

# 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: Elements of Mass Communication

Format of Textbook: HTML

Assistive Technology (AT) Evaluation Score: Overall	7.4 (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.	
<ul> <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>	
Non- Assistive Technology (NAT) Evaluation Score: Overall	5.7 (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 <u>Accessible Technology Initiative</u> and <u>MERLOT</u> (Multimedia Educational Resources for Learning and Online Teaching) developed the rubric or "checkpoints" for the accessibility evaluation. <u>CAST</u>, 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 <u>Center for Usability in Design and Accessibility</u> 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 erganization providing the online	Fail
A. The organization providing the online	raii
materials has a formal accessibility policy.	
Additional Information:	There were no links provided for additional
	information regarding the formal accessibility policy.
	The program used to analyze text content was NVDA
	which is an open source screen reader for Windows.
	Google chrome was used to access the book online.
	dogle chrome was used to access the book online.
B. The organization providing the online	Fail
materials has an accessibility statement.	
Additional Information:	There were no links provided for additional
	information regarding the accessibility statement. The
	program used to analyze text content was NVDA
	which is an open source screen reader for Windows.
	Google chrome was used to access the book online.
C. An Accessibility Evaluation Report is available	Fail
from an external organization.	
Additional Information:	There were no links provided for additional
	information regarding accessibility. The program used
	to analyze text content was NVDA which is an open
	source screen reader for Windows. Google chrome
	was used to access the book online.

### 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:	0/9 chapters were analyzed and passed text to speech. Chapters 1 through 9 were used for this



analysis. Although the NVDA program was able to read the text content, it paused every time it came to a word that was bolded. Once the NVDA reader was manually started after encountering these issues and pausing, some of the words in the sentence were missing. The reader would skip three or four words or entire sentences before beginning to read again. This section received a score of 5, which is failing, due to the fact that the reader did read most of the text but failed to perform adequately. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 3. Text Adjustment

A. Text is compatible with assistive technology.	Pass
Additional Information:	9/9 chapters were analyzed and passed text size compatibility. Chapters 1 through 9 were used for this analysis. The text content of the chapter allowed for adequate text size adjustment between the ranges of 30% to 300% zoom. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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:	9/9 chapters were analyzed and passed. Chapters 1 through 9 were analyzed and allowed for adequate adjustment of the font/background color. The tool used to analyze this component was the Google extension "Care your Eyes." Google chrome was used to access the book online.



# 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:	0/30 web pages were analyzed and passed. Content was taken from chapters 1 through 30. All of the web pages analyzed did not allow for adequate text reflow between 30% and 300% zoom levels.  Horizantal scrolling was required. Results may vary depending on screen size. Text reflow was analyzed using a standard Toshiba laptop with a 16 inch screen size. Google chrome was used to access the book online.
B. If the digital resource is an electronic alternative to printed materials, the page numbers correspond to the printed material.	N/A
Additional Information:	0/0 web pages were analyzed and passed for matching page number content in the PDF version. There was no PDF version of this text. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

# 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 were analyzed and passed for digital resource layout. Chapters 1 through 5 were used for this analysis. The reading order for digital resource content logically corresponded to the visual layout of the page when rendered by assistive technology. The program used to analyze the digital resource layout was NVDA which is an open source screen reader for



Windows. Google chrome was used to access the
book online.

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).	Pass
Additional Information:	9/9 chapters were analyzed and passed markup for navigational text. Chapters 1 through 9 were used to analyze navigational text. The text of the digital resource included markup that allowed for navigation by heading levels using assistive technology. All heading levels were red on a light blue white background. The program used to analyze navigational text was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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).	Pass
Additional Information:	10/10 lists were analyzed and passed for structural markup of lists. Chapters 1 through 9 were used to analyze lists. The text of the digital resource included markup for bullets and numbered lists that was compatible with assistive technology. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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	N/A



reader interface and move directly to the text content that is compatible with assistive technology.	
Additional Information:	0/0 text content analyzed for structural markup for eReader application. No additional eReader application being used in this evaluation. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 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).	Pass
Additional Information:	10/10 tables were analyzed and passed markup. Tables were taken from chapters 1 through 35. Data tables included markup that identified row and column headers in a manner that was compatible with assistive technology. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 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:	The within book links are included in the live links analysis for HTML formats.
B. Live hyperlinks take you to any website or webpages external to the book.	Pass



Additional Information:	This is a combined average of the following two subsections of the links description and functionality. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
C. Live links take you to the correct webpage that is functioning properly.	Pass
Additional Information:	50/50 links were analyzed and passed for functionality. The links were taken from chapters 1 through 9. The links took you to the correct location. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
D. Live links are descriptive enough for the users to know where it should take them.	Pass
Additional Information:	39/50 links were analyzed and passed for link description. The links were taken from chapters 1 through 9. There was adequate descriptions of the passing links that aided in determining where they would take you. Failing links had no adequate description of the link provided that was compatible with assistive technology, single words such as figure or link were used. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 9. Color and Contrast

