VPAT Accessibility Conformance Report

(Based on ITI VPAT©)

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| **Name of Product** | **eBooks - PDF** |
| **Date Last Updated** | **July 3, 2025** |
| Completed by | **Nicola Richardson** (Elsevier Digital Accessibility Team) |
| **Applicable Standards/Guidelines** | This document rates eBooks - PDF according to the [W3C WCAG 2.1 A and AA](https://www.w3.org/TR/WCAG21/) requirements. |
| **Note About eBooks** | Elsevier provides eBooks available in several different accessible formats including tagged PDF, ePUB, and HTML. To request a different accessible format than tagged PDF, [please use our Alternative Format Request service](service.elsevier.com/app/contact/supporthub/disability/). |
| **Contact for More Information** | Elsevier Digital Accessibility Teamaccessibility@elsevier.com |
| **Testing Tools and Methods** | * **Hands-on keyboard operation**
* **Mozilla Firefox 128.10.1 and Chrome 136.0.7103.93 browser PDF viewers on Windows 10**
* **Adobe Acrobat Reader 2025.001.20467 on Windows 10**
* **NVDA screen reader 2024.3.1**
* **Adobe Acrobat Pro 2025.001.20476 on Mac Sequoia 15.5**
* **Color Contrast Analyzer**
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| **Document Sections** | This review document includes all WCAG 2.1 A and AA checkpoints, organized into 7 logical sections: * Visuals
* Keyboard
* Headings and Structure
* Labeling
* Multimedia
* Usability
* Mobile User Experience
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| **Books Covered** | *Library Space Planning and Design: Best Practices And Case Studies from Special, Academic, and Rare Book Libraries*, first edition, Alexander Cohen, MLS. |
| **Terms** | * **Supports: The functionality of the product has at least one method that meets the criteria without known defects or meets with equivalent facilitation.**
* **Partially supports: Some functionality of the product does not meet the criteria.**
* **Does not support: Majority of functionality of the product does not meet the criteria.**
* **Supports (N/A): According to W3C on conformance, "If there is no content to which a success criterion applies, the success criterion is satisfied."**
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| **Notes/Terminology** | * **“AT” stands for Assistive Technology such as screen readers, voice input, etc.**
* **The assessed book uses a single-column layout. Results for other layouts may vary from those documented in this ACR.**
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## Conformance Summary

| **WCAG 2.1 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 (N/A) |
| 1.2.3: Audio Description or Full Text Alternative | A | Supports (N/A) |
| 1.2.4: Captions (Live) | AA | Supports (N/A) |
| 1.2.5: Audio Description | AA | Supports (N/A) |
| 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 (N/A) |
| 1.4.1: Use of Color | A | Supports |
| 1.4.2: Audio Control | A | Supports (N/A) |
| 1.4.3: Contrast (Minimum) | AA | Supports |
| 1.4.4: Resize text | AA | Supports |
| 1.4.5: Images of Text | AA | Supports |
| 1.4.10: Reflow (2.1) | AA | Supports (N/A) |
| 1.4.11: Non-Text Contrast (2.1) | AA | Supports |
| 1.4.12: Text Spacing (2.1) | AA | Supports (N/A) |
| 1.4.13: Content on Hover or Focus (2.1) | AA | Supports (N/A) |
| 2.1.1: Keyboard | A | Supports |
| 2.1.2: No Keyboard Trap | A | Supports |
| 2.1.4: Character Key Shortcuts (2.1) | A | Supports (N/A) |
| 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 | Supports |
| 2.4.2: Page Titled | A | Supports |
| 2.4.3: Focus Order | A | Supports |
| 2.4.4: Link Purpose (In Context) | A | Supports |
| 2.4.5: Multiple Ways | AA | Supports (N/A) |
| 2.4.6: Headings and Labels | AA | Supports |
| 2.4.7: Focus Visible | 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) |
| 3.1.1: Language of Page | A | Supports |
| 3.1.2: Language of Parts | AA | Supports |
| 3.2.1: On Focus | A | Supports |
| 3.2.2: On Input | A | Supports (N/A) |
| 3.2.3: Consistent Navigation | AA | Supports |
| 3.2.4: Consistent Identification | AA | Supports |
| 3.3.1: Error Identification | A | Supports (N/A) |
| 3.3.2: Labels or Instructions | A | Supports (N/A) |
| 3.3.3: Error Suggestion | AA | Supports (N/A) |
| 3.3.4: Error Prevention (Legal, Financial, Data) | AA | Supports (N/A) |
| 4.1.1: Parsing | A | Supports (N/A) |
| 4.1.2: Name, Role, Value | A | Supports |
| 4.1.3: Status Messages (2.1) | AA | Supports (N/A) |

