

# COOL4Ed ACCESSIBILITY CHECKPOINTS

---

METHODS FOR EPUB3 FORMATS  
(NONASSISTIVE TECHNOLOGIES)



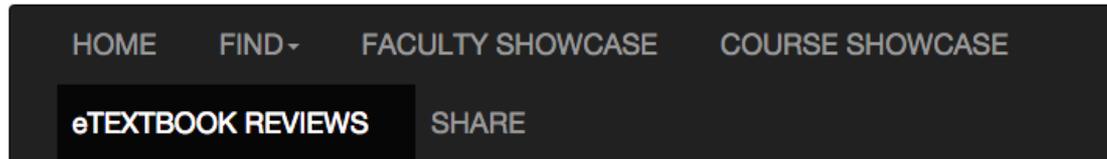
# Accessibility Checkpoints

1. Accessibility Documentation
2. Text Access
3. Text Adjustment
4. Reading Layout
5. Reading Order
6. Structural Markup/Navigation
7. Tables
8. Hyperlinks
9. Color and Contrast
10. Language
11. Images
12. Multimedia
13. Flickering
14. STEM
15. Interactive Elements

# How to access texts

## STEPS:

1. Visit Cool4Ed eTextbook Reviews site @ <http://www.cool4ed.org/reviews.html>



# How to access texts

## STEPS:

1. Visit Cool4Ed eTextbook Reviews site @ <http://www.cool4ed.org/reviews.html>
2. Select desired titles
3. Search for preferred formats
4. Download text

# How to access texts

## STEPS:

### 2. Select desired titles

Introduction to Statistics

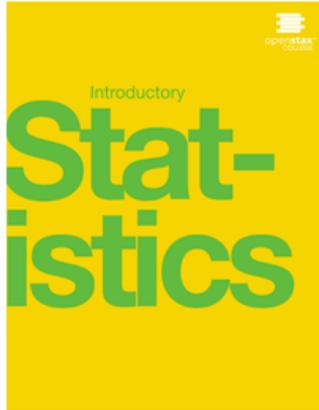


MATH 110

eTextbook	eTextbook Reviews
<i>Introductory Statistics From BC Campus</i>	Tami Matsumoto, CCC Faculty Andrew Noymer, UC Faculty Hasan Rahim, CCC Faculty
<i>Introductory Statistics From Open Stax College</i>	Tami Matsumoto, CCC Faculty Andrew Noymer, UC Faculty Hasan Rahim, CCC Faculty
<i>Online Statistics Education: An Interactive Multimedia Course of</i>	Tami Matsumoto, CCC

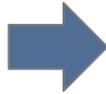
# How to access texts

## 3. Search for preferred format and download text



GET THIS BOOK >

MORE RESOURCES >



### GET INTRODUCTORY STATISTICS!

OpenStax College makes it easy to get high-quality textbooks for your course. Use the buttons below to start enjoying Introductory Statistics!



Get a premium, interactive ebook

Print

Get a low-cost, professionally printed copy.

PDF

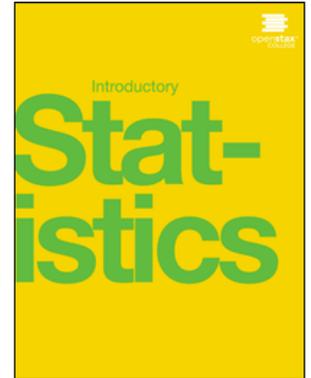
Download a free PDF of this book.

Web View

Read live on the web.

Bookshare

Download a free accessible version of this book.



# Formats

Online texts are available in various formats and should be evaluated based on the following rankings:

1. EPUB3
2. HTML
3. Microsoft Word
4. PDF

## GET INTRODUCTORY STATISTICS!

OpenStax College makes it easy to get high-quality textbooks for your course. Use the buttons below to start enjoying Introductory Statistics!



Get a premium, interactive ebook

Print

Get a low-cost, professionally printed copy.

PDF

Download a free PDF of this book.

Web View

Read live on the web.

Bookshare

Download a free accessible version of this book.

# Formats

In other words, EPUB3 is ideal, but if it is not available, we move down the list and search for the next available format

4. Download textbook or open link (if applicable)

## GET INTRODUCTORY STATISTICS!

OpenStax College makes it easy to get high-quality textbooks for your course. Use the buttons below to start enjoying Introductory Statistics!



Get a premium, interactive ebook

Print

Get a low-cost, professionally printed copy.

PDF

Download a free PDF of this book.

Web View

Read live on the web. (HTML)

Bookshare

Download a free accessible version of this book.

# Formats

Note: This is an OpenStax text. Although EPUB3 isn't listed, it is available!

To determine if there is an EPUB3 format for OpenStax texts, additional navigation is required.

## GET INTRODUCTORY STATISTICS!

OpenStax College makes it easy to get high-quality textbooks for your course. Use the buttons below to start enjoying Introductory Statistics!



Get a premium, interactive ebook

Print

Get a low-cost, professionally printed copy.

PDF

Download a free PDF of this book.

Web View

Read live on the web.

Bookshare

Download a free accessible version of this book.

# How to access texts

From the “Web View” select “Get This Book!”

## GET INTRODUCTORY STATISTICS!

OpenStax College makes it easy to get high-quality textbooks for your course. Use the buttons below to start enjoying Introductory Statistics!

	Get a premium, interactive ebook
<a href="#">Print</a>	Get a low-cost, professionally printed copy.
<a href="#">PDF</a>	Download a free PDF of this book.
<a href="#">Web View</a>	Read live on the web.
<a href="#">Bookshare</a>	Download a free accessible version of this book.



## Introductory Statistics

Book by: OpenStax College

[f](#) [t](#) [g+](#) [in](#)

[☰ Contents +](#) [i Metadata +](#) [⚙ Tools +](#)

[⏪ Back](#)  [Next ⏩](#)

Preface

Get This Book!

