**Accessible Learning Object Design – Compliance Checklist**

The following table identifies the sub-set of W3C Web Content Accessibility Guidelines (WCAG 2.0) specific to learning objects authored using popular software such as Articulate Storyline and Adobe Captivate. This sub-set of guidelines includes those criteria that require human intervention to ensure compliance of interactive learning objects with [WCAG 2.0 AA Web Accessibility](https://www.w3.org/WAI/WCAG20/quickref/) standards. This checklist can be used as a stand-alone resource or in conjunction with the browseable examples and illustrations found on the Accessible Learning Objects website at <access.onlinelearning.utoronto.ca>.

The material has been organized according to the four major accessible design principles, and the relevant guidelines applicable to learning objects, as formed by WCAG. These four areas are Perceivable, Operable, Understandable and Robust.

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| **Perceivable** | |
| **Success Criteria** | **Recommendations** |
| **Non-text Content (Level A)** | All non-text content that is presented to the user should have a text alternative that serves the equivalent purpose.  **Checklist:**   * Short text alternative for all non-text content that convey information/are not decorative is provided. |
| **Prerecorded Audio-only and Video-only (Level A)** | An alternative with equivalent information for prerecorded audio/video should be provided.  **Checklist:**  **Situation A** - If the content is prerecorded audio-only   * Text alternative is provided.   **Situation B** - If the content is prerecorded video-only   * Text alternative OR audio track/video with audio description is provided. |
| **Captions (Prerecorded) (Level A)** | Captions for all prerecorded audio content in synchronized media should be provided.  **Checklist:**   * Open (ie. always available) or closed captions for prerecorded audio are provided. |
| **Audio Description or Media Alternative (Prerecorded) (Level A)** | Alternative for time-based media or audio description should be provided for prerecorded video content in synchronized media.  **Checklist:**   * Text alternative OR audio track/video with audio description for prerecorded video is provided. |
| **Audio Description (Prerecorded) (Level AA)** | Audio description is provided for all prerecorded video content in synchronized media.  **Checklist:**   * Audio track/video with audio description for prerecorded video is provided. |
| **Meaning Sequence**  **(Level A)** | The sequences in which content is presented must be logical and intuitive.  **Checklist:**   * Content is ordered in a meaningful sequence. |
| **Sensory Characteristics**  **(Level A)** | Instructions provided for understanding and operating content should not solely rely on sensory characteristics like shape, size, spatial location/orientation, or sound.  **Checklist:**   * Text is used to identify items that rely on sensory information to be understood. |
| **Use of Color**  **(Level A)** | Colour should not be the only visual means of conveying information or distinguishing visual elements.  **Checklist:**  **Situation A** – If the color of particular words, backgrounds, or other content is used to indicate information   * Information conveyed by colour is also available in text. * Surrounding text has a contrast ratio of 3:1 * Text has additional visual cues (ex. **bold**, *italics*, underline).   **Situation B** – If colour is used within an image to convey information   * Information conveyed by colour is also available in text. * Patterns are included to convey the same colour information. |
| **Audio Control (Level A)** | If any audio plays automatically for more than 3 seconds, a mechanism should be available to pause/stop the audio or adjust audio volume independently from the overall system volume  **Checklist:**   * Mechanism is provided to stop, pause, mute, or adjust volume for audio, or audio automatically stops after 3 seconds. |
| **Contrast (Minimum)**  **(Level AA)** | Visual presentation of text and images of text should have a contrast ratio of 4.5:1 or 3:1 depending on font size.  **Checklist:**  **Situation A** – If text is less than 18 point font and/or less than 14 point bolded font.   * Contrast ratio of 4.5:1 exists between text/images of text and background.   **Situation B** – If text is at least 18 point font and/or 14 point bolded font.   * Contrast ratio of 3:1 exists between text/images of text and background. |

