California Open Online Library for Education & Accessibility

COOL4Ed (the California Open Online Library for Education) was created so that faculty can easily find, adopt, utilize, review and/or modify free and open etextbooks for little or no cost. The COOL4Ed accessibility open textbook evaluations can inform faculty, staff, and students how the free and open etextbooks meet 15 accessibility "checkpoints" that could impact the learning of learners with a range of disabilities.

SUMMARY OF ACCESSIBILITY EVALUATION:

Textbook: **Mi Vida Loca**
Format of Textbook: **HTML**

Assistive Technology (AT) Evaluation Score: Overall	5.6 (Maximum score = 10)
Assistive Technologies (AT) Evaluations applies specialized tools and software in the accessibility evaluation process. These specialized assistive technologies, see list below, are typically not used or available by the general public into the accessibility evaluation process. • Accessibility features of desktop operating systems (e.g. high-contrast display themes, settings from the Keyboard and Mouse control panels) • Accessibility-related software included with desktop operating systems (e.g. VoiceOver, Microsoft Narrator) • Third-party accessibility software and hardware: • Screen readers (e.g. JAWS, Window Eyes) • Magnification software (e.g. ZoomText Magnifier/Reader, MAGIC Pro with Speech) • Reading software for users with learning disabilities (e.g. Read and Write Gold, Kurzweil 3000) • Refreshable Braille displays	
Non- Assistive Technology (NAT) Evaluation Score: Overall	6.5 (Maximum score =10)
Non-Assistive Technologies (NAT) Evaluations applies only native or basic tools and software such as the keyboard and Narrator in the accessibility evaluation process. These non-assistive technologies are readily available and used by the general public.	

COOL4Ed Accessibility Evaluation Methods:

The California State University Accessible Technology Initiative and MERLOT (Multimedia Educational Resources for Learning and Online Teaching) developed the rubric or "checkpoints" for the accessibility evaluation. CAST, a nationally recognized organization with expertise in accessibility and UDL, reviewed and affirmed the appropriateness and value of the accessibility evaluation rubric and contributed the references and support resources to help people learn how best to design, evaluate, and remediate the learning materials to maximize the accessibility of the learning resources for all. The "checkpoints" have been built upon the Section 508 technical standards and has been organized and tailored to the typical characteristics of digital resources used in higher education courses.

The accessibility evaluations were performed by the Center for Usability in Design and Accessibility at California State University, Long Beach; faculty and graduate students with expertise in human factors, usability, and accessibility performed the evaluations of over 150 free and open etextbooks. COOL4ed.org has published the accessibility evaluation rubric and provides a detailed description of the methodology used to evaluate the accessibility of the etextbooks in COOL4ed.

LOOKING FOR DETAILED ACCESSIBILITY REPORTS?

See Detailed Accessibility Evaluation Report using Assistive Technologies

See Detailed Accessibility Evaluation Report using Non-Assistive Technologies

DETAILED ACCESSIBILITY EVALUATION REPORT using Assistive Technologies

Assistive Technologies (AT) Evaluations applies specialized tools and software in the accessibility evaluation process. These specialized assistive technologies, such as Kurzweil and NVDA, are typically not used or available by the general public into the accessibility evaluation process.

1. Accessibility Documentation

A. The organization providing the online materials has a formal accessibility policy.	**Fail**
Additional Information:	**Did not find any information about BBC's formal accessibility policy.**
B. The organization providing the online materials has an accessibility statement.	**Fail**
Additional Information:	**Did not find any information about BBC's accessibility statement.**
C. An Accessibility Evaluation Report is available from an external organization.	**Fail**
Additional Information:	**Did not find any information about BBC's accessibility evaluation report.**

2. Text Access

A. The text of the digital resource is available to assistive technology that allows the user to enable text-to-speech (TTS) functionality.	**Fail**
Additional Information:	**0/3 chapters/episode sections had proper text to speech capability (Ch. 1, 12, 19). In each of the episode sections, the NVDA reader would not read any of the actual content pertaining to the episode video or the content of the textbook, such as the PDFs. When reading the sections, the NVDA reader would say that the rest of the content was blank or an embedded object. The only sections that would be read aloud were the Learning Shortcuts sections, which would be read inconsistently. Sometimes the NVDA reader would read the sections after pressing**

	the headings hotkey, and sometimes it would not read any of the content at all. You were able to read the content of the textbook if you pressed the tab key, which makes it difficult to figure out if the person reading does not know.

