

# VPAT Accessibility Conformance Report

(Based on ITI VPAT<sup>®</sup>)

Name of Product	<b>Osmosis</b>
Date Last Updated	April 30, 2026
Completed by	Nicholas Seow (Elsevier Digital Accessibility Team)
Applicable Standards/Guidelines	This document rates Osmosis according to the <a href="#">W3C WCAG 2.2 A and AA</a> requirements.
Contact for More Information	Elsevier Digital Accessibility Team <a href="mailto:accessibility@elsevier.com">accessibility@elsevier.com</a>
Testing Tools and Methods	<ul style="list-style-type: none"><li>• Hands-on keyboard operation</li><li>• DevTools/Code inspection</li><li>• Mozilla Firefox 149 and Chrome 147 on Windows 11 24H2</li><li>• NVDA screen reader 2025.1</li><li>• WAVE Browser Extension</li><li>• Color Contrast Analyzer</li><li>• <a href="#">W3C Web Accessibility Initiative (WAI) Pages</a></li><li>• <a href="#">Elsevier Accessibility Checklist</a></li></ul>
Document Sections	This review document includes all WCAG 2.2 A and AA checkpoints, organized into 7 logical sections: <ul style="list-style-type: none"><li>• Visuals</li><li>• Keyboard</li><li>• Headings and Structure</li><li>• Labeling</li><li>• Multimedia</li><li>• Usability</li><li>• Mobile User Experience</li></ul>
Pages Covered	<ul style="list-style-type: none"><li>• <i>Learning tools and resources</i>: Dashboard, Search, Library, Video, Playlists, Quiz, Question Quiz Builder, Study Schedule (Study Schedule dashboard, Add Schedule Wizard)</li><li>• <i>User account management</i>: Account, Analytics</li><li>• <i>Access and authentication</i>: Login</li></ul>
Terms	<ul style="list-style-type: none"><li>• <b>Supports</b>: The functionality of the product has at least one method that meets the criteria without known defects or meets with equivalent facilitation.</li><li>• <b>Partially supports</b>: Some functionality of the product does not meet the criteria.</li><li>• <b>Does not support</b>: Majority of functionality of the product does not meet the criteria.</li><li>• <b>Supports (N/A)</b>: According to W3C on conformance, "If there is no content to which a success criterion applies, the success criterion is satisfied."</li></ul>
Notes/Terminology	<ul style="list-style-type: none"><li>• "AT" stands for Assistive Technology such as screen readers, voice input, etc.</li><li>• <b>Related ACRs</b>: <a href="#">Elsevier Identity</a> (NeoID – Elsevier registration, authentication, and account management)</li></ul>

## Conformance Summary

WCAG 2.2 Success Criterion	Level	Evaluation
1.1.1: Non-text Content	A	Partially supports
1.2.1: Audio-only and Video-only (Prerecorded)	A	Supports (N/A)
1.2.2: Captions (Prerecorded)	A	Supports
1.2.3: Audio Description or Full Text Alternative	A	Supports
1.2.4: Captions (Live)	AA	Supports (N/A)
1.2.5: Audio Description	AA	Partially supports
1.3.1: Info and Relationships	A	Partially supports
1.3.2: Meaningful Sequence	A	Supports
1.3.3: Sensory Characteristics	A	Supports
1.3.4: Orientation (2.1)	AA	Supports
1.3.5: Identify Input Purpose (2.1)	AA	Supports
1.4.1: Use of Color	A	Partially supports
1.4.2: Audio Control	A	Supports
1.4.3: Contrast (Minimum)	AA	Partially supports
1.4.4: Resize text	AA	Supports
1.4.5: Images of Text	AA	Supports
1.4.10: Reflow (2.1)	AA	Partially supports
1.4.11: Non-Text Contrast (2.1)	AA	Partially supports
1.4.12: Text Spacing (2.1)	AA	Supports
1.4.13: Content on Hover or Focus (2.1)	AA	Supports
2.1.1: Keyboard	A	Partially supports
2.1.2: No Keyboard Trap	A	Supports
2.1.4: Character Key Shortcuts (2.1)	A	Supports
2.2.1: Timing Adjustable	A	Supports (N/A)
2.2.2: Pause, Stop, Hide	A	Supports (N/A)
2.3.1: Three Flashes or Below Threshold	A	Supports (N/A)
2.4.1: Bypass Blocks	A	Partially supports
2.4.2: Page Titled	A	Partially supports
2.4.3: Focus Order	A	Partially supports
2.4.4: Link Purpose (In Context)	A	Supports
2.4.5: Multiple Ways	AA	Supports
2.4.6: Headings and Labels	AA	Supports
2.4.7: Focus Visible	AA	Supports
2.4.11: Focus Not Obscured (Minimum) (2.2)	AA	Supports
2.5.1: Pointer Gestures (2.1)	A	Supports (N/A)
2.5.2: Pointer Cancellation (2.1)	A	Supports
2.5.3: Label in Name (2.1)	A	Partially supports
2.5.4: Motion Actuation (2.1)	A	Supports (N/A)
2.5.7: Dragging Movements (2.2)	AA	Partially supports

