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: **Public Speaking: The Virtual Text**
Format of Textbook: **HTML**

Assistive Technology (AT) Evaluation Score: Overall	**4.8 (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:	**Google Chrome. URL not found.**
B. The organization providing the online materials has an accessibility statement.	**Fail**
Additional Information:	**Google Chrome. URL not found.**
C. An Accessibility Evaluation Report is available from an external organization.	**Fail**
Additional Information:	**Google Chrome. URL 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:	**9/9 pages. Google Chrome and NVDA. Home page, Chapters 1-4, 10, 15, 16, and 18 checked. The PDF materials could not be read by NVDA.**

3. Text Adjustment

A. Text is compatible with assistive technology.	**Pass**
Additional Information:	**34/34 pages. Google Chrome. Home page, Chapters 1-4, 10, 15, 16, 18, and the PDF materials for Chapters 1 and 2 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,	**Fail**

media player, or reader) that offers this functionality).	
Additional Information:	**9/34 pages. Google Chrome and Care your Eyes add-on. Home page, Chapters 1-4, 10, 15, 16, 18, and the PDF materials for Chapters 1 and 2 checked. The PDF materials in each chapter were unresponsive to the Care your Eyes Google Chrome add-on, but the html pages were receptive.**

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:	**0/34 pages. Google Chrome. Home page, Chapters 1-4, 10, 15, 16, 18, and the PDF materials for Chapters 1 and 2 checked.**
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 material to compare to HTML (and vice versa).**

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.	**Pass**
Additional Information:	**5/5 pages. Google Chrome and NVDA. Home page and Chapters 1-4 checked. NVDA could not read PDFs.**

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:	**0/5 pages. Google Chrome and NVDA. Home page and Chapters 1-4 checked. NVDA could not read PDFs. Since the html pages of the material were just giant tables, there was no formatting for headers.**
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).	**N/A**
Additional Information:	**Google Chrome. Home page and Chapters 1-6 checked. No lists 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:	**No eReader application used.**

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:	**0/5 pages. Google Chrome and NVDA. Home page and Chapters 1-4 checked. Each page was a giant**

	table. The functionality of a table was not necessary for the content and was only used for its aesthetics. This criteria will remain unrated because there were no actual tables in the material that were supposed to be used as tables.

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:	**Skipped.**
B. Live hyperlinks take you to any website or webpages external to the book.	**Fail**
Additional Information:	**Averaged score.**
C. Live links take you to the correct webpage that is functioning properly.	**Fail**
Additional Information:	**1/27 links. Google Chrome. Introduction to Public Speaking (1/13) and The Origins of Public Speaking (0/14) PDFs checked. Links in the PDF are truncated by return strokes. Though they still act as hyperlinks and are treated as such by Google Chrome's PDF viewer, the links send the user to the truncated web address, which is almost always not a valid site (unless the entire URL fit in one line, such as "http://www.naceweb.org/pressreleases/" in Introduction to Public Speaking).**
D. Live links are descriptive enough for the users to know where it should take them.	**Fail**
Additional Information:	**0/27 links. Google Chrome and NVDA. Introduction to Public Speaking PDF checked. No alt property for the links.**

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:	**14/27 links. Google Chrome. Introduction to Public Speaking (0/13) and The Origins of Public Speaking (14/14) PDFs checked. In Introduction to Public Speaking, links are either blue or not colored differently at all (i.e., black) and are not underlined. In The Origins of Public Speaking, all links (i.e., photo credit links) are blue and underlined.**
B. Information is conveyed from the sub-categories for contrast.	**Pass**
Additional Information:	**Averaged score.**
C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	**Pass**
Additional Information:	**30/30 pages. Google Chrome. Introduction to Public Speaking (&PDF) and Speaking to a Global Audience (&PDF) checked. Headers are blue on white, black on white, or dark blue on light blue, all of which pass.**
D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	**Pass**
Additional Information:	**30/30 pages. Google Chrome. Introduction to Public Speaking (&PDF) and Speaking to a Global Audience (&PDF) checked. Text is either black on white or blue on white (for emphasis quotations), both of which pass.**
E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	**N/A**
Additional Information:	**Google Chrome. Introduction to Public Speaking (&PDF) and Speaking to a Global Audience (&PDF) checked. All images (save for one) are decorative photographs.**

