

# Making Your Web Site Available to Everyone

by *Tim Stahmer*

Imagine your district building a new school and NOT including ramps and wide doors to allow unrestricted access to students and visitors in wheelchairs. Imagine visually impaired students in your district NOT being provided with assistive devices to allow them full access to the same information as other students. Whether through modifications of the physical facilities or the use of adaptive technology in the classroom, today we do everything we can to make the school experience available to as many people as possible.

## But What About Your School's Web Site?

Many people with visual, auditory and physical disabilities are using the web these days - including your site. But it's possible they are blocked from accessing the information you have to offer because of the way your pages are designed. For example, people with visual impairments often use screen readers to access web sites but these devices can be confused if pages are graphic heavy or oddly formatted. And if a site features a large amount of audio files, hearing impaired visitors will miss the information offered.

It doesn't have to be that way. Creating sites that are accessible to people with disabilities is very simple and costs nothing. Before making any changes, however, you should first find out just what problems your pages have. The best way, of course, would be to visit your web site the way that a person with disabilities might, using a text reader or other assistive technologies.

A second option would be to visit Bobby. "Bobby" is a web site created by The Center for Applied Special Technologies (CAST) (<http://www.cast.org/bobby/>) which will evaluate your pages and produce a report showing exactly where a user with disabilities might have problems. The CAST web site also has a wealth of information about how new technologies, such as cascading style sheets, affect the use of the web by the disabled.

However, as I said, it doesn't take a lot of work to create web pages that will be easily available to the widest possible audience. Here are some basic alterations you can make.

## Use ALT Tags

One of the easiest things you can do to aid your visually impaired visitors is to add ALT tags to your graphics, especially those used for navigation. Many people never see the ALT tags on a web page but if you set your browser to display pages without images, the ALT tag will be displayed in the space that would be occupied by the image. Including an ALT tag takes a few extra seconds (the manual for your editor program will tell you how).

When you write the ALT tag make sure the text accurately describes the image or link. For example, if you have a button that takes the visitor to the main page for the Social Studies

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department, the ALT text should be “click here for information about the social studies department” rather than just “social studies” (or worse, “soc stud”). In the same way, a picture a group of students showing off their science fair project should accurately describe the picture.

On the other hand, not every image requires a descriptive ALT tag. For instance, if you use a bullet graphic strictly for decoration, adding the ALT tag “bullet” would mean that a blind user would hear the word “bullet” over and over again as they moved across the page.

A side benefit of using ALT tags is that you help any of your visitors who are using a slow modem and elect to use their browser without downloading the images. The text in the ALT tags will give them a better idea of what is on your page and how to navigate around your site.

### Offer A “Text-Only” Version of Your Site

This is especially important if your site features audio information or if you have used Flash technology for presentation or navigation. Flash can be a big problem for screen readers and other assistive technology. If you rely on a Flash movie for site navigation, handicapped visitors may not be able to navigate your site.

Providing a text alternative is also a good idea for non-handicapped visitors. If access to your information relies on the visitor having a certain plug in or a certain version of that plug-in, you may turn away some people trying to view your pages. Remember, it can be frustrating to those who arrive at a page only to find they don't have the correct configuration to view it.

### Choose Fonts and Colors Carefully

Many people with low vision make the default text size used by their browser larger and sans-serif fonts (such as Helvetica or Arial) are much easier to read on a video screen and scale much better than serif fonts (like Times). For the same reason avoid italic fonts.

Also, keep the visually impaired in mind when you choose the colors. Some color combinations that look fine to you may not contrast well to people with low vision. People who are “color blind” may also have trouble, especially if you rely on color alone to indicate important information such as links. Give Users An Opportunity to turn “Off” Animation

### Give Users An Opportunity to Turn “Off” Animation

Many site builders like to have motion on their pages such as animated GIFs, scrolling text or animation using DHTML. But this movement can confuse the assistive technology used by some of your visitors and may be hard to view by others. Never use blinking text, the MARQUEE tag or other elements that cause the screen to flicker.

### Abbreviations and Acronyms

Avoid using too many abbreviations and acronyms which reader software will misread. If you do need to use acronyms, spell them out in titles, headers and opening

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paragraphs to make the information more understandable. Of course, this will also help sighted visitors who may not know all the inside terms that are familiar to your local community.

## Avoid Frames and Complex Tables

Frame structures, while sometimes useful to create navigation schemes for your web site, can also confuse screen readers and other technologies used by physically handicapped users to move around pages. Complex table structures can also do the same unless they include some kind of orientation information.

## Use Cascading Style Sheets

One of the best ways to make web sites more accessible is to use the relatively new technology of cascading style sheets (CSS). CSS allows web designers to separate the structure of a document from the content, which allows visitors using assistive technology to better interpret the content. A side benefit for the designer is that CSS makes the site easier to update and maintain.

There is much more to the topic of making the web more accessible to everyone than can be covered in a short article. However, this outline should provide you with a good foundation to begin the process of looking at your site and making the necessary changes.

## References

For more information, visit the following web sites:

- Center for Applied Special Technology ([www.cast.org/bobby](http://www.cast.org/bobby)) - In addition to the site checker mentioned earlier in this article, the CAST site includes information about other tools and techniques for building accessible web sites.
- The World Wide Web Consortium ([www.w3.org](http://www.w3.org)) - An international organization that develops and certifies new web technologies. Their standards include a proposed set of guidelines for making web sites more accessible.
- Section 508 Home Page ([www.usdoj.gov/crt/508/](http://www.usdoj.gov/crt/508/)) - Section 508 is a set of regulations that requires federal agencies to make sure that their web sites are accessible to people with disabilities. It is very likely that other governmental agencies (like schools) will be required to meet similar standards in the near future.

## About the Author

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