

Website Accessibility

WLG - May 3, 2012

Why accessibility is important

Most studies find that about **one fifth (20%) of the population** has some kind of disability.

The major categories of disability types are:

- **Visual** – Blindness, low vision, color-blindness
- **Hearing** – Deafness
- **Motor** – Inability to use a mouse, slow response time, limited fine motor control
- **Cognitive** – Learning disabilities, distractibility, inability to remember or focus on large amounts of information

What is the internet like for people with disabilities?

Screen reader simulation

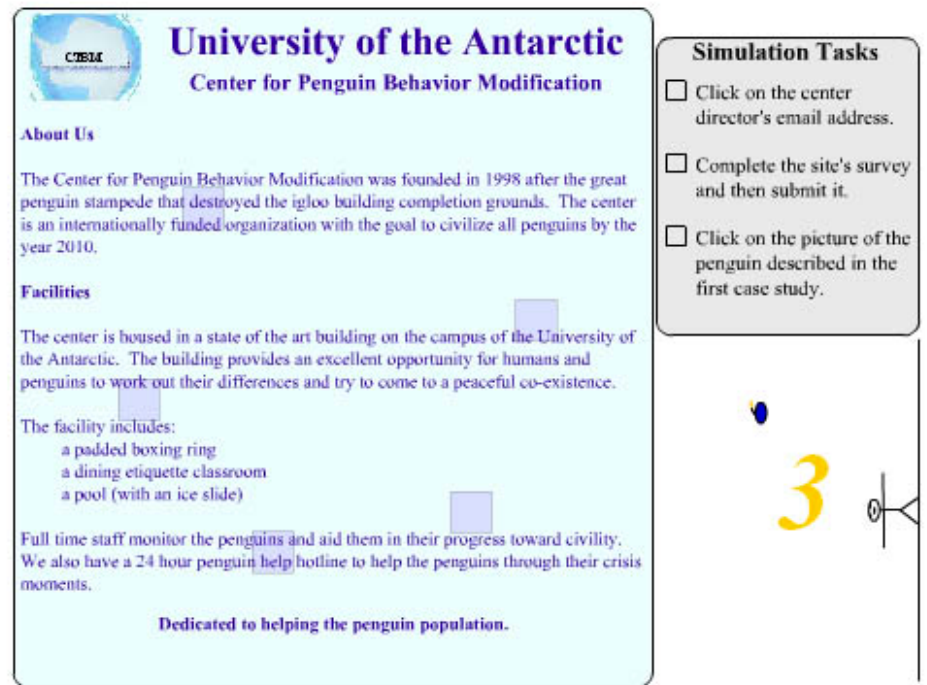
- <http://webanywhere.cs.washington.edu/>

WebAim.org

- [Accessibility videos](#)
- [Disability simulations](#)

Colorblind filter

- <http://colorfilter.wickline.org/>



University of the Antarctic
Center for Penguin Behavior Modification

About Us

The Center for Penguin Behavior Modification was founded in 1998 after the great penguin stampede that destroyed the igloo building completion grounds. The center is an internationally funded organization with the goal to civilize all penguins by the year 2010.

Facilities

The center is housed in a state of the art building on the campus of the University of the Antarctic. The building provides an excellent opportunity for humans and penguins to work out their differences and try to come to a peaceful co-existence.

The facility includes:

- a padded boxing ring
- a dining etiquette classroom
- a pool (with an ice slide)

Full time staff monitor the penguins and aid them in their progress toward civility. We also have a 24 hour penguin help hotline to help the penguins through their crisis moments.

Dedicated to helping the penguin population.

Simulation Tasks

- Click on the center director's email address.
- Complete the site's survey and then submit it.
- Click on the picture of the penguin described in the first case study.

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Accessibility is also the law

The Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973 require that websites have accessible features for people with disabilities.

An agency with an inaccessible website may also meet its legal obligations by providing an alternative accessible way for citizens to use the programs or services.

Our solution:

- Before: Text-only version of pages
- Now: Current footer link with alternate method for accessing content and action plan for making all pages more accessible

Text Only isn't the answer

One of the myths of web accessibility is that people with disabilities benefit from text-only versions. The truth is that practically nobody with a disability benefits in any way from a text-only version.

- **Not cost effective** – Maintaining two separate version of every web page is time consuming (and expensive if you pay for a service)
- **Not sustainable** – if dual sites can't be maintained with equal attention and resources, the text only site loses value
- **Not inclusive** – the people who are assumed to benefit from a text only site would prefer not to use one

<http://webaim.org/articles/design/textonly>

<http://www.nomensa.com/blog/2004/text-only-sites/>

UMKC Accessibility page

Footer update changed the text only link to point to a new accessibility page:

Accessibility

Materials on this website are available in alternate formats for those with disabilities that prevent them from accessing content.

For more information or to request an alternate format, e-mail webmaster@umkc.edu, call 816-235-1445 (Relay Missouri at 800-735-2966 for TT users or 800-735-2466, voice users) or write Web Manager, 318 Administrative Center, 5100 Rockhill Road, Kansas City, Missouri 64110.

Visit the [Disability Services page](#) for more information about services available on campus.

But this is just the start...**we all need to make sure our web pages are as accessible as possible.**

ACCESSIBILITY CHECKLIST

<http://webaim.org/standards/508/checklist>

<http://www.w3.org/TR/WCAG10/full-checklist.html>

Checklist hierarchy

- **Priority 1 – Must have**
Satisfying this checkpoint is a basic requirement for some groups to be able to use Web documents.
- **Priority 2 – Should have**
Satisfying this checkpoint will remove significant barriers to accessing Web documents.
- **Priority 3 – Nice to have**
Satisfying this checkpoint will improve access to Web documents.

