search bar is always available.	0

User Scenario B

User is a dairy-loving parent whose child wants to enter into dairy contests. As the child's meal planner, the user seeks comparative nutritional information on dairy products.

Heuristic Principle	Nutrition	Score (0-4)	Contest	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	A breadcrumb appears after you have gone into a main nav item and selected a sub category.	0	A breadcrumb appears after you have gone into a main nav item and selected a sub category.	0
Match between system and the real	The information is relevant to the user.	0	The information is relevant to the user.	0

world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?				
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	This did not seem to be an issue.	0	This did not seem to be an issue. Nav is always available to easily get back to pages.	0
Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	It's a little strange that the company search is part of "school foodservice."	1	Some of the pictures link to the corresponding contest, others don't at all or link to something different.	2
Error prevention Are problems being prevented?	There are clear instructions to click on which item to compare to chocolate milk, limiting errors.	0	There are some inconsistencies (like contest page pictures linking to different things) that may cause errors or confusion.	2
Recognition rather than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	The comparison tool is very easy to use and has simple instructions.	0	It is simple to find the rules for each contest. Some pictures are linked, others are not.	1
Flexibility and efficiency of use Are unseen accelerators being employed to speed up	There wasn't much of this but for this type of site it did not seem to be a large issue. The drop downs in the nav can	0	There wasn't much of this but for this type of site it did not seem to be a large issue. The drop downs in	0

interactions? Are users able to tailor frequent actions?	slightly speed up navigation.		the nav can slightly speed up navigation.	
Aesthetic and minimalist design Do dialogues only contain relevant information?	Site is mostly just an informational resource; not a whole lot of useless information on each page.	0	Site is mostly just an informational resource; not a whole lot of useless information on each page.	0
Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	I didn't notice any error messages.	0	I didn't notice any error messages.	0
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	Using the chocolate milk comparison tool gives you all the information you need.	0	Documentation did not seem necessary.	0

Researcher 2: Seth Melani

User Scenario A

User is a Physical Education teacher who is trying to give students accurate nutritional information on dairy products. They would like to procure educational materials they can give students to enhance their curriculum.

Heuristic Principle	PDF	Score (0-4)	Cart	Score (0-4)

Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	The site's breadcrumb feature allows the user to know where they are on the site and where they've been.	0	After adding items to the cart, at the bottom of the page user is informed of how many items are in cart.	0
Match between system and the real world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?	Being an educator, I went to the educators tab to find resources. I did not find the pdfs or the catalog. Had to go back to menu to find catalog under free materials.	2	On the Catalog page the cart and checkout functions are at the bottom of the page only. Verses in the header or top of the page like most sites with shopping carts. In addition, there is no way to delete items in the cart without changing the quantity and updating cart. A delete button would be expected.	1
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	The site has a breadcrumb feature allowing the user to navigate back to previous pages.	0	The site has a breadcrumb feature allowing the user to navigate back to previous pages.	0
Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	Once on the catalog page to acquire the item, the pdf version is just a link. Whereas the Add to cart is a button.	3	For the most part during this task conventions and actions were consistent.	0
Error prevention Are problems being prevented?	During this task there was no need for error prevention.	0	If a typo was made in the quantity box (30000) instead of 30 it allowed checkout to continue with such a large quantity.	3

Recognition rather than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	Once on the catalog page to acquire the item, the pdf version is just a link. Whereas the Add to cart is a button.r Once on the catalog page the search feature and description is at the top, for a second I saw no products and wondered if i was at the catalog page until I scrolled down. I feel the search would be better on the side of the page.	2	Once items were added to cart, had trouble viewing my cart. No cart at top of page. Had to click checkout button at the bottom of page to view cart. After navigating away from catalog, no cart or checkout button/icon/link anywhere. Had to go back to the catalog and to the bottom of page to check out.	4
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	Being an educator, I went to the educators tab to find resources. I did not find the pdfs or the catalog. Had to go back to menu to find catalog under free materials.	2	The site's breadcrumb feature as well as the side navigation on destination pages helps to accelerate efficiency.	0
Aesthetic and minimalist design Do dialogues only contain relevant information?	Once on the catalog page the search feature and description is at the top, for a second I saw no products and wondered if I was at the catalog page until I scrolled down. I feel the search would be better on the side of the page.	1	Aesthetically the overall type(including navigation) on the page is small. The site information itself is relevant to the users.	1
Help users recognize, diagnose, and recover from error Are error messages expressed	No error messages were received during this task	0	No error messages were received during this task	0

in plain language, that typical users can easily understand? Are problems and solutions presented clearly?				
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	When searching for the desired product, the search function was easy to use and accurate.	0	When searching for the desired product, the search function was easy to use and accurate.	0