WCAG 2.2 Success Criterion	Level	Evaluation
2.5.8: Target Size (Minimum) (2.2)	AA	Supports
3.1.1: Language of Page	A	Supports
3.1.2: Language of Parts	AA	Does not support
3.2.1: On Focus	A	Supports
3.2.2: On Input	A	Supports
3.2.3: Consistent Navigation	AA	Supports
3.2.4: Consistent Identification	AA	Supports
3.2.6: Consistent Help (2.2)	A	Supports
3.3.1: Error Identification	A	Supports
3.3.2: Labels or Instructions	A	Supports
3.3.3: Error Suggestion	AA	Supports
3.3.4: Error Prevention (Legal, Financial, Data)	AA	Supports
3.3.7: Redundant Entry (2.2)	A	Supports (N/A)
3.3.8: Accessible Authentication (Minimum) (2.2)	AA	Supports (N/A)
4.1.1: Parsing	A	Supports
4.1.2: Name, Role, Value	A	Partially supports
4.1.3: Status Messages (2.1)	AA	Partially supports

## WCAG 2.2 A and AA Success Criteria

### Visuals

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.1.1: Non-Text Content</a> (A) Provide text alternatives for non-text content (e.g. images)</p>	Partially supports	<p>Most images and icons have appropriate text equivalents. Alternatives for charts within the Analytics section are provided in the form of tables via "View More", as well as downloadable data spreadsheets.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Dashboard: Daily Practice streak– Flame icon representing the streak count along with its adjacent number lacks an appropriate text alternative (aria-label is on a generic element)</li> <li>• Search: Search result preview thumbnails – Search result type (e.g. video or document) is visually indicated via icons upon pointer hover, or other cues such as image aspect ratios. This information is not communicated via a text alternative within the search result item, although it is apparent at the destination.</li> <li>• Login, Create Account: Social media links – Brand icons for social media platforms are decorative yet have alt text, resulting in repetitive link labels</li> <li>• Video: "Notes" figures – A limited number of Video pages feature figures implemented via &lt;canvas&gt; viewers that may lack adequately descriptive text alternatives. These image viewer &lt;canvas&gt; elements lack fallback content, while adjacent figure captions generally provide minimally descriptive figure identification/numbering and legend notes. Some images intended for study/identification exercises (sans labels) lack such figure captions – or any other text description. Note: relevant descriptions of figures are typically available within audiovisual media and text (i.e. transcript) on the same topical Video page.</li> <li>• Notes: Supplementary High Yield Notes content take the form of SVG graphics that lack fully appropriate text alternatives – they are presented within &lt;img&gt; elements that bear alt text only describing topic &amp; page number. High Yield Notes are also available for download in PDF format.</li> <li>• Quiz: Quiz image – Images may lack descriptive text alternatives, although Quiz image content is relatively uncommon and often part of a visual identification test/exercise</li> <li>• Add Schedule Wizard: "Total hours" warning icon – Icon graphic is removed from the accessibility tree via aria-hidden and lacks descriptive text alternative</li> </ul>
<p><a href="#">1.3.3: Sensory Characteristics</a> (A) Do not rely on sensory characteristics of components such as shape, size, visual</p>	Supports	<p>There are no instructions or areas of content which rely solely on sensory characteristics.</p>