## WCAG 2.1 A and AA Success Criteria

### Visuals

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.1.1: Non-Text Content](https://www.w3.org/TR/WCAG21/#non-text-content) (A)Provide text alternatives for non-text content (e.g. images) | Partially supports | Most figures have appropriate text equivalents. Figures have programmatic text alternatives provided, as well as captions. Some figures have meaningful descriptive text in the adjacent body text.**Exceptions:*** Some text alternatives for complex images may not fully detail significant visual information.
 |
| [1.3.3: Sensory Characteristics](https://www.w3.org/TR/WCAG21/#sensory-characteristics) (A)Do not rely on sensory characteristics of components such as shape, size, visual location, orientation, or sound | Supports | There are no instructions or areas of content which rely solely on sensory characteristics.**Remarks:*** There are instances where general terms such as ‘above’ or ‘below’ may be used to direct attention to significant content, such as informational figures. In such cases the related content is also identified via references contained in parentheses directly after the text, providing another means to identify the content.
 |
| [1.4.1: Use of Color](https://www.w3.org/TR/WCAG21/#use-of-color) (A)Color is not used as the only visual means of conveying info | Supports | When color is used as a means of conveying information, another visual method is often used to convey the information without color. **Remarks:*** Color is frequently used to identify inline links. Where links refer to referenced material, these are additionally represented with italic font styling. For other inline links the color used surpasses the required contrast ratio with surrounding text at 4.3:1.
 |
| [1.4.3: Color Contrast (Minimum)](https://www.w3.org/TR/WCAG21/#contrast-minimum) (AA)Text has enough contrast with the background (4.5:1 for small text and 3:1 for large text) | Supports | Text has sufficient contrast with its corresponding background.**Remarks:*** Most content is presented in dark text on a white background with a contrast ratio of 16.2:1.
* Links are presented in blue text on a white background with a contrast ratio of 5.8:1.
 |
| [1.4.4: Resize Text](https://www.w3.org/TR/WCAG21/#resize-text) (AA)Text can be enlarged up to 200% without loss of functionality. | Supports | Text may be enlarged to 200% while preserving all content and associated functionality. |
| [1.4.5: Images of Text](https://www.w3.org/TR/WCAG21/#images-of-text) (AA)Text is used rather than images of text, except where the presentation of text is essential, such as logos | Supports | No images of text are used other than for essential presentation, for example photographs of hand-written content, or where the text is incidental to the main visual information being conveyed. |
| [1.4.10: Reflow](https://www.w3.org/TR/WCAG21/#reflow)(AA)Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:* Vertical scrolling content at a width equivalent to 320 CSS pixels;
* Horizontal scrolling content at a height equivalent to 256 CSS pixels..
 | Supports (N/A) | PDF documents provide, by design, fixed layouts. **Note:** Some tools may offer reflow-related layout options, such as browser ‘liquid’ modes or Adobe Acrobat’s ‘reflow’ zoom setting. Support for these will vary based on the tool used. |
| [1.4.11: Non-Text Contrast](https://www.w3.org/TR/WCAG21/#non-text-contrast) (AA)User interface components and graphical objects have a contrast ratio of at least 3:1 against adjacent color(s). | Supports | Graphical objects generally have at least a 3:1 contrast ratio against surrounding colors, except for essential presentations. Documents do not generally contain non-text UI components. |
| [1.4.12: Text Spacing](https://www.w3.org/TR/WCAG21/#text-spacing) (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 changing no other style property:* Line height (line spacing) to at least 1.5 times the font size;
* Spacing following paragraphs to at least 2 times the font size;
* Letter spacing (tracking) to at least 0.12 times the font size;
* Word spacing to at least 0.16 times the font size.
 | Supports (N/A) | This criterion is not applicable to PDF documents since they are not authored using a markup language. |
| [1.4.13: Content on Hover or Focus](https://www.w3.org/TR/WCAG21/#content-on-hover-or-focus) (AA)Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:* Dismissible
* Hoverable
* Persistent
 | Supports (N/A) | No applicable instances of content that may appear on hover or focus were identified. |
| [2.3.1: Three Flashes or Below Threshold](https://www.w3.org/TR/WCAG21/#three-flashes-or-below-threshold) (A)No more than three flashes in a 1-second period, or the flashes are below the defined thresholds | Supports (N/A) | No flashing content was identified. |