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.	**Fail**
Additional Information:	**0/9 pages. Google Chrome. Home page, Chapters 1-4, 10, 15, 16, and 18 checked. No "lang" specified in html code.**
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:	**Google Chrome. No foreign language passages found.**

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).	**Fail**
Additional Information:	**0/2 images. Google Chrome. Introduction to Public Speaking (1) and Ethics in Public Speaking (1) checked. No non-decorative images found in html; both images were from PDF and did not have alt properties.**
B. Decorative images are marked with null alternative text or contain markup that allows them to be ignored by assistive technology.	**Pass**
Additional Information:	**9/11 images. Google Chrome and NVDA. Home page (1/1), Intoduction to Public Speaking (3/3), The Origins of Public Speaking (2/2), Ethics in Public Speaking (2/3), and Listening Effectively (1/2) checked. NVDA could not read PDFs. Within the html pages, portraits have adequate, short alt text property (except for one image, which was too irrelevant to the image itself to pass). After using**

		"Inspect Element" on Google Chrome for PDFs, the images did not have alt properties.
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:		**0/2 images. Google Chrome. Introduction to Public Speaking (1) and Ethics in Public Speaking (1) checked. No complex images found in html; both images were from PDF and did not have alt properties.**

12.Multimedia

A.	A synchronized text track (e.g. open or closed captions) is provided with all video content.	**N/A**
Additional Information:		**Google Chrome. No multimedia found.**
B.	A transcript is provided with all audio content.	**N/A**
Additional Information:		**Google Chrome. No multimedia found.**
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:		**Google Chrome. No multimedia found.**

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:		**4/4 pages. Google Chrome. Home page, Introduction to Public Speaking, The Origins of Public Speaking, and Ethics of Public Speaking checked. No flickering found.**

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 found.**
B. STEM graphs have appropriate markup that indicates that the image is a graph.	**N/A**
Additional Information:	**No STEM content found.**
C. STEM equations have appropriate markup that indicates that the image is an equation.	**N/A**
Additional Information:	**No STEM content found.**
D. STEM tables have appropriate markup that indicates the image is a table.	**N/A**
Additional Information:	**No STEM content 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 content 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 content 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 content found.**
H. Assistive technology used can access the content from the STEM tables.	**N/A**
Additional Information:	**No STEM content 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:	**Google Chrome. 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:	**Google Chrome. 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:	**Google Chrome. 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:	**URL not found.**
B. The organization providing the online materials has an accessibility statement.	**Fail**
Additional Information:	**URL not found.**

C. An Accessibility Evaluation Report is available from an external organization.	**Fail**
Additional Information:	**URL 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:	**4/4 pages. Home page, Chapters 2, 5, and 14 checked. Google Chrome and SpeakIt! Google Chrome Extension.**

3. Text Adjustment

A. Text is compatible with assistive technology.	**Pass**
Additional Information:	**4/4 pages. Home page, Chapters 2, 5, and 14 checked. Google Chrome.**
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:	**4/4 pages. Home page, Chapters 2, 5, and 14 checked. Google Chrome and Care your Eyes Google Chrome Extension.**

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:	**0/19 pages. Home page, Chapters 1-18 checked. Google Chrome.**

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 material found.**

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:	**Non-Assistive Technologies only.**