location, orientation, or sound		
<p><a href="#">1.4.1: Use of Color</a> (A) Color is not used as the only visual means of conveying info</p>	Partially supports	<p>In almost all instances, when color is used as a means of conveying information, another visual method is also used to convey the information without color. For example, on Quiz pages, binary options are indicated via 'x' or check symbols and text, in addition to their color differences (red vs. green).</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Login: "Sign up" link – Link is in-line with adjacent text, yet lack another visual indication beyond color difference, e.g. underline style</li> <li>• Video: Video transcript links – Transcript may contain inline topical links that lack visual indication beyond color difference, e.g. underline style</li> <li>• Quiz: Quiz control buttons – Toggled state of buttons is only indicated via differences in color (colorful vs. grey icons)</li> </ul>
<p><a href="#">1.4.3: Color Contrast (Minimum)</a> (AA) Text has enough contrast with the background (4.5:1 for small text and 3:1 for large text)</p>	Partially supports	<p>Text has sufficient contrast with its corresponding background in most areas.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• All: "Live Chat" button – Button label (white) lacks sufficient contrast against background (light orange)</li> <li>• Dashboard: Heading in Daily Practice Settings modal – Heading text (light grey) lacks sufficient contrast against its background (white)</li> <li>• Dashboard, Video: "Osmosis AI" button – Parts of label text may lack sufficient contrast against button background gradient</li> <li>• Video: Videos selection – Link text of selected option (blue) lack sufficient contrast against its background (light blue)</li> <li>• Video – Publisher name and linked profiles of contributors/reviewers (grey or blue) lack sufficient contrast against the background (white)</li> <li>• Playlists: "Search" field in "Add" dialog – Search field placeholder (light grey) lacks sufficient contrast against the background (white)</li> <li>• Quiz: Text in "Lab values" dialog (e.g. heading, table headers) and the "Elimination tool" toggle label may lack sufficient contrast against backgrounds</li> <li>• Account: "Complete" text – Status text indicating profile completion for e.g. "School" (light green) lacks sufficient contrast against the background (white)</li> <li>• Study Schedule dashboard: "optional" field label in "Custom material" modal – Label text (grey) lack sufficient contrast against the background (white)</li> <li>• Add Schedule Wizard: Study hours values upon warning – Text (orange) lacks sufficient contrast against the container (light blue)</li> </ul>
<p><a href="#">1.4.4: Resize Text</a> (AA) Text can be enlarged up to 200% without loss of functionality.</p>	Supports	Text may typically be scaled to 200% while preserving functionality of content.

<p><a href="#">1.4.5: Images of Text</a> (AA) Text is used rather than images of text, except where the presentation of text is essential, such as logos</p>	Supports	<p>No images of text are used other than for logos or essential presentation.</p> <p>Note: Supplementary High Yield Notes content is only available as SVG graphics on Notes page or via downloadable PDF; High Yield Notes are typically documents with text.</p>
<p><a href="#">1.4.10: Reflow</a> (AA) Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:</p> <ul style="list-style-type: none"> <li>• Vertical scrolling content at a width equivalent to 320 CSS pixels;</li> <li>• Horizontal scrolling content at a height equivalent to 256 CSS pixels.</li> </ul>	Partially supports	<p>Most pages utilize a responsive view where content reflows into a single column. In most instances pages may be zoomed to 400% without necessitating horizontal scrolling, nor loss of functionality/content. For example: in Videos &amp; Playlists, sidebars and other content reflow in a single column at smaller viewports; in Search, the "Also appears in" breadcrumb toggle and topic links may be removed at high zoom states on the search page, yet the same information is readily available at the link target.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Notes: Three-column layout – Sections do not reflow into a single column at higher zoom states and button labels may get truncated. Notes &lt;svg&gt; content may be enlarged via "Full Screen" but may not be magnified further on the page.</li> <li>• Playlists: Playlist management – Section may require horizontal scrolling at very high zoom states</li> <li>• Analytics: Sidebar collapses into an expandable widget at very high zoom states – however the expanded container may unexpectedly overlap other page content</li> <li>• Study Schedule dashboard: Although a responsive mobile view is available, various sections of content and components may overlap and obscure one another at moderate/high zoom states or smaller viewports on some user agents</li> </ul>
<p><a href="#">1.4.11: Non-Text Contrast</a> (AA) User interface components and graphical objects have a contrast ratio of at least 3:1 against adjacent color(s).</p>	Partially supports	<p>Almost all non-text UI components and graphical objects have at least a 3:1 contrast ratio against surrounding colors.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Dashboard: Toggle buttons (checkboxes) in Daily Practice Settings modal – Components (grey/light grey) lack sufficient contrast against the background (white) in the un-toggled state to be distinguished as controls</li> <li>• Analytics: "Include retired content data" checkbox/toggle button – Component (white/light grey) lacks sufficiently contrasting visual indicator (e.g. boundary/outline)</li> </ul>
<p><a href="#">1.4.12: Text Spacing</a> (AA) In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all the following and by</p>	Supports	<p>Users may adjust the text spacing of content on pages to the minimum baseline properties without causing loss of content or functionality.</p>

