

## **Designing for diverse learners**

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### ***Presentation abstract***

Learning and teaching are only sustainable if accessible and inclusive. For this reason, we produced the [Designing for diverse learners poster](#), a set of easy to follow guidance on developing learning resources to support learners with a variety of needs. This poster (Figure 1) has been adopted by many institutions and has had a significant impact on practice for many teaching in higher education. This conference session launched the next version of the Designing for diverse learners poster – a fully interactive and digital version that includes how and why each of these design decisions is made. An accompanying website was demonstrated for the first time, and delegates were invited to consider ways in which it could support their learning and development practice, give feedback, and suggest further improvements. The idea of ‘diverse learners’ is fundamental to the poster resource and to its use by learning developers. The practices outlined in our new website will benefit every learner – including those who may require specific adjustments. We hope the new version of the poster and the accompanying website will help support the development of greater access and inclusion in learning development practice.

Figure 1. Designing for diverse learners poster.

# Designing for diverse learners



| Always...   |  | Avoid...  |
|---|--|---|
| <p>Always use a readable font, sentence case and a suitable font size - at least 12pt for print and 1 em for web.</p>                |  | <p>Avoid difficult to read text. Do not use as all capitals, small font sizes and cursive or script fonts.</p>                                        |
| <p>Always use left-aligned text and 1.5 line spacing.</p>    |  | <p>Avoid centre or right text alignment and full justification.</p>   |
| <p>Always break up information. Use meaningful headings, sub-headings and one-level bullet lists.</p>                                |  | <p>Avoid complex and cluttered layouts. Do not use multi-layered menus or complicated lists.</p>    |
| <p>Always use heading styles, tags or other formatting features for headings and sub-headings.</p>                                   |  | <p>Avoid manual formatting text to convey headings, meaning or structure.</p>   |
| <p>Always make important information clear and easy to find.</p>   |  | <p>Avoid the use of all capital letters, underlining and italics for heading styles or emphasis.</p> <p><b>DON'T DO THIS</b></p>  |
| <p>Always write descriptive and meaningful hyperlinks and use a URL shortener if required.</p> <p style="text-align: right;"><b>Contact us</b></p>  |  | <p>Avoid using uninformative hyperlinks and never use 'click here'.</p> <p style="text-align: right;"><b>Click here</b></p>   |
| <p>Always use a combination of colour, shapes and text to convey meaning.</p>    |  | <p>Avoid the use of colour or shape as the only way to convey meaning.</p>    |
| <p>Always ensure sufficient colour contrast from foreground and background elements.</p>   |  | <p>Avoid low colour contrasts and the use of text over images or patterned backgrounds.</p>   |
| <p>Always provide multiple means of representation. Add meaningful alternative (alt) text to all images, diagrams and tables.</p>  |  | <p>Avoid using one means of expression, especially when using media or explaining challenging concepts. Avoid unclear or overcomplex alt text.</p>  |
| <p>Always provide transcripts or captions for audio and video. Narrate video descriptively.</p>                                    |  | <p>Avoid providing audio and video without an alternative representation.</p>   |
| <p>Always allow user control for media and navigation. Ensure all content can be navigated with a keyboard.</p>                    |  | <p>Avoid automatically playing media content and forcing control by use of a mouse or touch screen alone.</p>                                       |
| <p>Always use accessibility checkers where available.</p>    |  | <p>Avoid assuming your content is accessible without testing it</p>   |

Created by Dr Lee Fallin, Tom Tomlinson & Sue Watling with input from the HigherEd community. Based on the Accessibility Poster Series from the Home Office Digital (CC-BY-NC-SA).

Poster v4.0 

## Community response

Respondents commented not only on the practical value of the resource but were anticipating and openly sharing how it would bring about change in their own practice and potentially their wider networks and institutional contexts. Respondents shared that the resource reminded them about the power of simple design and visual representation, reflecting on how we can often become reliant purely on text to convey information as educators. It was noted that the use of relevant icons and graphics alongside text is a powerful technique that we can all employ across different mediums such as PowerPoint

and web resources, and that the Designing for diverse learners poster will be a helpful quick reference point. A key theme here was the recognition that the project was a creation driving positive change, rather than a vehicle for condemning or blaming shortcomings in the sector. One respondent offered reflections in support of the idea that we should consciously avoid an 'adversarial' approach when promoting accessibility because it is counterproductive and often happens subconsciously.