# How to access texts

Now you can download the EPUB file!

Introductory Statistics

Book by: OpenStax College

ASK US

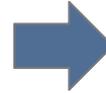
Contents + Metadata + Tools +

Facebook Twitter Google+ LinkedIn

Back Next

Preface

Get This Book



Note: At the time of this writing, only OpenStax texts have been found to need additional navigation. All other texts have been found to clearly list out all available formats.

Get This Book

Get This Book

Download Book:

PDF | EPUB | Offline ZIP

Order Printed Book

# Checklist

All information obtained from textbook evaluation will be entered into checklists:

HTML Accessibility Checklist					
Content	Name of book	Format	OS Used	Total Number of Pages	Number of Chapters
HTML					

Check point	Criteria	Amount of Material	Pass/Fail
1 Acc. Documentation	A. URL to Formal Accessibility Policy		
1 Acc. Documentation	B. URL to Accessibility Statement		
1 Acc. Documentation	C. URL to Accessibility Evaluation Report		
2 Text Access	Text to Speech	0	
3 Text Adjustment	A. Compatible	0	
3 Text Adjustment	B. Adjust font and colors	0	
4 Reading Layout	A. Reflow the text	30 web pages	
4 Reading Layout	B. Page # match printed material & reflow of text	30 web pages	
5 Reading Order	Digital resource layout		
6 Structural Markup	A. Navigation text		
6 Structural Markup	B. Lists		
6 Structural Markup	C. eReader application		
7 Table Markup	Table Markup		
8 Hyperlinks	Hyperlinks (within book)		
8 Hyperlinks	Hyperlink (live on internet)	20 links	
9 Color and Contrast	A. Color redundancy		
9 Color and Contrast	B. Contrast		
10 Language	A. Markup		
10 Language	B. Passage Markup		
11 Images	A. Non-decorative		
11 Images	B. Decorative		
11 Images	C. Complex		
12 Multimedia	A. Text Track		
12 Multimedia	B. Transcript		
12 Multimedia	C. Assistive Player		
13 Flickering	Flickering	10 links	
14 STEM	A. Markup (figures)	10 figures	
14 STEM	A. Markup (graphs)	10 graphs	
14 STEM	A. Markup (equation)	10 equations	
14 STEM	B. Notation Markup (figures)	10 figures	
14 STEM	B. Notation Markup (graphs)	10 graphs	
14 STEM	B. Notation (equation)	10 equations	
15 Interactive Elements	A. Keyboard		
15 Interactive Elements	B. Markup		
15 Interactive Elements	C. Text Prompts		

EPUB Accessibility Checklist					
Content	Name of book	Format	OS Used	Total Number of Pages	Number of Chapters
EPUB					
#	Check point	Criteria	Amount of Material	Pass/Fail	Additional Info
1	Acc. Documentation	A. URL to Formal Accessibility Policy			
1	Acc. Documentation	B. URL to Accessibility Statement			
1	Acc. Documentation	C. URL to Accessibility Evaluation Report			
2	Text Access	Text to Speech	0 pages		
3	Text Adjustment	A. Compatible	0 pages		
3	Text Adjustment	B. Adjust font and colors	0 pages		
4	Reading Layout	A. Reflow the text	0 pages		
4	Reading Layout	B. Page #s match printed material & reflow of text	0 pages		
5	Reading Order	Digital resource layout			
6	Structural Markup	A. Navigation text			
6	Structural Markup	B. Lists			
6	Structural Markup	C. eReader application			
7	Table Markup	Table Markup			
8	Hyperlinks	Hyperlinks (in-book)	30 links		
8	Hyperlinks	Hyperlink (live)	20 links		
9	Color and Contrast	A. Color redundancy			
9	Color and Contrast	B. Contrast			
10	Language	A. Markup			
10	Language	B. Passage Markup			
11	Images	A. Non-decorative			
11	Images	B. Decorative			
11	Images	C. Complex			
12	Multimedia	A. Text Track			
12	Multimedia	B. Transcript			
12	Multimedia	C. Assistive Player			
13	Flickering	Flickering	10 links		
14	STEM	A. Markup (figures)	10 figures		
14	STEM	A. Markup (graphs)	10 graphs		
14	STEM	A. Markup (equation)	10 equations		
14	STEM	B. Notation Markup (figures)	10 figures		
14	STEM	B. Notation Markup (graphs)	10 graphs		
14	STEM	B. Notation (equation)	10 equations		
15	Interactive Elements	A. Keyboard			
15	Interactive Elements	B. Markup			
15	Interactive Elements	C. Text Prompts			

# Checklist

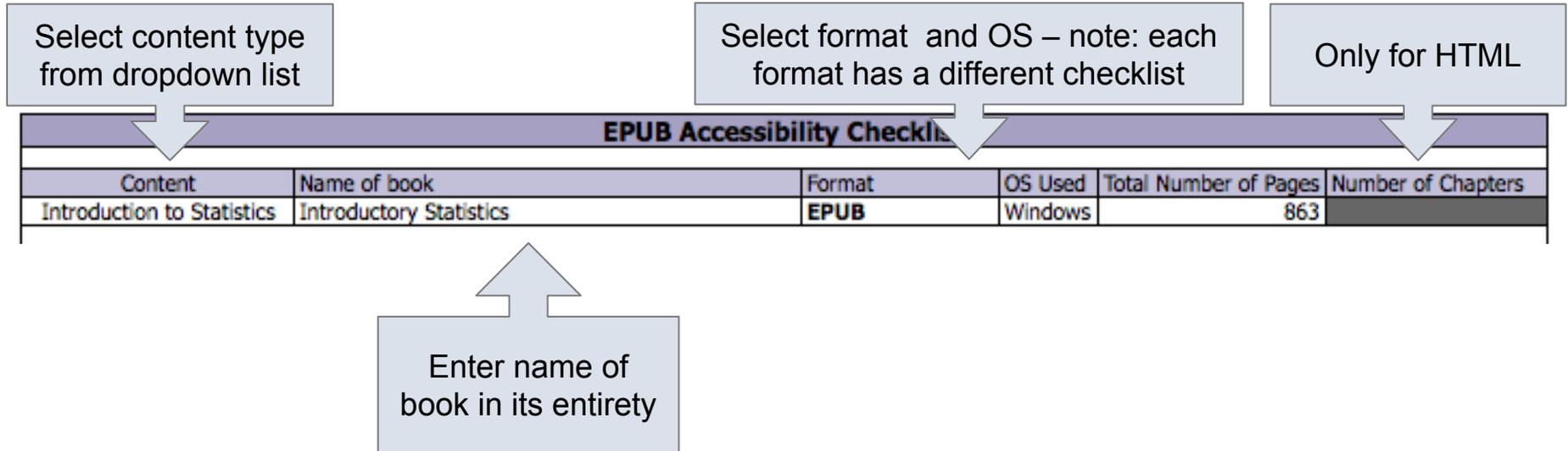
For every book, enter the following:

- Content area
- Name of book
- Format (i.e., EPUB, HTML, Word, or PDF)
- OS used (e.g., Microsoft; Windows)
- For EPUB, Word, and PDF formats: Total number of pages (obtained from Word or PDF format preferably, if available)
- For HTML only: Total number of chapters

Note: Only Windows will be used for analysis until Apple equivalents are decided upon.

# Checklist

Example for the EPUB format of Introductory Statistics (PDF version has 863 pages)



# Checklist

Note: When certain information is entered such as the number of pages or number of chapters, certain information in the checklist is updated:

EPUB Accessibility Checklist					
Content	Name of book	Format	OS Used	Total Number of Pages	Number of Chapters
Introduction to Statistics	Introductory Statistics	EPUB	Windows	863	
#	Check point	Criteria	Amount of Material	Pass/Fail	Additional Info
1	Acc. Documentation	A. URL to Formal Accessibility Policy			
1	Acc. Documentation	B. URL to Accessibility Statement			
1	Acc. Documentation	C. URL to Accessibility Evaluation Report			
2	Text Access	Text to Speech	172.6 pages		
3	Text Adjustment	A. Compatible	86.3 pages		
3	Text Adjustment	B. Adjust font and colors	86.3 pages		
4	Reading Layout	A. Reflow the text	172.6 pages		
4	Reading Layout	B. Page #s match printed material & reflow of text	172.6 pages		

# Checklist

This information is based upon predetermined values for the amount of information that needs to be evaluated. You only need to round up to the next page count (or link count).

EPUB Accessibility Checklist					
Content	Name of book	Format	OS Used	Total Number of Pages	Number of Chapters
Introduction to Statistics	Introductory Statistics	EPUB	Windows	863	
#	Check point	Criteria	Amount of Material	Pass/Fail	Additional Info
1	Acc. Documentation	A. URL to Formal Accessibility Policy			
1	Acc. Documentation	B. URL to Accessibility Statement			
1	Acc. Documentation	C. URL to Accessibility Evaluation Report			
2	Text Access	Text to Speech	172.6 pages		
3	Text Adjustment	A. Compatible	86.3 pages		
3	Text Adjustment	B. Adjust font and colors	86.3 pages		
4	Reading Layout	A. Reflow the text	172.6 pages		
4	Reading Layout	B. Page #s match printed material & reflow of text	172.6 pages		



173 pages  
87 pages  
87 pages  
173 pages  
173 pages

# Checklist

The percentages used are included in this presentation, but that is only for your reference – the checklist will fill out this information for you!

EPUB Accessibility Checklist					
Content	Name of book	Format	OS Used	Total Number of Pages	Number of Chapters
Introduction to Statistics	Introductory Statistics	EPUB	Windows	863	
#	Check point	Criteria	Amount of Material	Pass/Fail	Additional Info
1	Acc. Documentation	A. URL to Formal Accessibility Policy			
1	Acc. Documentation	B. URL to Accessibility Statement			
1	Acc. Documentation	C. URL to Accessibility Evaluation Report			
2	Text Access	Text to Speech	172.6 pages		
3	Text Adjustment	A. Compatible	86.3 pages		
3	Text Adjustment	B. Adjust font and colors	86.3 pages		
4	Reading Layout	A. Reflow the text	172.6 pages		
4	Reading Layout	B. Page #s match printed material & reflow of text	172.6 pages		

173 pages  
87 pages  
87 pages  
173 pages  
173 pages

# Skills Commons Accessibility Checkpoints

All information obtained from textbook evaluation will be entered into the checkpoints document:

### 3. *Text Adjustment*

PASS/FAIL: \_\_\_\_\_ Ranking: \_\_\_\_\_

- A. Text is compatible with assistive technology.
- 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).

Additional Information: Please describe the technologies (hardware and software versions) and methodologies you used to evaluate the accessibility of the resource for this feature.

Enter info such as the pages you evaluated here as well.

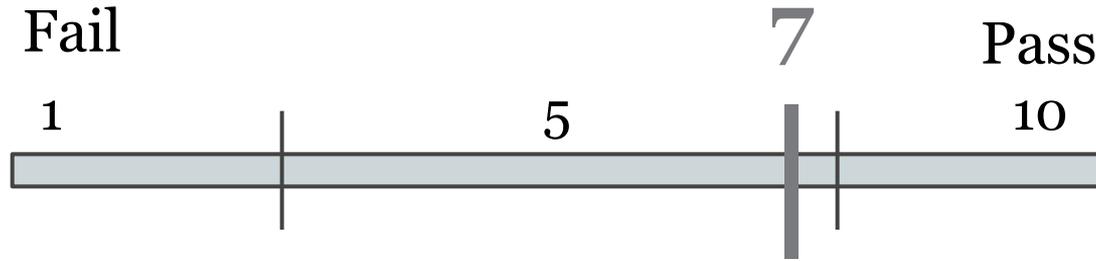


# Pass, Fail, or N/A?

- Evaluate material based on the amount of material included in the checklist
- Example: Evaluate 10 links for flickering  
7 / 10 links - PASS  
6/10 links - FAIL  
*N/A cannot be used here!*