User Scenario B

User is a dairy-loving parent whose child wants to enter into dairy contests. As the child's meal planner, the user seeks comparative nutritional information on dairy products.

Heuristic Principle	Nutrition	Score (0-4)	Contest	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	The chocolate milk comparison tool was easy to get to and labeled well.	0	Labels are visible, and it's obvious the user is on the contest page. There is effort to make a clear definition between the contest types, although it could be taken further.	1
Match between system and the real world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being	The language and conventions make sense and are being used well.	0	Some of the contests have their own pages and overviews. However, the only way to get to some of these pages is by clicking on the image. Further, some take you to a totally different site or a pdf.	3

employed?				
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	When performing this task there is a clear 'x' icon in the upper right to exit the nutrition window and the user may start again using the comparison tool.	0	Once on a contest rules page there is only a link in the side nav to the specific contest page, not the main page I came from. There is the breadcrumb feature, but a user has no other direct way to get back to the main contests page.	1
Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	Language and conventions were consistent when performing this task.	0	Some of the contests have their own pages and overviews. However, the only way to get to some of these pages is by clicking on the image. Further, some take you to a totally different site or a pdf. This is inconsistent and confusing.	3
Error prevention Are problems being prevented?	The task is very clear, it would be very difficult for a user to make an error based on the tools and instructions available.	0	All contests have expired, this notice is small. The deadline in the info section should be bigger and more noticeable. The contest rules links all look the same. Perhaps customizing the link for each contest so the user knows which contest rules they're about to view.	2
Recognition rather than recall Are objects, actions, and	Objects and descriptions were visible to the user. Instructions are clear and simple.	0	Once on the contest page. There was many contest rules links. Had to decipher	1

			which contest's rules I was clicking on.	
options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?				
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	The site's breadcrumb feature as well as the side navigation on destination pages helps to accelerate efficiency.	0	The site's breadcrumb feature as well as the side navigation on destination pages helps to accelerate efficiency.	0
Aesthetic and minimalist design Do dialogues only contain relevant information?	The milk comparison tool is designed well and gives relevant useful information.	0	The areas of information are relevant, although contain a lot of content. Especially the rules and individual contest pages. It becomes a bit overwhelming, perhaps could be simplified.	2
Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	No errors occurred during this task.	0	No errors occurred during this task.	0
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	No documentation needed for this task.	0	Documentation probably not necessary. I did find myself asking numerous questions during this task. Maybe restructuring the contest pages in a "Q&A" type of format would be	0

				helpful.	

Researcher 3: Sam McHaney

User Scenario A

User is a Physical Education teacher who is trying to give students accurate nutritional information on dairy products. They would like to procure educational materials they can give students to enhance their curriculum.

Heuristic Principle	PDF	Score (0-4)	Cart	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	Breadcrumb is helpful for navigation. Search results are off-page.	2.5	Cart is not visible after leaving catalog. Difficult to navigate back.	4
Match between system and the real world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?	Uses terms "promotional catalog", "online catalog", and "free resource materials", none are fully intuitive to the user.	3	Same concerns as "PDF" user task.	3
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	Most mis-clicked items open in a new tab, preventing the user from becoming too lost.	0	Same concerns as "PDF" user task.	0
Consistency and	Uses terms "promotional		Same concerns as	

standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	catalog", "online catalog", and "free resource materials", interchangeably.	4	"PDF" user task.	4
Error prevention Are problems being prevented?	Clicking the wrong "Search" button results in no results.	4	Same concerns as "PDF" user task.	4
Recognition rather than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	Clearing the search results is difficult in the layout.	3	Same concerns as "PDF" user task.	3
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	Some items must be purchased in the cart and others can only be viewed as a PDF. This is extremely confusing.	4	Same concerns as "PDF" user task.	4
Aesthetic and minimalist design Do dialogues only contain relevant information?	Multiple search bars are redundant, too much extra information is given before displaying the requested content.	3	Same concerns as "PDF" user task.	3
Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	Clicking the wrong "Search" button results in no results.	3	Same concerns as "PDF" user task.	3

| Help and documentation

Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise? | Some documentation available on product limitations, no information on site usage. | 1 | Same concerns as "PDF" user task. | 1 |

User Scenario B

User is a dairy-loving parent whose child wants to enter into dairy contests. As the child's meal planner, the user seeks comparative nutritional information on dairy products.

Heuristic Principle	Nutrition	Score (0-4)	Contests	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	Fairly easy to navigate to, breadcrumb is helpful.	0	Sometimes hard to tell which section you're in, also a switch to an external site is hard to notice and isn't labeled.	3
Match between system and the real world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?	Language and presentation are very real-world friendly.	0	Language is confusing, had to carefully consider which links might be valid.	3
User control and freedom Does the user have an "emergency exit" if they make a	Selections are clear, and incorrect selections are easily closed.	0	Selections are clear, and incorrect selections are easily navigated away from with the	2

mistake? Can the undo and redo, easily?			breadcrumb--except for places where the user is transferred to an external site.	
Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	Breadcrumb and side nav may be slightly redundant, the page name appears in 3 different places.	1	Submission pages are buried in a page of text consisting of contest rules, totally incongruous with navigability up to this point.	4
Error prevention Are problems being prevented?	After mis-navigating to the subsection containing the target page, it is still easily reachable from the landing location.	0	Proper link is not immediately clear after landing on the main contest page.	2
Recognition rather than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	Navigation away from the page is fairly intuitive, there are no other subsections to this specific content.	0	Recognizing how to locate the submissions page is extremely difficult without reading contest rules.	3
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	Navigation in this area is uncomplicated, unintentional clicks (on the nav header for example) still result in easy navigation to the desired page in the scenario.	0	No integration of accelerators, navigation to the contest submission pages (past the rules page specified in the scenario) is difficult.	3
Aesthetic and minimalist design Do dialogues only contain relevant information?	Pages are fairly clean, options clearly available.	0	Pages along navigational path are increasingly text-heavy, requiring more reading at each step to determine a page's organizational	3

			function.	
Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	Received no errors.	0	Received no errors.	0
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	No documentation needed for page.	0	Help with section may be prudent, at least an FAQ. The section contains a lot of text-heavy content.	2

Researcher 4: Brianna Karle

User Scenario A

User is a Physical Education teacher who is trying to give students accurate nutritional information on dairy products. They would like to procure educational materials they can give students to enhance their curriculum.

Heuristic Principle	PDF	Score (0-4)	Cart	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	There do not appear to be any visual cues for the user. However, everything on the site appears to run very quickly, so there was no	0	There do not appear to be any visual cues for the user. However, everything on the site appears to run very quickly, so	0

	lag time where I was wondering what was going on.		there was no lag time where I was wondering what was going on.	
Match between system and the real world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?	When on the List Page for materials, I expected that I would be able to click on any of the items and end up on a view page. That is a typical web commerce standard. However, there were no links from the list items, and I had to add them to my cart directly from the list page.	3	The system does not make sense. On a normal website where you can acquire materials, there is an accessible shopping cart. The one on this site is very difficult to find. As a user, I would expect to see a shopping cart in the utility nav.	3
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	When I realized the images on the list page were links, I clicked on one, hoping to end up at a view page. Instead, it opened a new window that was a larger version of the image. There was no navigation out of that page, so I tried to click "back". However, it was a new window, so I ended up having to close out of it.	3	When in the shopping cart, I was instructed to remove an item. There was no "delete" option. I had to write in "0" and click update, which luckily worked. If I had not been able to do that, I'm not sure what I would have done.	3
Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	The site does appear to be consistent, within this task.	0	The site does appear to be consistent, within this task.	0
Error prevention Are problems being prevented?	Problems are being prevented. When adding quantities of items to the shopping cart, I was	2	As with the PDF, problems are being prevented throughout the "shopping"	1

