

# PROCESS FOR CREATING ACCESSIBLE ELEARNING

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## I. ID

#### Designing for accessibility

#### Visual Impairment

Add narration to the learning.

Learners using screen reading software can read invisible text, or alt text. Invisible text can be used to convey instructions specifically to these learners. Alt text can be added to graphics as well as regular text, which the screenreader will read differently from the visual text.

If the learning contains any of the following, the activity will have to be converted to a multiple choice or multiple selection format. This can be made available as a secondary option in addition to the original activity.

- any drag-and-drop activity
- any drop-down menu activity
- text or numeric entry boxes

#### Aural impairment

Avoid placing narration behind click-and-reveal activities, as programming multiple layers of audio to interrupt each other as well as the corresponding CC text can be difficult.

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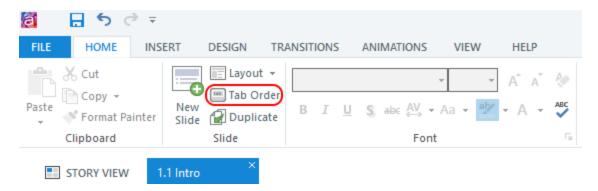


## II. Programming

#### Programming accessible modules

## Keyboard functionality

The Tab Order menu can be found on the Home toolbar in Storyline 2, in the second section from the left labeled Slide. It is the second button under Layout.



This menu can edit which objects on the slide can be accessed via the Tab key, the order in which they appear, and any alt text that needs to be added. Ensure that any unnecessary objects are removed from the tab order to minimize the amount of tabbing the keyboard user needs to navigate through the slide. The order can be changed by dragging any item to another place in the list.

However, any shape, text box or hotspot on the screen with functionality will be read as 'button' following any text or alt text already on the object. E.g.: a text box saying 'CLICK HERE' will be read as 'CLICK HERE, BUTTON' by JAWS. Conversely, a button created specifically from the Interactive Objects menu without any functionality will still be read as 'button'.

'Invisible' text can be made for screenreader instructions by selecting the text and using the eyedropper in the font colour menu to select the background colour. Then make sure the text is placed behind all other objects on the slide. Of course, you can still adjust when the learner can tab to it from the Tab Order menu.

## **Closed Captioning**

Where there is narration, ensure that there is space to accommodate closed caption text. Generally, this text is placed in a narrow bar that appears along the bottom of the slides. Keep the space clear of any necessary text or graphics that may be hidden by the CC bar.

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#### Programming the CC bar and triggers

First, create two variables, a True/False variable named CCtoggle and a blank text variable named CCtext. Create a CC bar in a new layer named CC at the top of the slide master, and center %CCtext% in it. This will display whatever the CCtext variable is set to. Create triggers in the slide master as follows:

Show layer CC
When the timeline starts
If CCtoggle is equal to True
Hide layer CC
When the timeline starts
If CCtoggle is equal to False

Create a new scene with a new slide that cannot be navigated to, and set the timeline to 1/8 of a second. Add these triggers:

Toggle variable CCtoggle

When the timeline starts

Jump to previous slide

When the timeline starts

Then, in the Player Properties Menu, add an item in the Topbar Right named CC or Closed Captions and add a trigger to it that jumps to this dummy slide.

Keep in mind that when using this system for CC text, all the slides in the module should 'Reset to Initial' on revisit, and all layers should be have 'Hide other slide layers' turned off.

When programming individual slides, CCtext is cued to cue points on the timeline based on the audio. Each line of text will be a separate trigger; e.g.

Set CCtext equal to [transcript of audio line]
When the timeline reaches Cue point #1

Adjust the cue points as necessary to have the text lines correspond to when they are spoken. Also, check to make sure that the line will fit in the text box, if it doesn't, you will have to separate the line into two triggers.

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## III. QA

#### Checking that everything works

#### **Closed Captioning**

Have the CC turned on to check that the text matches and is correctly timed to the audio.

## Keyboard functionality and JAWS

When testing with JAWS, the module must be run on Internet Explorer for JAWS to work.

If using JAWS for the first time, it is useful to turn the Typing Echo off so the reader doesn't repeat Tab every time you press the key. Go to the Utilities in the JAWS window, select Settings Center from the drop down menu, and select Off under the Tying Echo in the User section.

Test the course using only Tab, Shift+Tab, Enter and Space to ensure the course can be navigated fully with the keyboard, and that JAWS is reading the items out correctly.

The default blank 'Skip Navigation' tab item that JAWS reads out at the end of the tab order allows the user to restart tabbing from the beginning of the tab order without having to tab through the player menu options.

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