



State of the eNation web accessibility reports

Social Networking Websites

January 2008

Summary

The AbilityNet State of the eNation Reports are a quarterly review for accessibility and usability of a number of websites in a particular sector.

This report concerns social networking websites which are among the most popular on the internet today. Our review found that most of the websites are either difficult or impossible for disabled people to use – in many cases a user is not even able to register with the website.

The websites reviewed are:

- **MySpace**
- **Facebook**
- **Youtube**
- **Yahoo**
- **Bebo**



Web Accessibility – why it's important?

Today many services are only available, or offered at a discounted rate on the Internet. Other websites provide vital information or functionality. If a website doesn't meet a base level of accessibility then it will be impossible for a large number of disabled visitors to use. Many others with some sort of limiting condition will also have great difficulty.

It is illegal to bar disabled visitors from on-line services and information offered to the general public. No organisation would purposefully do this but many are either not aware of the problem, or don't know what to do to address it. In the UK there are estimated to be 1.6 million registered blind people, 1.5 million with cognitive difficulties, a further 3.4 million people who are otherwise IT disabled and 6 million that have dyslexia. The total spending power of this group is now estimated at £120 billion a year.

Why is it important for social networking websites to be accessible?

“Social networking is completely fantastic. In terms of career it's really important. If you go to a conference where you normally have to do good old fashioned, real life networking, meeting people, shaking hands. That kind of thing is very difficult for me being blind, I can't necessarily go and pick out someone from a crowd who's just done a really good speech to talk to. I can't do that kind of thing but if I find out their name and where



they work, for instance, I might be able to find them on Facebook and do my networking that way - perhaps a little bit later than everyone else, which is not as perfect, but is pretty useful.”

Damon Rose, Editor BBC Ouch (www.bbc.co.uk/ouch/)

Social networking websites are an increasingly important part of the internet and have become vitally important both for work and leisure activities. For many disabled people, social networking websites offer huge opportunities to conduct business and to socialise without physical barriers.

Good business sense suggests that disabled users should be a key market for any social networking website, yet our research shows that their needs are being ignored.

“When I registered there was a visual verification code that I had to ask a sighted person to read out for me. I think this is awful treatment of blind people who use this service.”

Screen reader user who responded to AbilityNet’s social networking survey.

~~excluded~~

Fig 1 – Our research shows that Captcha graphics prevent many disabled users from signing up to social networking websites.



Popular Social Networking Websites - Accessibility review in summary

A 5 star scale was used: * = Very inaccessible

*** = Satisfies a base level of accessibility

***** = Very accessible.

Please note that some websites are given a rating between these three levels, such as two stars, when they meet some criteria for the next level.

For information on how we decide a website's ranking please see [Appendix B](#).

5 websites were reviewed: 4 websites had a * ranking and 1 website had a ** ranking

Accessibility Review – The findings

All websites were audited in December 2007 for accessibility and usability using a wide range of in-depth manual checks. The testing process was assisted by Watchfire's accessibility testing tool 'Bobby WorldWide', the AIS toolbar and colour checking tools.



Issues common to all websites

The following are issues that were common to all of the 5 websites tested:

- Although each of the websites reviewed had a help section detailing common questions and answers regarding the website, there was no mention of help for users who may have difficulty using the website due to a disability. This would be an ideal place for a section for disabled visitors, explaining where they could go for more help if they had any difficulty using the website. Further to this, there was no separate accessibility page on any of the websites tested. Many websites now display an accessibility page as a way of making a public statement of commitment to ensuring disabled access to their website and to explain any measures, such as access keys which allow keyboard users quick access to important pages. In addition, an accessibility page can be used to provide extra information for disabled users, such as contact details for the organisation in question.
- Keyboard only users would experience varying degrees of difficulty, ranging from a lack of links that allow them to jump over main navigation links, to pages or features that were effectively inaccessible to keyboard users.
- Many graphics lack any alternative text (or 'tool tips'). This is true of both graphics that are essential to navigation as well as graphics used purely for cosmetic purposes, causing problems especially for blind screen reader users and those using voice recognition.



