



## 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:** Sage American History

**Format of Textbook:** HTML

<b>Assistive Technology (AT) Evaluation Score: Overall</b>	<b>6.9 (Maximum score = 10)</b>
<p><b>Assistive Technologies (AT) Evaluations</b> 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.</p> <ul style="list-style-type: none"> <li>• Accessibility features of desktop operating systems (e.g. high-contrast display themes, settings from the Keyboard and Mouse control panels)</li> <li>• Accessibility-related software included with desktop operating systems (e.g. VoiceOver, Microsoft Narrator)</li> <li>• Third-party accessibility software and hardware:</li> <li>• Screen readers (e.g. JAWS, Window Eyes)</li> <li>• Magnification software (e.g. ZoomText Magnifier/Reader, MAGIC Pro with Speech)</li> <li>• Reading software for users with learning disabilities (e.g. Read and Write Gold, Kurzweil 3000)</li> <li>• Refreshable Braille displays</li> </ul>	
<b>Non- Assistive Technology (NAT) Evaluation Score: Overall</b>	<b>6.6 (Maximum score =10)</b>
<p><b>Non-Assistive Technologies (NAT) Evaluations</b> 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.</p>	



## **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.

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## **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.	<b>Fail</b>
Additional Information:	<b>URL not found. Google Chrome.</b>
B. The organization providing the online materials has an accessibility statement.	<b>Fail</b>
Additional Information:	<b>URL not found. Google Chrome.</b>
C. An Accessibility Evaluation Report is available from an external organization.	<b>Fail</b>
Additional Information:	<b>URL not found. Google Chrome.</b>

### 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.	<b>Pass</b>
Additional Information:	<b>5/5 pages. Google Chrome and NVDA. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked.</b>

### 3. Text Adjustment

A. Text is compatible with assistive technology.	<b>Pass</b>
Additional Information:	<b>5/5 pages. Google Chrome. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked.</b>



<p>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).</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>5/5 pages. Google Chrome and Care your Eyes add-on. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked.</b></p>

#### 4. Reading Layout

<p>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).</p>	<p><b>Fail</b></p>
<p>Additional Information:</p>	<p><b>0/5 pages. Google Chrome. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. No reflow.</b></p>
<p>B. If the digital resource is an electronic alternative to printed materials, the page numbers correspond to the printed material.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	<p><b>No printed material found.</b></p>

#### 5. Reading Order

<p>A. The reading order for digital resource content logically corresponds to the visual layout of the page when rendered by assistive technology.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>5/5 pages. Google Chrome and NVDA. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked.</b></p>



## 6. Structural Markup/Navigation

<p>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).</p>	<p><b>Fail</b></p>
<p>Additional Information:</p>	<p><b>0/5 pages. Google Chrome and NVDA. Colonia America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. No headings marked up.</b></p>
<p>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).</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>15/15 lists. Google Chrome and NVDA. Colonial America (4), Native American Cultures (2), Colonial American History (3), and Reconstruction 1873-1877 (3), and The Gilded Age, 1865-1900 (3) checked.</b></p>
<p>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.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	<p><b>eReader application not used.</b></p>

## 7. Tables

<p>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</p>	<p><b>Pass</b></p>
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such as a browser, media player, or reader that offers this functionality).	
Additional Information:	<b>11/11 tables. Google Chrome and NVDA. Colonial America (3), Native American Cultures (1), Colonial American History (1), Reconstruction 1873-1877 (2), The Gilded Age, 1865-1900 (2), and The Progressive Era: 1896-1920 (2) checked.</b>

