Gale Cengage
Opposing Viewpoints in Context
Heuristic Evaluation Report

SI 622: Evaluation of Systems and Services
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Executive Summary

In this stage of our ongoing evaluation of the Opposing Viewpoints in Context database, our group conducted a heuristic evaluation of the system. Using well-established usability principles such as consistency, flexibility, navigation, and system feedback, we evaluated each of the major components of the system in detail to surface user interface issues that deviated from these heuristics. We also identified areas where the system conformed well to the guidelines. Where appropriate, we have rated the severity of these issues and provided recommendations for improvement.

Our evaluation is based on Jakob Nielsen's set of ten heuristics for user interface design (Nielsen, 2005a), which boils down many years of usability research into a solid foundation of guidelines that can be easily and quickly applied to a wide variety of interactive systems.

We evaluated each of the major sections of the system (Home, Issues, Maps, Resources, Search and Miscellaneous) individually and in multiple passes. We then aggregated our results and assigned severity ratings for each usability issue we identified. This report presents the most pertinent of our findings as well as our recommendations.

The largest section of the site, Issues, contains many minor issues, which can add up to a frustrating user experience. The most glaring issue is related to the "Listen" link on all sub-pages, which provides a valuable feature that is hampered by confusing terminology. Similarly, the Maps section provides useful functionality, but suffers from poor, inflexible navigation. The Resources section is conceptually muddled and also suffers from navigational hurdles. The Search features are generally well implemented, but have a few minor usability issues. There are also issues that affect the site as a whole, namely that there is no easily accessible help or documentation.

Introduction

Gale Cengage Learning is a world leader in e-research and educational publishing for libraries, schools and businesses. Gale's "In Context" is a huge and well known database that aggregates text-based content, including news reports, magazine articles, journal articles, bibliographies, documentations, etc., and multimedia content, such as videos, audios, images and charts, from hundreds of primary sources. It interacts with users through web applications. Opposing Viewpoints In Context (OVIC) is a sub product of Gale's the "In Context" database series. It is an online reference database developed by Gale Cengage for K12 students who are looking to complete an academic activity and the K12 educators who are planning and instructing lessons. The system presents more than 300 on-debate social issues in a variety of fields, with articles supporting both sides of the argument surrounding each issue. Currently OVIC is being used by more than 2800 educational libraries national-wide. Although the targeted market is K12 institutions, quite a few higher education institutions, such as community colleges, are also using the product. (Opposing Viewpoints in Context, 2010)

Our team's goal is to evaluate the OVIC system in terms of the usability of the web interface. In this phase our team performed a heuristic evaluation of OVIC system. Based on Jakob Nielsen's ten heuristics (Nielsen, 2005a), our group found **67** violations of these heuristics, while we also found a lot of positive ways that the system follows Nielsen's guidelines. This report summarizes the results of our heuristic evaluation, including how we conducted our research, our major findings and recommendations and a detailed table that lists all of them in appendix.

Methods

When our team conducted our heuristic evaluation of the Opposing Viewpoints In Context system, we mainly focused on the search experience and the portal pages associated with each Issue. Before we began our evaluation, we broke the paper into four different sections so that each member could concentrate on a small piece of the system at a time. These four parts were: Home (front page), Miscellaneous, Maps, Resources, Issues and Miscellaneous.

As we evaluated each section, whenever we found a heuristic violation as outlined by Jakob Nielsen (2005a) (Table 1), we would record it in the spreadsheet. In this spreadsheet we would also record a rating of severity. Our severity scale (Nielsen, 2005b) is from 0 to 4, 0 being a positive (or neutral) aspect of the system and 4 being a major, catastrophic problem that must be fixed as soon as possible, with the numbers increasing in scale of severity as you move from 0 through 4.

1	Visibility of system status
2	Match between the system and the real world
3	User control and freedom
4	Consistency and standards
5	Error prevention
6	Recognition rather than recall
7	Flexibility and efficiency of use
8	Aesthetic and minimalist design
9	Help users recognize, diagnose, and recover from errors
10	Help and documentation

Table 1. Heuristics according to Nielsen (2005a)

Once we all had had adequate time to discover violations and to record them in our shared Google Docs spreadsheet, we met to discuss our findings. While meeting we tried to decide on how severe each item actually was while also trying to combine items that were similar.

We then decided on how we wanted to split the written work among our group. We also decided how we wanted to structure our Findings and Recommendations section of the paper since there are so many findings and recommendations for this report. Our decision was to break it up by sections of the OVIC system. Within each section the findings are ranked by how severe they are. The recommendations to address the findings are addressed directly after the finding in question so as to keep the paper clean and logical.

Once everything was written we went back to our findings and recommendations so that we could take the accompanying screen shots to be included in Appendix B. These should provide a way to consistently reproduce the mentioned problem and they show how the tester saw the page in question.

Findings and Recommendations

Overview

Our group identified several usability issues across each of the four major sections of the site: Issues, Maps, Resources, and Search. We also had two extra categories: one related to the front page (Home) (or, issues that the visitor immediately notices on the front page, even before advancing to other sections) and one for miscellaneous issues affecting the whole site or appearing randomly.

Overall, the system performed favorably to our heuristic evaluation, with many areas of the site lining up closely with established usability principles. However, there are several interface issues we identified that deviate from the heuristics and are in need of improvement. We present these here, organized by section and then severity.

Home

We identified one critical flaw on the home page: there is no visible "Help" or "Documentation" link anywhere (H08).

A new user might like to see instructions on the use of the service and different features and maybe hints on how to user it more efficiently, but currently it is impossible. A good and consistent way of having a help functionality could be to add a link or menu next to the "Change Resources" functionality.

As the user visits the site for the first time, the "Home" page is what welcomes him or her to OVIC. Our evaluation found this entrance aesthetically pleasing, clear and the used language sufficiently clear and understandable. These are also general positive characteristics of the whole site (Items H02-H06, H11).

There are some consistency issues, like coloring the links after visiting them ("View All" behaves in a different way than individual topics), lack of clear statement of where the user is at the moment (the "Home" link in the top navigation bar is consistently of the same color as the links to Issues, Maps and Resources) (H15). Lacking navigation aids affect the whole site, including the front page. One solution would be to work on a consistent navigation path on the top of the page - one that would show the actual names of the pages accessed, instead of general names like "Topic" and "Document".

The attractive "slide show" on the home page has a significant flaw: it will not change to another image and text unless the user specifically clicks the corresponding number (1-5), which we doubt that many will do (H12). Instead, it might be good to make it "roll" automatically to the next item or have an alternative navigation method, like arrow links to right and left.

Miscellaneous

We identified several problems that affect the user experience throughout the site or reflect general design flaws, not specifically related to any particular page.

One of the most severe (score 4 on the severity scale) is the inconsistent use of "Back" functionality - there is no clear way to get back to the previous page or category, and when there is one provided, it is too generic or even misleading (C07-09). Also, the concept of a "page" is not always clear - if the user translates an article to other language, OVIC treats the translation as just a feature of the same page. This means that clicking the Back button in the web browser does not lead to the English version of the page, but the previous viewed page (Issues front page, for example). In addition to these, it might be good to make the OVIC logo clickable, so that it would offer an easy shortcut to the front page (C04).

