

# Guidance regarding the accessibility of Teaching and Learning digital resources

## Contents

About .....	2
How can I check the accessibility of my teaching resources? .....	3
How accurate and reliable are these tools? .....	3
Is it better to address every issue in individual teaching materials one by one, or address specific issues across all materials? .....	3
The accessibility checker in PowerPoint showed different issues to Blackboard Ally – which one do I use? .....	3
Who will be able to see the Ally accessibility score for my module content? .....	4
What other tools could I use? .....	4
Which file formats does this apply to? .....	4
Do I need to make my PowerPoint slides screen reader friendly if we don't have any visually impaired students on our courses? .....	5
What do I do if I want to use a teaching resource which I can't make accessible? ..	5
We provide examples of previous students' work, as a learning aid. Does this work need to be made digitally accessible before it can be shared? .....	5
What general principles are there for written content? .....	6
How can I make my emails accessible? .....	6
Images and complex diagrams (alternative text descriptions) .....	7
How can I make videos accessible? .....	7
Does video on external sites need to be captioned? .....	8
Do videos need transcripts? .....	8
Does audio-only content need captions, e.g. podcasts? .....	8
Does video-only content need a written description? .....	8
How can I make pdfs accessible? .....	9
Pdfs where the copyright is owned by you, a colleague or the university (e.g. ones you created yourself) .....	9
What if the pdf is a scanned image of a book/magazine/journal article which I do not have access to? .....	9
What should I do with pdf documents sourced from external sites, e.g. academic journals? .....	10
What should I do with handwritten notes? .....	10
Do I need to do anything with third-party content, e.g. external websites? .....	10

I'm concerned about the workload implications of making these changes in time to meet the deadlines set out by the university, who should I speak to? .....	11
Advice for Module Leaders - How to let students know if there are likely to be any issues with the digital accessibility of my module content.....	11
Examinations and online assessments .....	12
Further Learning, Help and Support .....	13

## About

This is a FAQ-style guidance that concerns L&T resources/media, created primarily by academic staff, for use in student education. It gives an overview of accessibility remediation for digital L&T resource and signposts further training opportunities and resources.

The guidance has been developed by academics for academics. It is based on some steering principles and standards approved by TSEB on 24/06/2020.

Colleagues in different disciplines will be approaching this topic with a variety of desired outcomes, so the FAQs include how to audit your resources for accessibility, how to remediate specific types of documents/media, and broader pedagogical concerns about how this may impact your practice.

Some areas of the guidance are still a work in progress. The guidance will be updated as our approach to interpreting the accessibility regulations for complex academic disciplines is refined. In the meantime academic colleagues should use the recommended online accessibility checkers and this guidance to update their L&T resources so that they are accessible in general, while bearing in mind that individual subject knowledge and their own reflections on pedagogy and learning outcomes may inform the application of this guidance to specific resources.

## How can I check the accessibility of my teaching resources?

Blackboard Ally analyses most commonly used content (documents, images, presentations etc) within each Minerva module, identifying any issues regarding accessibility as well as providing detailed instructions for how to fix them. Each item is given a percentage score as well as a red/amber/green rating, and each module has an accessibility report available under 'module tools', which includes an overall score as well as lists of the most common issues and all items by accessibility score.

Information about how to use Blackboard Ally is available on the [Minerva support site](#). Training on Ally will form part of future staff development sessions, [see future dates and book a place](#) on 'Making Minerva accessible'.

Microsoft Word, PowerPoint and Excel have a built-in accessibility checker which can also be used to audit documents. If you are using a recent desktop version of these applications, the accessibility checker also explains how to make changes and why they are important. Microsoft provides [detailed advice on the MS accessibility checker](#).

## How accurate and reliable are these tools?

Extremely. If you follow their guidance the resulting documents will meet a very high standard of accessibility. There are some limitations, for example neither tool can assess the quality of alt text descriptions of images, only whether one is present.

Microsoft's accessibility checker does not evaluate font size, and Ally is currently unable to recognise where materials meet accessibility requirements by supplementing each other. For example, where visual content is made accessible by supplementing it with a written description in a separate document, Ally's score for the visual content will not be updated.

## Is it better to address every issue in individual teaching materials one by one, or address specific issues across all materials?