	unable to insert letters or negative numbers. I was able to add 9000 copies of the PDF to the shopping cart. I feel like that should be prevented, but at the same time, maybe someone really would need that many copies.		experience.	
Recognition rather than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	There are instructions at the top of the Catalogue about how to get promotional material if you are not a K-12 Wisconsin School. I did not notice this, and as a non-Wisconsin person, it could potentially have been irritating to spend a considerable amount of time on the site and be unable to get the materials I want, because of not seeing those instructions. Outside of this issue, the PDF was easy to find and the user would not have any issues with recognition or recall.	3	In order to return the to the shopping cart, I had to remember how I got to it in the first place. This was very frustrating.	3
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	I have not noticed anything of this sort. It seems fine.	0	I have not noticed anything of this sort. It seems fine.	0
Aesthetic and minimalist design Do dialogues only contain	It was very minimalist. I found myself wanting more relevant information.	2	It was very minimalist. I found myself wanting more relevant information.	2

relevant information?				
Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	I did not run into any error messages. Errors appeared to be naturally prevented. Perhaps, while preventing errors, it would have been nice for the website to tell me what I was doing wrong.	1	I did not run into any error messages. Errors appeared to be naturally prevented. Perhaps, while preventing errors, it would have been nice for the website to tell me what I was doing wrong.	1
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	Documentation is not necessary. Ordering a PDF seems to be a relatively simple, straightforward process.	0	Documentation is not necessary. Ordering materials seems to be a relatively simple, straightforward process.	0

User Scenario B

User is a dairy-loving parent whose child wants to enter into dairy contests. As the child's meal planner, the user seeks comparative nutritional information on dairy products.

Heuristic Principle	Nutrition	Score (0-4)	Contest	Score (0-4)
Visibility of system status Is the user being informed about what is going on? If so, is it in a timely manner?	The website seems to run quickly enough that the user does not need to be informed about what is going on.	0	The pages are quick loading and the user does not need to be informed about any lag.	0
Match between system and the real	The natural order makes sense. It is easy to navigate to and easy to	0	The system is somewhat confusing. I expected to find a	1

world Does the system make sense to the user? Does it follow a natural, logical order? Are real-world conventions, that are familiar to the user, being employed?	use.		nav item for contest rules, but there was not one. It does make sense that each contest has its own section for rules, but it is not what I expected.	
User control and freedom Does the user have an "emergency exit" if they make a mistake? Can the undo and redo, easily?	If a user clicks on the drink that they don't want to, they can easily "X" out of it.	0	When a user navigates into a contest, it is very difficult to navigate out, without the use of the back button. The sidebar nav is constantly changing. This really feels like you are going deeper and deeper down the rabbit hole, and there's no way out.	3
Consistency and standards Are the same conventions being used throughout the site? Are words, situations, and actions consistent?	The conventions appear to be consistent, when performing this task.	0	The conventions are somewhat consistent. Wording between contest rules are slightly different. This may be difficult for the user to decipher. The ways in and out of Contest Information pages are inconsistent. Where the images link to, and if they link to anything at all, is also inconsistent.	4
Error prevention Are problems being prevented?	As far as I can tell, there is no way for a user to cause an error.	0	As far as I can tell, there is no way for a user to cause an error.	0
Recognition rather	The user does not have		The user may not be	

than recall Are objects, actions, and options visible for the user? Does the user have to remember information? Are instructions easy to retrieve?	to remember information. There are not instructions, but perhaps there should be.	1	able to navigate back to the page or contest that they came from. They will have to remember what contest they are referring to.	3
Flexibility and efficiency of use Are unseen accelerators being employed to speed up interactions? Are users able to tailor frequent actions?	It is possible that it is being accelerated. The user can easily frequently close and open the window.	0	The pages are light and probably do not need to be accelerated.	0
Aesthetic and minimalist design Do dialogues only contain relevant information?	Yes, everything is relevant.	0	Yes, everything is relevant.	0
Help users recognize, diagnose, and recover from error Are error messages expressed in plain language, that typical users can easily understand? Are problems and solutions presented clearly?	There are no errors, from this page.	0	There are no errors, from this page.	0
Help and documentation Is documentation necessary? If so, is the documentation easy to search, focused on the user's task, concrete, clear, and concise?	Documentation may be helpful for some users. However "Click a Drink to Compare" seems clear.	0	Documentation could be easier to read. Currently, contest information is just large blocks of content, which are difficult to skim.	3