We appreciated the fact in the upper right corner of the page there is always a certain set of functions and a search bar (C05). The links in the activity bar (My Activity, Change Resources), however, do not seem to work in a consistent manner (C01, C06) - perhaps there is a bug in the software in the Change Resources functionality, as it just reloads the page?

Issues Section

The Issues section is generally easy to use, but it also exhibits a critical flaw and a lot of mild usability problems, most of them are related to inconsistency and real-world reflection.

The most glaring discrepancy of the Issues section is related to the "Listen" button that is at the top of all portal or Issue pages (I05, I10). The term "listen" does not give a clear and easy to understand representation of what it is allowing the user to do by clicking the link. This violates Nielsen's second heuristic of matching the system with the real world. Our team considers this to be severity 3 out of 4. The term "Listen" in this case is used to allow a person with a print disability to have the contents of the screen audibly read to them. In most users' case, they will assume that they can listen to a reporter speaking about the story rather than having a computer voice read them the article on the page. The term "Listen" should be changed to something that more clearly indicates that clicking the link will activate a screen reader.

We also found a large number of less severe heuristic violations in the Issues section of OVIC that are still important to address. Often on Issue pages images are distorted, most likely because of the way that they were uploaded. While it is a minor issue, it can disrupt the users' experience (I31). This is a violation of the Aesthetic and Minimalist design aesthetic, the pictures could be much more aesthetically pleasing. After images are uploaded, they should be reviewed in the production system to ensure that they are always displayed in the correct resolution and aspect ratio. We ranked this problem as a 3 out of 4. Another moderate problem is the fact that Issues and Topics are used synonymously throughout the system (I22). In some areas, such as the home page, they are referred to as issues, but when you are in an issue page there is a link to go to "related topics". We think that this terminology should be made consistent, so Cengage should pick either Topics or Issues but not both, and then update the entire site to reflect that change. We gave this problem a 3 out of 4 severity.

There were a very large number of minor issues that our team discovered while evaluating the Issues section of OVIC. Some of these include but are not limited to: the difference between save and bookmark is not clear (I06) (heuristic 4 & 2), downloaded articles contain no metadata (I09) (7), article font size must be adjusted on every page, font settings are not remembered (I14) (7), and breadcrumb "topic" link should be labeled with the actual page name (I23) (3). These are all very minor with respect to the other problems above. All of these citations received either a 1 or 2 out of 4 for level of severity. For a complete list of every heuristic issue that our group found, consult Appendix A.

For all of these issues, we suggest that Cengage first performs user testing that focuses on the issues that we point out. The case may be that some of the changes that we propose would actually require more resources than we anticipate, so it would be valuable for them to assess the true severity of all of these issues.

Our group also found many positive aspects of the OVIC Issues section. We thought that being able to download articles as PDF, HTML, or in audio was a very nice adherence to heuristic 7 (flexibility and efficiency of use) and we also were impressed that articles can be translated to several other languages, also following heuristic 7.

Maps Section

The Maps section is clean and visually appealing, but has very severe problems with the usability of navigation area.

The most severe problem with Maps section is that the navigation is poorly designed. At the top of the page, there is an area with forward and back navigation buttons that enables users to choose the map they want to see. However, the content is sorted alphabetically and the area can only show five maps at a time. If a user wants to see the map whose name starts with Z, he or she may need to click the forward button more than ten times. This problem violates the third heuristic: that user should be given freedom and control over navigation. We consider it a major design flaw and give it 3 out of 4 for severity. We recommend that Gale develop a more accessible and flexible navigation system, possibly just a simple list of all available maps.

There are also two minor usability problems. First, every map has an associated "More on *this issue*" link that links to the related issue. For example, below the map of AIDS rates there is a link called "More on AIDS". However, a user may not be able to know what is the destination that the link points to? Does it mean more maps or just go to the issue page? We consider it a trivial inconsistency (severity 2 out of 4) that goes against heuristic 4 and suggest changing the link text to "View the issue page for..." Second, graphics and related data sets in the Maps section cannot be saved (to account's favorites) or downloaded, whereas most other content on the site can. It is an inconsistency (heuristic 4) and a flexibility issue (heuristic 7) with a severity ranking of 1. We recommend Gale add save and download functionality to the Maps section.

Resources Section

Generally, the design of the Resources section is problematic because there are two major defects, namely confusing section names and inflexible navigation that receive full points (4) for severity.

Firstly, the section name "Resources" is inappropriate because this section contains information about worldwide curriculum standards, which cannot be rephrased simply as "Resources". In other words, we are unclear about the purpose of setting up this section. We suggest changing the name of the section, or adding more relevant resources and an introductory paragraph that describes those resources. Secondly, the navigation does not support "undos". When a user enters the third level menu, the first two levels of the menu suddenly disappear and there is no way for him or her to go back. Additionally, when a user clicks a related subject link on the end-level menu, the new page is opened in the same window rather than in a separate window; when the user use the back button on the browser, the previous selection has been lost and he or she needs to repeat the clicks again. Our recommendation is to totally abandon the menu-style navigation and use the combination of tables, drop-down menus and selection tools.

Search Interface

On the whole, the search interface is well designed without severe usability issues, but we also discovered a few minor problems.

The good points of the search interface are the clean and simple design and the real-time suggestions when a user is typing. The most noticeable problem is the lack of instructions and explanatory information, which violates heuristic 10. For example, there is no explanation available for the uncommon term "Content Level" or "Lexile Range"; "Limit to" and "Limit by" are confusing when they appear simultaneously. We gave those problems 1 or 2 out of 4 for severity. We suggest Gale offering more contextual help for search interface: (1) attach an explanatory sentence to each input field and its title; (2) provide some external links to explain unusual terms.

Additionally, there are some other minor problems that are concerned with lack of control and functional flaws. For example, a user can add a row to add new search criteria, but cannot delete it; the "Jump to" function of narrowing down document types seems to only work in Internet Explorer. We suggest Gale correcting the errors to improve the functionality of advanced search.

Discussion

While our heuristic evaluation followed established procedures and best practices, there are some caveats to our study. Namely, our findings and recommendations are partially dependent on the prior experience of our group members. We are all graduate students with considerable technical competency and extensive experience using web sites and services. While we have made conscious efforts to approach the heuristic evaluation process with a fresh, unbiased perspective, there remains the possibility of unintentional influence due to our experience. This may have resulted in our group missing or overlooking certain usability issues that currently exist in the system. On the other hand, we may have included "false positives"—issues identified during heuristic evaluation that are not imputing actual users.

Formal usability testing (the final phase of our evaluation) will be more accurate, both in general and with regard to these heuristic evaluation caveats. Since usability testing will be conducted with actual users of the system, it may also surface some domain-dependent usability issues that were missed in this study. It will also provide an opportunity to validate our heuristic evaluation findings against real-life users of the system.

While we believe our presented findings and recommendations are valuable in their own right, further studies could provide additional insights. For instance, conducting a quick heuristic evaluation of the systems we compared to OVIC in our comparative analyze report may provide a good usability benchmark. Similarly, a heuristic evaluation of the previous version of the database could strengthen understanding of the reaction to the current version. Perhaps some of that response could be attributed to usability issues that were introduced during the development of the updated version.

