

Near-Life: How to Create Accessible Content

Why accessibility is important.

Here at Near-Life we want to help you make your content as accessible as possible - whether it's interactive course content designed for learners. Or content designed for other end users.

Ensuring content is accessible for as many people as possible, regardless of their abilities, isn't just something you do to meet standards, such as the [Web Content Accessibility Guidelines \(WCAG\)](#) and [Section 508](#): When you enhance the accessibility of your content, everyone benefits.

This short guide has been developed with help from the [Digital Accessibility Centre](#) in the UK and is designed to support the Near-Life user community to put accessibility at the forefront of their content design.

Key sections of the guide include how to:

- Design with accessibility in mind
- Consider the specific nature of video
- Make images accessible

- Make text accessible
- Find out more - get extra help and advice

Design with Accessibility in Mind

You want all your users, including those with visual, motor, auditory, speech, or cognitive disabilities, to understand, navigate, and interact with your content. By offering clear instructions up front - whether in the actual interactive scenario, or on the website or LMS your interactive content is hosted - it should help make users comfortable with the layout and design by providing accessibility instructions.

Here are some best practice ideas that could help:

- **Use simple, straightforward language.** Focussing on clarity of language helps your users understand things more easily.
- **Use consistent design.** A consistent design makes any content easier to navigate and understand. Use consistent fonts to look the way you want, then reuse them throughout your course: whether you're using Near-Life's slide functionality, creating visual overlays on a video or using an external design tool such as Canva or Powerpoint.

- **Provide clear feedback whenever possible.** Users can benefit from getting confirmation when an action is completed. Error messages should also provide clear direction.
- **Try to avoid distractions and clutter** - Overly involved and intricate designs can cause people with cognitive disabilities to miss key information. If there are complex designs e.g. with lots of animation, that you feel are important, consider offering two versions.
- **Use accessible fonts.** Try to stick with plain and straight fonts, such as Sans serif fonts and avoid all-caps formatting as it's challenging to read.
- **Use descriptive links.** Try and provide links with the proper context. For example, "click here" doesn't tell learners what the link does. Hyperlink a specific phrase instead: "read our policy statement."
- **Provide text-based alternatives.** Text is always valuable in communicating important details. If you are creating something particularly visual, using images, video or animations, text-based alternatives for learners and other users with visual impairments can be incredibly helpful. Where possible, use alternative (alt) text to describe images. Or, add an optional link to an animated slide that opens information that is accessible using a screen reader.

- **Avoid flashing content.** In the case of photosensitive epilepsy, flashing can trigger seizures. Animations, GIFs, and videos shouldn't flash, blink, or flicker more than three times per second.

Consider the specific nature of video

Although Near-Life is compatible with various media, it is primarily designed as an interactive video authoring tool and content shared from the platform plays like a self-contained piece of video content or 'game'.

Working with video brings its own specific accessibility challenges but there are key things to consider:

Avoid autoplay

Some people will navigate by listening, so it can be helpful not to allow audio or video content to start playing automatically. Near-Life scenarios or games will always require users to press play to begin. However, consider using 'waypoints' in your interactive content, that allow for moments of reflection - and allow people to choose when to commence the next elements. This will provide your users or learners greater control when navigating interactive content.

Add Subtitles

Near-Life allows users to provide subtitles, or closed captions, to all their media. Subtitles are easily added using a simple VTT file. This will allow users with hearing difficulties, or people who comprehend written text better, the ability to follow video content. You can also provide alternative language versions.

Plus, closed captioning isn't just for learners with hearing impairments. If your course is a second language for learners, captions might help them fully understand the content. And learners in noisy surroundings will appreciate captions too. It also helps to clearly define the language you are using - especially for learning projects that may be accessed by multiple audiences.

Provide a Transcript

Transcripts are audio converted to written text. They are different from closed captions, which are time-coded frames. Consider adding a transcript, wherever you choose to embed your Near-Life scenario. Be sure to include necessary details in the written transcript conveyed visually in images and videos so learners have all the information.

Add Audio Description

Where possible, it is good practice to ensure that any important characters, text on screen and or other important reference points, should be in an audio-description or the audio track itself.

Customize the Text Labels

Screen readers use text labels to describe buttons, messages, screen reader instructions, and other player controls.