<p>changing no other style property:</p> <ul style="list-style-type: none"> <li>Line height (line spacing) to at least 1.5 times the font size;</li> <li>Spacing following paragraphs to at least 2 times the font size;</li> <li>Letter spacing (tracking) to at least 0.12 times the font size;</li> <li>Word spacing to at least 0.16 times the font size.</li> </ul>		
<p><a href="#">1.4.13: Content on Hover or Focus</a> (AA) Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:</p> <ul style="list-style-type: none"> <li>Dismissible</li> <li>Hoverable</li> <li>Persistent</li> </ul>	Supports	Content that appears on hover or focus is occasionally found in the form of custom tooltips bearing component labels or supplemental information. These are typically dismissible, hoverable, & persistent.
<p><a href="#">2.3.1: Three Flashes or Below Threshold</a> (A) No more than three flashes in a 1-second period, or the flashes are below the defined thresholds</p>	Supports (N/A)	No flashing content exists.

## Keyboard

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.3.2: Meaningful Sequence</a> (A) The correct reading sequence can be programmatically determined</p>	Supports	The correct reading sequence is logical and programmatically determinable, with the DOM order typically according with the visual order.
<p><a href="#">2.1.1: Keyboard</a> (A) All functionality is available from a keyboard, except for tasks such as drawing</p>	Partially supports	Standard web page content and functionality is generally keyboard operable, with a few exceptions. Activating (pointer-drag) highlight functionality in Quiz will also present instructions for keyboard operation.

		<p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• All: Hamburger menu – Accordion controls for e.g. "Community" are not keyboard focusable</li> <li>• Dashboard, Study Schedule dashboard – Several tooltips cannot be activated via keyboard, and only trigger on pointer hover</li> <li>• Library: Accordions – Accordions in main content area may only be activated collectively via "Collapse/Expand all" button, and not individually</li> <li>• Video: Video segment titles/previews – Tooltip displaying segment titles/previews on certain videos only occurs on pointer hover. While similar information is available within a menu activated by the Chapter button, the menu options to jump to respective segments are not keyboard focusable/usable.</li> <li>• Account: Profile &amp; Settings options – Several components that trigger dialogs for various forms/settings are not keyboard operable</li> <li>• Analytics: Tooltip – In Firefox, tooltip for "Include retired content data" cannot be activated via keyboard, and only triggers on pointer hover</li> </ul>
<p><a href="#">2.1.2: No Keyboard Trap</a> (A)</p> <p>The user can use the keyboard to move through page elements and is not trapped on a particular element</p>	Supports	No pages have a keyboard trap.
<p><a href="#">2.1.4: Character Key Shortcuts</a> (A)</p> <p>If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:</p> <ul style="list-style-type: none"> <li>• Turn off</li> <li>• Remap</li> <li>• Active only on focus</li> </ul>	Supports	Single-key – including character key – shortcuts are enabled on Quiz and Video pages. On Video pages, keyboard shortcuts are only active while the video player or constituent components are in focus. On Quiz pages, several single character key shortcuts (e.g. for spaced repetition options) are defined by default, but shortcuts may be individually remapped or collectively disabled via Quiz Settings.
<p><a href="#">2.4.3: Focus Order</a> (A)</p> <p>Users can tab through the elements of a page in a logical order</p>	Partially supports	<p>Tab order is generally logical across the site and preserves the meaning and operability of content. Focus is managed appropriately in most instances. For example: dialog/modal content often immediately receives focus upon activation, or is otherwise next in the tab order; activating sidebar navigation anchor links in Library pages shifts focus to the respective page sections.</p> <p><b>Exceptions:</b></p>

		<ul style="list-style-type: none"> <li>Library: Collapsed sections – Components within accordions in the main content area are able to receive keyboard focus while collapsed</li> <li>Quiz: "Lab values" dialog – Focus is not placed within the container at point of activation, although it visually resembles a dialog and overlays other content until dismissed</li> </ul>
<a href="#">2.4.7: Focus Visible</a> (AA) The page element with the current keyboard focus has a visible focus indicator	Supports	Elements across the site typically have a decent visible indication of focus – the focus indicator is often a prominent solid blue or black outline.
<a href="#">2.4.11: Focus Not Obscured (Minimum)</a> (AA) When a user interface component receives keyboard focus, the component is not entirely hidden due to author-created content.	Supports	Components are typically not obscured by other content at the point when they receive focus.
<a href="#">3.2.1: On Focus</a> (A) When a UI component receives focus, this does not trigger unexpected actions.	Supports	Focusable elements do not cause unexpected actions/changes of context when receiving focus.

