EDpuzzle Accessibility Research and Testing: Overview of Accessibility Issues

Why we needed to review your product:

- North Carolina Community College System has adopted the Web Content Accessibility Guidelines ("WCAG") 2.0 as the standard for which we must design and deliver online content to our students
- When we wish to use 3rd party tools, such as your product, our system requires that those be accessible as well (basically, all digital content we expose our students to must follow those guidelines)
- We love your product! We wanted to determine whether we could continue to use it!

Two types of testing were performed: keyboard testing and screen reader testing

- Why these two tests:
 - Though there are a number of accessibility tests available, we selected these two tests because they allow us to capture a snapshot of how your product functions when two groups of people -not typically defined as "general users" by web developers – use it.
 - These tests are not intended to be comprehensive (our budget and staffing limit how deeply we can dive into testing 3rd party applications), but the tests do provide insight into the difficulties that some users experience.
- Test 1: Keyboard-only testing
 - PURPOSE OF TEST: to determine whether or not all actions that can be performed with a mouse are able to be performed with the keyboard
 - WHY: Users with mobile impairments that limit their ability to use a mouse utilize the keyboard for all computing activities.
- Test 2: Screen reader testing
 - PURPOSE OF TEST: to determine whether or not all actions that can be performed by the general user population are able to be performed by a user with an assistive technology
 - WHY: Some users with visual impairment are unable to see content on the monitor

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Summary of results:

Keyboard-only interfacing: LIMITED

- Expectation:
 - The user should be able to complete all of the **same functions** with a keyboard that can be completed with a mouse.
- Supports:
 - \circ the ability to log in to embedded EDpuzzle via (what appears to be a) modal window
 - o the ability to log in via the EDpuzzle website
 - ability to locate and access the desired video on the website
 - o type and submit an open-ended response
 - select and open a hyperlink
- Barriers:
 - unable to access the video player control panel (after starting the video, there is no ability to stop/pause button)
 - unable to access closed captions
 - unable to use the timeline to jump to content
 - o unable to select and submit a multiple choice response

Screen reader interfacing: POOR

- Expectation:
 - The user should be able to **readily locate information and complete all of the functions** with a keyboard and screen reader that a sighted user can complete visually with a mouse.
- Barriers:
 - unable to successfully log in to embedded video
 - unable to successfully log in to website
 - unable to play video through direct link to EDpuzzle video
- Additional notes
 - after visually assisted log in to embedded content and EDpuzzle classroom

(for testing purposes, to gather additional information, a visually impaired user should be able to log in without assistance from a sighted person)

- much of the content that appears on screen is not labeled in the code (very difficult to locate relevant information)
- difficult to remain orientated due to Tab order of items and unlabeled elements
- difficult to make selections:
 - cannot use headings nor Tab button to quickly locate assignments in classroom (unsure of which content is the video itself)
 - most of the text and graphics are announced as clickable (which should indicate a hyperlink), but the text is not, in fact, clickable (this leads user to believe there is some sort of error)
- when video pauses, there is no trigger to the screen reader to announce what to do next
- unable to access the video player's control panel (after starting the video, there is no access to stop/pause button)
- \circ when enabled by the instructor, unable to use the timeline to jump to content
- unable to select and submit a multiple choice response
- o no ability to add alt text (and long description, when needed) to images