In general it is better to pick out specific issues and address them for all materials, e.g. coloured backgrounds, as a module where everything meets a good standard of accessibility will likely be more accessible overall than one where some materials are perfect but others have significant issues. You should prioritise consistently meeting the general principles first, then address further issues. It is possible that in some limited circumstances addressing individual files fully would be preferable, colleagues should use their own judgment in making this decision.

## The accessibility checker in PowerPoint showed different issues to Blackboard Ally – which one do I use?

While for the most part both checkers will pick up the same accessibility issues, in some instances one checker can pick up issues the other will not. This is a known problem. However, both checkers cover the legal requirements; any differences between the two are generally an interpretation of good practice. The limitations of

these tools can be mitigated largely by using accessible templates for MS Office documents. As you become familiar with the application of the checkers, templates and this guidance to your own pedagogy you should be able to build the creation of accessible resources into your normal practice.

## Who will be able to see the Ally accessibility score for my module content?

The purpose of Ally and the accessibility score it generates is to enable staff to understand and address the accessibility of their learning materials. They are not visible to students. On a per faculty basis, Deans and Directors of Student Education, or module leaders, may wish to use the scores to quickly review risks on the accessibility of L&T resource. The data Ally generates will otherwise be covered by the Code of Practice on Learning Analytics approved by Senate.

## What other tools could I use?

There are numerous other tools which could be useful, though not supported by the university. The tools provided in MS Office applications are known to provide high quality outputs, and Blackboard Ally is a specialist tool that has been developed and tested by academic and library colleagues. In the first instance, please use these tools.

## Which file formats does this apply to?

Everything that a student needs or might need to engage with through the web, including communications with students (emails). If it's something that a student needs or might need to engage with, then it must be made accessible. This includes but is not limited to document file formats including MS Office files (Word, PowerPoint, Excel), pdf, images, multimedia, webpages, interactive objects, SCORM packages, and embedded content using the HTML <iframe> tag. In addition, international students domiciled overseas who cannot access Minerva may access learning resources through MS Teams or email attachments.

Work is ongoing at the university to remediate content on all our web pages. This guidance concerns L&T resources/media, created primarily by academic staff, for use in student education. Nevertheless the university recognises the scale of this challenge and is putting in place additional support resource and training to help. Outside of that provision, colleagues in different disciplines should use their professional judgement to determine the best approach to remediating their resources pending further guidance. Start with any new or existing key learning materials intended for use next semester, then tackle material as it becomes relevant for the delivery of your module, prioritising any handwritten notes. Ally provides a module report with quick fixes that could help staff to target updates to their 20/21 materials.

## Do I need to make my PowerPoint slides screen reader friendly if we don't have any visually impaired students on our courses?

Yes, even if you're not aware of any students using screen readers, you still need to make materials accessible. Making documents accessible means all students will benefit from being able to engage with the learning in more flexible ways. This guidance will be updated once the university has agreed its approach to complex visual L&T information such as graphs, mathematical expressions and molecular structures. In the meantime please make reasonable adjustments to these content types using the general principles section.

## What do I do if I want to use a teaching resource which I can't make accessible?

If you are unable to make a specific resource fully accessible, it is perfectly acceptable to supplement it with one or more additional resources, so that in combination they provide learning opportunities which are suitable for all students. This represents a high standard of accessibility.

For example, an interactive quiz which can only use serif fonts could be supplemented by a Word document containing the questions and answers in a sans serif font. A non-captioned video on a third-party platform could be supplemented with a text description of the content, or a link to a website which covers the same learning.

This guidance will be updated once the university has agreed its approach to complex visual L&T information such as graphs, mathematical expressions and molecular structures. In the meantime please make reasonable adjustments to these content types using the general principles section.

## We provide examples of previous students' work, as a learning aid. Does this work need to be made digitally accessible before it can be shared?

Yes, the work needs to be made accessible otherwise some students may not be able to access the learning it is being used to provide. However, there may be good pedagogic reasons to leave the original work untouched in order to illustrate exactly what the previous students produced. In this case, the original work should be supplemented with an alternative resource which addresses any accessibility issues. This could be an updated version of the original work which meets accessibility requirements, or a different document which addresses any missing content (e.g. alt text descriptions of images/diagrams, a transcript of audio-visual content). Please note that where colleagues edit a student's work this may impact on its copyright status, which may be relevant in a small number of cases.