## Headings and Structure

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<a href="#">1.3.1: Information and Relationships</a> (A) Info, structure, and relationships can be programmatically determined	Partially supports	<p>Content is generally distinguishable via semantic structure and relationships (with a few exceptions). Appropriate landmarks demarcating content regions and a logical heading order reflecting page organization/content are programmatically determinable on most pages. Most input elements have programmatically determinable labels.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>Search, Library, Video: Breadcrumb topic links – Hierarchical sequence of nested topics lacks list markup and is instead concatenated as a single link (to the most specific subtopic page)</li> <li>Search: Headings – Primary heading, e.g. "Search Results (21)", is not defined in markup</li> <li>Playlists: "New Playlist" modal input field – Input may lack a programmatically determinable label (field placeholder text does not suffice)</li> <li>Playlists: Video links – Each video in the playlist is represented by two links in sequence (video thumbnail/duration &amp; video title) that have the same destination</li> </ul>

		<ul style="list-style-type: none"> <li>• Playlists: "Add" dialog – Search results are organized by heading, however video thumbnail link for each search result does not occur under the respective &lt;h4&gt; heading. Topic breadcrumbs for search results lack (ordered) list markup. "Search" input lacks a programmatically determinable label (field placeholder text does not suffice)</li> <li>• Account: "Student/Professional" selection – Buttons emulate radio buttons but are not grouped or otherwise related in markup, and selected option is not programmatically determinable</li> <li>• Account: A few inputs lack programmatically determinable labels – visible labels may not be programmatically associated. Minor issues with heading hierarchy/markup.</li> <li>• Analytics: Heading hierarchy does not appropriately reflect presentation. Two &lt;main&gt; landmarks are present and are not distinguished via unique labels.</li> <li>• Analytics: Secondary navigation – Navigation options are implemented as a tablist lacking appropriate roles (rather than a list of navigation links)</li> <li>• Question Quiz Builder: Nested checkboxes – Parent/child relationships of subject options are not programmatically determinable</li> <li>• Question Quiz Builder: "Question Mode" radio inputs – Relevant inputs may not be grouped (e.g. set of related checkboxes contained within a fieldset).</li> </ul>
<a href="#">2.4.1: Bypass Blocks</a> (A) Users can bypass repeated blocks of content.	Partially supports	On most pages, a logical heading order and landmarks demarcating various content regions allow AT users to conveniently jump to different areas of content.  <b>Exceptions:</b> <ul style="list-style-type: none"> <li>• Some pages feature skip links to main/significant sections. However, they are generally encountered after the global header: pages may lack skip links to bypass the repeated content in the header.</li> </ul>
<a href="#">2.4.6: Headings and Labels</a> (AA) Headings and labels are clear and consistent.	Supports	Headings and labels used are typically clear and descriptive. Most pages feature descriptive, visually distinct, and programmatically determinable main and secondary headings to help distinguish content.
<a href="#">3.1.1: Language of Page</a> (A) The language of the page is specified	Supports	The default page language is typically defined in accordance with the selected language for the site and is updated appropriately when another language is selected.
<a href="#">3.1.2: Language of Parts</a> (AA) Specify the language of text passages that are in a different language than the default language of the page.	Does not support	When Spanish is the user-selected language, a few sections of text (e.g. "Key Takeaways" section on Video pages) may remain in English. The language of these parts may be indicated via heading labels ("en inglés") but is typically not programmatically specified as differing from the language of the page. The navigation link to Flashcards similarly informs that it is "en inglés" – however the language of the main section on the Flashcards is not programmatically determinable as English.
<a href="#">4.1.1: Parsing</a> (A)	Supports	HTML and CSS typically pass concerning these 4 specific criteria:

Use valid, error-free HTML		<p>(i) elements have complete start and end tags,  (ii) elements are nested according to their specifications  (iii) elements do not contain duplicate attributes  (iv) any IDs are unique, except where the specifications allow these features.</p> <p>Note: There may be other general HTML validation errors outside the scope of this criterion. WCAG Errata notes: "This Success Criterion should be considered as always satisfied for any content using HTML or XML."</p>
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## Labeling