Conclusion

Our heuristic evaluation of the OVIC system identified a number of usability issues and we have formulated a set of recommendations for improvement. The Issues section has several small issues that could result in a less than ideal user experience. The most prominent is the confusing labeling of the "Listen" function, which we recommend renaming. The Maps section contains many useful resources, but navigating between the various maps could be more flexible and accessible. The Resources section is ambiguous in concept and could also benefit from a retooled navigation system. The Search functionality is relatively well-conceived, but has a few minor usability issues, such as lack of documentation, that we recommend remedying. In terms of the site as a whole, we recommend adding a comprehensive help system and corresponding documentation. We also suggest a reevaluation of the native back button functionality site-wide to increase consistency with other websites as well to reduce confusion on the part of users.

While our findings provide actionable data on improving system usability, they may contain "false positives" that are not impacting actual users and may not include domain-dependent issues that only arise in real-world use. Formal usability studies provide more insight into these issues, especially as they pertain to actual users.

Our next step will be to conduct a survey of users in order to assess their views on system functionality, perceived usability, and overall satisfaction. Our survey questions will be informed by and the results referenced against the findings we have amassed thus far.

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Appendices

Appendix A: List of Usability Issues

Home Section

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
H01	The buttons Home, Issues, Maps and Resources do not allow the user to drill deeper from Home page. The user cannot go into any of the other portions of the system except for the landing page for that system.	Create dropdown menus under each section button.	3	1	Josh
H02	The system does a good job of using natural language that is easily understood (good)		2	0	Josh
H03	Consistency and standards are well thought out and implemented well throughout homepage(good)		4	0	Josh
H04	Errors are hard to create, good design prevents most errors (good)		5	0	Josh
H05	The system always presents the user with many of their options, leading to little need for recall (good)		6	0	Josh
H06	Very flexible, allows user to navigate to almost anywhere from almost anywhere (good)		7	0	Josh
H07	The homepage slideshows link to the corresponding issue page, which sometimes conflicts with its caption which describes an event rather than the issue	Clarify what homepage slideshow links to, Issue or current event	4	3	Hao
H08	Help / documentation is not visible (actually under "About Us", which is illogical)	Make "Help" tab at the bottom of each page in the footer	2	4	Hao
H09	The Featured Video preview is the logo of the news agency - like an advertisement	Change the preview to a screenshot in the middle of the video	2	3	Hao
H10	Visited links to issue pages and documents do not turn red, but View All does. Confusing.	Remove the specific style for visited "View All"s	4	2	Hao
H11	When loading, there is a proper indicator (good)		1	0	Hao
H12	The slideshow will not roll automatically, no one will click the links	Add an automatic rolling function	2 or 8	3	Hao
H13	Background image is sometimes distracting or disturbing the content.	Add opacity to the background image.	8	2	Hao and Travis

H14	The number of issues should be appended to View All, like the one in issue page	Append number of issues	1 and 4	1	Hao
H15	The top navigation bar does not highlight the currently selected section (also on other pages)	Create a different style for active menu items	1 (3)	3	Mikko
H16	Listen button appears on every document-level page. e.g. Video has a listen button, which is confusing; Audio has two listen buttons	Move the listen button for accessibility issues to toolbox area OR change the name of "Listen"	2	4	Hao

Issues Section

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
I01	Sometimes pictures are distorted (e.g. pictures for issues displayed in the homepage slides)	Create standard process for image uploading that results in the right resolution images every time	8	3	Hao and Mikko
I02	Hover over the "Share" link will trigger the "share" pop-up, which block the following links (citation, print...)	Tailor hover behavior or put the mentioned links in different areas	3	3	Hao
I03	The "Browse Issues" page does not clearly display that it is actually a subpage of "Issues"	Highlight the "Issues" section link	3 and 4	3	Mikko
I04	Nothing happens when you click an "Expert Pick" icon	Possibly JavaScript bug needs fixing	3 and 5	3	Mikko
I05	On an issue page I clicked a featured video. There I could not see video, but saw a "Listen" link. I clicked it and got a message: "FILE NOT FOUND (CFIIV)". Under this there is a text "To view this video, click here:" (the line ends here). Under this there is an icon of PBS Newshour, which is a link.	Create more informative error messages (and prevent errors from happening)	3 and 9	3	Mikko
I06	The difference between Tools sidebar items "Bookmark" and "Save" is unclear.	Since the "Bookmark" option merely displays the page URL, eliminate this option to remove confusion (users can still bookmark the page using their browser and/or copy the URL elsewhere).	4 and 2	2	Travis
I07	Spinning loading indicators lack a time-to-completion estimate. When loading longer than normal, it is unclear whether there is an error or simply a delay.	Add a percentage loaded indicator, so users can determine the difference between a slow connection and a stalled connection.	1	2	Travis
I08	Articles can be "saved" but not topics (although topics can be "bookmarked").	Allow users to "save" topics as well as articles.	7	2	Travis

I09	Articles downloaded as PDFs contain no metadata (filename is "Download.pdf"; Title, Author, and Subject fields are blank).	Integrate article metadata at a deeper level in the system and pass that data to the PDF converter.	7	2	Travis
I10	On pages with original audio / video content, the difference between the two "Listen" links is unclear (machine read vs. audio broadcast).	Move the machine reading option to the Tools sidebar.	2	4	Hao and Travis
I11	Following the link to original audio broadcasts brings the user out of OVIC to an external site, which requires navigating a completely different interface to actually listen to the audio.	Clearly inform the user that the original audio is only available on a third party site, or provide the audio directly within OVIC.	3	2	Travis
I12	The is no clear delineation between content types on topic pages (ex: magazines vs. news).	Provide a key explaining the various content types or provide pop-up descriptions for each.	2	2	Travis
I13	The Citation Tools dialog box is overly verbose.	Reword dialog box text to be more straightforward and helpful. If needed, refer user to separate page with additional details.	8	2	Travis
I14	Article font size settings must be adjusted for every page (setting is not remembered per user or session).	Provide an option to save preferred font size to user preferences.	7	2	Travis
I15	Front page of issues section looks cluttered because it lists all issues	Add categories; organize the page	8	2	Josh
I16	When "Bookmark" is clicked, it will show a pop-up that instruct you how to copy-and-paste instead of directly bookmarking this page.	Add an script that automatically bookmarks this page OR add an button that will directly paste the address to system clipboard	2	2	Hao
I17	Often there is a significant delay when "Tools" sidebar is being loaded, but there is no indicator. It will appear suddenly.	Add a loading indicator for Tools, like other areas	1	2	Hao
I18	Table of content should be more obvious, rather than staying on the sidebar below "Tools"	Move the Table of content to a more obvious area	2	2	Hao
I19	Error is usually all capitalized text in red with only diagnostic code, which is not user-friendly	Change the output style of error and explain the error code	9	2	Hao
I20	In articles there are red words that look like links but are not	Explain these; make them links if they are supposed to lead somewhere	4	2	Mikko
I21	If you translate a document to some language using the tool, then by pressing Back you get back to the portal page, instead of the English version - the concept of a "page" is not consistent	Add consistency; add a clear and easy way to get back to the previous content	1 (3)	2	Mikko