- Websites all use an unlabelled 'CAPTCHA' (Completely Automated Public Turing Test to Tell Computers and Humans Apart) image as a vital part of the registration process. As explained below, a CAPTCHA image is part of a system to prevent automatic user registrations. It involves the user having to read a distorted image of a word and enter that text to be able to continue. There is no alternative text provided for these images as the point of such a process is to avoid automatic registrations to take place. MySpace, Yahoo and Bebo provide no assistance for vision impaired users with this. Facebook and Yahoo provide limited assistance.
- Although all the websites reviewed offered the option to users of uploading their own videos, none of them mentioned the importance of captions (or subtitles), and only Yahoo gave the option of adding a transcript to a video

One of our surveys sums up the difficulties lack of help information can cause:

“Often the sheer amount of material on a page, and having no real idea how to begin to navigate such a large amount of info, makes it difficult to summon the will to continue! Badly labelled links in my case make it extremely difficult to find anything meaningful. “

Screen reader user



MySpace

www.myspace.com

Ranking: *

Significant accessibility and usability issues across the website means MySpace can only achieve 1 out of 5 stars.

The website uses sans serif text which will assist visitors with a vision impairment or dyslexia.

The home page has a lot of content, including animated adverts, but different sections are generally well separated.

The account creation process uses a CAPTCHA image. An example CAPTCHA image is shown below (fig. 2):



Fig 2 – example CAPTCHA image

These types of image are used to prevent computers automatically setting up multiple user accounts as it is assumed that only humans can read the distorted text shown in the image. The problem here is that while computers cannot read the distorted text, neither can people who have a vision impairment, who are dyslexic or have some other disability that affects vision or language processing.



There is no alternative provided for this step of creating an account, so already a number of users are excluded even before they've created an account.

There are no links to jump over the main navigation links for keyboard or screen reader users. These are often called 'skip' links as they allow the user to skip past the navigation on a page and get straight to the content. For keyboard users, which could be anyone who has difficulty using a mouse, these 'skip' links are essential for websites with many links on their pages. A keyboard user will access the website by pressing the tab key to cycle through the available links on a page, and press enter when the desired link is selected. For websites with many navigation links, this means that a keyboard user will need to tab through each of these navigation links on every page – a process that can often take 20 or more keypresses.

Text size on every page has been 'hard coded' meaning it cannot easily be resized by many users –vital for many visitors who have a vision impairment or who are viewing the website on a small screen. Should a user override the default text size by changing their browser settings, some website content can overlap and make the text difficult or impossible to read.

Often a text label (or 'tooltip') appears when you move the mouse over an image. Blind and dyslexic visitors rely on the presence of text labels as a spoken description of the image. Without them the image is meaningless. Critically on this website almost every image, including most importantly images that are also links (amongst them links for adding, messaging and interacting with friends) are unlabelled. Imagine trying to make a journey where signposts at every roundabout are left blank!



Users of screen reading software pull all links on a page into a list — to quickly access the link they want. Many links on the website do not make sense when read out of context in this way, such as many occurrences of ‘Click here’ where each instance takes the user to a different page.

Many websites use mini programs called JavaScript embedded in their pages which can often cause difficulties for those using older browsers, those with vision impairments using some special browsers, and those whose organisations disable JavaScript for security reasons. Some of the key functionality of MySpace will be unavailable to users who do not have JavaScript enabled. In fact, with JavaScript disabled, it was not even possible for our tester to create a MySpace account.

Some of the other features unavailable to users with JavaScript disabled include controlling playback of music and videos and viewing your friends’ updates on your homepage.



Facebook

www.facebook.com

Ranking: *

A professional looking exterior belies a range of accessibility issues on this popular networking website.

The website uses sans serif text which will assist visitors with a vision impairment or dyslexia.

As with the MySpace website, Facebook requires the user to identify a CAPTCHA image when creating an account. This can be a barrier for vision impaired users, particularly screen reader users, but also users with minor vision impairments or dyslexia.

Many websites use mini programs called JavaScript embedded in their pages which can often cause difficulties for those using older browsers, those with vision impairments using some special browsers, and those whose organisations disable JavaScript for security reasons. Like MySpace, Facebook requires JavaScript to be enabled, otherwise a user cannot create an account.

Further to this, if an existing Facebook user logs into the website, yet has JavaScript disabled, there will be various functionalities unavailable to them such as drop down menus not working and the ability to set your phone up to send photos directly to your Facebook account.



Text size on every page has been ‘hard coded’ meaning it cannot easily be resized by many users – so vital for many visitors who have a vision impairment or who are viewing the website on a small screen. Should a user override the default text size by changing their browser settings, some website content can overlap and make the text difficult or impossible to read.

Users of screen reading software pull all links on a page into a list – so they can quickly access the link they want. As with MySpace, many links on the website do not make sense when read out of context in this way, such as many occurrences of ‘See all’ or ‘Change’ that each take the user to a different page, or perform a different action.



YouTube

www.youtube.com

Ranking: *

This popular video sharing website unfortunately has a range of issues that can prevent disabled users using the website to its potential.