# Ratings

- Ratings are on a scale of 1-10



- Failure to meet a checkpoint (Fail) should not be rated above a 7
- Meeting a checkpoint (Pass) should not be rated below a 7

# EPUB3

---

# EPUB3 Evaluation Requirements

## OS and Native Software

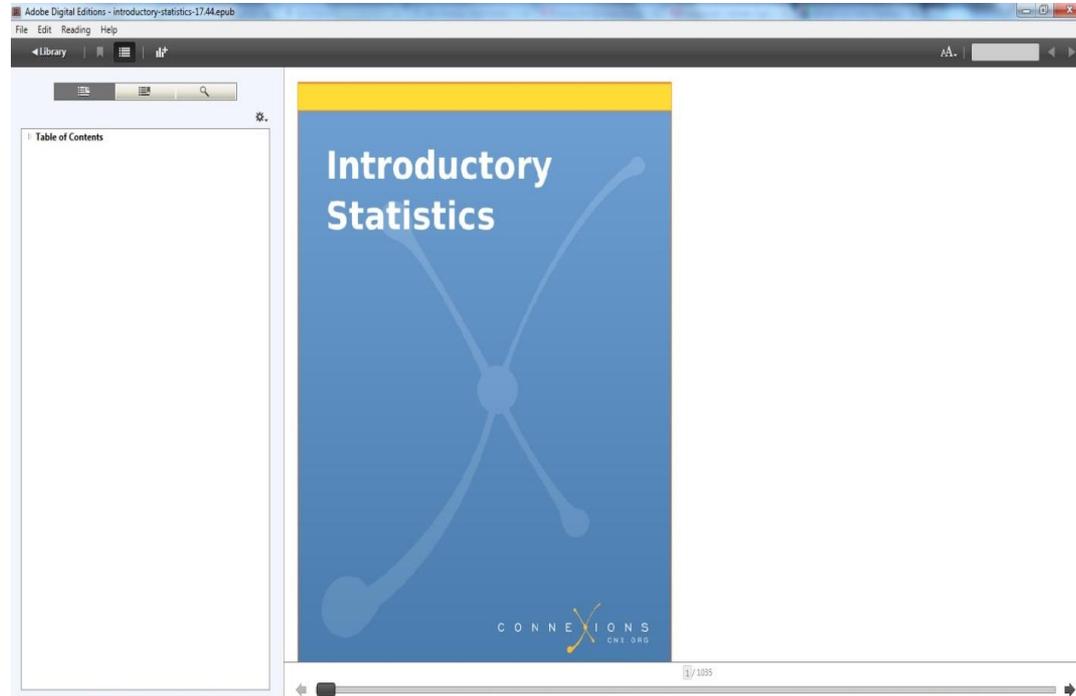
- Windows OS (XP or above)
- Narrator (Windows built-in text-to-speech)

## Require Downloading

- Adobe Digital Editions ([Download](#))
- EPUB Check ([Download](#))
- Pagina EPUB Checker ([Download](#))
- Color Contrast Analyzer- CCA ([Download](#))
- Google Chrome ([Download](#))

# EPUB3

- To open EPUB files, download Adobe Digital Editions:



# EPUB3

To evaluate images:

- EPUB Check (uses command line tool; no GUI)
  - Download EPUB Check @ <https://github.com/IDPF/epubcheck/releases/tag/v3.0.1>
- Pagina EPUB-Checker (provides GUI)
  - Download Pagina EPUB-Checker @ <http://www.pagina-online.de/produkte/epub-checker/>

# 1. Accessibility Documentation

For the textbooks' organizations, find the following:

- URL to formal Accessibility Policy
- URL to accessibility statements
- URL to Accessibility Evaluation Report

## 2. Text Access

- ☑ The text of the digital resource is available to assistive technology that allows the user to enable text-to-speech (TTS) functionality

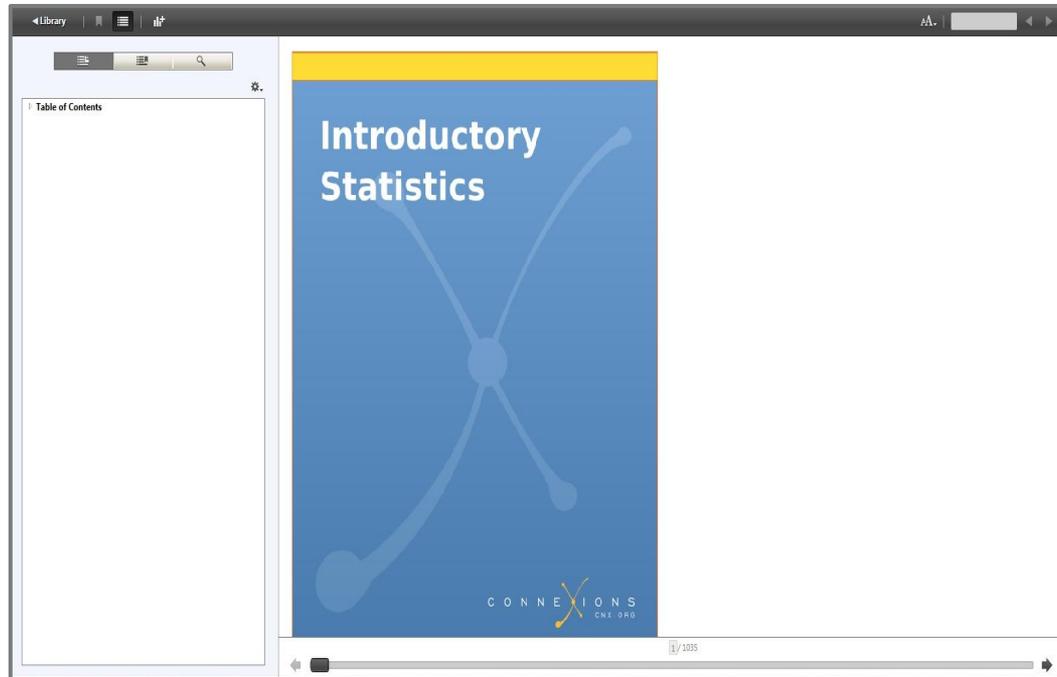
## 2. Text Access

### STEPS:

1. Open up EPUB book with Adobe Digital Editions
2. Use search function to search for "Narrator"
3. Open Narrator
4. Open Adobe Digital Editions to allow Narrator to read text