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
I22	The difference between a "topic" and an "issue" is unclear. A page selected from within the Issues section is labeled as a Topic.	Make the language consistent throughout the site.	4	1	Travis
I23	On article pages, the breadcrumb "Topic" link should be labeled with actual name rather than the generic term.	Change the "Topic" link to the title of the currently selected topic.	3	1	Travis
I24	On article pages, content level icons look clickable, but aren't.	Either allow users to click on the content level icons to show a description, or show the pop-up description without changing the user's cursor.	4	1	Travis
I26	There is no system status indicator but nothing ever seems like it acts out of order	Add a clear way to see where the user is and what is happening	1	1	Josh
I27	It's hard to find your desired issue in "View All Issues" page	Provide links that jump to issues start with "a", "b", "c"....	6	1	Hao
I28	"Share successful" is not necessary, need an extra step to close the window	Remove the window	8	1	Hao
I29	User cannot see the related issues at the document level, and go back to the corresponding issue	Add "related issues" sidebar area on document-level page	3	1	Hao
I30	On article pages, the gale logo looks a lot like a process wheel, making the user wonder if it is loading something	Consider moving the logo or making it look more colorful or distinct	1	1	Mikko
I32	"Table of Contents" and "Related Subjects" use different font sizes and list styles	Use consistent font sizes	4 and 8	1	Mikko
I33	Users can download articles as HTML, PDF, and audio (good).		7	0	Travis
I34	Users can translate documents to several other languages (good).		7	0	Travis
I35	Users can adjust the article font size (good).		7	0	Travis

Maps Section

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
M01	Maps can only be navigated alphabetically and then only five items at a time.	Change Map navigation to a simple list.	3	4	Travis
M02	Maps cannot be downloaded or saved.	Allow maps to be downloaded and/or saved.	7	2	Travis
M03	"More on '...'" Link under a map is confusing: more maps, or more related issues?	"More on '...'" Links should clearly say "View '...' Issue page"	4	2	Hao

M04	Home, Issues, Maps, Resources buttons do not allow user to drill deeper from Maps page	Add a drop-down menu under each section button that allows the user to go to a part of that system that is deeper than the landing page	3	1	Josh

Resources Section

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
R01	There is no explanation of resources section. The content under "Resources" is confusing.	Add an explanatory paragraph.	10 & 4	4	Travis & Hao
R02	User cannot go back when enter the third-level menu. The first two levels disappear.	Change the presentation of the menu OR use traditional combination of dropdown menu, tables and other selection tools.	3	4	Hao
R03	"Related subject" is opened in the same window. User cannot go back when finishes the search	Open "Related subject" in a new window	3	4	Hao
R04	Curriculum standards: nothing happens after grade selection		3 / 9	3	Mikko
R05	Does not really follow standards that other sections do as far as navigation of "resources". Must scroll, expand nodes when desired resource is found.	Implement a search function or consider a different way to implement navigation of resources.	4	2	Josh

Search Functionality

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
S01	The search bar offers live as-you-type suggestions (good).		5	0	Travis
S02	In-line loading can cause page elements to move.	Load page elements in order from top to bottom to minimize individual sections from moving as other items are loaded.	2	2	Travis
S03	No explanation of "content level" is provided.	Provide pop-up descriptions of these items or link to external resources.	10	2	Travis
S04	Content level indicator is not intuitive. Visual communication is against common perception.	Use cartoon icon or simple text to indicate the content level	2	3	Hao
S05	Jump to "A", "B", "C"... links in document type area in advanced search interface do not work in Chrome or Safari	Modify to code to make them cross-platform	8	2	Hao
S06	There is no explanation for "Lexile range"	Add an question mark that links to the description of Lexile range	10	2	Hao

S07	You can add a row for search criteria, but there is no way to delete a row	Add a delete button	3	2	Hao
S08	The "Limit to" is confusing when presented with "Limit by" simultaneously	Add an explanatory caption	10 and 4	3	Hao
S09	The terms under "Limit to" are totally new, but there are no explanations.	Change the terms OR provide explanations.	4	2	Hao

Miscellaneous Issues

ID	Issue	Recommendation	Heuristic	Severity	Evaluator
C01	"Change Resources" link is unclear and not functional (just reloads homepage)	Remove "Change Resources" link	4	3	Travis
C02	System is often slow to load new pages	Increase resources for OVIC system. (We know, easier said than done)	1	4	Travis
C03	No help or introduction to system functions	Create a video walkthrough tutorial for new users	10	3	Travis
C04	Logo does not link back to homepage	Make main logo link back to homepage when clicked	4	2	Travis
C05	Navigation and Search bars available on all pages (good)		3	0	Travis
C06	"My Activity" is not clickable	Create a page that shows an overview of my activity	4	1	Hao
C07	Document/navigation path does not feature actual names of the accessed pages (a general problem, not limited to a specific section of the website), ambiguous what the current page's location and classification is	Include actual names of accessed pages and in paths taken by the user	3 (1)	3	Mikko
C08	Document/navigation path does not have the root level and its function is not consistent		3	3	Mikko
C09	"Back" link or function totally missing	Add a "back" link, also including a visual aid would be even better	3	4	Mikko

Appendix B. Screenshots of Violations of Heuristics

H01. The buttons Home, Issues, Maps and Resources

H07. Homepage Slideshow Links

H08. Help Documentation is Not Visible

H09. Looks Like An Advertisement

H10. Visited Links Do Not Turn Red, View All Does

H12. Slideshow Does Not Roll Automatically

H13. Background Image Is Distracting
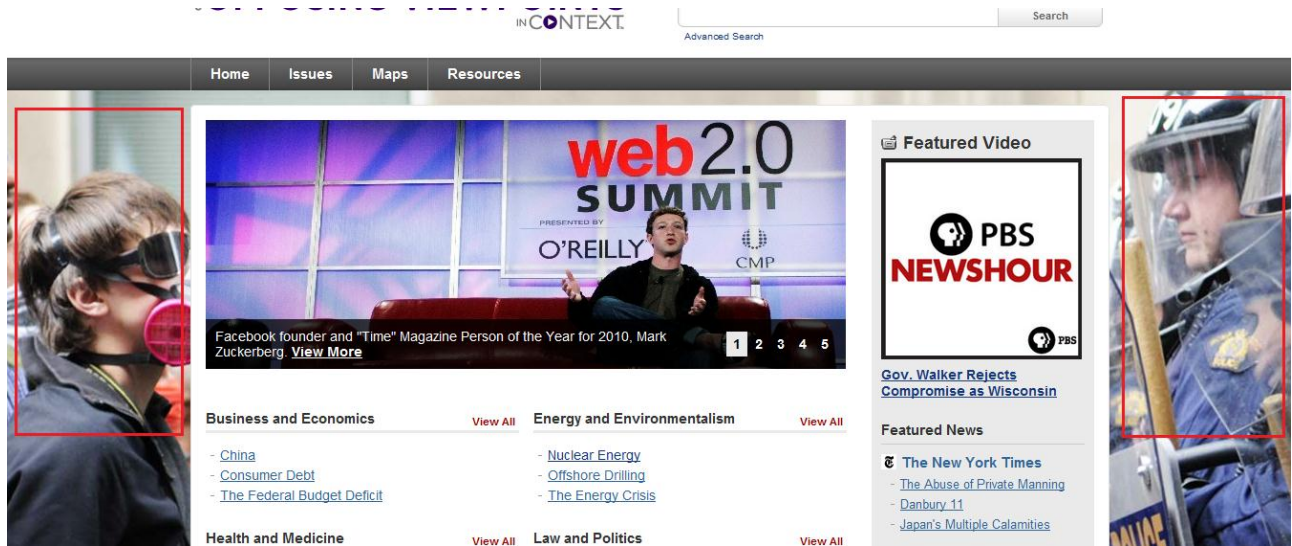
H14. Number Of Issues Should Be Appended to View All
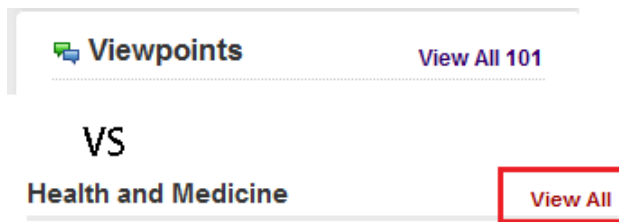
H16. Listen Button Appears On Every Document-level Page

Gov. Walker Rejects Compromis
Union Protests Continue

The Online NewsHour, 2010

▶ Listen ⑦

To view this video, click here:

PBS Newshour
Discusses the continuing protests in Wisconsin's capitol as Govern
striking public employees about collective bargaining rights.