3. Text Adjustment

A. Text is compatible with assistive technology.	**Pass**
Additional Information:	**3/3 chapters were capable of zooming in and out (Episode 1, 12, 19). However, when zooming in, in order to read the content on the page you had to horizontally scroll.**
B. The resource allows the user to adjust the font size and font/background color (or is rendered by an application such as a browser, media player, or reader) that offers this functionality).	**Pass**
Additional Information:	**3/3 chapters were capable of adjusting font colors and video colors using the Care your eyes program (Ch. 1, 12, 19).**

4. Reading Layout

A. Text of the digital resource is compatible with assistive technology that allows the user to reflow the text by specifying the margins and line spacing (or is rendered by an application such as a browser, media player, or reader that offers this functionality).	**Pass**
Additional Information:	**30/30 webpages had proper reflow of text (Ch. 1(12), 13(16), 20(2)). These webpages had proper reflow. However, the layout of the page did not change as you zoomed in or out. The reflow stayed the same throughout the textbook whether you zoomed in or out.**

B. If the digital resource is an electronic alternative to printed materials, the page numbers correspond to the printed material.	**N/A**
Additional Information:	**No PDF available**

5. Reading Order

A. The reading order for digital resource content logically corresponds to the visual layout of the page when rendered by assistive technology.	**Fail**
Additional Information:	**0/5 pages had proper reading order (Episode 1, 3, 12, 13, 19). In each of the episode sections, the NVDA reader would not read any of the actual content pertaining to the episode video or the content of the textbook, such as the PDFs. When reading the sections, the NVDA reader would say that the rest of the content was blank or an embedded object. The only sections that would be read aloud were the Learning Shortcuts sections, which would be read inconsistently. Sometimes the NVDA reader would read the sections after pressing the headings hotkey, and sometimes it would not read any of the content at all. You were able to read the content of the textbook if you pressed the tab key, which makes it difficult to figure out if the person reading does not know. In the learning sections, there were also blank videos that just remained black.**

6. Structural Markup/Navigation

A. The text of the digital resource includes markup (e.g. tags or styles) that allows for navigation by key structural elements (chapters, headings, pages) using assistive technology (or is rendered by an application such as a browser, media player, or reader that offers this functionality).	**Fail**

Additional Information:	**0/3 chapters/episode sections had proper navigation of text while using the NVDA hotkeys (Ch. 1, 12, 19). Headers and content were only found after pressing the tab key to find the links.**
B. The text of the digital resource includes markup for bullets and numbered lists that is compatible with assistive technology (or is rendered by an application such as a browser, media player, or reader that offers this functionality).	**Fail**
Additional Information:	**0/10 content lists were found using the NVDA hotkeys (Ch. 1(3), 3(3), 12(3), 19(1)). Lists were not found.**
C. If the text of the digital resource is delivered within an ebook reader application, a method is provided that allows users to bypass the reader interface and move directly to the text content that is compatible with assistive technology.	**N/A**
Additional Information:	**Not using eReader application.**

7. Tables

A. Data tables include markup (e.g. tags or styles) that identifies row and column headers in a manner that is compatible with assistive technology (or are rendered by an application such as a browser, media player, or reader that offers this functionality).	**N/A**
Additional Information:	**No tables found.**

8. Hyperlinks

A. In-book links take you to a location within the textbook. For example, the table of contents would be considered in-book links and embedded links take you to the correct location in the book.	**N/A**