### 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.	<b>N/A</b>
Additional Information:	<b>Skipped</b>
B. Live hyperlinks take you to any website or webpages external to the book.	<b>Pass</b>
Additional Information:	<b>Averaged score.</b>
C. Live links take you to the correct webpage that is functioning properly.	<b>Pass</b>
Additional Information:	<b>52/62 links. Google Chrome and NVDA. Colonial America (24/24), Native American Cultures (4/9), and Colonial American History (24/29) checked. Some links lead to incorrect web pages in that either the page did not exist anymore (but the domain did) or the</b>
D. Live links are descriptive enough for the users to know where it should take them.	<b>Pass</b>
Additional Information:	<b>62/62 links. Google Chrome and NVDA. Colonial America (24), Native American Cultures (9), and Colonial American History (29) checked. Though links are not displayed as their URLs, their titles on the webpage are good indicators of the content within the l</b>



## 9. Color and Contrast

<p>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.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>5/5 pages. Google Chrome. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. All links are blue and underlined.</b></p>
<p>B. Information is conveyed from the sub-categories for contrast.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>Averaged score.</b></p>
<p>C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>5/5 pages. Google Chrome and Colour Contrast Analyser. Colonial America, Native American Cultures, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. All headers in "Colonial America" are either dark green on white or dark maroon on white, b</b></p>
<p>D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>5/5 pages. Google Chrome and Colour Contrast Analyser. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. All text is either black on white or blue on white (for links),</b></p>
<p>E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).</p>	<p><b>Fail</b></p>
<p>Additional Information:</p>	<p><b>1/2 images. Google Chrome and Colour Contrast Analyser. Colonial American History (1/2) checked. The title image atop the page of "Colonial American History" has sections where the red text is in front of the red portions of the background, making the con</b></p>



### 10. Language

<p>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.</p>	<p><b>Fail</b></p>
<p>Additional Information:</p>	<p><b>0/5 pages. Google Chrome. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. "lang='en'" not found.</b></p>
<p>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.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	<p><b>No foreign languages found.</b></p>

### 11. Images

<p>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).</p>	<p><b>Fail</b></p>
<p>Additional Information:</p>	<p><b>0/2 images. Google Chrome and NVDA. Colonial American History (0/1), and The Gilded Age, 1865-1900 (0/1) checked. The images atop "Colonial American History" and "The Gilded Age, 1865-1900" also act as the section titles. However, the descriptive text for</b></p>
<p>B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>6/7 images. Google Chrome and NVDA. Colonial America (1/1), Native American Cultures (2/2), Colonial American History (1/1), Reconstruction 1873-1877 (0/1), and The Gilded Age, 1865-1900 (2)</b></p>



	<b>checked. Most images have minimal descriptions short enough for</b>
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).	<b>N/A</b>
Additional Information:	<b>No complex images found.</b>

### **12.Multimedia**

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

### **13.Flickering**

A. The digital resource content does not contain anything that flashes more than three times in any one-second period.	<b>Pass</b>
Additional Information:	<b>5/5 pages. Google Chrome. Colonial America, Native American Cultures, Colonial American History, Reconstruction 1873-1877, and The Gilded Age, 1865-1900 checked. No flickering found.</b>



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

## 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 Included
B. The organization providing the online materials has an accessibility statement.	Fail



Additional Information:	<b>Not Included</b>
C. An Accessibility Evaluation Report is available from an external organization.	<b>Fail</b>
Additional Information:	<b>Not Included</b>

## 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.	<b>Pass</b>
Additional Information:	<b>Text was converted to speech without a problem, Colonial America, 1607-1740.</b>

## 3. Text Adjustment

A. Text is compatible with assistive technology.	<b>Pass</b>
Additional Information:	<b>It is possible to increase font size by percentages.</b>
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).	<b>Pass</b>
Additional Information:	<b>Colors can be changed but font styles are restricted.</b>

## 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).	<b>Fail</b>
Additional Information:	<b>No pages reflow, Colonial America,.1607-1740.</b>
B. If the digital resource is an electronic alternative to printed materials, the page numbers correspond to the printed material.	<b>N/A</b>



Additional Information:	
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### 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.	<b>Pass</b>
Additional Information:	<b>Text is read in a logical order.</b>