C01. Change Resources Link Is Unclear
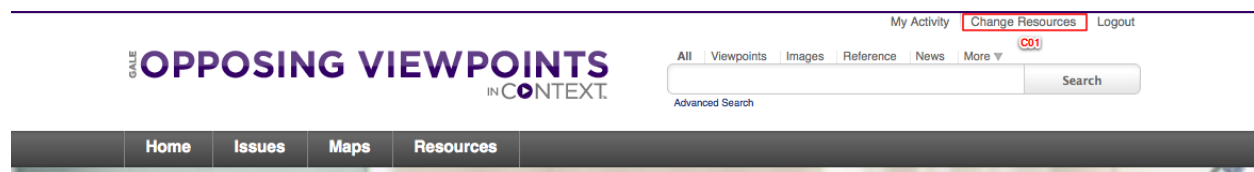
C04. Logo Does Not Link Back To Homepage
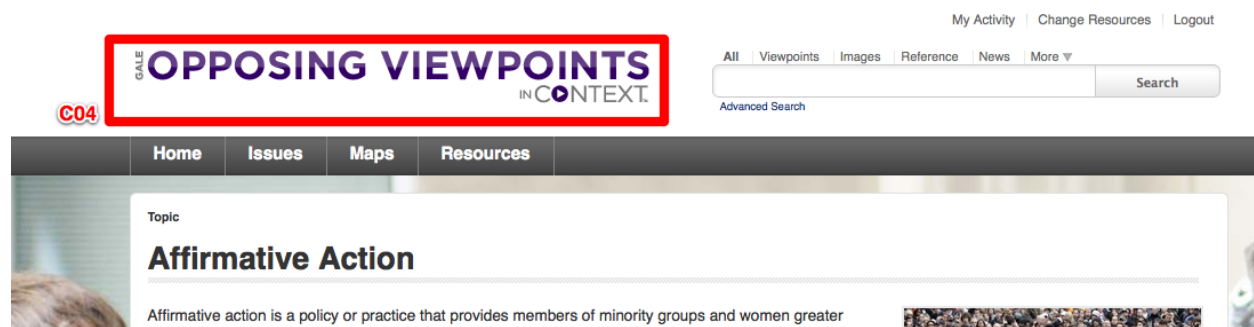
C06. "My Activity" Is Not Clickable
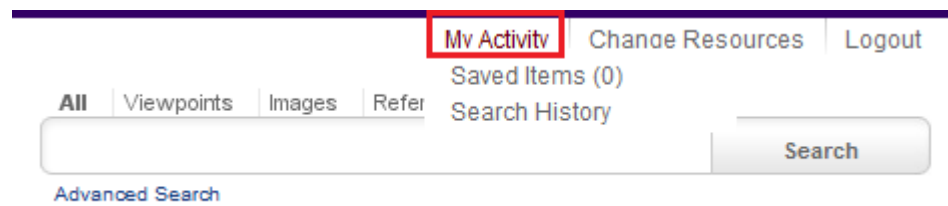
I01. Sometimes Pictures Are Distorted

Facebook founder Mark Zuckerberg

I02. Share Link Blocks Other Links
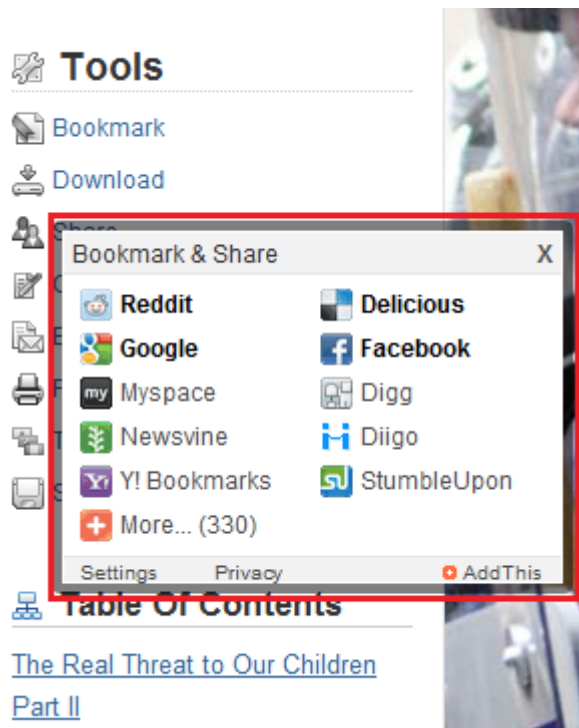
I05. Listen Link File Not Found
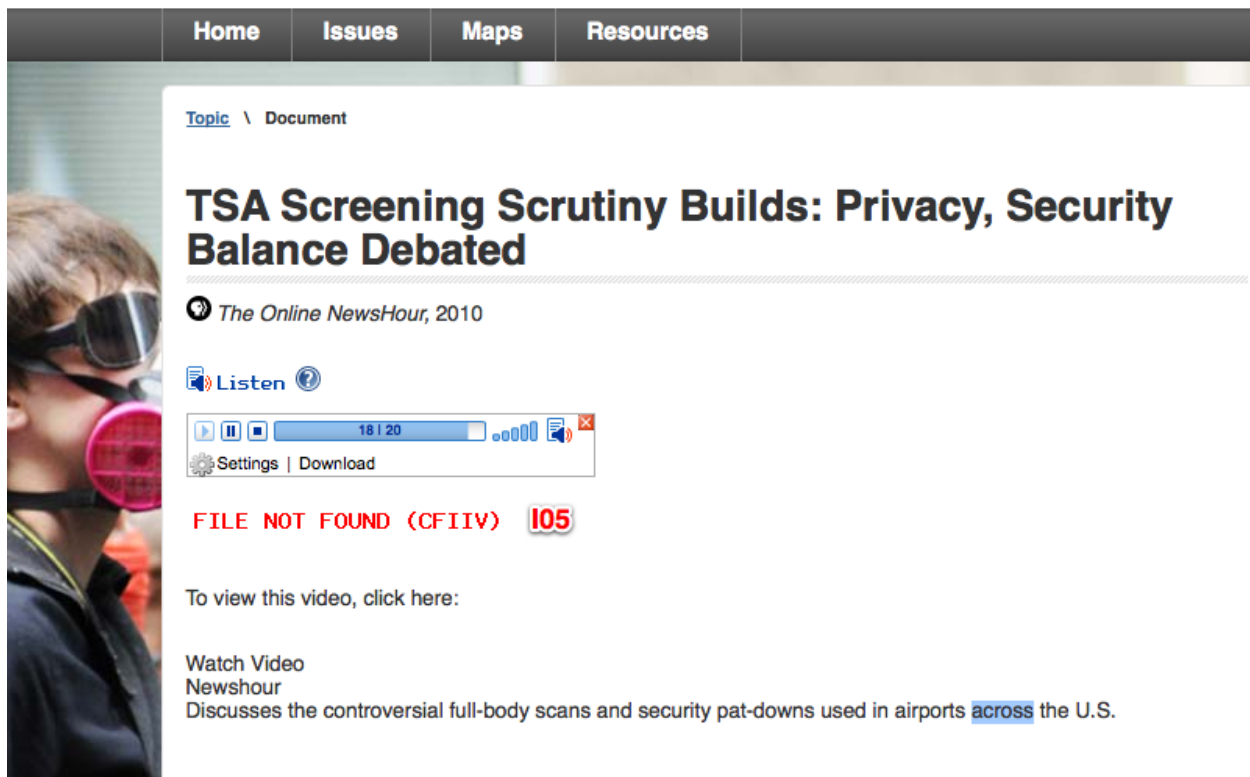
I06. Difference Between Save and Bookmark Unclear