If you're unable to provide an alternative version, it is important to make it clear in your module accessibility statement so that students so that students can seek appropriate advice or support at an early stage if they need it.

## What general principles are there for written content?

These general principles should be seen as quick wins; they are general good practice for optimum readability and apply to Word, Excel, PowerPoint and pdf documents as well as written content more broadly.

- Sans serif font (e.g. Arial, Calibri, Verdana) in all cases.
- Minimum text size 12 for Word documents, emails and similar formats designed to be read on a screen.
- Minimum text size 24 for PowerPoint and other presentations designed to be displayed using a projector or in a webinar. This optimises the accessibility for most formats, including viewing on a mobile device, but the font may need to be bigger for display in large rooms with small display screens.
- Use a pastel coloured background for all documents and emails, and avoid using colour alone to convey meaning.
- Documents should use Headings (Word), or slide Titles (PowerPoint).
- The general aim for all sentences and paragraphs should be that they are concise (around 25 words or five lines respectively) but defer to your own subject knowledge and pedagogy.
- Avoid underlining, italics or all capitals for emphasis; use bold instead.
- Try to avoid multi-clause sentences (one that is made up of a main clause and then one or more dependent clauses) where possible but defer to your own subject knowledge and pedagogy.
- Links should be meaningful text which states what the link is to, rather than e.g. "click here" or "link".
- Avoid images of text, unless there is a pedagogic need to share it as an image.
- Use high quality images so that they don't appear pixilated when magnified [link to section on how to do that]
- Accessible templates are provided

## How can I make my emails accessible?

The university's position is that any content which students are required to engage with needs to be made accessible, including electronic communications such as emails and social media, as well as other engagement outside of Minerva such as surveys. This is important for consistency of student experience, and from a legal perspective emails and other communications are covered by the Equality Act (2010).

The general principles above apply to emails. There is also detailed guidance available on the university's [Digital Accessibility website](#).

## Images, diagrams and complex expressions (alternative text descriptions)

Provide a simple “alt text” (alternative text) description for visual content including images, diagrams and graphs; a placeholder statement for complex cases where there is a need for detail can also support the accessibility of diagrams, graphs etc.

The “alt text” should briefly describe the content of the image and why it is being used, followed by a standardised statement:

"Please contact your module leader if you cannot visually access the information in this picture."

If the information in the picture is available elsewhere in the learning material (e.g. in the captions or transcript), this should be noted in the alt-text field. Further information on creating good alt text descriptions can be found at [the Diagram Center](#).

This guidance will be updated once the university has agreed its approach to complex visual L&T information such as graphs, mathematical expressions and molecular structures. In the meantime please make reasonable adjustments to these content types using the general principles section.

For complex expressions created using LaTeX, the software usually defaults to a serif font but a sans serif font can be selected. Microsoft's equation editor defaults to Cambria Math, which has relatively small serifs.

This guidance will be updated once a robust solution to the challenge of applying the new accessibility regulations to complex and specialist text and diagrams has been agreed.

## How can I make videos accessible?

This section will be supplemented with additional detailed advice once it becomes available. It will refer to the approved updated AV recording policy.

From 23<sup>rd</sup> September 2020 all videos which are uploaded to Minerva or any other online space used for teaching – e.g. Teams, OneDrive – need to include captions and an audio description of any purely visual content (this description can be included in the captions, however, it doesn't need to be separate).

There are two university systems which will automatically create captions for video content – Mediasite and Stream. Mediasite is the tool which is used for lecture capture, but can also create desktop capture videos and video files can be uploaded directly to it. Stream allows you to upload video files directly, and recorded meetings from Teams are located in the Stream of the person who started the recording. Some versions of PowerPoint allow presentations to be published directly to Stream as a video.

Both Mediasite and Stream are roughly as accurate in producing captions for video content; generally their accuracy is of a good standard but some editing may be required to improve accuracy in some instances.

Both allow the videos to be downloaded, include basic editing features, and can add elements of interactivity into videos, e.g. quizzes. Mediasite allows videos to be quickly and easily shared to one or more Minerva modules, while Stream is better suited to sharing content with the whole institution, named individuals or specific Microsoft Teams.