### Keyboard

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.2: Meaningful Sequence](https://www.w3.org/TR/WCAG21/#meaningfuusequence) (A)The correct reading sequence can be programmatically determined | Supports | A correct reading sequence is programmatically determinable. The reading order aligns with the visual order in most places with occasional adjustments to present content in more contextually aware sequencing, such as for referenced figures.**Remarks:*** Where content is emphasized in callout-style boxes, these may be read in the visual sequence of information rather than in relation to where they are referenced. This is considered appropriate for the material.

**Note:** See 1.3.1: Information and Relationships for cases where the tagging of two-column content in callout-style boxes may impact the reading sequence. |
| [2.1.1: Keyboard](https://www.w3.org/TR/WCAG21/#keyboard) (A)All functionality is available from a keyboard, except for tasks such as drawing | Supports | Interactive content can be reached and operated via keyboard alone. |
| [2.1.2: No Keyboard Trap](https://www.w3.org/TR/WCAG21/#no-keyboard-trap) (A)The user can use the keyboard to move through page elements and is not trapped on a particular element | Supports | Interactive content can be traversed forwards and backwards without any keyboard traps. |
| [2.1.4: Character Key Shortcuts](https://www.w3.org/TR/WCAG21/#character-key-shortcuts) (A)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:* Turn off
* Remap
* Active only on focus
 | Supports (N/A) | No character key shortcuts identified.**Note:** while the documents themselves do not implement any character key shortcuts, the tool used to read the documents may provide such functionality. |
| [2.4.3: Focus Order](https://www.w3.org/TR/WCAG21/#focus-order) (A)Users can tab through the elements of a page in a logical order | Supports | Interactive elements, predominantly links, are reachable in a predictable and logical order. |
| [2.4.7: Focus Visible](https://www.w3.org/TR/WCAG21/#focus-visible) (AA)The page element with the current keyboard focus has a visible focus indicator | Supports | All interactive elements in documents have prominent focus indicators. |
| [3.2.1: On Focus](https://www.w3.org/TR/WCAG21/#on-focus) (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

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.1: Information and Relationships](https://www.w3.org/TR/WCAG21/#info-and-relationships) (A)Info, structure, and relationships can be programmatically determined | Partially supports | Most content is distinguishable via semantic structure and relationships. Most headings are appropriately tagged, and list tags are largely used accurately. Simple table implementations are correctly tagged, and links are programmatically identifiable.**Exceptions:*** Some heading tags may be missing or may not accurately reflect the visual hierarchy of information.
* Some paragraphs may be incorrectly tagged as headings.
* Text-based tags in two-column layouts may occasionally span across both columns rather than following the visual structure.
 |
| [2.4.1: Bypass Blocks](https://www.w3.org/TR/WCAG21/#bypass-blocks) (A)Users can bypass repeated blocks of content. | Supports | Headings are used appropriately to define the document structure and proper semantic tagging of lists and tables allows for quick navigation between content elements. Bookmarks have been implemented for precise navigation through book content.**Remarks:*** See 1.3.1: Information and Relationships for cases where visual headings may be missing semantic heading tags.
 |
| [2.4.6: Headings and Labels](https://www.w3.org/TR/WCAG21/#headings-and-labels) (AA) Headings and labels are clear and consistent. | Supports | Headings used are clear and descriptive. For example, chapters feature visually distinct and programmatically determinable main and secondary headings to help distinguish content.**Remarks:*** See 1.3.1: Information and Relationships for cases where visual headings may be missing semantic heading tags.
 |
| [3.1.1: Language of Page](https://www.w3.org/TR/WCAG21/#language-of-page) (A)The language of the page is specified | Supports | The default document language is defined as ‘English’. |
| [3.1.2: Language of Parts](https://www.w3.org/TR/WCAG21/#language-of-parts) (AA)Specify the language of text passages that are in a different language than the default language of the page. | Supports | The documents assessed contained no sections of text that do not match the default language of the page, or which would be considered outside the vernacular of the surrounding text. |
| [4.1.1: Parsing](https://www.w3.org/TR/WCAG21/#parsing) (A)Use valid, error-free HTML | Supports (N/A) | This criterion is not applicable to PDF documents since they are not authored using a markup language. |