# Text Access

1. Open up the EPUB book with Adobe Digital Editions



# Text Access

## 2. Use the search function from the start menu > type in "Narrator" to search

The screenshot shows a Windows desktop with a search window open. The search term is "narrator". The search results are as follows:

- Programs (1)
  - Narrator
- Control Panel (5)
  - Change the Narrator voice
  - Hear text read aloud with Narrator
  - Use screen reader
- Documents (3)
  - open narrator - text access
  - search for narrator - text access
  - SkillsCommons-Accessibility-Checkpoints v2 (1)
- Pictures (2)
  - SkillsCommons-Accessibility-Checkpoints v2 (1)
  - SkillsCommons-Accessibility-Checkpoints v2
- Files (2)
  - search for narrator - text access
- See more results

The search bar at the bottom of the window contains the text "narrator" and a "shut down" button. The background document contains the following text:

interpreting and solving statistical problems. To keep the text relevant for students, the examples are drawn from a broad spectrum of practical topics; these include examples about college life and learning, health and medicine, retail and business, and sports and entertainment.

- **Try It** practice problems immediately follow many examples and give students the opportunity to practice as they read the text. **They are usually based on practical and familiar topics, like the Examples themselves.**
- **Collaborative Exercises** provide an in-class scenario for students to work together to explore presented concepts.
- **Using the TI-83, 83+, 84, 84+ Calculator** shows students step-by-step instructions to input problems into their calculator.
- **The Technology Icon** indicates where the use of a TI calculator or computer software is recommended.
- **Practice, Homework, and Bringing It Together** problems give the students problems at various degrees of difficulty while also including real-world scenarios to engage students.

### Statistics Labs

These innovative activities were developed by Barbara Illowsky and Susan Dean in order to offer students the experience of designing, implementing, and interpreting statistical analyses. They are drawn from actual experiments and data-gathering processes, and offer a unique hands-on and collaborative experience. The labs provide a foundation for further learning and classroom interaction that will produce a meaningful application of statistics.

Statistics Labs appear at the end of each chapter, and begin with student learning outcomes, general estimates for time on task, and any global implementation notes. Students are then provided step-by-step

- **Webassign Online Homework System**
- **Video Lectures** delivered by Barbara Illowsky are provided for each chapter.

## 2. About Our Team

- [Senior Contributing Authors](#)
- [Contributors](#)
- [Sample TI Technology](#)

### Senior Contributing Authors

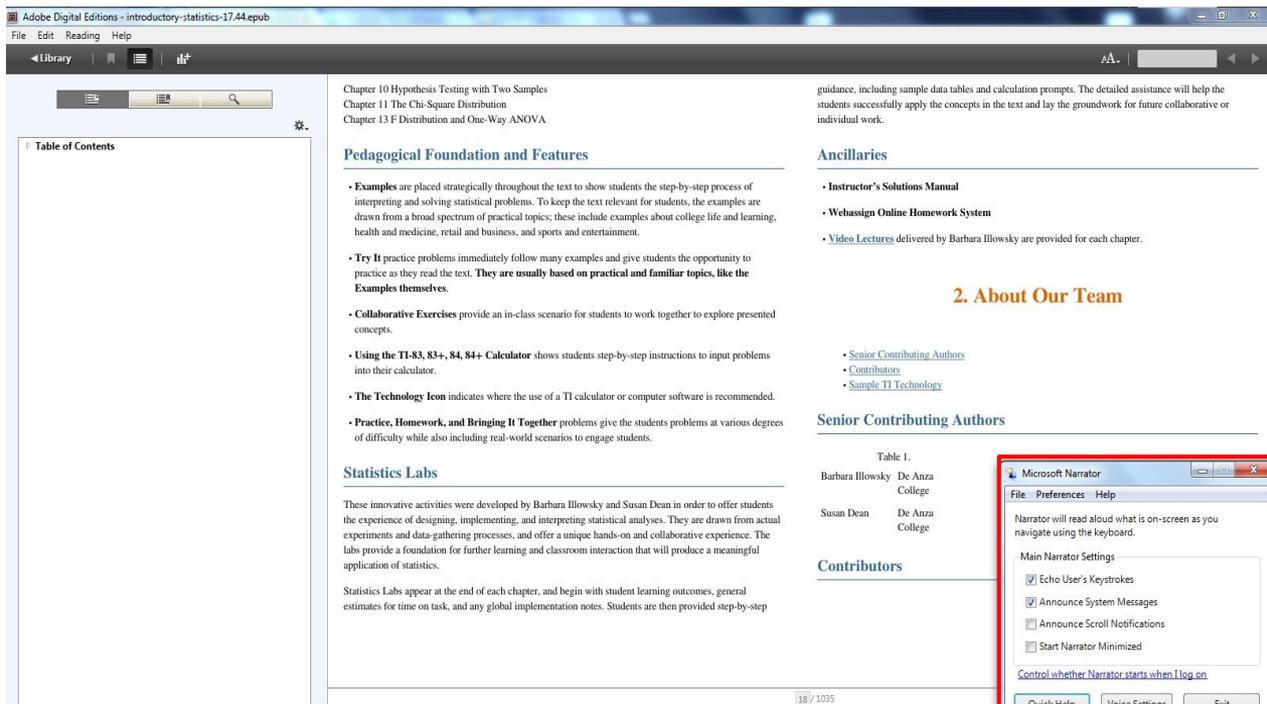
Table 1.