Additional Information:	**All hyperlinks are live.**
B. Live hyperlinks take you to any website or webpages external to the book.	**Pass**
Additional Information:	**50/50 hyperlinks had proper functionality (Ch. 1(12), 3(13), 13(17), 20(9)). These links brought the reader to the correct webpages. 50/50 hyperlinks had proper description (Ch. 1(12), 3(13), 13(17), 20(9)). The links were not labeled as just URLs. 50/50 hyperlinks had proper description (Ch. 1(12), 3(13), 13(17), 20(9)). The links were not labeled as just URLs.**
C. Live links take you to the correct webpage that is functioning properly.	**Pass**
Additional Information:	**50/50 hyperlinks had proper functionality (Ch. 1(12), 3(13), 13(17), 20(9)). These links brought the reader to the correct webpages.**
D. Live links are descriptive enough for the users to know where it should take them.	**Pass**
Additional Information:	**50/50 hyperlinks had proper description (Ch. 1(12), 3(13), 13(17), 20(9)). The links were not labeled as just URLs.**

9. Color and Contrast

A. All information within the material that is conveyed using color is also available in a manner that is compatible with those that do not perceive color, and information conveyed by color is also conveyed in other ways.	**Pass**
Additional Information:	**3/3 chapters had consistent color redundancy. Headers were consistently bold and black, regular text was consistently black with navy blue links.**
B. Information is conveyed from the sub-categories for contrast.	**Pass**
Additional Information:	**The black headers against the gray background passed the contrast evaluation but the headers that were white against red background did not pass. The**

	text was black against gray brackground. Simple image of man in learning section passed, but other simple images did not.
C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	**Pass**
Additional Information:	**The black headers against the gray background passed the contrast evaluation but the headers that were white against red background did not pass.**
D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	**Pass**
Additional Information:	**The text was black against gray brackground.**
E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	**Pass**
Additional Information:	**Simple image of man in learning section passed, but other simple images did not.**

10. Language

A. The text of the digital resource includes markup that declares the language of the content in a manner that is compatible with assistive technology.	**Pass**
Additional Information:	**The language markup is English.**
B. If the digital resource includes passages in a foreign language, these passages include markup that declares the language in a manner that is compatible with assistive technology.	**N/A**
Additional Information:	**No passage markup**

11. Images

A. Non-decorative images have alternative text that is compatible with assistive technology (or is rendered by an application such as a	**Fail**

browser, media player, or reader that offers this functionality).	
Additional Information:	**0/3 chapters had non-decorative images that were properly described (Ch. 1, 12, 19). These images were skipped when read aloud by the NVDA reader because the NVDA reader did not read any of the content.**
B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.	**Pass**
Additional Information:	**Decorative images were skipped.**
C. Complex images, charts, and graphs have longer text descriptions that are compatible with assistive technology (or are rendered by an application such as a browser, media player, or reader) that offers this functionality).	**Fail**
Additional Information:	**0/3 chapters had complex images that were properly described (Ch. 1, 12, 19). These images were skipped when read aloud by the NVDA reader because the NVDA reader did not read any of the content.**

12. Multimedia

A. A synchronized text track (e.g. open or closed captions) is provided with all video content.	**Pass**
Additional Information:	**3/3 multimedia had proper synchronized closed captioning (Ch. 1, 12, 19).**
B. A transcript is provided with all audio content.	**Fail**
Additional Information:	**0/3 videos had transcripts (Ch. 1, 12, 19). Only closed captioning was available.**
C. Audio/video content is delivered via a media player that is compatible with assistive technology. This includes support for all criteria listed in Section 15 below.	**Pass**

Additional Information:	**3/3 videos had assistive technology such as closed captioning in both English and in Spanish (Ch. 1, 12, 19).**

13. Flickering

A. The digital resource content does not contain anything that flashes more than three times in any one-second period.	**Pass**
Additional Information:	**No flickering content**

14. Science, Technology, Engineering, and Math (STEM)

A. STEM figures have appropriate markup that indicates that the image is a figure.	**N/A**
Additional Information:	**No STEM content**
B. STEM graphs have appropriate markup that indicates that the image is a graph.	**N/A**
Additional Information:	**No STEM content**
C. STEM equations have appropriate markup that indicates that the image is an equation.	**N/A**
Additional Information:	**No STEM content**
D. STEM tables have appropriate markup that indicates the image is a table.	**N/A**
Additional Information:	**No STEM content**
E. STEM figures have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**No STEM content**
F. STEM graphs have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**No STEM content**