### 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).	<b>N/A</b>
Additional Information:	
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).	<b>N/A</b>
Additional Information:	
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.	<b>N/A</b>
Additional Information:	



### 7. Tables

<p>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).</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	

### 8. Hyperlinks

<p>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.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	
<p>B. Live hyperlinks take you to any website or webpages external to the book.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	
<p>C. Live links take you to the correct webpage that is functioning properly.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>Some links were expired. The Electoral College Link on first page does not work. Also on this page <a href="http://www.sageamericanhistory.net/colonial/docs/Mayflower.htm">http://www.sageamericanhistory.net/colonial/docs/Mayflower.htm</a> the "originla english.." does not work. ALSO the Colonial America link in "The Second Hundred Years War" was broken.</b></p>
<p>D. Live links are descriptive enough for the users to know where it should take them.</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>Chapter links are descriptive, at the bottom of every page are links that are also descriptive.</b></p>

### 9. Color and Contrast

<p>A. All information within the material that is conveyed using color is also available in a</p>	<p><b>Pass</b></p>
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manner that is compatible with those that do not perceive color, and information conveyed by color is also conveyed in other ways.	
Additional Information:	<b>Headers and links are emphasized using boldface, italics, and capitalization.</b>
A. Information is conveyed from the sub-categories for contrast.	<b>N/A</b>
Additional Information:	
B. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	<b>Pass</b>
Additional Information:	<b>All headers pass standards.</b>
C. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	<b>Pass</b>
Additional Information:	<b>Ratio 18.87:1</b>
D. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	<b>N/A</b>
Additional Information:	

### **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.	<b>Fail</b>
Additional Information:	<b>No language was declared.</b>
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.	<b>N/A</b>
Additional Information:	



### 11.Images

<p>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).</p>	<p><b>Pass</b></p>
<p>Additional Information:</p>	<p><b>Most pictures contain an alt with a brief description:</b>  <a href="http://www.sageamericanhistory.net/colonies_empire/topics/colonialwars.html">http://www.sageamericanhistory.net/colonies_empire/topics/colonialwars.html</a></p>
<p>B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	
<p>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).</p>	<p><b>Fail</b></p>
<p>Additional Information:</p>	<p><b>Some images do not have an alt attribute and some do not give adequate description</b>  <a href="http://www.sageamericanhistory.net/civilwar/topics/civilwar1863.html">http://www.sageamericanhistory.net/civilwar/topics/civilwar1863.html</a></p>

### 12.Multimedia

<p>A. A synchronized text track (e.g. open or closed captions) is provided with all video content.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	
<p>B. A transcript is provided with all audio content.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	
<p>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.</p>	<p><b>N/A</b></p>
<p>Additional Information:</p>	



### 13. Flickering

A. The digital resource content does not contain anything that flashes more than three times in any one-second period.	<b>Pass</b>
Additional Information:	<b>None found</b>

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

A. STEM figures have appropriate markup that indicates that the image is a figure.	<b>N/A</b>
Additional Information:	
B. STEM graphs have appropriate markup that indicates that the image is a graph.	<b>N/A</b>
Additional Information:	
C. STEM equations have appropriate markup that indicates that the image is an equation.	<b>N/A</b>
Additional Information:	
D. STEM tables have appropriate markup that indicates the image is a table.	<b>N/A</b>
Additional Information:	
E. STEM figures have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	<b>N/A</b>
Additional Information:	
F. STEM graphs have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	<b>N/A</b>
Additional Information:	
G. STEM equations have appropriate notation markup that conveys both the notation	<b>N/A</b>



(presentation) and meaning (semantics) of the STEM content.	
Additional Information:	
H. Assistive technology used can access the content from the STEM tables.	<b>N/A</b>
Additional Information:	

### *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.	<b>N/A</b>
Additional Information:	
B. Each interactive element conveys information to assistive technology regarding the element's name, type, and status (e.g. "Play, button, selected").	<b>N/A</b>
Additional Information:	
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).	<b>N/A</b>
Additional Information:	

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