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.3.5: Identify Input Purpose</a> (AA)</p> <p>The purpose of each input field collecting information about the user can be programmatically determined when:</p> <ul style="list-style-type: none"> <li>The input field serves a purpose identified in the Input Purposes for User Interface Components section; and</li> <li>The content is implemented using technologies with support for identifying the expected meaning for form input data.</li> </ul>	Supports	The only pages featuring applicable form elements that collect such information about the user are Login and Account. The appropriate autocomplete attributes are implemented on relevant fields to facilitate auto-fill.
<p><a href="#">2.4.2: Page Titled</a> (A)</p> <p>The page has a title describing its topic or purpose</p>	Partially supports	<p>A descriptive page title that identifies content/purpose is generally available. For instance, video pages bear highly descriptive titles: e.g. "Myocardial Infarction: Video, Anatomy &amp; Description   Osmosis".</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>Study Schedule dashboard, Add Schedule Wizard: Page title remains, somewhat generically, "Study Schedule - Osmosis" despite page/content changes</li> </ul>
<p><a href="#">2.4.4: Link Purpose (In Context)</a> (A)</p> <p>The purpose of each link can be determined from the link text or surrounding context.</p>	Supports	An identifiable purpose may typically be deduced for links from the link text or surrounding context.

<p><a href="#">2.5.3: Label in Name</a> (A) For user interface components with labels that include text or images of text, the name contains the text that is presented visually.</p>	Partially supports	<p>Almost all user interface components that have visible text consistently contain that text within the accessible name.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>Library: Checkbox inputs – "Mark as completed" checkbox bear accessible names that reflect "Select video..." instead</li> </ul>
<p><a href="#">3.2.4: Consistent Identification</a> (AA) UI components used across the web site are identified consistently on every page.</p>	Supports	<p>Components are typically consistent across the site, and identified consistently where they perform the same function across pages.</p>
<p><a href="#">3.3.1: Error Identification</a> (A) Input errors are clearly marked and described to the user.</p>	Supports	<p>Errors are typically identified and presented well visually. Depending on the form, inputs may be validated before or after form submission. Error messages that offer specific feedback are presented adjacently and visually distinguished via different container background or text color (typically red or orange). Error messages are announced to AT in most instances, and error states are largely programmatically determinable on relevant inputs.</p>
<p><a href="#">3.3.2: Labels or Instructions</a> (A) Items requiring user input are clearly labeled or have clear instructions.</p>	Supports	<p>Labels or instructions are typically provided for most form elements, most of which are programmatically associated with their inputs.</p> <p>Note: see SC 1.3.1 for exceptions where visible labels may not be programmatically associated with inputs.</p>
<p><a href="#">3.3.3: Error Suggestion</a> (AA) When the user makes an input error, give suggestions for valid input.</p>	Supports	<p>The nature of content would largely not give rise to opportunities for error suggestions, but relevant helpful suggestions are occasionally provided in text. For instance, the study hours allotment form in Study Schedule features helpful dynamic feedback on meeting the recommended study time via visual cues, status &amp; error message text, and announcements.</p>
<p><a href="#">4.1.2: Name, Role, Value</a> (A) For all UI components, the name, value, and role can be programmatically determined.</p>	Partially supports	<p>Most UI components communicate their state programmatically and have accessible names that are appropriately defined. For example, button controls for expandable/collapsible content generally bear aria-expanded attributes. In limited instances, ARIA attributes and roles may not be present where appropriate.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>All: Buttons in header – Several controls launching dialogs lack attributes to communicate the availability/type of interaction (e.g. aria-haspopup), although the buttons are aptly named e.g, "Toggle flashcard queue popup"; the respective dialog containers may also lack accessible names. Icon buttons may feature superimposed badges with various numbers that are not available as part of components' accessible names or descriptions, although the number is reflected within the respective dialogs.</li> <li>All: Search suggestions autocomplete listbox and Topics modal lack accessible names</li> </ul>

		<ul style="list-style-type: none"> <li>• Library, Playlists: Accordions – Accordion names may reflect state ("Expand/Collapse...") rather than section header, or may lack accessible names.</li> <li>• Dashboard, Video, Account, Playlists, Quiz, Add Schedule Wizard: Modals &amp; dialogs – A few containers lack accessible names or (less commonly) dialog roles</li> <li>• Video, Study Schedule dashboard – Tabs and tabbed content (e.g. in "Edit Schedule") lack appropriate roles, states, and properties to operate well as a manually activated tablist</li> <li>• Quiz: Radio inputs – Non-editable input controls after answer reveal lack aria-disabled attributes</li> <li>• Quiz: Quiz image – Image element holds interactivity (initiates a expanded view), but component is not implemented as a button</li> <li>• Analytics: Collapsed sidebar control – Control for expandable container (during high zoom states) lacks an accessible name &amp; role</li> <li>• Analytics: Charts – Chart widgets lack accessible names</li> <li>• Analytics: Tooltip – Tooltip trigger components lack accessible names (icons are removed from the accessibility tree via aria-hidden)</li> <li>• Question Quiz Builder: Question mode button – Button lacks an accessible name</li> <li>• Study Schedule dashboard: To-do items – Components are implemented as generic elements rather than links (activation leads to destination pages)</li> </ul>
<p><a href="#">4.1.3: Status Messages</a> (AA) In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus.</p>	Partially supports	<p>Status messages are uncommonly encountered yet generally announced by assistive technology. For instance, the study hours allotment form in Study Schedule features helpful dynamic feedback on meeting the recommended study time, with relevant status messages communicated to AT via announcements.</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Analytics: "Start Date"/"End Date" inputs – Error message/feedback during dynamic input validation is not announced to AT</li> <li>• Add Schedule Wizard: Date field – Error message is presented upon invalid user selection yet not announced to AT</li> <li>• Study Schedule dashboard: Calendar view – Active Day/Week/Month in calendar view may be modified via previous/next buttons (with corresponding content changes), yet is not announced to AT</li> </ul>