I07. Spinning Loading Indicators Lack Time To Completion Indicator

I08. Articles Can Be Saved But Not Topics

Tools

Bookmark

Download

Share

Citation Tools

Email

Print

Translate

Save

Tools

Bookmark

Share

Email

I09. Articles Downloaded As PDFs Contain No Metadata

Download.pdf (page 1 of 5)

More Adoption Regu
Potential Parents fro

Issues in Adoption, 2009
Michael Crowley, "The Cruelest Con," *Read*
Association, Inc. Reproduced by permission

Michael Crowley is senior editor at *The New*
Magazine, Slate, and *The Atlantic.*

Emotionally Crushed

Document Info

Summary | Attributes

Title: –
Author: –
Subject: –
Content Creator: –
PDF Producer: iText 2.0.8 (by lowagie.com)
Creation date: 3/16/11
Modification date: 3/16/11
Keywords: –

I10. Difference Between Two Listen Links Is Unclear

Topic \ Document
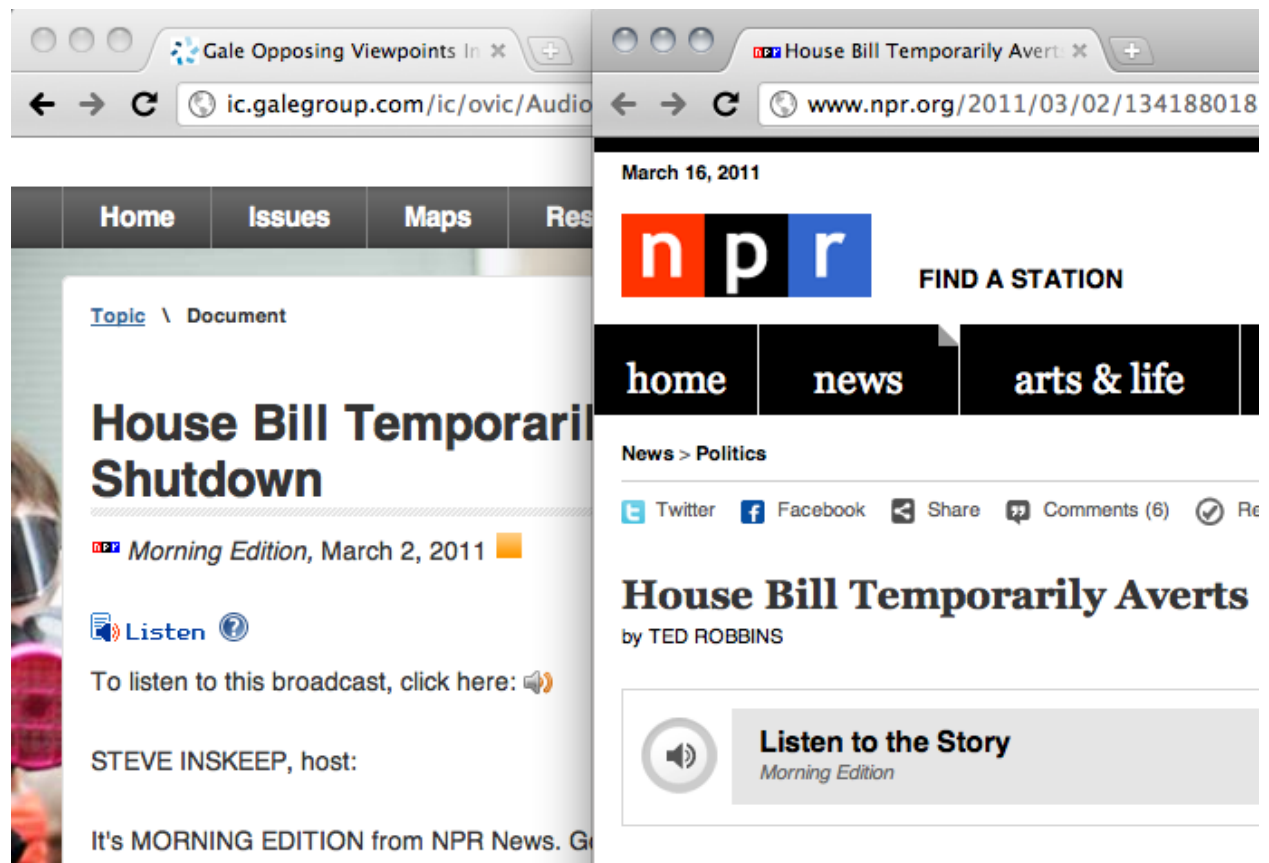
House Bill Temporarily Averts Government Shutdown

Morning Edition, March 2, 2011

Listen

To listen to this broadcast, click here:

I11. Following Listen Link Takes User to External Site

Gale Opposing Viewpoints In

ic.galegroup.com/ic/ovic/Audio

Home   Issues   Maps   Res

Topic \ Document

House Bill Temporaril Shutdown

Morning Edition, March 2, 2011

Listen

To listen to this broadcast, click here:

STEVE INSKEEP, host:

It's MORNING EDITION from NPR News. G

House Bill Temporarily Avert

www.npr.org/2011/03/02/134188018

March 16, 2011

n p r

FIND A STATION

home   news   arts & life

News > Politics

Twitter   Facebook   Share   Comments (6)   Re

House Bill Temporarily Averts

by TED ROBBINS

Listen to the Story
Morning Edition

I12. No Clear Delineation Between Content Types On Topic Pages

I13. Citation Tools Box Dialogue is Overly Verbose

I16. When "Bookmark" Is Clicked A Lightbox Pops Up Rather Than Bookmarking Page

I17. Significant Delay When Tools Sidebar is Being Loaded

Web Sites

A A

3s Later

🖧 **Table Of Contents**

The Real Threat to Our Children
Part II

🔩 **Related Subjects**

Online social networks

06, the United States House

se of Representatives,

b **Sites**

Jnited States House

presentatives,
ican Library

A A

📝 **Tools**

📑 Bookmark

📥 Download

👥 Share

📝 Citation Tools

📧 Email

🖨 Print

🔁 Translate

💾 Save

I18. Table Of Content Should Be More Obvious

Online Social Networking Has Altered the Rules of Social Interaction

✴ *Online Social Networking, 2008* 🟧

🔊 **Listen** ❓

Dan Bobkoff, "In the Age of Facebook, Students Have Few Secrets," *Wesleyan Argus*, April 15, 2005. Copyright 2004-2007 *The Wesleyan Argus*. All rights reserved. Reproduced by permission.