A. All information within the material that is	Fail
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.	
Additional Information:	0/9 chapters were analyzed and passed for color
	redundancy. Chapter 1 through 9 were analyzed. The
	text content was not color redundant in that it did
	not provide adequate means of distinguishing the



	content aside from color. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
B. Information is conveyed from the sub- categories for contrast.	Pass
Additional Information:	This is an average score taken from the combined sub sections of the color and contrast field. The content was analyzed using the color contrast analyzer tool. Google chrome was used to access the book online.
C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	Pass
Additional Information:	9/9 chapters were analyzed and passed for adequate header color contrast. Chapters 1 through 9 were used for analysis. All heading levels were red on a light blue white background. The content was analyzed using the color contrast analyzer tool. Google chrome was used to access the book online.
D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	Pass
Additional Information:	9/9 chapters were analyzed and passed for adequate text color contrast. Chapters 1 through 9 were used for analysis. All standard text samplings were of black, dark red, or dark blue text on a light blue white background. The content was analyzed using the color contrast analyzer tool. Google chrome was used to access the book online.
E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	Pass
Additional Information:	2/3 chapters with simple images were analyzed and passed color contrast. 6/7 simple images were analyzed and passed for adequate color contrast, the failing image had a contrast ratio of 2.7:1; this image was found in chapter 5 and is of a graphdisplaying movie ticket sales. The images were taken from



chapters 1 through 9. The content was analyzed
using the color contrast analyzer tool. Google chrome
was used to access the book online.

# 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 text of the digital resource included markup that declares the language of the content in a manner that is compatible with assistive technology. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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:	The digital resource did not include passages in a foreign language. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 11.Images

A. Non-decorative images have alternative text	Pass
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:	14/20 non-decorative images were analyzed and
	passed. Chapters 1 through 9 were used for this
	analysis. Alternate text descriptions are provided for
	each passing image that are compatible with



	assistive technology. failling images were found in chapters 5, 8, and 9. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.	Pass
Additional Information:	66/66 decorative images were analyzed and passed.  Decorative images were taken from chapters 1 through 9. The decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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:	0/0 complex images were analyzed and passed. No complex images were found within chapters 1 through 9. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 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 were found within the text resource. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
B. A transcript is provided with all audio content.	N/A



Additional Information:	No multimedia were found within the text resource. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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 were found within the text resource. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 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:	While analyzing book material there was no flickering on any of the pages. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

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

A. STEM figures have appropriate markup that indicates that the image is a figure.	Fail
Additional Information:	0/10 figures were analyzed and passed. STEM figures were found in chapters 17, 21, 42, and 44. The figures were not marked up in a manner that is compatible with assistive technology. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
B. STEM graphs have appropriate markup that indicates that the image is a graph.	Fail



Additional Information:	0/6 graphs were analyzed and passed. STEM graphs were found in chapters 17, 20, 35, 42, and 45. The graphs were not marked up in a manner that is compatible with assistive technology. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
C. STEM equations have appropriate markup that indicates that the image is an equation.	N/A
Additional Information:	No STEM content was found for equations within the text document. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
D. STEM tables have appropriate markup that indicates the image is a table.	N/A
Additional Information:	No STEM content was found for tables within the text document. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
E. STEM figures have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	Pass
Additional Information:	10/10 figures were analyzed and passed. All STEM figures were taken from chapters 17, 21, 42, and 44. Although the reader could not read the figures, the resource conveys both the notation (presentation) and meaning (semantics) of the STEM content. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
F. STEM graphs have appropriate notation markup that conveys both the notation (presentation) and meaning (semantics) of the STEM content.	Pass



Additional Information:	10/10 graphs were analyzed and passed. The graphs were found in chapters 17, 20, 35, 42, and 45. Although the reader could not read the graphs, the resource conveys both the notation (presentation) and meaning (semantics) of the STEM content. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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 was found for equations within the text document. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
<ul> <li>H. Assistive technology used can access the content from the STEM tables.</li> </ul>	N/A
Additional Information:	No STEM content was found for tables within the text document. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

### 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 were found within the text resource. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
B. Each interactive element conveys information to assistive technology regarding the	N/A



element's name, type, and status (e.g. "Play, button, selected").	
Additional Information:	No interactive elements were found within the text resource. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.
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 were found within the text resource. The program used to analyze text content was NVDA which is an open source screen reader for Windows. Google chrome was used to access the book online.