There was also an openness to reflecting on individual and collective practice using this tool by the 'change champions'. A respondent observed that the poster could be used as a teaching aid in poster sessions with students, as well as an aid for their own practice. Others noted that the online resources were being made publicly available online, enabling colleagues at other institutions to access them and direct academic colleagues to them in order to further promote good accessible design practice.

### ***Editorial comments***

One way of conceptualising the dynamic of this conference session is to consider both the authors and their audience as part of a wider change initiative – in this case, the reception of the work of 'change agents' (Fallin and Tomlinson) by a community of 'change champions' (learning developers) (Pearson et al., 2019). Learning development practitioners are key stakeholders in the Designing for diverse learners project, and this conference session offered a valuable opportunity for contributions to a process of continuing, iterative improvement – initially, to the poster, and more broadly to good practice.

It seems worth acknowledging here the congruence between this rich, collective reflection on a 'change initiative', the #ALDcon22 forum, and its host the University of Northampton – a 'global changemaker' campus with a commitment to positive disruption, challenging norms and bringing about social justice (University of Northampton, 2022). This sense of ongoing, continued change was reflected in the responses which observed the longer-term legacy of this project. It was clear to respondents how the Designing for diverse learners project had developed from its original incarnation and was continuing to develop thanks to a collaboration between two 'creative and committed' members of the community. This

reminded one observer that there is always space to evolve, grow and expand in ways that might not even have been imagined at the start of a project.

### ***Authors' reflection***

'Change agents', Lee and Tom, offered further helpful reflections.

Lee: I passionately believe in the values of inclusive education, and for me, the Designing for diverse learners (D4DL) work embodies many of the considerations educators need to make in their resource design. It is for this reason, I am always slightly nervous when presenting our D4DL work, as it is something I wholeheartedly believe in. Thankfully, the work was well received, and we had some great feedback from attendees.

Tom: The project allowed me to contribute to a very useful resource. I had seen previous versions shared on Twitter and pinned to colleagues' walls. I was aware of the poster's utility, but supporting the new version helped crystallise why the resource resonated with so many people. On reflection, it seemed that the poster did three things exceptionally well:

1. Presents salient points clearly.
2. Does not burden the reader with technical complexity.
3. Does not assume a deficit/shortfall with the reader.

The project expanded my knowledge of accessibility, WCAG compliance and the significance of making guidelines practical and actionable. Design is not how something looks; it is how it works. Initial feedback from the audience indicates we are on the right path. I would be remiss if I didn't express my thanks to Lee Fallin, for not only having a vision for this project, but also for having extreme compassion and belief in others. This was an overwhelmingly positive experience.

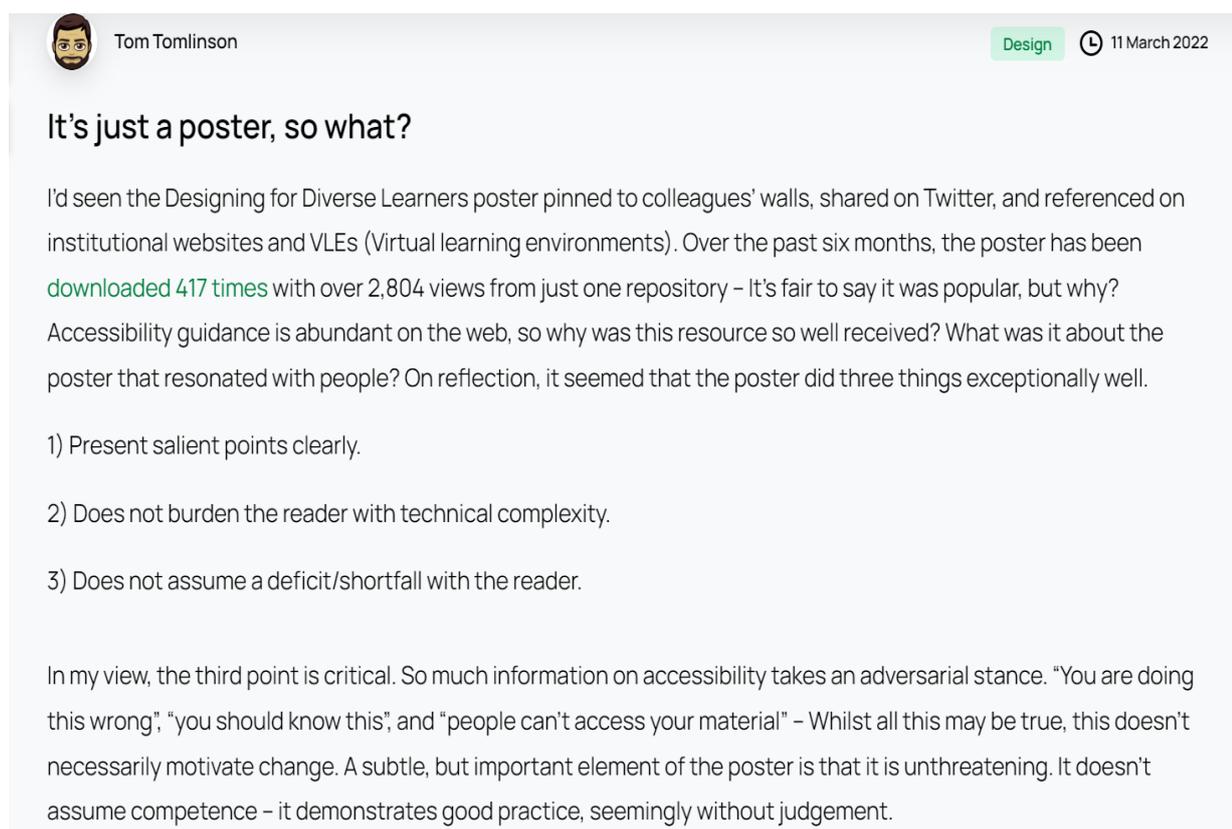
Lee: On a personal note, presenting at ALDcon was also a nice opportunity to showcase the hard work of my colleague Thomas Tomlinson. I find Thomas takes the role of 'enabler', working his magic unseen, behind the curtains. It was nice to co-present with him and have him take some of the spotlight himself. The work Thomas has done to take

