Moodle Accessibility for Students with Specific Learning Difficulties – Raising Staff Awareness

Document Aim

In accordance with the Special Educational Needs and Disability Act (SENDA)\(^1\) 2001, and the Disability Discrimination Act (DDA)\(^2\) 2005, the needs of disabled students must be anticipated within the Higher Education sector. This has been endorsed through the Faculty Learning and Teaching Strategy which also promotes the use of technology to support the student learning process.

Students with Specific Learning Difficulties (SpLD)\(^3\) such as Dyslexia typically experience problems with visual processing and may be affected by the aesthetics of design and the visual readability of web content (Rainger P, 2003)\(^4\). They may therefore experience significant challenges when reading and navigating through the Moodle interface. Nevertheless, careful design of Moodle pages and their associated resources can encourage access from a diverse student group. The aim of this document is to raise staff awareness of accessibility guidelines to encourage consistency in Moodle provision for a variety of learning needs.

Establishing Need and Good Practice

To promote an inclusive teaching\(^5\) strategy, it is important to consider your target user group in order to anticipate their needs; a requirement under DDA part 4. Some ‘reasonable adjustments’ can be made to your Moodle site to accommodate a variety of specific learning difficulties and you may find that these adjustments will ultimately benefit the whole group. Remember though that these requirements will change group-by-group so regular maintenance of your Moodle sites is necessary.
You may feel that by rigorously conforming to web content accessibility guidelines, this will inhibit innovation and may demotivate you from building creative online learning resources. If however, you have created an online resource that you know would benefit the majority of your group, but you know is inaccessible to some, then do make it available. You then need to find alternative learning methods to ensure the same learning outcomes can be met in a different way. By maintaining this strategy, none of your students will be disadvantaged.

Effective signposting on Moodle is vitally important for all users but it is also good practice to indicate whether or not a specific learning resource is fully accessible. This will prevent SpLD or disabled students from wasting time trying to access a resource that ultimately won’t work for them.

**JISC TechDis**[^6] is an advisory service, which provides guidance for disability and technology within the education sector. They suggest that there is no single solution for accessibility due to a wide variety of individual needs however; some general principles may be adhered to in order to improve the overall learning experience.

**Technical Accessibility** – are users able to open and fully engage with your online resources? It is good practice to provide clear, step-by-step instructions for users to follow to ensure successful access. It is also good practice to indicate whether your resources are compatible with assistive technologies such as screen reader software.

**Perceptual Accessibility** – visually impaired Moodle users may have problems perceiving images. If this is the case then alternative resources such as text-based descriptions, should be provided. Other Moodle users may particularly benefit from having written paragraphs interspersed with images to help with visual processing.

[^6]: JISC TechDis
**Temporal Accessibility** – Although SpLD students may be able to access an online resource, are you aware of the time it takes them to access? Is this amount of time reasonable for individual users? If not, then alternative resources should be provided.

To find out if your learning resources are accessible, embark on some user testing sessions before you make your resource readily available to all.

**Accessible Teaching Strategies for Moodle**

Some basic teaching strategies should be considered as essential inclusions on Moodle module sites. The following have been identified by JISC TechDis:

- course syllabus and book lists
- timetable information
- glossary of new technical terms and vocabulary
- session or lesson plans
- timings for assignment deadlines
- clearly expressed aims and learning outcomes for each session
- copies of handouts and lecture notes
- where possible, audio summary of notes
Accessible Moodle Design

In addition to these basic teaching strategies, staff should also consider the design and presentation of their Moodle pages in order to enhance accessibility. Web developers take into account the following WC3 [WCAG2](#) accessibility principles which have been summarised by [Moodle.org](#). Staff at Birmingham City University should therefore acknowledge these principles when developing their own Moodle sites:

1. **User customisation**

Users with Specific Learning Difficulties and those with visual impairments, can access online content more efficiently if they can select a favoured font style, size or colour scheme. Moodle 1.9 enables users to choose an interface colour scheme by selecting the 'preferred theme', a setting located in their 'edit profile' function.

Moodle users should be instructed on how to select and edit their profile to choose their 'preferred theme' from the list.