The website uses sans serif text which will assist visitors with a vision impairment or dyslexia. As there is good use of whitespace throughout the website pages rarely feel cluttered, however, some exceptions to this are user’s custom pages with non-white, tiled background images which can be distracting.



Joining MySpace and Facebook, YouTube opts to use CAPTCHA image verification as part of the account creation process, thus excluding vision impaired users, in particular screen reader users, but also users with minor vision impairments or dyslexia, from signing up to their website.

As with other websites tested, the text size is hard coded, meaning it cannot easily be resized by many users – so vital for many visitors who have a vision impairment or who are viewing the website on a small screen. Should a user override the default text size by changing their browser settings, some website content can overlap and make the text unreadable.

On the first page of the website, and in any search result listings, a thumbnail image of the video is used as the link to the actual video. However, the thumbnail image does not have any alt text assigned to it so a screen reader user will just hear the image filename, often cryptic and meaningless.

AJAX, a current buzzword amongst web 2.0 websites, basically means the ability for web pages to update content without refreshing the page. For many users, this can enhance the user experience, but it can cause issues for screen reader users. The YouTube registration process uses AJAX to check the user's username as they are typing it in, to ensure the user chooses a unique username. However, although the text changes on screen to reflect the username status, there is no warning to vision impaired users that any page content has change – a common issue for AJAX based pages. Although not a showstopper, this could hinder users in creating a profile.



Yahoo

www.yahoo.co.uk

Ranking: **

Please note we reviewed the sign in process which users must complete before they can sign up to any Yahoo service such as Flickr or Yahoo 360°.

All website text checked was displayed in a sans serif font, which is generally easier to read on a computer screen, particularly for users with a vision impairment. Further to this, the majority of website text was resizable by users. Again this is particularly useful for vision impairments or dyslexia.

Similarly with the previous three websites, Yahoo opts to use CAPTCHA image verification as part of the account creation process. Unlike the previous three websites, Yahoo have an alert for screen reader users accessing the registration page that warns them of the potential difficulty of the CAPTCHA image. An alternative method of registering, involving contacting a Yahoo representative is provided. We sent an email off to the listed email address here, and received an email back asking us to contact Yahoo via phone for free assistance with registration. When we contacted the given number however, the only menu options were 'Press 1 for billing enquiries, information on premium services or to report inappropriate content, Press 2 for information on free services.' Pressing 2 then gave us the following message 'We do not offer telephone customer support for our free services'. We did not proceed further with this.

The mail and chat interface is effectively inaccessible via the keyboard, and therefore, to screen reader users as well. An alert for screen reader users was available, informing that the new Yahoo mail was currently inaccessible to screen readers but that the classic mail was an available alternative.



A number of links within the new webmail open 'pop-up' windows without informing the user that this will happen. This could be confusing for blind visitors, or those with a cognitive impairment or learning disability.

In common with MySpace, there are no 'skip' links across the website. A 'skip' links allows the user to effectively jump straight to the content on a page, dramatically cutting down on the number of keypresses required.

**Bebo**www.bebo.com

Ranking: *

Most images had alt text present. The website uses sans serif text which will assist visitors with a vision impairment or dyslexia.

Similarly to the websites above , Bebo opts to use CAPTCHA image verification as part of the account creation process, thus excluding vision impaired users, in particular screen reader users, but also users with minor vision impairments or dyslexia, from signing up to their website.

Text size on every page has been 'hard coded' meaning it cannot easily be resized by many users – vital for many visitors who have a vision impairment or who are viewing the website on a small screen. There were numerous examples of text that was very small by default. Should a user override the default text size by changing their browser settings, some website content can overlap and make the text difficult or impossible to read.



With no 'skip' links used, keyboard users often had to tab many times to reach parts of the page. Our tester had to tab more than 50 times in order to login to the website.

Throughout the website, links become underlined as the user moved the mouse over them. There is no such provision for keyboard users, however, and it becomes increasingly difficult to see which link is currently selected when tabbing around the page.

Many websites use mini programs called JavaScript embedded in their pages which can often cause difficulties for those using older browsers, those with vision impairments using some special browsers, and those whose organisations disable JavaScript for security reasons. Some of the key functionality of Bebo will be unavailable to users who do not have JavaScript enabled (Accessing user videos for instance). In fact, with JavaScript disabled, it was not even possible for our tester to create a Bebo account.

End Report



Appendix A - Further Sources of Advice and Support

AbilityNet

- www.abilitynet.org.uk

AbilityNet is able to offer information, advice and a range of services to help make a website accessible and usable for everyone – including accessibility audits, disabled end user testing, training, support, accessible web design and a Key Info Pack to get you started.