Prioritization based on W3C guidelines:

<http://www.w3.org/TR/WCAG10/full-checklist.html>

Photos and graphics

Priority 1

- All images, applets, embedded media, complex graphics, etc. have equivalent alternate text (alt, longdesc, etc.) that fully describe the meaning.
- Images that have a function (linked images, buttons, hot spots) have **alt** text describing their function.
- Decorative graphics or background images have null/empty **alt** values (alt=" ") rather than extraneous text like "spacer."
- Ensure that equivalents for dynamic content are updated when the dynamic content changes.

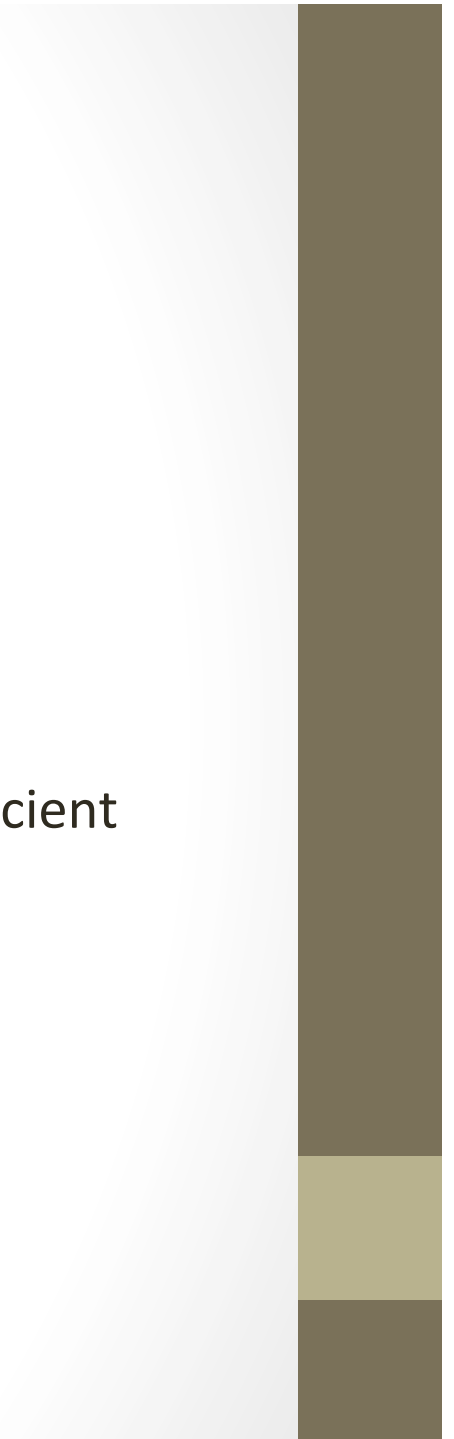
Color

Priority 1

- Ensure that all information conveyed with color is also available without color.

Priority 2

- Ensure that the foreground and background have sufficient contrast.



Layout

Priority 1

- Organize documents so they may be read without style sheets.
- Give frames a title that describes the frame's purpose or content.
- Use client-side image maps instead of server-side image maps. Alt text should be provided for the image as well as each hot spot area.

Priority 2

- Use style sheets to control layout and presentation.
- Use relative rather than absolute units where possible (ems instead of pixels or points).

Priority 3

- Create a logical tab order through links, form controls and objects.

Content

Priority 1

- Clearly identify differences in the document's text with markup, such as between body content and captions.
- Use the clearest and simplest language appropriate for a site's content.

Priority 2

- Use **header** elements to convey document structure (**h2** is a subhead of **h1**, etc.) Mark up lists and list items properly. Mark up quotations with the **blockquote** element.
- Divide large blocks of information into more manageable groups where natural.
- Provide metadata for all pages.

Priority 3

- Identify the primary native language for the pages.

Multimedia

Priority 1

- Provide an audio description track for content presented visually but not through audio.
- Video files and live audio broadcasts must have synchronized captions.
- Provide transcripts for audio content.

Tables

Priority 1

- Data tables should have column and/or row headers appropriately identified (using the **th** element).
- Data tables that have two or more logical levels of headers must use markup to differentiate between header and data cells.
- Avoid using tables for layout. If tables must be used for layout, do not use the **th** element.

Scripts and plug-ins

Priority 1

- Ensure that pages are usable when scripts, applets, etc. are turned off or not supported. If this is not possible, provide equivalent information on an alternative accessible page.
- Do not cause the screen to flicker or text to blink.

Priority 2

- Links to required plug-ins must be provided.
- Configure the server to perform redirects rather than using markup. Do not force the page to refresh.

Navigation

Priority 2

- Identify the **target** of each link (`_blank`, `_parent`, etc.), but avoid creating pop up windows where possible.
- Provide information about the structure of the site (site map or table of contents)
- Use navigation mechanisms consistently across pages.
- Provide a link to skip over navigational menus or other repetitive lists of links.

Priority 3

- Provide keyboard shortcuts to important links.
- Render adjacent links distinctly (with non-link characters or spaces between).
- Group related links, identify them and provide a method for bypassing them.

Forms

Priority 2

- **Input, textarea** and **select** elements should always have a **label** associated with them or be given a descriptive **title** element.
- Labels should be positioned next to their associated form element.
- Do not set forms to time out.

If all else fails...

If you cannot create an accessible page, provide a link to an alternative page that uses accessible technologies, has equivalent information and is updated as often as the original (inaccessible) page.

VALIDATE YOUR PAGES



Check page accessibility

W3C markup validator

<http://validator.w3.org/>

W3C CSS validator

<http://jigsaw.w3.org/css-validator/>

Webaim.org validator

<http://wave.webaim.org/>

W3C link checker

<http://validator.w3.org/checklink>