Barbara Illowsky	De Anza College
Susan Dean	De Anza College

### Contributors

# Text Access

## 3. Open "Narrator"



The screenshot shows the Adobe Digital Editions interface. The main window displays a textbook page with a table of contents on the left and a main content area. The content area is divided into sections: "Pedagogical Foundation and Features", "Statistics Labs", "Ancillaries", and "Senior Contributing Authors". A Microsoft Narrator window is open in the foreground, displaying the "Main Narrator Settings" dialog box. The settings include checkboxes for "Echo User's Keystrokes", "Announce System Messages", "Announce Scroll Notifications", and "Start Narrator Minimized". The "Announce System Messages" checkbox is checked. The "Control whether Narrator starts when I log on" section is also visible.

Adobe Digital Editions - introductory-statistics-1744.epub

File Edit Reading Help

Library

Table of Contents

Chapter 10 Hypothesis Testing with Two Samples  
Chapter 11 The Chi-Square Distribution  
Chapter 13 F Distribution and One-Way ANOVA

### Pedagogical Foundation and Features

- **Examples** are placed strategically throughout the text to show students the step-by-step process of interpreting and solving statistical problems. To keep the text relevant for students, the examples are drawn from a broad spectrum of practical topics; these include examples about college life and learning, health and medicine, retail and business, and sports and entertainment.
- **Try It** practice problems immediately follow many examples and give students the opportunity to practice as they read the text. **They are usually based on practical and familiar topics, like the Examples themselves.**
- **Collaborative Exercises** provide an in-class scenario for students to work together to explore presented concepts.
- **Using the TI-83, 83+, 84, 84+ Calculator** shows students step-by-step instructions to input problems into their calculator.
- **The Technology Icon** indicates where the use of a TI calculator or computer software is recommended.
- **Practice, Homework, and Bringing It Together** problems give the students problems at various degrees of difficulty while also including real-world scenarios to engage students.

### Statistics Labs

These innovative activities were developed by Barbara Illowsky and Susan Dean in order to offer students the experience of designing, implementing, and interpreting statistical analyses. They are drawn from actual experiments and data-gathering processes, and offer a unique hands-on and collaborative experience. The labs provide a foundation for further learning and classroom interaction that will produce a meaningful application of statistics.

Statistics Labs appear at the end of each chapter, and begin with student learning outcomes, general estimates for time on task, and any global implementation notes. Students are then provided step-by-step

guidance, including sample data tables and calculation prompts. The detailed assistance will help the students successfully apply the concepts in the text and lay the groundwork for future collaborative or individual work.

### Ancillaries

- **Instructor's Solutions Manual**
- **Weassign Online Homework System**
- **Video Lectures** delivered by Barbara Illowsky are provided for each chapter.

## 2. About Our Team

- [Senior Contributing Authors](#)
- [Contributors](#)
- [Sample TI Technology](#)

### Senior Contributing Authors

Barbara Illowsky	De Anza College
Susan Dean	De Anza College

### Contributors

18 / 1035

Microsoft Narrator

File Preferences Help

Narrator will read aloud what is on-screen as you navigate using the keyboard.

Main Narrator Settings

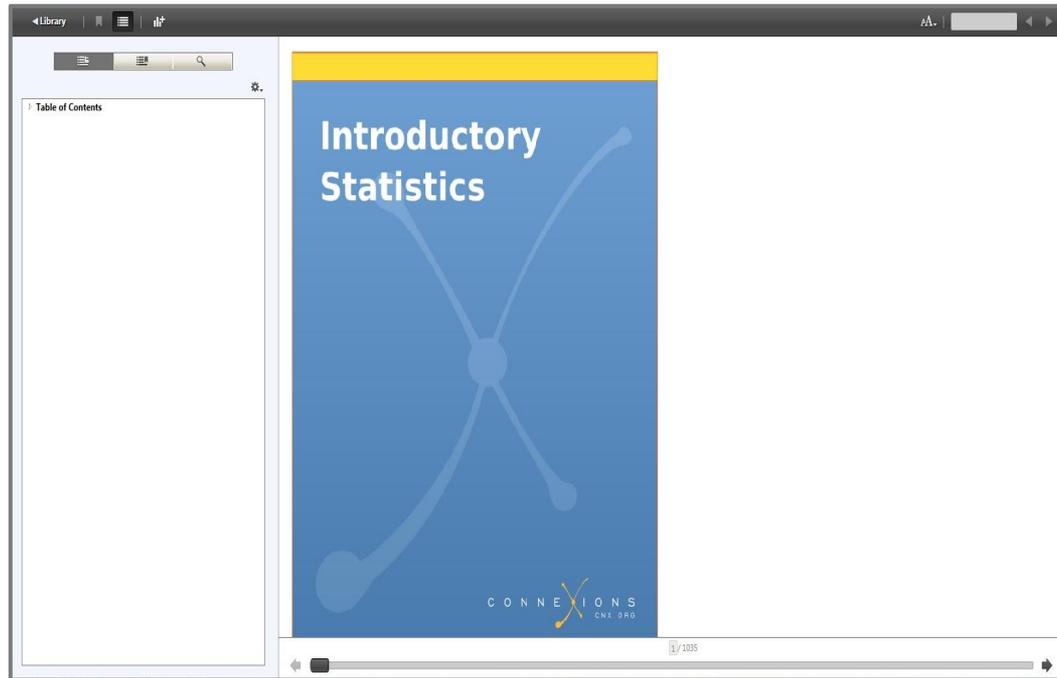
- Echo User's Keystrokes
- Announce System Messages
- Announce Scroll Notifications
- Start Narrator Minimized