# 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:	8/8 chapter pass. 1, 3, 5, 10, 15, 20, 25, 30 were checked.

# 3. Text Adjustment

A. Text is compatible with assistive technology.	Pass
Additional Information:	8/8 chapter pass. 1, 3, 5, 10, 15, 20, 25, 30 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).	Fail
Additional Information:	0/8 chapters pass. The color do invert however, when inverted the colors are too similar to be to distinguish between foreground and background. 1, 3, 5, 10, 15, 20, 25, 30 were checked.

# 4. Reading Layout

A. Text of the digital resource is compatible with	Fail
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).	



Additional Information:	0/8 chapters pass. Content does not reflow when making browser smaller or zooming in to %200. 1, 3, 5, 10, 15, 20, 25, 30 were 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/pdf version found.

# 5. Reading Order

Add	itional Information:	Non-Assistive Techonology Only.
	the page when rendered by assistive technology.	
	logically corresponds to the visual layout of	
	A. The reading order for digital resource content	N/A

# 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
Additio	nal Information:	Non-Assistive Techonology Only.
В.	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
Additio	onal Information:	Non-Assistive Techonology 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	N/A



content that is compatible with assistive technology.	
Additional Information:	Non-Assistive Techonology Only.

### 7. Tables

A. Data tables include markup (e.g. tags or	N/A
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).	
Additional Information:	Non-Assistive Techonology Only.
Additional information.	Non-Assistive rectionology 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 only contains live link, no inbook links available.
B. Live hyperlinks take you to any website or webpages external to the book.	Pass
Additional Information:	Average score
C. Live links take you to the correct webpage that is functioning properly.	Pass
Additional Information:	19/20 links pass. The link that was checked and did not work was under the mass communication index and it was the "history and development of film."
D. Live links are descriptive enough for the users to know where it should take them.	Pass
Additional Information:	20/20 links pass.



### 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:	Links are highlighted blue to show they are links however there is no other code to show they are links other than color.
B. Information is conveyed from the sub- categories for contrast.	Pass
Additional Information:	Average score
C. Contrast for headers passed WCAG AA standards for large texts (contrast ratio 3:1).	Pass
Additional Information:	Headers are either black text and off white background or background is black and text is white.
D. Contrast for text passed WCAG AA standards for normal texts (contrast ratio of 4.5:1).	Pass
Additional Information:	Text is black and background is off white.
E. Contrast for simple images (for example, images of atoms) passed WCAG AA standards (contrast ratio of 4.5:1).	N/A
Additional Information:	No simple images found.

### 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:	0/8 chapters pass. No langeuage is declared. 1, 3, 5, 10, 15, 20, 25, 30 were checked.
B. If the digital resource includes passages in a foreign language, these passages include markup that declares the language in a	N/A



manner that is compatible with assistive technology.	
Additional Information:	No other langauge 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:	0/8 chapters pass. Chapters need alt tags. 1, 3, 5, 10, 15, 20, 25, 30 were checked. W3c was used.
B. Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology.	Fail
Additional Information:	0/8 chapters pass. Chapters need alt tags. 1, 3, 5, 10, 15, 20, 25, 30 were checked. W3c was used.
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 were found. Home page, 1, 2, 3, 4 chapters were checked. No images had an alt tags.

### 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.
B. A transcript is provided with all audio content.	N/A
Additional Information:	No multimdeia found.
C. Audio/video content is delivered via a media	N/A
player that is compatible with assistive	



technology. This includes support for all criteria listed in Section 15 below.	
Additional Information:	No multimedia found.

### 13.Flickering

A. The digital resource content does not contain	Pass
anything that flashes more than three times in	
any one-second period.	
Additional Information:	No flickering. Home page and Chapters 1-18 checked.
	Google Chrome.

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

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A.	STEM figures have appropriate markup that	N/A
	indicates that the image is a figure.	
Additio	onal Information:	No STEM figures found.
D	STEM graphs have appropriate markup that	N/A
Б.		N/A
	indicates that the image is a graph.	
Additio	onal Information:	No STEM graphs found.
		and the second s
C.	STEM equations have appropriate markup	N/A
	that indicates that the image is an equation.	
	-	
Additio	onal Information:	No STEM equations found.
D.	STEM tables have appropriate markup that	N/A
	indicates the image is a table.	
	mulcates the image is a table.	
Additio	onal Information:	No STEM tables found.
E.	STEM figures have appropriate notation	N/A
	markup that conveys both the notation	
	(presentation) and meaning (semantics) of the	
	STEM content.	
	STEW CONTENT.	
Additio	onal Information:	No STEM figures found.
F	STEM graphs have appropriate notation	N/A
	markup that conveys both the notation	
	(presentation) and meaning (semantics) of the	
1	STEM content.	



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.
<ul> <li>H. Assistive technology used can access the content from the STEM tables.</li> </ul>	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 content in the book.
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 content in the book.
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 content in the book.

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