

An Accessible Learning Environment

Experiences with Blackboard

Rob Howe



University College
NORTHAMPTON

Why have an accessible VLE ? – legal view

Disability Legislation

The Special Educational Needs and Disability Act 2001 (SENDA) places an obligation on all education institutions to make reasonable adjustments to ensure that disabled learners are able to participate equally in all aspects of the educational environment. This obligation extends to online learning, the use of Information Learning Technology (ILT) and distance learning.

Why have an accessible VLE ? – sensible view

- All users of the system will benefit from a well designed VLE that makes it easy to access and use information that has been uploaded to it.
- We need to ensure that we define accessibility appropriately and use appropriate tests. (eg physical accessibility or technical accessibility).

Why have an accessible VLE ? – sensible view

- We also need to consider the accessibility of both the environment and the material that is uploaded.
- According to Frontend (2001), 'Usability focuses on making software, websites and on-line applications and services easy for people to use. Accessibility may be defined as making them equally easy for everyone to use, including people who may use assistive technologies such as screen readers etc.'

The Blackboard Environment (early experiences)

- Blackboard has an accessibility policy statement and provides details on their website
<http://www.blackboard.com/products/access/index.htm>
- Has a screen reader tutorial (describes what the reader will pickup from the screen and how to do basic navigation)

Some extra useful items....

- All system images have alt tags, and instructors are able to add alt tags to uploaded images in the content creation areas of the software (with the exception of optional assessment images, which should be described in the question or answer text).

Some extra useful items....

- Framesets are appropriately titled and have meaningful (noframes) content, describing the functionality of the frames layout.

Some extra useful items....

- Data tables are optimized for use with screen readers by adding attributes to associate column headings with table content.

From rapid web survey

- One member from Dundee noted that the virtual classrooms in Blackboard were inaccessible.
[Noted that you do need the Java access bridge in addition to the appropriate Java plug-in]

From rapid web survey

- The ALERT project (Dr Barbara Newland et al) - Case studies within ALERT examine the experience of disabled students and the role they perceive the VLE to play in their learning. (awaiting writeup)

More from the rapid web survey....

From VIRTUAL LEARNING ENVIRONMENT USER
TESTING

PROJECT (Jan 2003)

<http://www.techdis.ac.uk/resources/VLE002.html>

Used version 5 Bb with Jaws 3.7 and Supernova 5.02
with

five learners with various disabilities -

- three with no sight (one with dyslexia and one with a hearing impairment),
- two visually impaired (one with a hearing impairment and one with motor impairment).

More from the rapid web survey.... Some quotes from discussions about the use of online discussions:

- "When I am in an ordinary group discussion, I cannot always hear what others are saying and I don't always like to ask them to repeat what they have said. With Blackboard I don't miss anything."

From VIRTUAL LEARNING ENVIRONMENT USER TESTING PROJECT, TechDis Jan 2003

More from the rapid web survey.... Some quotes from discussions about the use of online discussions:

- "I like using computers, face-to-face is ok but it can become boring over a long period of time. I also feel that I can express myself more freely in a forum."

From VIRTUAL LEARNING ENVIRONMENT USER TESTING PROJECT, TechDis Jan 2003

More from the rapid web survey.... Some quotes from discussions about the use of online discussions:

- "Well, in my opinion there are advantages and disadvantages of the teacher talking to you all the while. It helps the information to sink in if a teacher is babbling away to you for half an hour or so, then giving you work to complete to see how much you really understand about the subject in question. I love this discussion board. It gives everyone a chance to say what they think whenever and however they want. It presents a challenge. How can I express myself in a message? If I am angry how do I convey this??..... I can't wait to read other peoples views."

Yet – even more.....

From: Davitt Hughes at Texthelp
email [d.hughes @ texthelp.com](mailto:d.hughes@texthelp.com)

- Read & Write 7 is fully compatible with Blackboard. Texthelp Systems work closely with Blackboard to ensure complete compatibility.
- With Web Highlighting enabled, Read & Write 7 can read text from BlackBoard's web pages very easily. It will also highlight the text as it is being read.

The external consultants report:-

- TPG (group specialising in accessibility reviews) have been commissioned by Blackboard to review version 6.
- Performed a standards based analysis against criteria specifically stated in Section 508 1194.22, Web Based Intranet and Internet Information and Applications.

The external consultants report

- Performed user accessibility analysis testing with JAWS 4.51, IBM's Home Page Reader, and WindowEyes
-has been externally audited for the 95% degree of compliance of section 508 and WAI

The system works well – make sure the content is as good.....

- Several formats available to upload documents in. The most common are Office (Word / PowerPoint); Adobe PDF; and HTML / XML
- Adobe have created many sites to inform users on creating accessible PDFs (see references)

The system works well – make sure the content is as good.....

- The BbMatters site has several documents for creating readable and accessible Word and PowerPoint documents
- There are many HTML / XML verifiers - can't check behind password protected pages - or can they ?

What is it really like to have an impairment ?

- Have a look at the simulation site at:

<http://members.aol.com/srousell/sim-dis/index.htm>