Control whether Narrator starts when I log on

Quick Help Voice Settings Exit

# Text Access

4. Click back on the Adobe Digital Editions window and the program will start reading the text.



# 3. Text Adjustment (Size)

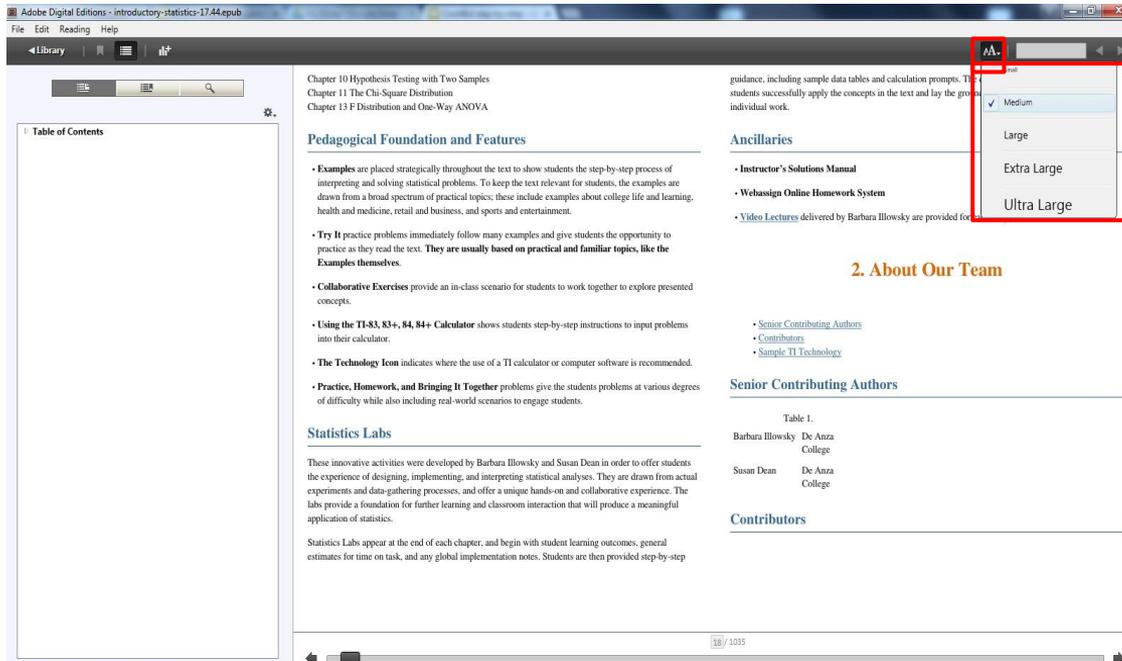
- ☑ The text allows the user to adjust the font size

## STEPS:

1. Open the EPUB file with Adobe Digital Editions
2. Use the AA button (top right corner) or press on Ctrl + for font size increase and Ctrl - for decrease.

# Text Adjustment (Size)

1. Open the EPUB file with Adobe Digital Editions
2. Use the AA button (top right corner) or press on Ctrl + for font size increase and Ctrl - for decrease.



# Text Adjustment (Size)

- Amount of Material to Be Evaluated

\*\*\* Sample 10% of the pages \*\*\*

Ex. If the book has 150 pages in total  
 $150 \text{ pages} \times .10 = 15 \text{ pages}$

You will check 15 pages for text adjustment

Note: The checklist will decide most of these values for you.

# 3. Text Adjustment (Color)

- ☑ The text allows the user to adjust the font size

**\*\*See Assistive Technologies PowerPoint\*\***

## 4. Reading Layout

- ☑ 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

**\*\*See Assistive Technologies PowerPoint\*\***

# 4. Reading Layout

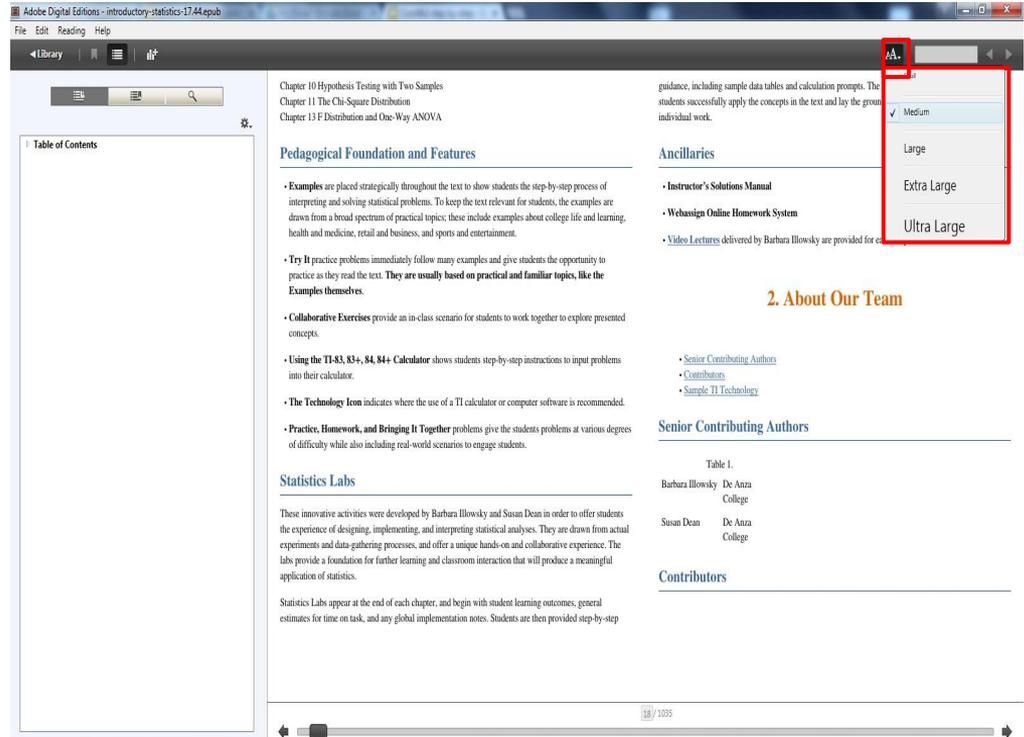
- ☑ If the digital resource is an electronic alternative to printed materials, the page numbers correspond to the printed material