2. **Provide equivalents for visual and auditory content**

Text is the most readily accessible form of online content (Moodle.org) therefore, it is good practice to provide text descriptions to supplement each item of multimedia content such as images, graphics, video and audio resources. In this
way, screen readers can be utilised to interpret content for students with visual impairments.

3. Use different ways of presenting information
Students learn and access information in different ways. To meet the needs of a wider variety of learners, your Moodle sites should include a variety of alternative methods of content delivery. Communicate with your students to find out what works best for them.

4. Provide compatibility with assistive technologies
Assistive technologies such as screen readers, screen magnifiers and voice recognition software provide essential accessibility to computers. The design of your Moodle site should support the use of such products.

5. Allow access to all functionality from keyboard alone
As far as possible, Moodle have endeavoured to make the interface accessible in this format under W3C guidelines.

6. Provide context and orientation information
Navigational design is an important element for consideration as the presentation of your Moodle content should not become a barrier to learning. Effective signposting is essential so that users are clear about where they are within a site, what they should access, how they access and when to access. Moodle induction sessions should also be provided by the module coordinator / Moodle site author at the beginning of a course to further aid navigation. This will also allow you to emphasise key areas for study.

Adapted from Development: Moodle Accessibility Specification, Moodle.org
Designing your Moodle page

Some principles for good practice have been highlighted above, but to help you with the design and layout of your Moodle site, the British Dyslexia Association have written a Dyslexia style guide which has been adapted below. For the original guidelines, follow this link: BDA Dyslexia Style Guide

Media

- Avoid white backgrounds for visual aids. You may wish to upload a variety of PowerPoint presentations onto your moodle site though to include the original design; black on white for printing and a colour choice for SpLD students.

Font

- Fonts should be clear and easy to read. Dyslexic users are likely to have difficulties with visual processing and are sensitive to font styles.
  Suggested font styles for web use are: Arial, Trebuchet MS,Verdana
- Font size should be at least 12 point.

Headings and Emphasis

- Use larger font in bold for headings and title paragraphs.
- Avoid underlining large blocks of text as this makes text difficult to read. Only hyperlinked text should be underlined.
- Avoid using capitals for whole words and sentences. It is harder to read and looks like you are SHOUTING!
- Adding colour to text can help to emphasise points and makes them more memorable.
Layout

- Avoid using justified text as this causes uneven spacing between words and affects visual processing. Select left justified instead:

- Lines should not be too long: 60 to 70 characters.
- Space out paragraphs and use numbered lists and bullet points for clarity.
- Line spacing of 1.5 is preferable.

Writing Style

- Keep sentences short – an average length of 15 – 20 words.
- Use active verbs.
- Refer to the user as ‘you’ and yourself / team as I and we.
- Provide simple, clear instructions where necessary.

‘Plain English’\(^{10}\) is a model for writing which emphasises clarity and limits confusion when reading text. In general, Plain English promotes the use of a writing style with wording that is clear and appropriate for the reader. Long-winded, complicated sentences can be opaque to SpLD Moodle users and should be avoided. Again, an active rather than a passive voice is promoted here.

Increasing Accessibility

- Use flow charts and graphics to explain principles and guide users through your site.
- Include a list of do’s and don’ts to highlight good practice.
- Avoid abbreviations or include a glossary of abbreviations where necessary.
Website Design

- Include a site map or contents page to aid navigation.
- Use graphics to break up text.
- Offer text reader alternative documents where necessary.
- Avoid moving text effects as these can be distracting.
- Avoid green and red/pink as these provide problems for colour-blind users.
- Promote user customisation of web design (see above).

Preparing a document for text-readers

- Include full stops after bullet points to separate each point (colour these white if you don’t want them to be seen).
- Use internal and external hyperlinks. Number menu items.
- Avoid text written in capitals in the middle of a line. These words will be read as single letters.
- Limit the use of asterisks and dashes as these will be spoken.
- Use colons to make the voice pause.
- Use straight rather than curly quotation marks.
- Avoid roman numerals and No. for number.
- Avoid text within images as it will not be read.
- Use hyphens in compound words to aid text-reading pronunciation.
- Chunk-up phone numbers to avoid being read as millions or thousands.

Proactively anticipating the needs of learners with Specific Learning Difficulties by following these guidelines will support an inclusive teaching strategy that will ultimately benefit the whole of your student group.

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References / External Links