Findings and Results

Heuristic Principle	PDF	Cart	Nutrition	Contest	Average Score
1 Visibility of system status	.625	1.75	0	1	.84
2 Match between system and the real world	2.5	2.25	0	1.75	1.63
3 User control and freedom	.75	1.25	0	1.5	.88
4 Consistency and standards	2	1.75	.5	3.25	1.88
5 Error prevention	1.5	2.125	0	1.5	1.28
6 Recognition rather than recall	2	3.25	.25	2	1.88
7 Flexibility and efficiency of use	1.5	1	0	.75	.81
8 Aesthetic and minimalist design	1.75	2.25	0	1.25	1.31
9 Help users recognize,	1	1.25	0	0	.56

diagnose, and recover from errors					
10 Help and documentation	.25	0.25	0	1.25	0.44

User Task 1: PDF

a. User will go to site http://www.wisconsindairycouncil.com/

b. Navigate to free educational material catalog

c. Find the document labeled "Milk From Cow to You - Handout (1st Grade)

d. Open the PDF

1 Visibility of System Status

Breadcrumb navigation helps user know where they are on the website. Everything on the site appears to run very quickly, no lag time wondering what is going on.

2 Match Between System and the Real World

Being an educator, the assumption is that you would click on the "educator" nav item, but the pdfs are not located there. Titles for various search items are a different color implying they can be clicked on to get details, they do not do anything. Uses terms "promotional catalog", "online catalog", and "free resource materials", none are fully intuitive to the user.

3 User Control and Freedom

The site has a breadcrumb feature allowing the user to navigate back to previous pages. Most mis-clicked items open in a new tab, preventing the user from becoming too lost.

④ Consistency and Standards

Expected the icons of the items to open up to the pdf instead of a larger picture. Uses terms "promotional catalog", "online catalog", and "free resource materials", interchangeably. Once on the catalog page to acquire the item, the pdf version is just a link. Whereas the Add to cart is a button.

⑤ Error Prevention

Search bars provide appropriate feedback if something does not exist. Clicking the wrong "Search" button results in no results. Negative numbers and letters cannot be added to quantity of items. Quantities do not have a limit, 9000 items were able to be added to shopping cart.

⑥ Recognition Rather than Recall

To acquire the item, the pdf version is a link whereas adding to the shopping cart in a button. There are instructions at the top of the catalogue about how to get promotional material if not part of K-12 Wisconsin School. They are not very noticeable, a user in this situation could potentially waste a lot of time trying to figure out how to obtain resources.

⑦ Flexibility and Efficiency of Use

The drops downs in the nav can slightly speed up navigation throughout the site. Some items must be purchased in the cart, others can only be viewed as PDFs.

8 Aesthetic and Minimalist Design

Multiple search bars are redundant, too much extra information is given before displaying the requested content. Very minimalist, could use some more information. Search may be better on the side of the page.

9 Help Users Recognize, Diagnose, and Recover from Errors

Clicking the incorrect search button make all search items go away. No error messages were received during this task. Feedback may have been helpful.

10 Help and Documentation

Some documentation available on product limitations, no information on site usage. Search bar was easy to use and helpful for finding desired information

Recommendations

Approached from an educator's perspective, some of these materials might be expected in the "Educators" section of the site. But, the navigation of the current online catalog is fairly usable. The search pagination and item-view processes are easy for the user. However, the presence of two nearly-identical search fields increases the chance for an unrecognized user error--it is

recommended that these be combined. It is also advised that materials available in download or download-only form be separated from mail-order materials.