## Multimedia

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.2.1: Audio-only or Video-only (Prerecorded)</a> (A) Provide alternatives for pre-recorded</p>	Supports (N/A)	There is no pre-recorded audio-only or video-only content. Video content is typically accompanied by a track of narrative audio.

audio-only or video-only content.		
<a href="#">1.2.2: Captions (Prerecorded)</a> (A) Provide captions for pre-recorded audio	Supports	Closed captions are typically provided for audiovisual content. Users may select from English or Spanish language captions via video player controls. Audiovisual content typically features an individual narrator whose speech is typically fully rendered in caption text. Note: very brief promotional outros may not be captioned.
<a href="#">1.2.3: Audio Description or Media Alternative (Prerecorded)</a> (A) Provide alternatives for pre-recorded synchronized audio/video	Supports	Comprehensive transcripts are readily available on Video pages. These transcripts represent the complete text of the closed captions pertaining to the respective topical video, along with appropriate section headings (e.g. "Summary"). Audiovisual content typically features an individual narrator whose speech is fully rendered in caption text; the narration is explanatory of the respective topic, and highly descriptive of the animated illustrations and other diagrammatic information represented in video content. Minor instances of visual information (parts of animations depicting specific biological processes) or non-speech sounds (e.g. sound effects) may not be exhaustively described via narration or transcript text. Key visual information presented via video may also be available via related Notes or other supplementary material.
<a href="#">1.2.4: Captions (Live)</a> (AA) Provide captions for live audio in synchronized audio/video.	Supports (N/A)	There is no live audio content in synchronized media.
<a href="#">1.2.5: Audio Description (Prerecorded)</a> (AA) Provide an audio description of pre-recorded video.	Partially supports	A secondary audio track with comprehensive/extended audio description (or other method) is not provided for audiovisual content on Video pages. However, audiovisual content typically features an individual narrator thoroughly explaining the respective topic – speech audio is highly descriptive of the animated illustrations and other diagrammatic information represented in video content. Minor instances of visual information (parts of animations depicting specific biological processes) may not be exhaustively described via narration, however there are generally very few appropriate pauses in speech to permit further audio description.
<a href="#">1.4.2: Audio Control</a> (A) Audio can be paused and stopped, or the audio volume can be changed.	Supports	No pages feature audio that plays automatically. The video player on Video pages only initiates playback on user interaction (there is an additional global setting to disable autoplay on page load), and features pause/stop and volume controls.
<a href="#">2.2.2: Pause, Stop, Hide</a> (A) Users can stop, pause, or hide moving, blinking, scrolling, or auto-updating information.	Supports (N/A)	There is no moving, scrolling, or auto-updating information for which the criterion is applicable.