G. STEM equations have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	N/A
Additional Information:	**No STEM content**
H. Assistive technology used can access the content from the STEM tables.	N/A
Additional Information:	**No STEM content**

15. Interactive Elements

A. Each interactive element (e.g. menu, hyperlink, button) and function (e.g. annotations) allows keyboard-only operation both with and without assistive technology.	N/A
Additional Information:	**No interactive elements**
B. Each interactive element conveys information to assistive technology regarding the element's name, type, and status (e.g. "Play, button, selected").	N/A
Additional Information:	**No interactive elements**
C. All instructions, prompts, and error messages necessary to complete forms are conveyed as text to assistive technology (or are rendered by an application such as a browser, media player, or reader that offers this functionality).	N/A
Additional Information:	**No interactive elements**

DETAILED ACCESSIBILITY EVALUATION REPORT using
Non-Assistive Technologies

Non-Assistive Technologies (NAT) Evaluations applies only native or basic tools and software such as the keyboard and Narrator in the accessibility evaluation process. These non-assistive technologies are readily available and used by the general public.

1. Accessibility Documentation

A. The organization providing the online materials has a formal accessibility policy.	**Fail**
Additional Information:	**Not found**
B. The organization providing the online materials has an accessibility statement.	**Fail**
Additional Information:	**Not found**
C. An Accessibility Evaluation Report is available from an external organization.	**Fail**
Additional Information:	**Not found**

2. Text Access

A. The text of the digital resource is available to assistive technology that allows the user to enable text-to-speech (TTS) functionality.	**Pass**
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked.**

3. Text Adjustment

A. Text is compatible with assistive technology.	**Pass**
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked.**
B. The resource allows the user to adjust the font size and font/background color (or is rendered by an application such as a browser, media player, or reader) that offers this functionality).	**Pass**
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked.**

4. Reading Layout

A. Text of the digital resource is compatible with assistive technology that allows the user to reflow the text by specifying the margins and line spacing (or is rendered by an application such as a browser, media player, or reader that offers this functionality).	**Fail**
Additional Information:	**0/3 chapters pass. 3, 5 and 13 were checked. They did reflow when zooming in to 200% or when making browser smaller.**
B. If the digital resource is an electronic alternative to printed materials, the page numbers correspond to the printed material.	**N/A**
Additional Information:	**No printed or pdf version found to compare to.**

5. Reading Order

A. The reading order for digital resource content logically corresponds to the visual layout of the page when rendered by assistive technology.	**N/A**
Additional Information:	**No printed or pdf version found to compare to.**

6. Structural Markup/Navigation

A. The text of the digital resource includes markup (e.g. tags or styles) that allows for navigation by key structural elements (chapters, headings, pages) using assistive technology (or is rendered by an application such as a browser, media player, or reader that offers this functionality).	**N/A**
Additional Information:	**Non-assistive technology only.**
B. The text of the digital resource includes markup for bullets and numbered lists that is compatible with assistive technology (or is	**N/A**

rendered by an application such as a browser, media player, or reader that offers this functionality).	
Additional Information:	**Non-assistive technology only.**
C. If the text of the digital resource is delivered within an ebook reader application, a method is provided that allows users to bypass the reader interface and move directly to the text content that is compatible with assistive technology.	**N/A**
Additional Information:	**Non-assistive technology only.**

7. Tables

A. Data tables include markup (e.g. tags or styles) that identifies row and column headers in a manner that is compatible with assistive technology (or are rendered by an application such as a browser, media player, or reader that offers this functionality).	**N/A**
Additional Information:	**Non-assistive technology only.**

8. Hyperlinks

A. In-book links take you to a location within the textbook. For example, the table of contents would be considered in-book links and embedded links take you to the correct location in the book.	**N/A**
Additional Information:	**Non-assistive technology only.**
B. Live hyperlinks take you to any website or webpages external to the book.	
Additional Information:	**Average Score**
C. Live links take you to the correct webpage that is functioning properly.	**Pass**