User Task 2: Cart

a. User will go to site http://www.wisconsindairycouncil.com/

b. Navigate to educational material catalog

c. Add 30 Dairy Snack Bar Recipe Bookmarks and 1 Growing a Healthy Wisconsin

Poster to your shopping cart

d. View your shopping cart and delete the Poster from your cart

e. Navigate to the home page

f. View the items in your cart

1 Visibility of System Status

All researches commented on the difficulty of locating the user's cart. Once an item is added to the cart it is difficult to tell if this task has completed. The page offers barely any notice that a cart exists, or that it contains an item.

2 Match Between System and the Real World

This task was particularly hindered by the lack of a robust shopping cart interaction. For example, the shopping cart does not have an accessible function to remove added items with a single-click, the user has to counterintuitively reset the quantity to 0. The lack of a useful sub-navigation for the shopping portion is extremely detrimental to functionality.

3   User Control and Freedom

While in the catalog section, navigating through materials is fairly intuitive. But once users were done with using the catalog, or would like to check out, this ease-of-use ceased. The inability to easily delete items from the cart was a frustration.

4   Consistency and Standards

In the catalog there is an "Add to Cart" button, intuitively we expect a "Remove from Cart" button. The mixing of download-only items (which cannot be added to the cart) and mailed materials was confusing to some users. Naming of items could be more consistent--"promotional catalog", "online catalog", and "free resource materials" are used interchangeably.

5   Error Prevention

Accidentally changing an item quantity, or deleting it, in the checkout page could cause accidental removals of items. The quantity box also allows for extremely large quantities to be requested. In the search page, there are two near-identical search bars, clicking the wrong "Search" function results in a seemingly valid return of no results.

6   Recognition Rather than Recall

User has to remember where the "Checkout" and "View Cart" sections are--it is not obviously placed. This is especially difficult after navigating away from the catalog section.

7   Flexibility and Efficiency of Use

The navigation through this section is mostly simple and straightforward, the breadcrumb and side-nav provide a helpful reminder of location.

8   Aesthetic and Minimalist Design

Some of the text sections are too small and verbose, crowding the page slightly. But overall, the design is relatively simple. This helps the catalog's ease-of-use, the page sections are clearly delineated and easy to find.

9   Help Users Recognize, Diagnose, and Recover from Errors

A mis-clicked search bar in the catalog provides no error recovery to the user. Otherwise, no errors were reported.

10   Help and Documentation

No reported problems with help or documentation.

Recommendations

Most concerns for this task centered around the usability and visibility of the "Shopping Cart" and "Checkout" features of this section. It is highly recommended that a Cart section is added in

a visible location, and its status is readily visible (does it contain items). It is also recommended that the cart section has an item-by-item "remove from cart" function.

User Task 3: Nutrition

In this task, the user was asked to:

a. Go to site http://www.wisconsindairycouncil.com/

b. Go to Health & Nutrition page

c. Find chocolate milk comparison tool

d. Compare nutritional data of energy drink to chocolate milk

Visibility of System Status

The researchers all found that the page was easy to navigate to and was labeled well. The breadcrumb was helpful, once they had selected the subcategory. The website and page run quickly, so the user does not need to know what is going on during any lag time.

Match Between System and the Real World

The researchers found that the language, order, and information were real-world friendly. A typical user should have no trouble understanding this page.

User Control and Freedom

User control and freedom is not an issue, on this page. The selections are clear and the user can easily exit and start using the tool again.

Consistency and Standards

During this exercise, one researcher found that the "Company Search" is under the category "School Foodservice". This did not make sense, in the layout. Another researcher felt that the breadcrumb and side navigation panel were redundant. Overall, this could be an issue, for the overall site. There was no issue associated with this specific task.

5 Error Prevention

The majority of the experts found that errors were limited, when performing this task. The instructions are clear. If the user lands on this page by error, they should be able to navigate away, easily.

6 Recognition Rather than Recall

The tool was simple and easy to use. Navigation was intuitive.

7 Flexibility and Efficiency of Use

The breadcrumb, dropdown navigation, and sidebars helped to accelerate user efficiency.

8 Aesthetic and Minimalist Design

The information on the Chocolate Milk Comparison Tool page appears to be relevant and useful. It was designed well. The page is clean, and options are clearly available.