## Usability

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<p><a href="#">2.2.1: Timing Adjustable</a> (A) Users are warned of time limits shorter than 20 hours and time limits can be turned off or extended</p>	Supports (N/A)	There is no session timeout to which the criterion is applicable; the time limit is longer than 20 hours.
<p><a href="#">2.4.5: Multiple Ways</a> (AA) More than one way is available to navigate to other web pages.</p>	Supports	All pages (except steps/results of a process) may typically be located and accessed in multiple ways. For example, main navigation (in global header & hamburger menu) is consistently available across pages, and secondary navigation is often present (e.g. in the form of breadcrumb trails representing topic hierarchy on Video pages). Global search functionality that comprehensively indexes content across the site allows users to find specific Video pages. The extensive “Video Topics” menu leading to the topical Library pages is readily available via main navigation, and taxonomically organizes Video pages. Users may also compile Playlists to curate custom sets of Video pages.
<p><a href="#">3.2.2: On Input</a> (A) Changing the setting of a checkbox, radio button, or other UI component does not trigger unexpected changes in context.</p>	Supports	User input, such as changing the values of form elements, does not initiate unexpected actions or changes in context.
<p><a href="#">3.2.3: Consistent Navigation</a> (AA) Navigation menus are in the same location and order on every web page.</p>	Supports	Navigation menus are consistent across pages. For example, main navigation (in global header & hamburger menu) is consistent across pages, with links occurring in the same order; secondary navigation is consistently positioned across appropriate sets of pages.
<p><a href="#">3.2.6: Consistent Help</a> (A) Help mechanisms such as contact details or self-help options are in the same relative order across multiple web pages, unless the user changes them.</p>	Supports	The primary help mechanism is globally available via hamburger slide-out menu (“Help Center” link); a “Live Chat” floating help button is also consistently available/positioned across pages.
<p><a href="#">3.3.7: Redundant Entry</a> (A) Previously entered information is either auto-populated or selectable for the user in the same process, except when re-entry is essential, needed for security, or the</p>	Supports (N/A)	There are no applicable multi-step processes that involve re-entry of information.

information is outdated.		
<p><a href="#">3.3.8: Accessible Authentication (Minimum)</a> (AA)</p> <p>A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:</p> <ul style="list-style-type: none"> <li>• Alternative</li> <li>• Mechanism</li> <li>• Object Recognition</li> <li>• Personal Content</li> </ul>	Supports (N/A)	Applicable functionality is handled via <a href="#">Elsevier Identity</a> (NeoID) registration & authentication.
<p><a href="#">3.3.4: Error Prevention (Legal, Financial, Data)</a> (AA)</p> <p>For web pages with legal or financial commitments, input can be reviewed and corrected before final submission, and submissions can be reverted.</p>	Supports	There are no submissions which require legal or financial commitments for an institutional user. The order confirmation process for the purchase of an individual Osmosis Membership (not otherwise reviewed in this ACR) permits the user to clearly review the intended purchase, including selected term and pricing – and provides a checkbox in addition to a submit button.

## Mobile User Experience

WCAG 2.2 Checkpoint	Conformance Level	Remarks
<p><a href="#">1.3.4: Orientation</a> (AA)</p> <p>Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential.</p>	Supports	Pages do not restrict view and operation of content to a single orientation.
<p><a href="#">2.5.1: Pointer Gestures</a> (A)</p> <p>All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a</p>	Supports (N/A)	Pages do not utilize or require multipoint or path-based gestures for any functionality.

<p>multipoint or path-based gesture is essential.</p>		
<p><a href="#">2.5.2: Pointer Cancellation</a> (A)  For functionality that can be operated using a single pointer, at least one of the following is true:</p> <ul style="list-style-type: none"> <li>• No Down-Event</li> <li>• Abort or Undo</li> <li>• Up Reversal</li> <li>• Essential</li> </ul>	<p>Supports</p>	<p>All interactive content functions through the Up-Event, allowing users to potentially move their pointer off the component to cancel.</p>
<p><a href="#">2.5.4: Motion Actuation</a> (A)  Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when:</p> <ul style="list-style-type: none"> <li>• Supported Interface</li> <li>• Essential</li> </ul>	<p>Supports (N/A)</p>	<p>There is no content that utilizes device or user motion.</p>
<p><a href="#">2.5.7: Dragging Movements</a> (AA)  All functionality that uses a dragging movement for operation can be achieved by a single pointer without dragging, unless dragging is essential or the functionality is determined by the user agent and not modified by the author.</p>	<p>Partially supports</p>	<p>Functionality involving dragging movements for operation is uncommon. An alternative single pointer mechanism that does not involve dragging is available for re-ordering items in Playlists. Highlight functionality in Quiz features a simple control scheme for keyboard operation that employs text editing conventions/functionality provided by the user agent (e.g. place cursor at initial position with pointer, and Shift+click at end position to highlight).</p> <p><b>Exceptions:</b></p> <ul style="list-style-type: none"> <li>• Study Schedule dashboard: Schedule items – Re-ordering items in Week &amp; Month views by pointer requires dragging movements</li> </ul>
<p><a href="#">2.5.8: Target Size (Minimum)</a> (AA)  The size of the target for pointer inputs is at least 24 by 24 CSS pixels, with certain exceptions involving:</p>	<p>Supports</p>	<p>Targets for pointer inputs typically exceed the minimum size defined by the criterion.</p>

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| <ul style="list-style-type: none"><li>• Spacing</li><li>• Equivalent</li><li>• Inline</li><li>• User agent control</li><li>• Essential</li></ul> |  |  |
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