Additional Information:	**20/20 links pass. There links that lead to multimedia, pdf transcripts and links on table of contents. All worked.**
D. Live links are descriptive enough for the users to know where it should take them.	**Pass**
Additional Information:	**20/20 links pass. There links that lead to multimedia, pdf transcripts and links on table of contents. All worked.**

9. Color and Contrast

A. All information within the material that is conveyed using color is also available in a manner that is compatible with those that do not perceive color, and information conveyed by color is also conveyed in other ways.	**Fail**
Additional Information:	**When hovering over links of the tables on contents they do not have a redudant code that lets the user know they are links where other links through out the text are underline to show they are links.**
B. Information is conveyed from the sub-categories for contrast.	
Additional Information:	**Average Score**
C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	**Pass**
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked.**
D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	**Pass**
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked.**
E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	**Pass**
Additional Information:	**Simple images found at the top of the navigation bar pass. Chapters 3, 5 and 8 were checked.**

10.Language

A. The text of the digital resource includes markup that declares the language of the content in a manner that is compatible with assistive technology.	**Pass**
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked.**
B. If the digital resource includes passages in a foreign language, these passages include markup that declares the language in a manner that is compatible with assistive technology.	**N/A**
Additional Information:	**Despite the fact this is a spansh book, there's no text in Spanish. The Spanish is only found in the videos.**

11.Images

A. Non-decorative images have alternative text that is compatible with assistive technology (or is rendered by an application such as a browser, media player, or reader that offers this functionality).	
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked using w3c.**
B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.	
Additional Information:	**3/3 chapters pass. 3, 5 and 8 were checked using w3c.**
C. Complex images, charts, and graphs have longer text descriptions that are compatible with assistive technology (or are rendered by an application such as a browser, media player, or reader) that offers this functionality).	**N/A**
Additional Information:	**No complex images found. 3, 5 and 8 chapeters were checked.**

12. Multimedia

A. A synchronized text track (e.g. open or closed captions) is provided with all video content.	**Pass**
Additional Information:	**3/3 pass. Chapters 3, 5 and 13 were checked. Text is provided in both English and Spanish.**
B. A transcript is provided with all audio content.	**Pass**
Additional Information:	**3/3 pass. Chapters 3, 5 and 13 were checked. A transcript is provided for every video.**
C. Audio/video content is delivered via a media player that is compatible with assistive technology. This includes support for all criteria listed in Section 15 below.	**N/A**
Additional Information:	**Non assistive technology only**

13. Flickering

A. The digital resource content does not contain anything that flashes more than three times in any one-second period.	**Pass**
Additional Information:	**No flickering. Chapters 1-10 were checked.**

14. Science, Technology, Engineering, and Math (STEM)

A. STEM figures have appropriate markup that indicates that the image is a figure.	**N/A**
Additional Information:	**No stem figures found.**
B. STEM graphs have appropriate markup that indicates that the image is a graph.	**N/A**
Additional Information:	**No stem graphs found.**
C. STEM equations have appropriate markup that indicates that the image is an equation.	**N/A**
Additional Information:	**No stem equations found.**
D. STEM tables have appropriate markup that indicates the image is a table.	**N/A**

Additional Information:	**No stem tables found.**
E. STEM figures have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**No stem figures found.**
F. STEM graphs have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**No stem graphs found.**
G. STEM equations have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**No stem equations found.**
H. Assistive technology used can access the content from the STEM tables.	**N/A**
Additional Information:	**No stem tables found.**

15. Interactive Elements

A. Each interactive element (e.g. menu, hyperlink, button) and function (e.g. annotations) allows keyboard-only operation both with and without assistive technology.	**N/A**
Additional Information:	**No interactive elements found.**
B. Each interactive element conveys information to assistive technology regarding the element's name, type, and status (e.g. "Play, button, selected").	**N/A**
Additional Information:	**No interactive elements found.**
C. All instructions, prompts, and error messages necessary to complete forms are conveyed as text to assistive technology (or are rendered	**N/A**

by an application such as a browser, media player, or reader that offers this functionality).	
Additional Information:	**No interactive elements found.**