### Does video on external sites need to be captioned?

Ideally yes, but if this is not possible then the video must be supplemented by a text document which includes the same learning. This might be a verbatim transcript or another document which contains the same or similar information.

It also does not have to be specifically created for this purpose, the key point is that it allows students who cannot fully perceive the video to access the same or closely similar learning. In some cases an existing resource could fulfil this need.

Sites which caption all videos include YouTube, LinkedIn Learning and Box of Broadcasts (Learning on Screen).

### Do videos need transcripts?

No. Adding a transcript will enhance the accessibility of a video but it isn't a requirement. Microsoft Stream can automatically create transcripts as well as captions, so is a useful tool if you specifically want or need a transcript.

### Does audio-only content need captions, e.g. podcasts?

Yes otherwise someone who cannot listen to the content will not be able to access the learning it contains.

### Does video-only content need a written description?

Yes otherwise someone who cannot visually see the content cannot access the learning it contains.

## How can I make pdfs accessible?

Pdfs where the copyright is owned by you, a colleague or the university (e.g. ones you created yourself)

Pdfs are difficult to evaluate for accessibility by looking at them, as the structure that is required is not visually represented on-screen. It is recommended to use Blackboard Ally to evaluate the accessibility of pdf documents. Accessible pdfs are also known as “tagged” pdfs.

If you created the pdf document yourself then you are responsible for its level of accessibility – where you have retained an original Word/Excel/PowerPoint version then you should use the accessibility checker on the original file, then [follow these instructions](#) if you need to create an accessible pdf version of the document.

However, pdf documents are inherently limited regarding accessibility since they do not respond to screen size. This means they are poorly suited to reading on mobile devices, which are [used by a high proportion of students to access VLE content](#). Over time we should move away from using pdf in favour of more accessible options such as HTML and Microsoft Office formats. To start this process we should avoid creating new pdf documents unless strictly necessary, and where there is a perceived need for pdf to also provide a different file format, e.g. Word. If the rationale for using pdf is to prevent students making changes, Microsoft’s Word’s [restrict editing function](#) can be used instead.

### What if the pdf is a scanned image of a book/magazine/journal article which I do not have access to?

These types of files are highly inaccessible, since anyone who relies on a screen reader will likely perceive nothing at all. Depending on the image quality they may also be difficult to perceive for many or most students regardless of any specific needs.

It is possible to convert pdf documents into Word format, either using Microsoft Word or Abbyy pdf transformer [links to guidance here]. For pdf documents with a simple layout this can be very accurate and reasonably quick to proofread and edit, but for more complex documents the time required is likely to be prohibitive. In these cases you should contact the library for advice on acquiring an OCR (Optical Character Recognition) scan of the original document.

This guidance would also apply to managing scarcity in L&T resource. For example where there are not enough copies of e-books for all of your students and you provide copies of the relevant chapters as pdfs.

## What should I do with pdf documents sourced from external sites, e.g. academic journals?

It may not be possible to edit these documents ourselves due to copyright restrictions, depending on the publisher and the details of the university's licensing agreement. It is recommended that rather than sharing the pdf document, staff share a link to the electronic version via the library website. If you feel there is a benefit to some students from sharing the pdf directly you can do both, but you need to clearly highlight the limitations of the pdf document. This information can be added to the Module Accessibility statement.

## What should I do with handwritten notes?

These should be converted into electronic text (not scanned as an image), which will make them accessible to students using screen readers and likely enhance readability for all students. This can be achieved in different ways, for example automatically using Optical Character Recognition (OCR) software, manually typed, or by audio-narrating the content and auto-captioning the resulting recording.

The speech-to-text capabilities of MS Word etc are also now very powerful, and most mobile device keyboards include an option to transcribe speech to text. Please note audio narration may be less effective for highly technical content including mathematical expressions. If you feel there is a pedagogic need for your students to view handwritten content, it can be provided alongside a typed version.

## Do I need to do anything with third-party content, e.g. external websites?

If the website is not owned, funded or supported by the university then its content is not legally required to be made accessible by us. However, we are required to provide learning opportunities which are accessible to all students, so if third-party content is not fully accessible then it needs to be supplemented with one or more other resources, so that in combination they meet the needs of all students. For example, if an external website includes some content which relies on colour alone to convey meaning, then it could be supplemented with a separate explanation of that content which does not rely on colour. If a voluntary external speaker provides a PowerPoint presentation which does not meet the general principles then it needs to be edited to meet them (it's acceptable to also provide the original presentation alongside the edited one, as long as the difference between them is clearly indicated).

