

## Summary of Accessibility Research and Observations: Jan 25/01

### Research performed

- Review of W3C Guidelines for Accessibility (attached)
- Email correspondence with colleagues from other universities
- Two 1.5 hr informal sessions with blind users at the Center for Adaptive Technologies at Indiana University, Main Library. JAWS Braille technology used.
- Trials performed informally in lab using free download of JAWS 3.7 speech recognition software

### Summary of issues

- Blind users DO NOT want alternative versions developed if at all possible. They would rather experience the same site that everybody else has...as long as it is usable for them.
- Login screen can be made more functional, informative and quicker to login to
- Need for meaningful ALT TAGS on all image maps, and graphic links
- Careful application of tables is required due to JAWS mechanism for handling tables
- Forms objects (checkboxes, pulldowns, etc.) are handled inconsistently by JAWS

Issue	Recommendation
<b>OneStart login screen</b>	
<p>The login screen needs to serve more as an introduction to the portal environment and less as a replica of the actual portal. The current design, with its login channel may confuse users initially to think that they are already in the portal. The embedded login channel may also slow users in determining the login process. Since guests will be able to login to view a sample portal, there seems to be little benefit of replicating the portal channels on this screen.</p>	<p>1. The new login screen could have logo, tagline, login area (close to top to improve efficiency), and space for system msgs or announcements re: the portal and any new additions or revisions to watch for.</p> <p>A link for first time users could be placed here as well that provides instructions/tutorial... A link re: ADA compliance and for visually impaired users could also be provided to provide any hints for using the portal.</p>



<b>Personalize window</b> (including Content, Layout, Color and Add/Edit Pages)	
<p>The current window title of “Content Personalization for <i>username</i>” is inaccurate as there are actually multiple personalization options within the new window. The window name is critical for JAWS users since it introduces them to the new window and its various elements.</p>	<ol style="list-style-type: none"> <li>2. Rename the Personalize window to reflect the multiple options contained: e.g. “Personalization Options” or “Personalization Window”.</li> <li>3. Ensure that all new windows (e.g. Help windows) are labeled so as to accurately inform the user (e.g. Help for Weather Channel).</li> </ol>
<p>The greater the amount of content in any one section of the Personalize window, the farther apart are the <i>Save and Close</i> buttons. This proved to be very difficult for JAWS users to navigate as they had to proceed through the entire text to know there was a button at the bottom of the screen. The problem was compounded by JAWS tendency to enter into <i>Forms mode</i> once it encountered a Forms object (checkbox, pulldown menu, etc.) Once the system entered Forms mode, users expected to be able to hit “Enter” or “Escape” to get out of the window and return to the portal, but it didn’t seem to respond at that point.</p>	<ol style="list-style-type: none"> <li>4. More testing is required here to know just what the best solution might be. Whether the design involves new browser windows or a switch to a new web page, we must ensure a graceful exit from the Personalize section back to the portal.  A more descriptive ALT TAG on the Save and Close button OR a renaming of the button entirely might be the answer (in conjunction with the overall interaction design for how the Saving sequence works for the tabs inside the Personalize window).</li> </ol>
<p>Users did express a desire to be able to customize their content and layout (not N or W or colors, but everything else).</p>	<ol style="list-style-type: none"> <li>5. Maintain a compartmentalized approach to Personalize features. This makes it easier for users to ignore features they don’t want or cannot make use of (e.g. color).</li> </ol>

<b>Content window</b>	
<p>As we have discussed, the current design is not scalable. Even its current design is largely unusable by JAWS users:</p> <ul style="list-style-type: none"> <li>• JAWS does not distinguish between the inactive (gray) checkboxes and the active checkboxes</li> <li>• The visual two-column display goes unnoticed by JAWS users and actually causes confusion for them since JAWS reads tables row by row. Because they don't see the difference between narrow and wide columns, the N and W labels hold no value for them.</li> <li>• The column of generic Help icons requires specific labels for each icon in order for JAWS users to recognize its purpose. Proximity alone is inadequate.</li> <li>• One of the most common strategies for JAWS users is to Search for the item they want. Currently, this feature does not exist.</li> </ul>	<ol style="list-style-type: none"> <li>6. Combine the Content and Layout sections into one window pane. This would allow for two methods of changing content and layout (one that employs Drag and Drop-D&amp;D, and one that is more ADA compliant).</li> <li>7. For the D&amp;D pane, provide content channels in a scrollable field with a "Add to my Page" button that moves the selected item into the drag and drop area below it. Multiple selections could be made by ctrl-clicking. The selected items would immediately appear in the D&amp;D area below and be available for reordering within and between columns.</li> <li>8. An "About this Channel" button would also be available to provide the Help window for a selected channel.</li> <li>9. The ADA pane would present selected channels in more of a list format with the option to reorder channels using simple (move upwards, move downwards, move to other column) buttons or links.</li> <li>10. Remove the choice of whether a channel is W or N for users. Every channel will be preset in a format appropriate for its content (either single page, narrow or wide). Removing the N/W criteria will allow simpler selection, but may require additional feedback to handle certain selections made (e.g. requesting a single column channel to be placed on a page that is set to 2 or 3 columns).</li> <li>11. Allow users to select different methods for locating content that is available to them. This might include: <ul style="list-style-type: none"> <li>• Search feature (keyword entry)</li> <li>• Alphabetical listing of entire set of channels</li> <li>• Categorical listing (by activity type)</li> <li>• Recent additions (to view what the latest additions to the portal are)</li> <li>• Current selections (to view only the channels you currently have selected).</li> </ul> </li> </ol>

<b>Layout window</b>	
A drag and drop will be unusable by JAWS users. If this approach is used, an alternative method will have to be made available to be ADA compliant.	12. See #5 above... The tabs involved might now be presented as "Content & Layout" with an opportunity on the personalize page to choose a button version that is more ADA compliant.
<b>General</b>	
The popup confirmation window that follows the users' action of deleting a channel asks if they want to "close" the channel, yet the button name is currently "delete".	13. Use a more descriptive ALT TAG on all buttons and graphic links to ensure that the item is specifically tied to the action (e.g. Remove Sports channel from this page).
Users liked the idea of a calendar, but the current calendar channel causes JAWS problems due to its tendency to read rows. Many blind users have never seen a calendar before and have no graphical frame of reference so they quickly lose track of what the numbers are representing (days, months, etc.?).	14. Future calendar design may need an alternative display in order to be ADA compliant. One solution might be to provide options for displaying months, days and events in regular text form like the datebook section of the newspaper.

### Current Personalize Window Dimensions (Color)