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 Technologies only.**
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).	N/A
Additional Information:	**Non-Assistive Technologies 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 Technologies 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 Technologies 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:	**HTML document.**
B. Live hyperlinks take you to any website or webpages external to the book.	**Pass**
Additional Information:	**Averaged score.**
C. Live links take you to the correct webpage that is functioning properly.	**Pass**
Additional Information:	**20/20 links. Home page and Chapter 1 checked. Google Chrome.**
D. Live links are descriptive enough for the users to know where it should take them.	**Pass**
Additional Information:	**20/20 links. Home page and Chapter 1 checked. Google Chrome.**

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	**Pass**

not perceive color, and information conveyed by color is also conveyed in other ways.	
Additional Information:	**2/3 pages. Home page, Chapter 1, and Chapter 18 checked. Home page contains chapter links that are of a different color than the normal text (blue), but they are not underlined. Document links within the chapters are not underlined, either, but are housed within buttons/boxes.**
B. Information is conveyed from the sub-categories for contrast.	**Pass**
Additional Information:	**Averaged score.**
C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	**Pass**
Additional Information:	**3/3 pages. Home page, Chapter 1, and Chapter 18 checked. Headers are either black on white (home page header, 21.0:1), blue on white (chapter headers, 8.58:1), white on dark blue ("about the authors", 13.21:1), or black on gray (bio headers, 11.57:1). Google Chrome and Colour Contrast Analyser.**
D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	**Pass**
Additional Information:	**3/3 pages. Home page, Chapter 1, and Chapter 18 checked. Text is black on white (21.0:1). Of note, however: the website's url in the home page header (www.publicspeakingproject.org) is gray on white and does not pass the criterion for small text (3.66:1 < 4.5:1). Google Chrome and Colour Contrast Analyser.**
E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	**N/A**
Additional Information:	**0/19 pages. No simple images found. Home page and Chapters 1-18 checked. Google Chrome.**

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.	**Fail**
Additional Information:	**0/4 pages. No language markup found. Home page, Chapters 1, 8, and 16 checked. Google Chrome.**
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 foreign language passages found. Home page and Chapters 1-18 checked. Google Chrome.**

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).	**Fail**
Additional Information:	**0/4 pages. The banners at the top of each page are truncated versions of each chapter's topic, not conveying adequate information of the chapter itself. Home page, Chapter 1, Chapter 7, and Chapter 12 checked. Google Chrome.**
B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.	**Pass**
Additional Information:	**5/6 images. Home page, Chapter 1, and Chapter 7 checked. Chapter 7 contains an image of at the top-right corner of the page with alternate text useless to a reader. Google Chrome.**
C. Complex images, charts, and graphs have longer text descriptions that are compatible with assistive technology (or are rendered by	**N/A**

an application such as a browser, media player, or reader) that offers this functionality).	
Additional Information:	**No complex images found. Home page, Chapter 1, and Chapter 7 checked. Google Chrome.**

12.Multimedia

A. A synchronized text track (e.g. open or closed captions) is provided with all video content.	**N/A**
Additional Information:	**No multimedia found. Home page and Chapters 1-18 checked. Google Chrome.**
B. A transcript is provided with all audio content.	**N/A**
Additional Information:	**No multimedia found. Home page and Chapters 1-18 checked. Google Chrome.**
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:	**No multimedia found. Home page and Chapters 1-18 checked. Google Chrome.**

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. Home page and Chapters 1-18 checked. Google Chrome.**

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:	**Non-Assistive Technologies only.**

B. STEM graphs have appropriate markup that indicates that the image is a graph.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**
C. STEM equations have appropriate markup that indicates that the image is an equation.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**
D. STEM tables have appropriate markup that indicates the image is a table.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**
E. STEM figures have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**
F. STEM graphs have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**
G. STEM equations have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**
H. Assistive technology used can access the content from the STEM tables.	**N/A**
Additional Information:	**Non-Assistive Technologies only.**

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.	**Pass**

Additional Information:	**3/3 pages. Links can be navigated through and accessed with keyboard-only controls. Home page, Chapter 1, and Chapter 3 checked. Google Chrome.**
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:	**Non-Assistive Technologies only.**
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:	**Non-Assistive Technologies only.**

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