At the time this article was written Dan Bobkoff was an executive editor of the Wesleyan Argus, *a paper published by the undergraduates of Wesleyan University.*

When Susannah Fox '92 attended Wesleyan, she often spent her Wednesday nights at "Blues and Brews," a weekly house party held by Eric Halperin '92 and his friends. On one of these Wednesdays—Robert Cray playing in the background—Fox and Halperin met by the keg and hit it off. The trouble was, after that night, Eric disappeared.

📝 **Tools**

📑 Bookmark

📥 Download

👥 Share

📝 Citation Tools

📧 Email

🖨 Print

🔁 Translate

💾 Save

🖧 **Table Of Contents**

Students Believe They Are Safe
Professors Are Joining Facebook
People Now Research Each Other
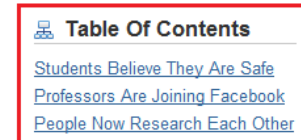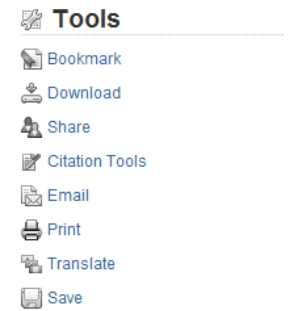
I19. Error Is Unfriendly Text

countries. For example, Table 8.4:

📷 **Document Images**

FILE NOT FOUND (CFIIV)

FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)

shows that in 2003 women aged 19 and younger in the United States had an abortion rate of 22 abortions for every 1,000 women. This rate was higher in 2003 than for most other countries shown on the list; countries with higher teen abortion rates in 2003 were New Zealand, Sweden, Estonia, England and Wales, and the Russian Federation. The United States has made progress in the teen abortion rate, however. In 1996 the rate was 29 abortions per 1,000 women aged 19 and younger. The only industrialized countries shown in Table 8.4:

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FILE NOT FOUND (CFIIV)

FILE NOT FOUND (CFIIV)

with higher teen abortion rates in that year were Estonia, the Russian Federation, and Hungary.

FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)

International comparative statistics are usually difficult and time consuming to compile, so they are often dated. As of mid-2009, the most recent comparative compilation of pregnancy, birth, and abortion rates among teenagers in the United States and other developed countries from the Guttmacher Institute used data from the mid-1990s. In *Teenage Sexual and Reproductive Behavior in Developed Countries: Can More Progress Be Made? Executive Summary* (November 2001, http://www.guttmacher.org/pubs/summaries/euroteens_summ.pdf), the Guttmacher Institute uses these data to show that the United States in the mid-1990s had the highest rates of teen pregnancies, births, and abortions among Western industrialized countries in general, and had higher rates than Sweden, France, Canada, and Great Britain in particular.

FILE NOT FOUND (CFIIV)
FILE NOT FOUND (CFIIV)

The Guttmacher Institute reported these figures as part of a study conducted to see what the United States could learn from countries with lower teen pregnancy rates. In *Teenage Sexual and Reproductive Behavior*

I22. Difference Between Topic And Issue Is Unclear
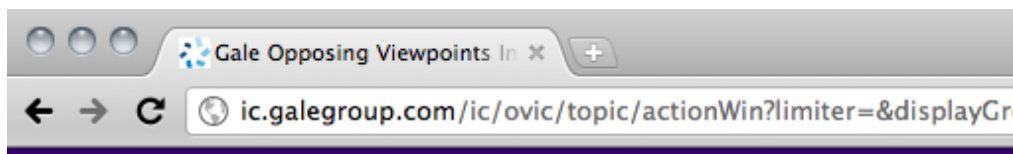
I23. Breadcrumb Should Be Labeled With Actual Name

I24. Content Level Icons Look Clickable But Aren't

## I27. Hard To Find Issue In "View All Issues" Page

Browse Issues

Abortion	Iraq
Abortion: Late-Term/Partial-Birth	Iraq Wars
Abortion: Parental Consent	Islamic Fundamentalism
Activism	Israel
Addiction	Japan
Adoption	Juvenile Drug Abuse
Advertising	Juvenile Offenders
Affirmative Action	Labor Unions
Afghan War	Marijuana
Agricultural Subsidies	Mass Media
Agriculture Industry	Media Violence
AIDS	Medical Care
Airport Security	Medical Ethics
Alcohol and Tobacco Advertising	Medical Marijuana
Alcoholism	Medicare
Alzheimer's Disease	Mental Disorders
American Housing Collapse	Mental Health
Amnesty	Middle East
Animal Experimentation **and more...**	Military Deployment
Animal Rights	Minimum Wage
Arab-Israeli Conflict	Mobile Phones

I28. "Share successful" Is Not Necessary
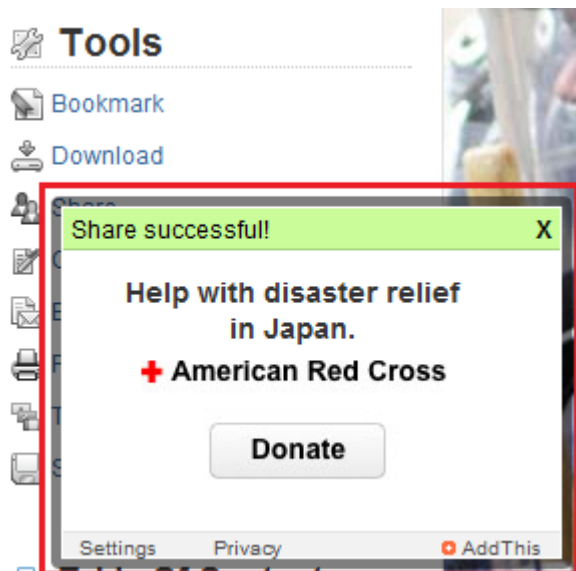
I29. Cannot See Corresponding Issues At Document Level

Topic \ Document

Online Social Networking Has Altered the Rules of Social Interaction

Online Social Networking, 2008

Listen

Dan Bobkoff, "In the Age of Facebook, Students Have Few Secrets," *Wesleyan Argus*, April 15, 2005. Copyright 2004-2007 *The Wesleyan Argus*. All rights reserved. Reproduced by permission.