the D4DL project into a native web format is phenomenal, and he deserves all the credit he can get!

With the benefit of writing a few weeks after the conference, it is also nice to share that we had strong interest from others who wanted to join this project. We are already beginning to reshape and enhance this work further, and I cannot wait to see where this goes. There is still chance to get involved if you are interested – see the next section.

Read more about Tom’s work on [his blog](#) (Figure 2).

### Figure 2. Extract from Tom Tomlinson’s blog.



The image shows a screenshot of a blog post. At the top left, there is a profile picture of Tom Tomlinson and his name. At the top right, there is a green tag that says 'Design' and a clock icon followed by the date '11 March 2022'. The main title of the post is 'It's just a poster, so what?'. The body of the post starts with a paragraph: 'I'd seen the Designing for Diverse Learners poster pinned to colleagues' walls, shared on Twitter, and referenced on institutional websites and VLEs (Virtual learning environments). Over the past six months, the poster has been downloaded 417 times with over 2,804 views from just one repository – It's fair to say it was popular, but why? Accessibility guidance is abundant on the web, so why was this resource so well received? What was it about the poster that resonated with people? On reflection, it seemed that the poster did three things exceptionally well.' This is followed by a numbered list: '1) Present salient points clearly.', '2) Does not burden the reader with technical complexity.', and '3) Does not assume a deficit/shortfall with the reader.' The post concludes with a paragraph: 'In my view, the third point is critical. So much information on accessibility takes an adversarial stance. "You are doing this wrong", "you should know this", and "people can't access your material" – Whilst all this may be true, this doesn't necessarily motivate change. A subtle, but important element of the poster is that it is unthreatening. It doesn't assume competence – it demonstrates good practice, seemingly without judgement.'

Presenting at ALDcon was a great opportunity to bring the Designing for diverse learners work back to our community for feedback. We have also recruited a broader range of people to help us take this work forward. I cannot wait to see where we go next with the project.

## ***Next steps and additional questions***

For many learning developers, this will prompt further soul searching – how can we become more actively involved in the positive, sustainable change the authors demonstrate such commitment to? To be involved in the Designing for diverse learners project, respond to this [call for volunteers](#).

## ***Acknowledgments***

Thank you to all the contributors who shared their reflections and enriched our insight into this conference presentation and its impact on the audience.

## ***References***

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## ***Author details***

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**Tom Tomlinson** works as a teaching enhancement officer at the University of Hull. Tom supports staff to make the best use of technology for teaching and learning. He delivers digital literacy and curriculum enhancement workshops via online, face-to-face and blended modes. Tom has a background in design and explores the practical application of technology to enhance learning.