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| **Operable** | |
| **Success Criteria** | **Recommendations** |
| **Keyboard (Level A)** | All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.  **Checklist:**   * All slide functionality is available using the keyboard. * All events handlers triggered by non-keyboard functionality are associated with a keyboard functionality. * Keyboard focus is able to freely move to and away a component of the slide using the keyboard. |
| **No Keyboard Trap (Level A)** | Keyboard focus should be able to move to a component of the slide, then be moved away from that component using only a keyboard interface. If switching focus requires more than unmodified arrow, tab keys, or other standard exit methods, instructions to move focus away should be provided.  **Checklist:**   * Users can navigate to and from slide components using only a keyboard. |
| **Timing Adjustable (Level A)** | If a slide or application has a time limit, users should be given options to turn off, adjust, or extend that time limit. This is not required for real-time events, where the time limit is absolutely required, or if the time limit is longer than 20 hours.  **Checklist:**   * Mechanism is provided to turn off, adjust, or extend time limit. * Warning that time is about to expire is provided. |
| **Pause, Stop, Hide (Level A)** | A mechanism should be provided to pause, stop, and/or hide moving, blinking, scrolling information that (1) starts automatically, (2) last for more than 5 seconds, and (3) is presented in parallel with other content.  **Checklist:**   * Mechanism is provided to pause, stop, and/or hide information. * Paused information can be restarted from where it was paused. |
| **Three Flashes or Below Threshold (Level A)** | Slides should not contain anything that flashes more than 3 times per second, or flashes should be below the the general flash and red flash thresholds.  **Checklist:**   * No components on the slide contain flashes that occur more than 3 times per second, or flashes are sufficiently small and are not too red. |
| **Bypass Blocks (Level A)** | A mechanism should be provided to bypass content that is repeated on Slides.  **Checklist:**   * Repeated content is grouped together, and an option to skip content is provided. |
| **Slide Titled (Level A)** | Slides should have titles that appropriately identify the topic or purpose, and orient users without having to read or interpret the content of the slide.  **Checklist:**   * Slides have titles that appropriately identify the topic or purpose. |
| **Focus Order (Level A)** | If a slide can be navigated sequentially, and the navigation sequences affects content meaning, focus on components of the slide should be order to preserves content meaning.  **Checklist:**   * Navigation order conveys the meaning of the content. |
| **Link Purpose (In Context) (Level A)** | The purpose of each link should be determined from the link text alone, or from the link text in combination with its context.  **Checklist:**   * The purpose of the link is described in the text of the link, or described in text alternatives/labels. |
| **Multiple Ways (Level AA)** | Multiple ways should be provided to access a slide, except where the slide is a result of a process.  **Checklist:**   * At least two options are available to access a slide (ex. table of contents, search function, content map) |
| **Headings and Labels (Level AA)** | Headings and labels should have titles that appropriately identify the topic or purpose to increase the ease of locating and understanding content.  **Checklist:**   * Headings and labels have titles that appropriately identify the topic or purpose. * Avoided duplications of headings and labels, unless there was adequate differentiation between them. |
| **Focus Visible (Level AA)** | All keyboard operable user interface should have a mode of operation where the keyboard focus indicator is visible.  **Checklist:**   * It is visually apparent which slide component has the current keyboard focus (i.e., as you tab through the slide, you can see where you are). |

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| **Understandable** | |
| **Success Criteria** | **Recommendations** |
| **Unusual Words (Level AAA)** | Words that may be ambiguous, unknown, or used in a very specific way should be defined through adjacent text, a definition list, a glossary, or other suitable method.  **Checklist:**   * Words that are ambiguous, unknown or used in a specific way are defined. |
| **Abbreviations (Level AAA)** | Expansions for abbreviations should be provided by expanding or explaining the definition the first time it is used.  **Checklist:**   * Abbreviations are defined |
| **Consistent Navigation (Level AA)** | Navigational mechanisms that are repeated on multiple slides should occur in the same relative order each time they are repeated, unless a change is initiated by the user.  **Checklist:**   * Navigation mechanisms that are repeated do not change order throughout the module. |
| **Consistent Identification (Level AA)** | Components that have the same functionality should be identified consistently.  **Checklist:**   * Component that have the same functionality are identified consistently across the module. |
| **Error Identification (Level A)** | If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text.  **Checklist:**   * Text descriptions are provided to identify input errors. |
| **Error Suggestion (Level AA)** | If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content.  **Checklist:**   * Text descriptions are provided to identify input error and suggest corrections. |

Storyline and Captivate provide Voluntary Product accessibility Templates (VPATs) which describe how the published output of their software comply with accessibility standards. The “Robust” criteria are captured in these VPATs.

Storyline: <https://articulate.com/support/article/Articulate-Storyline-Section-508-Accessibility-VPAT>

Captivate: <http://www.adobe.com/accessibility/compliance/adobe-captivate-9-section-508-vpat.html>

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| **Robust** | |
| **Success Criteria** | **Recommendations** |
| **Parsing (Level A)** | In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. |
| **Name, Role, Value (Level A)** | For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. |

All material adapted from How To Meet WCAG 2.0

<https://www.w3.org/WAI/WCAG20/quickref/>

accessed March 10, 2017