I31. Images Often In Wrong Aspect Ratio

M01. Maps Can Only Be Navigated Alphabetically

M03. "More On…" Link Under Map Is Confusing

By state, the estimated number of people living with an HIV diagnosis or living with an AIDS diagnosis, 2007, and the rate of AIDS diagnoses (per 100,000 population), 2008
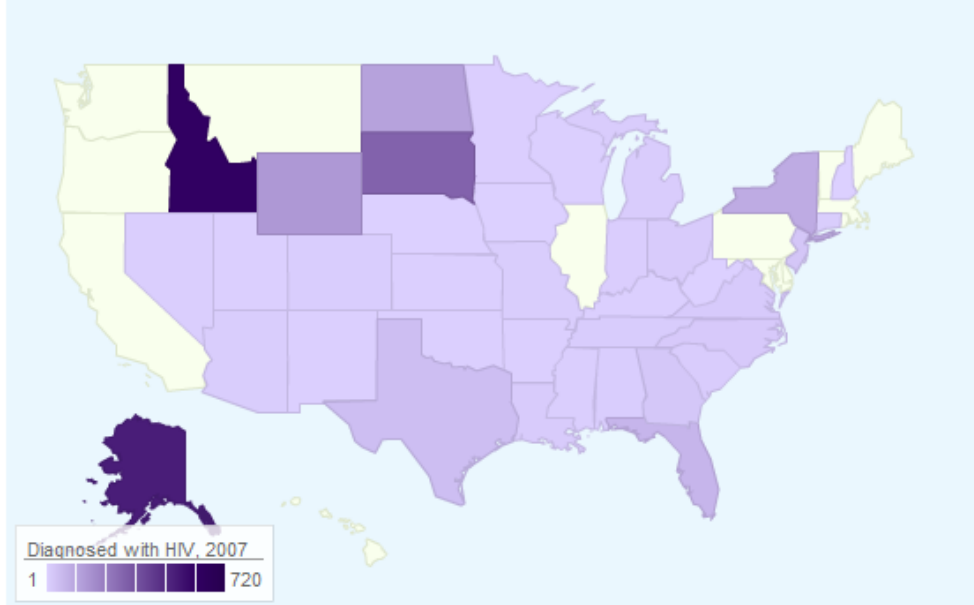
Adapted from "Estimated number of adults and adolescents living with an AIDS diagnosis or a diagnosis of HIV infection at the end of 2007, and reported AIDS diagnosis rates in 2008, by state and dependent area," AVERT.org http://www.avert.org/usa-states-cities.htm (accessed July 15, 2010)

More on AIDS

R01. No Explanation of Resources Section

R02. Cannot Go Back Once Third-Level Menu Is Entered
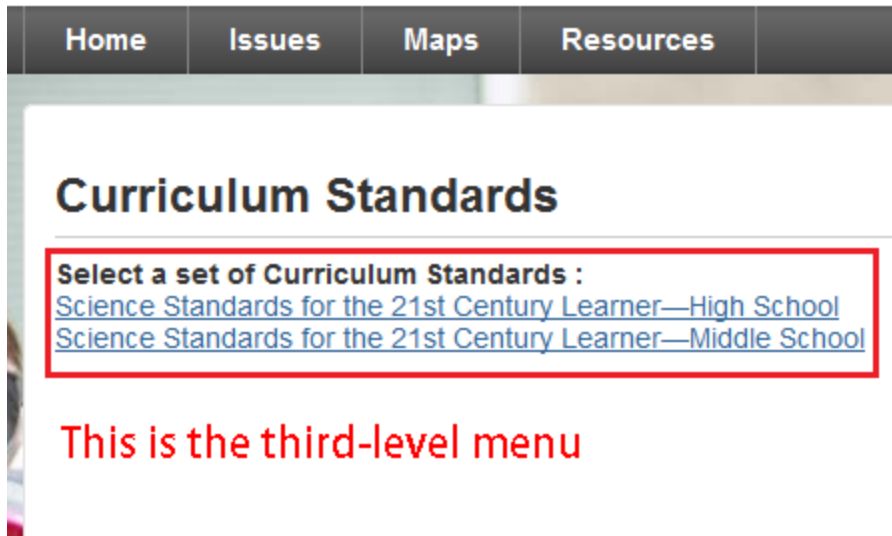
R03. "Related subject" Opens In Same Window, Prevents User from Going Back after Search is Complete

S02. Inline loading Causes Page Elements to Move
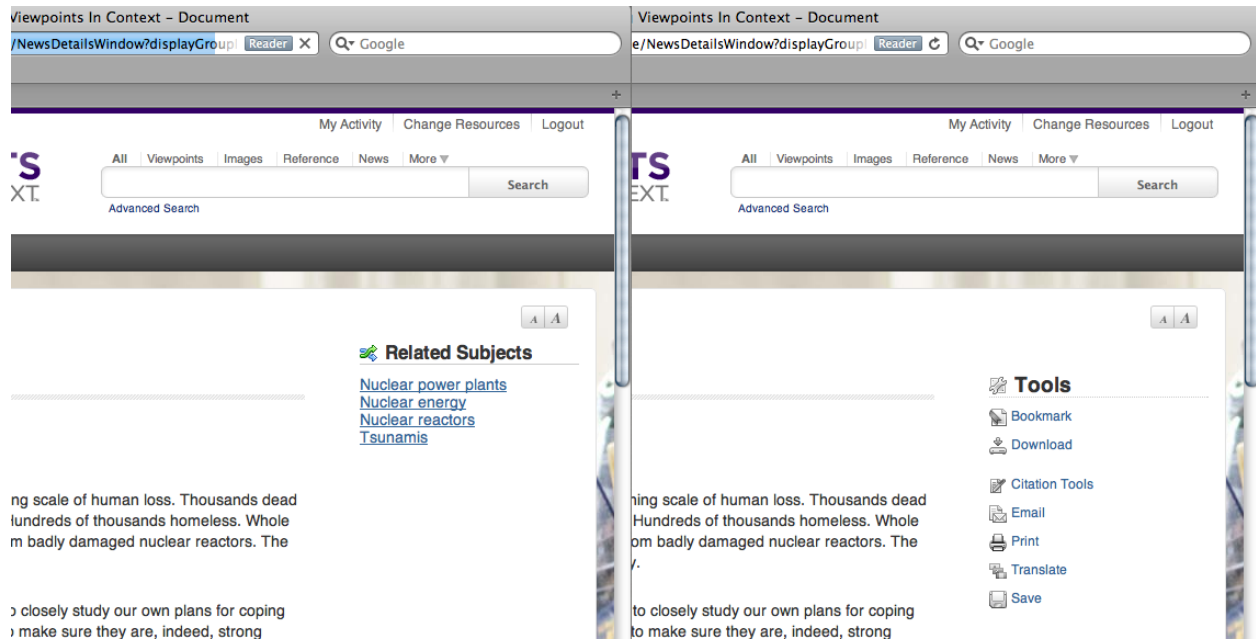
S03. There is No Explanation for Content Level

S04. Content Level Indicators Are Not Intuitive

S05. "Jump to" Links does not Work in Non-IE Browser

S06. There is No Explanation for Term "Lexile Range"

Lexile Range

Minimum [   ]   Maximum [   ]

Minimum value is 0 and maximum is 1300

S07. You can Add Rows, But Cannot Delete Rows

Find

Search for [   ] in Keyword [▼]

And [▼] [   ] in Keyword [▼]

And [▼] [   ] in Keyword [▼]

Add row

S08. "Limit To" and "Limit By" are Confusing

Limit To

☐ Full Text Documents
☐ Peer Reviewed Journals

Limit By

S09. Terms under "Limit to" are Totally New, No Explanation is Provided

Limit To

☐ Full Text Documents
☐ Peer Reviewed Journals