Choose Visible Focus Indicator Colors

Use hotspot overlays to provide a ‘focus indicator’. When learners navigate using a keyboard, an outline—called a focus indicator—highlights the currently selected object. Without a focus indicator, these learners won't know where they are on the page—so it's essential. The visible focus indicator ratio is 3:1 - this helps ensure keyboard-only users can see focus indicators clearly.

Increase Font Size

When designing buttons you have control over the size of the button and the text used. Using hotspot overlays and your own personally designed slides, or image overlay, you can also have complete control over how you present visual interactions.

There's more information on using hotspot overlays to create interactions [here](#).

Make Images Accessible

Add Alternative Text

Non-text content needs alternative text (alt text) to describe its meaning to learners using assistive technologies, such as screen readers.

You only need to add alt text to objects that convey meaning or context to the learner. It's good practice to hide purely decorative images and shapes from accessibility tools when they don't contribute to the purpose of the content. Otherwise, screen reader users will be fatigued by unnecessary announcements.

Here are some useful tips for writing good alt text:

- Convey the same content and information presented by the object or image—no need to include any on-screen text.
- Be concise without skimping on relevant information.
- Don't include "image of" and "graphic of" and just provide the information needed.
- Don't use abbreviations and excessive punctuation such as ***, which screen readers will annoyingly read as "asterisk, asterisk, asterisk."

Make Text Accessible

Use a Contrast Ratio of 4.5:1

Some learners have low vision rather than total blindness. To make your course accessible for learners with low vision, use on-screen text with a contrast ratio of 4.5:1 or higher against the background color.

If you overlay text on a background image, reduce the brightness and contrast of the image to make the text easier to read. Or, place a semi-transparent shape between the image and the text to increase the contrast ratio.

To quickly determine the contrast ratio, try this [web-based contrast checker](#) or download this [contrast checker tool](#).

Offer an Audio Alternative for On-Screen Text

Some learners may be able to see your course but prefer to listen rather than read. They might have learning disabilities, such as dyslexia, might not be strong readers, or might be in a busy environment where they can't focus on the screen. Or perhaps your course language is a second language for them. Consider offering an audio version of text-based slides for these learners. For example, you could play optional narration when learners click a speaker icon or press a keyboard shortcut.

With Near-Life's interactive branching abilities, it's easy for you to build out an alternative audio branch and allow your end users to choose an audio alternative if that is their preferred option.

Don't Rely on Color Alone to Convey Meaning

If you use color to provide important context or meaning, offer text, audio, or image equivalents for learners with color blindness. For example, if you use green to indicate a correct response and red to indicate an incorrect response, include audio or on-screen text to convey the same information for learners who can't distinguish between green and red.

Similarly, don't rely on color alone to identify hyperlinks. For example, underline text with a link, and provide instructions for images with links, so learners know they're interactive.

Ideally, it's best to work with someone who has color blindness so you can ensure the best possible experience. [Color Oracle](#) is a free color blindness simulator if that's not an option. It takes the guesswork out of designing for color blindness by showing you what people with common color vision impairments will see in real-time.

Don't Rely on Hover States Alone to Display Details

While hover states are great for conveying interactivity, important information should be delivered with richer information. For example, the color of a button or hotspot when a mouse hovers over it will indicate that it's a clickable object but the key feedback text should be provided either via a pop-up or by branching to a new slide or video.

Consider the Appropriateness of Time Limits

Where time based decision making is critical, Near-Life learning can help simulate the pressure of this decision making. However it is not always necessary to add time limits. Time pressure can prohibit the learner's ability to use the accessible alternatives you've added or may create a focus obstacle. Unless fundamental to a specific test-purpose, quiz timers can create accessibility difficulties.

Accessibility and 180/360° Images and Video

VR/ XR content can provide a more immersive experience for users: whether for immersive scenarios or virtual tours and other exploratory experiences. Research has shown that immersive content can significantly aid knowledge retention.

Near-Life treats 360 and 180 video and images in the same way it does standard 2D video. Consider the same types of feedback, audio and navigation rules that you would use with other 2D content.

Find out more

These guidelines have been developed with the support of the Digital Accessibility Centre in the UK. They are a recognised source of expertise regarding all things accessibility. Please contact them to explore projects or ideas where accessibility is central to your aims.

You can also visit <https://webaim.org>, based in the US, for comprehensive web accessibility solutions, including training, tools, and community support.

Near-Life aims to continue to update their accessibility resources - including advice, best practice information.

And if you're struggling with any technical implementation, the Near-Life team is always here to help: support@near-life.tech.