I'm concerned about the workload implications of making these changes in time to meet the deadlines set out by the university, who should I speak to?

It's unavoidable that the systematic enhancement of all teaching materials may take a significant amount of time, and for many reasons the time commitment required of individual colleagues could vary quite substantially. If you would like clarification of what you are being asked to do beyond what is provided in this guidance please visit [The Digital Practice website](#) for details of training sessions, or contact your [School Academic Lead for Inclusive Practice \(SALIP\)](#). If you feel that you fully understand what you are being asked to do but are concerned about the workload implications, please discuss this with your line manager.

## Advice for Module Leaders - How to let students know if there are likely to be any issues with the digital accessibility of your module content

Module leaders can use Blackboard Ally to help populate module-level accessibility statements once some work towards meeting the general principles outlined in this guidance has been completed. The statement should be housed in the Module Information area.

Statements to be deleted as appropriate:

Information for students about the accessibility of the learning and teaching materials in this module:

- This module contains pdfs which do not meet accessibility standards due to copyright restrictions
- This module contains complex diagrams or graphs which do not have an accompanying long description (including within a transcript created via audio capture)
- This module contains videos recorded prior to September 2019 which do not have accompanying captions or a transcript
- This module contains online maps which do not meet accessibility standards
- This module contains handwritten solutions which are not digitally accessible
- Some of the images used in this module have not been converted to a high quality resolution and may therefore be incompatible with magnification software
- The following third party software applications are used in this module (e.g. Top Hat)
- If you are unable to access any of the content of this module for disability related reasons, please contact your module leader in the first instance. You should also ensure that you have registered for support from [Disability Services](#)

It is recommended that colleagues only use the wording provided here, in order to maximise clarity and consistency. They can be supplemented by a more detailed

description (e.g. which specific resources are affected) following the list of statements, should colleagues choose to do so.

## Examinations and online assessments

Guidelines have been compiled detailing how students with Exam Access Arrangements (EAAs) can be supported and assessments can be structured inclusively. It is worth acknowledging that, in many instances, online or remote examinations are more appropriate or beneficial for a wider range of students. However, it is also the case that new challenges may be presented, including some that would require bespoke adjustments.

Colleagues in the Programmes and Assessment Team, Disability Services and LITE have proposed a set of online assessment principles which were approved by TSEB on 24/06/2020. These are intended to ensure that disabled students and/or those with personal circumstances that may impact their ability to access or participate in online examinations are fully supported. In addition, guidance is provided regarding EAA appropriate adjustments in the context of online assessment.

## Further Learning, Help and Support

First advice and guidance is published on the university's [digital accessibility website](#) and plans for more advice, drop in advice sessions and training are being developed.

### Accessibility fundamentals

- [Accessibility legislation – what it means for Leeds](#) (published February 2020)
- [Information on accessibility fundamentals](#)
- [Create accessible emails with Microsoft Outlook](#)
- [School Academic Leads for Inclusive Practice](#)
- [Digital accessibility and the curriculum](#) (external site)

### How to write accessible technical content

- [Writing accessible technical content](#) (external site)

### Creating high resolution images

- [How to create high resolution images for users with low vision](#) (external site)

### Digital tools and resources

- [Tools and resources at University of Leeds](#)

### Digital accessibility checkers

- [Blackboard Ally information](#)  
[Online training sessions including on Blackboard Ally](#) (the sessions available are regularly updated and subject to change over time)
- Microsoft Office - [improve accessibility with the accessibility checker](#) and [check document accessibility in Word](#).

### Support and Training

- [Digital Education Service home page](#)
- [Digital Education Service accessibility webpage](#)
- [Organisational Development & Professional Learning's digital practice website](#)
- [JISC accessibility drop-in clinic](#) (external service, due to re-start in September)
- [Disability Services webpage](#)

### Other Information

- [Accessibility regulations – what you need to know](#) (external site)
- [Recent improvements for disabled students](#) (external site)