### Labeling

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.5: Identify Input Purpose](https://www.w3.org/TR/WCAG21/#identify-input-purpose) (AA)The purpose of each input field collecting information about the user can be programmatically determined when:* The input field serves a purpose identified in the Input Purposes for User Interface Components section; and
* The content is implemented using technologies with support for identifying the expected meaning for form input data.
 | Supports (N/A) | No input fields collecting information about the user were identified. |
| [2.4.2: Page Titled](https://www.w3.org/TR/WCAG21/#page-titled) (A)The page has a title describing its topic or purpose | Supports | Documents have descriptive and relevant titles provided by the document Title entry in the document information dictionary. |
| [2.4.4: Link Purpose (In Context)](https://www.w3.org/TR/WCAG21/#link-purpose-in-context) (A)The purpose of each link can be determined from the link text or surrounding context. | Supports | Links contained in documents are largely internal, pointing to referenced material, or contextually relevant figures or tables. An identifiable purpose may be deduced for all links from the link text alone or surrounding context. |
| [2.5.3: Label in Name](https://www.w3.org/TR/WCAG21/#label-in-name) (A)For user interface components with labels that include text or images of text, the name contains the text that is presented visually. | Partially supports | The accessible name assigned to links may contain the text that is presented visually, depending on the tool used to read the document.**Remarks:*** Links have been provided alternate description text of ‘Link’. Adobe Acrobat Reader uses this field as the accessible name meaning that users relying on AT in that tool will receive “link” as the component description. Browser-based PDF viewing tools may communicate link accessible names differently, ranging from announcing the visible text to the underlying URL.
 |
| [3.2.4: Consistent Identification](https://www.w3.org/TR/WCAG21/#consistent-identification) (AA)UI components used across the web site are identified consistently on every page. | Supports | Documents do not generally contain repeated UI components. Where chapters reference their containing book, this information and the associated link is consistently identified. |
| [3.3.1: Error Identification](https://www.w3.org/TR/WCAG21/#error-identification) (A)Input errors are clearly marked and described to the user. | Supports (N/A) | No form fields requiring user input were identified. |
| [3.3.2: Labels or Instructions](https://www.w3.org/TR/WCAG21/#labels-or-instructions) (A)Items requiring user input are clearly labeled or have clear instructions. | Supports (N/A) | No form fields requiring user input were identified. |
| [3.3.3: Error Suggestion](https://www.w3.org/TR/WCAG21/#error-suggestion) (AA)When the user makes an input error, give suggestions for valid input. | Supports (N/A) | No form fields requiring user input were identified. |
| [4.1.2: Name, Role, Value](https://www.w3.org/TR/WCAG21/#name-role-value) (A)For all UI components, the name, value, and role can be programmatically determined. | Supports | UI components, specifically links, have accessible names provided and appropriate roles defined.**Remarks:*** See 2.5.3 Label in Name for cases where link accessible names may not be accurate.
 |
| [4.1.3: Status Messages](https://www.w3.org/TR/WCAG21/#status-messages) (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. | Supports (N/A) | No applicable instances of status messages were identified. |