9 Help Users Recognize, Diagnose, and Recover from Errors

No errors occurred while the experts were performing this task.

10 Help and Documentation

The documentation for this task appears to be clear.

Recommendations

For this task, the researchers found no major problems. A typical user should have no issues finding and using the Chocolate Milk Comparison Tool. The client should consider changing the navigation structure, for clarity and ease of use.

User Task 4: Contest

a. User will go to site http://www.wisconsindairycouncil.com/

b. They will go to the fuel up to play60 page

c. Go to contests

d. Find contest rules

1 Visibility of System Status

Breadcrumb feature allows the user to know where they are on the site and how they got there. Regarding the main contest page, the sections for each contest could be more defined. Some links take you to external sites and the user isn't notified of that.

2 Match Between System and the Real World

Some of the contests have their own pages and overviews. However, the only way to get to some of these pages is by clicking on the image. System and language is confusing, users might have to carefully consider which links might be valid.

3 User Control and Freedom

The researchers found that incorrect selections are easily navigated away from with the breadcrumb and side navigation. When a user navigates into a contest, it is very difficult to navigate out, without the use of the back button.

4 ## Consistency and Standards

Some of the contests have their own pages and links to them. These links are inconsistent, they take you to an external site, a pdf, or a page within the WDC site. There is no way the user is aware of this prior to clicking. Submission pages are buried in a page of text consisting of contest rules, totally incongruous with navigability up to this point. The ways in and out of Contest Information pages are inconsistent.

5 ## Error Prevention

There are some inconsistencies (like contest page pictures linking to different things) that may cause errors. The desired link is not immediately clear after landing on the main contest page. The contest deadline in the info section could be more noticeable.

6 ## Recognition Rather than Recall

Some images are linked, others are not. The user will have to decipher which contest's rules they are clicking on because they all look the same. Recognizing how to locate the submissions page is extremely difficult without reading contest rules. The user may not be able to navigate back to the page or contest that they came from. They will have to remember what contest they are referring to.

7   Flexibility and Efficiency of Use

There is no integration of accelerators, navigation to the contest submission pages (past the rules page specified in the scenario) is difficult.

8   Aesthetic and Minimalist Design

The areas of information are relevant, although contain a lot of content. Pages along navigational path are increasingly text-heavy, requiring more reading at each step to determine a page's organizational function.

9   Help Users Recognize, Diagnose, and Recover from Errors

No error messages were received during this task.

10   Help and Documentation

The researchers felt that help with the section may be prudent, at least an FAQ. Documentation could be easier to read. Currently, contest information is just large blocks of content, which are difficult to skim.

Recommendation

Based on the findings during the heuristic evaluation phase, the researchers recommend that the contest page be simplified and further organized. Creating more definition between contests and more cohesive organization of each contest sections information will take some guesswork out of the user's experience. The links on the page need to be more clear as to where they are taking the user. Some of the images in the contest sections are links, these links need to be consistent with links offered in the information section of each contest. The heavy areas of content should be simplified, potentially adding a FAQ section could help with this. Finally, the

overall navigability from the individual contest pages/subpages to the main contest page needs to be easier and clear. The side navigation should be updated to prevent the user from needing to use the back button in their browser.

Conclusion

The researchers found that overall the site performed well. Our strongest recommendation is an improvement of the functionality of the Shopping Cart and checkout--difficulty of use was a persistent subject of comment. This could best be achieved by improving its visibility in the navigational structure and by making its status visible. A "remove item" function is also recommended.

The main navigation would benefit from restructuring. This was especially an issue for the categorization of Educators' materials--they are spread between a few locations. In the catalog section, the breadcrumb navigation was very helpful and should be maintained. The researchers felt that the Contests task was made difficult by the site's organization. It is not immediately clear the status of each contest (announced, accepting entries, closed, in-progress, ended) and navigating to contest rules and entry pages were not clear. Further, the inconsistent links and destinations combined with the overwhelming text-heavy content on the contest pages, proved to really affect the tasks usability by decreasing immediate legibility. A restructure and edit of the contest pages themselves would benefit the user experience greatly.