For further details please call Robin on 01926 312847 or email

accessibility@abilitynet.org.uk

Other sources of help and information include:

Web Content Accessibility Guidelines

- www.w3.org/TR/WAI-WEBCONTENT

The World Wide Web Consortium (W3C) is the body at the forefront of the development of standards in good design on the World Wide Web (including accessibility). The W3C's Web Content Accessibility Guidelines (WCAG) form the basis of all other standards.



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Authoring Tool Accessibility Guidelines 1.0

- www.w3.org/TR/WAI-AUTOOLS/

The W3C publish standards for tools which allow users to publish content. Vendors of content managements systems (CMS) and applications which allow the user to create content should adhere to the Authoring Tool Accessibility Guidelines (ATAG).

Accessible Rich Internet Applications Suite (WAI-ARIA)

- www.w3.org/WAI/intro/aria
Many web applications, such as social networking websites, rely on new scripting languages such as AJAX to allow complex interactions such as re-positioning elements on the screen. The Accessible Rich Applications (ARIA) suite is a series of documents which are working towards making AJAX and related technologies accessible.

Illustrated handbook for web management teams

- www.cabinetoffice.gov.uk/e-government/resources/handbook/introduction.asp
The UK E-government Unit has guidelines on web accessibility (based upon the W3C guidelines). These can be viewed on-line or downloaded as an illustrated Word document.



Equality and Human Rights Commission

<http://www.equalityhumanrights.com>

(Please note since October 2007 the Disability Rights Commission became part of the Equality and Human Rights Commission)

Organisations are legally obliged to provide websites that are accessible to disabled people. This website includes information on the Disability Discrimination Act (DDA), its accompanying code of practice and their report outlining the findings of research into the accessibility and usability of 1000 websites.



Appendix B – How We Decide the Ranking

The world standards in web accessibility (W3C WCAG) have prioritised their checkpoints into 3 priority levels. Compliance of your websites with these levels are phrased as - level 1 (highest) = “must”, level 2 = “should” and level 3 = “ought”.

The Disability Discrimination Act (DDA) has meant that it has been law in the UK to have an accessible website since 1999. Arguably a website can only meet its legal requirement under the DDA if it is, at the very least, compliant with all level 1 checkpoints.

As it is only level 2 compliance which does not hinder some groups’ access (as defined by the W3C) it is our opinion that the true DDA requirement lies somewhere between levels 1 and 2 compliance.

This said, it has been our experience that many websites that meet level 1 and even level 2 priority checkpoints can nevertheless still present significant difficulties for disabled visitors in practice.

This can be due to a number of reasons. For example, over-reliance on purely visual clues to guide the user (leaving blind users without vital clues about where the designer intends the user’s ‘eye’ to be drawn), small or closely clustered links or buttons (causing those with fine motor control difficulties to miss what they intended to click on - or click on the wrong thing), lack of proper separation of page objects (meaning that users with vision or cognitive difficulties can miss important items which are not sufficiently separated from neighbouring content),



the sheer bulk and complexity of links and sections on a page (making those who's access technology or methodology is slow become frustrated or give up) or a host of other reasons.

Similarly a website that falls short of priority 1 or 2 compliance in a number of respects can nevertheless be very accessible and usable by the vast majority of disabled visitors in practice.

This can be due to the fact that particular checkpoints are only contravened very rarely (still denying the website level 1 compliance but having very little impact on a disabled users overall experience of the website), or because checkpoints that are contravened more widely only impact upon a very small number of users.

Thus we have tried to reflect the overall user experience of a website when deciding its ranking.

*** Ranking

We have chosen our *** ("satisfies a base level of accessibility") ranking as compliance (or near compliance where the shortfall has little evident impact on users) with priority level 1 checkpoints.

Further than that we look for significant (in our opinion based upon broad experience of working with disabled users) priority level 2 issues - such as the scalability of text, the avoidance of frames and any positive steps a website has



taken to benefit visitors with an impairment (such as accessibility info or offering a choice of colour/text size schemes).

Note - It is our opinion that the addition of a Text only parallel website to the exclusion of addressing the accessibility/usability issues of the main website is neither necessary or in the spirit of inclusion or the W3C WCAG standards.

*** and ** Rankings**

We award * and ** to a website dependant upon how much it falls short of our definition of *** ranking.

****** and ***** Rankings**

We award **** and ***** to a website dependant upon how much it exceeds our definition of *** ranking.

For any further clarification please contact accessibility@abilitynet.org.uk