### Multimedia

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.2.1: Audio-only or Video-only (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-only-and-video-only-prerecorded) (A)Provide alternatives for pre-recorded audio-only or video-only content. | Supports (N/A) | No pre-recorded audio-only or video-only content was identified. |
| [1.2.2: Captions (Prerecorded)](https://www.w3.org/TR/WCAG21/#captions-prerecorded) (A)Provide captions for pre-recorded audio | Supports (N/A) | No pre-recorded audio content was identified. |
| [1.2.3: Audio Description or Media Alternative (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-description-or-media-alternative-prerecorded) (A)Provide alternatives for pre-recorded synchronized audio/video | Supports (N/A) | No pre-recorded synchronized audio/video content was identified. |
| [1.2.4: Captions (Live)](https://www.w3.org/TR/WCAG21/#captions-live) (AA)Provide captions for live audio in synchronized audio/video. | Supports (N/A) | No live synchronized audio/video content was identified. |
| [1.2.5: Audio Description (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-description-prerecorded) (AA)Provide an audio description of pre-recorded video. | Supports (N/A) | No pre-recorded synchronized audio/video content was identified. |
| [1.4.2: Audio Control](https://www.w3.org/TR/WCAG21/#audio-control) (A)Audio can be paused and stopped, or the audio volume can be changed. | Supports (N/A) | No audio that plays automatically was identified.  |
| [2.2.2: Pause, Stop, Hide](https://www.w3.org/TR/WCAG21/#pause-stop-hide) (A)Users can stop, pause, or hide moving, blinking, scrolling, or auto-updating information. | Supports (N/A) | No moving, scrolling, or auto-updating information for which the criterion is applicable was identified.  |

### Usability

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [2.2.1: Timing Adjustable](https://www.w3.org/TR/WCAG21/#pause-stop-hide) (A)Users are warned of time limits shorter than 20 hours and time limits can be turned off or extended | Supports (N/A) | No applicable time limits set by the content were identified. |
| [2.4.5: Multiple Ways](https://www.w3.org/TR/WCAG21/#multiple-ways) (AA)More than one way is available to navigate to other web pages. | Supports (N/A) | While PDF documents are not considered to be a ‘set of web pages’, bookmarks are well-used in documents to provide an alternate way of locating information. |
| [3.2.2: On Input](https://www.w3.org/TR/WCAG21/#on-input) (A) Changing the setting of a checkbox, radio button, or other UI component does not trigger unexpected changes in context. | Supports (N/A) | No interactive components requiring user input were identified. |
| [3.2.3: Consistent Navigation](https://www.w3.org/TR/WCAG21/#consistent-navigation) (AA)Navigation menus are in the same location and order on every web page. | Supports | Running headers identify the book and chapter titles. Page numbers are present in the running headers and are accurately aligned with the programmatic page number set in reading tools. |
| [3.3.4: Error Prevention (Legal, Financial, Data)](https://www.w3.org/TR/WCAG21/#error-prevention-legal-financial-data) (AA)For web pages with legal or financial commitments, input can be reviewed and corrected before final submission, and submissions can be reverted. | Supports (N/A) | No submissions which require legal or financial commitments were identified.  |

### Mobile User Experience

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.4: Orientation](https://www.w3.org/TR/WCAG21/#orientation) (AA)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. | Supports | Documents are not restricted to a single display orientation. |
| [2.5.1: Pointer Gestures](https://www.w3.org/TR/WCAG21/#pointer-gestures) (A)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 multipoint or path-based gesture is essential. | Supports (N/A) | No functionality requiring multipoint or path-based gestures was identified. |
| [2.5.2: Pointer Cancellation](https://www.w3.org/TR/WCAG21/#pointer-cancellation) (A)For functionality that can be operated using a single pointer, at least one of the following is true:* No Down-Event
* Abort or Undo
* Up Reversal
* Essential
 | Supports | All interactive content functions through the Up-Event, allowing users to potentially move their pointer off the component to cancel. |
| [2.5.4: Motion Actuation](https://www.w3.org/TR/WCAG21/#motion-actuation) (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:* Supported Interface
* Essential
 | Supports (N/A) | No content utilizing device or user motion was identified. |