Accessibility Considerations for Learning Management Systems

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The answer is...

ATutor
(http://www.atutor.ca/)

Any idea what the question may be?
Overview

- Technical vs. Usable Accessibility
- Questions that started it all...
- Defining the 3 C's
- Planning and Supporting Accessibility
- Resources
Defining Accessibility

- **Technical Accessibility**
  - Content developed such that it meets "X" technical standard

- **Usable Accessibility**
  - Content developed such that an individual with a disability can interact with the information
<table>
<thead>
<tr>
<th>Questions...</th>
</tr>
</thead>
<tbody>
<tr>
<td>● How accessible is &quot;X&quot; LMS, because that is what we use on our campus?</td>
</tr>
<tr>
<td>● Can a student with a disability use &quot;X&quot; LMS if they enrolled in our online courses?</td>
</tr>
<tr>
<td>● We need to get a new LMS and have been told none are fully accessible or 508-compliant – what are we supposed to do?</td>
</tr>
</tbody>
</table>
The 3 C's

- Container
- Capability
- Content
Container
Container

- Navigation
  - Headings, Skip Links, Tab-key
- Images
  - Was description provided (alt) and meaningful
- Frames
  - Meaningful description
- Discussion Boards/Forums
  - Was the interface functional with AT
## Container: Navigation

<table>
<thead>
<tr>
<th></th>
<th>Blackboard 7.1</th>
<th>Moodle 1.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headings</td>
<td>Limited</td>
<td>Multiple</td>
</tr>
<tr>
<td>Skip Links</td>
<td>Limited</td>
<td>Multiple</td>
</tr>
<tr>
<td>Tab-key</td>
<td>Functional</td>
<td>Functional</td>
</tr>
</tbody>
</table>
Assignment One

Assignment One

You are to complete assignment one. This assignment is to introduce yourself and say something nice about the instructor.

Negative people will be beaten until they are happy.

Assignment Two

Assignment Two

This is assignment two and all the relevant information contained within. In order to pass this class, you will need to bring me a shrubbery.

Not too tall, and not too short.

Assignment Three

Remember to Finish Assignment Two!

Remember to finish the discussion board option in assignment two.
## Container: Images

<table>
<thead>
<tr>
<th></th>
<th>Blackboard 7.1</th>
<th>Moodle 1.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptions Provided</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Informative</td>
<td>Varies</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Blackboard 7.1</td>
<td>Moodle 1.8</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td>Frames Identified</td>
<td>Yes</td>
<td>NA</td>
</tr>
<tr>
<td>Informative</td>
<td>Yes</td>
<td>NA</td>
</tr>
</tbody>
</table>
Discussion framework is more complex in Blackboard vs. Moodle interface
- Multiple sort, view, and reply options

The addition of more features adds to the overall complexity of the interface

Deeply threaded discussions can be challenging to interact and respond
This is a response to the message. I really do not like green eggs and ham.
Some Irish Sayings
by Sean Keegan - Monday, April 7, 2008, 02:25 PM

Irish Toasts
(as opposed to plain bread)
As you slide down the banisters of life may the splinters never point the wrong way.
May your troubles be as few and as far apart as my Grandmothers teeth.
Any others?

Re: Some Irish Sayings
by Sean's Test Student - Monday, April 7, 2008, 01:50 PM

Here is another Irish Toast...
Here's to our wives and girlfriends:
May they never meet!
Container

- The container is a fixed environment
- Accessibility features (or limitations) are not easily changed by the institution
- You **can** control the content and the features available for use in the LMS
Container

Capability

Content
Capability

- Capability - the ability of the LMS to support the creation of accessible content

- Instructors may choose to use the LMS interface to create materials

- The LMS interface should allow, or prompt for, the inclusion of information that supports access
# Capability

<table>
<thead>
<tr>
<th>Capability</th>
<th>Blackboard 7.1</th>
<th>Moodle 1.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Text Descriptions to Images</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Add Headings to Content</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Add Headers to Data Tables</td>
<td>Not in a WYSIWYG editor</td>
<td>Not in a WYSIWYG editor</td>
</tr>
</tbody>
</table>
Welcome to the Introduc tion!

In this forum, please introduce yourself and tell us something that is very unique (for example, you have three heads or you are all blue like a smurf).
Container

Capability

Content
Content

- Content includes the materials uploaded into the LMS "container"
  - PowerPoint presentations
  - PDF / MS Word documents
  - Audio / Video files
  - Web pages, images, interactive experiences

- Accessibility of uploaded content is not the responsibility of the LMS "container"
Content: Format Options

- Web pages should be the initial format when preparing materials for online viewing.

- If content cannot be delivered as Web page, provide options to access materials:
  - Course Outline [MS Word]
  - Course Outline [PDF]
Some Suggestions

- Use Headings for navigation
- Include descriptions for relevant images
- Provide descriptive Hyperlinks
  - Click [Here](#) for the Course Outline
  - Click Here for the [Course Outline](#)
- Include transcripts for Audio and captions for Video content
"Accessible" Authoring

- Creating accessible (and usable!) content requires ongoing training & support
  - Each person can contribute to the course development process and integrate accessibility into the authoring of materials

- Authoring accessibility into content can be integrated into key checkpoints
  - Curriculum approval and review process
  - Self-assessments using simple checklists
  - During training on using the new LMS platform
<table>
<thead>
<tr>
<th>Accessibility Issue</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate text descriptions for images.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcript or alternative provided for audio content.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captioning provided for video/media content.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least one video is opened on the user's computer (i.e., video is not embedded on the Web page).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperlinks provide clear information as to end location or function.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other elements beside color are used to convey information (e.g., asterisk, etc.).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sufficient color contrast is present to differentiate between the</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use Caution

"Gatekeeper" models are not scalable

One person should not be the focal point for all materials to be evaluated and repaired
Final Thoughts

- Addressing accessibility in LMS platforms requires separating the system into discrete components.

- For instance -
  A LMS "container" may be fully accessible, yet "content" may fail in providing access for all students.
Final Thoughts

- It is not just about an accessible LMS platform
- It is about addressing the entire infrastructure for online teaching and learning
  - Business needs of the institution for a LMS
  - Functions and limitations of the LMS container, including accessibility
  - Training and support for authoring course content and using the LMS platform
  - Resolving students needs when accommodations are necessary in an online environment
Planning Ahead...

Do you have procedures or support in place for an online student who:

- Wants to know if disability services are available?
- Requests materials in alternate formats?
- Is eligible to receive extended testing time for assignments?
- Is required to access 3rd-party content that may not be accessible? (e.g., YouTube videos, interactive exercises, etc.)
Additional Resources

- High Tech Center Training Unit
  [http://www.htctu.net](http://www.htctu.net)

- Blackboard Accessibility Interest Group

- Moodle Accessibility Forum

- iCITA Web Best Practices
  [http://html.cita.uiuc.edu/](http://html.cita.uiuc.edu/)

- WebAIM
Thank you

Sean Keegan
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California Community Colleges
http://www.htctu.net