## STEPS:

1. Open the EPUB file with Adobe Digital Editions
2. Use the AA button (top right corner) or press on Ctrl + for font size increase and Ctrl - for decrease
3. Check the page number at the bottom of the page while adjusting the font size

# Reading Layout

1. Open the EPUB file with Adobe Digital Editions
2. Use the AA button (top right corner) or press on Ctrl + for font size increase and Ctrl - for decrease



# Reading Layout

3. Check the page number at the bottom of the page while adjusting the font size

The screenshot shows the Adobe Digital Editions interface. The main content area displays a page from a statistics textbook. The page number '27 / 1035' is highlighted with a red box at the bottom right. The page content includes:

- Exercise 1:** A word problem about average money spent on school uniforms. It defines population, sample, parameter, statistic, variable, and data.
- Example 1.2:** A problem about average cumulative GPA at a local college, with a list of multiple-choice options.
- Example 1.3:** A problem about car safety tests using dummies, including a table of crash data.

Speed at which Cars Crashed	Location of "drive" (i.e. dummies)
35 miles/hour	Front Seat

At the bottom of the page, the page number '27 / 1035' is displayed in a small box, which is highlighted with a red rectangle in the screenshot.

# Reading Layout

- Amount of Material to Be Evaluated

\*\*\* Sample 5% of the pages \*\*\*

# 5. Reading Order

- ☑ Reading order for digital resource content logically corresponds to the visual layout of the page when rendered by assistive technology

**\*\*See Assistive Technologies PowerPoint\*\***

# 6. Structural Markup / Navigation

- ☑ 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

**\*\*See Assistive Technologies PowerPoint\*\***

# Structural Markup / Navigation

- ☑ The text of the digital resource includes markup for bullets and numbered lists that is compatible with assistive technology

**\*\*See Assistive Technologies PowerPoint\*\***

# Structural Markup / Navigation

- ☑ 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

**\*\*See Assistive Technologies PowerPoint\*\***

# 7. Tables

- ☑ Data tables include markup (e.g. tags or styles) that identifies row and column headers in a manner that is compatible with assistive technology

**\*\*See Assistive Technologies PowerPoint\*\***

# 8. Hyperlinks

- ✓ Functionality: Links (e.g. website or email addresses) within the text of the digital resource are rendered as active hyperlinks in a manner that allows them to be detected and activated with assistive technology.
- ✓ Descriptive: The link is descriptive enough for the users to know where the link will take them. If the link appears as an URL = fail this sub-category.
- ✓ Checking for both in-book links and live hyperlinks

# Hyperlinks

1. Open up the EPUB book with Adobe Digital Editions
2. Select hyperlinks See if it takes you to the correct location (section of book/website)



## Introductory Statistics

By: OpenStax College

Online: <https://legacy.cnx.org/content/col11562/1.17>

This selection and arrangement of content as a collection is copyrighted by OpenStax College.

Creative Commons Attribution License 4.0 <http://creativecommons.org/licenses/by/4.0/>

Collection structure revised: 2017

For copyright and attribution information for the modules contained in this collection, see the "Attribution" section at

The screenshot shows the OpenStax CNX website interface. At the top, there is a navigation bar with links for Home, Content, Lenses, About Us, Help, and MyCNX. Below the navigation bar, the breadcrumb trail reads "You are here: Home > Content > Introductory Statistics". The main content area features the OpenStax College logo on the left and the title "Introductory Statistics" on the right. Under the title, it specifies "Collection type: Textbook" and "Textbook by: OpenStax College" with a link to "E-mail the author". A "Start >" link is also present. A "Summary" section follows, describing the book's purpose for a one-semester statistics course. Below the summary, it states "This collection contains:" and "Modules by: OpenStax College." At the bottom, there is a "GIVE FEEDBACK" section with a link to "E-mail the collection author". On the left side of the page, there is a "TABLE OF CONTENTS" section with a dropdown arrow, listing various chapters from "Preface" to "9. Hypothesis Testing with One Sample".

# Hyperlinks

## Check for functionality & descriptive link

### Amount of Material to Be Evaluated

\*\*\* Sample 30 in-book links \*\*\*

10 from the beginning of the book

10 from the middle of the book

10 from the end of the book

Ex. Links that takes you to a certain chapter

\*\*\* Sample 20 website hyperlinks \*\*\*

Hyperlink that takes you somewhere outside of the book

Ex. Links to a live website

**Introductory Statistics**

Table of Contents

- [Preface](#)
  - [1. About \*Introductory Statistics\*](#)
    - [Coverage and Scope](#)
    - [Alternate Sequencing](#)
    - [Pedagogical Foundation and Features](#)
    - [Statistics Labs](#)
    - [Ancillaries](#)
  - [2. About Our Team](#)
    - [Senior Contributing Authors](#)
    - [Contributors](#)
    - [Sample TI Technology](#)
- [Chapter 1. Sampling and Data](#)
  - [1.1. Definitions of Statistics, Probability, and Key Terms](#)
    - [Probability](#)
    - [Key Terms](#)
  - [1.2. Data, Sampling, and Variation in Data and Sampling](#)

By: OpenStax College

Online: <https://legacy.cnx.org/content/col11562/1.17>

This selection and arrangement of content as a collection is copyrighted by OpenStax College.

Creative Commons Attribution License 4.0 <http://creativecommons.org/licenses/by/4.0/>

Collection structure revised: 2014/05/09

For copyright and attribution information for the modules contained in this collection, see the "Attributions" section at the end of the collection.

# 9. Color & Contrast (Color Redundancy)

- ☑ Color redundancy (information is not conveyed by color alone) needs to be checked manually

\*\*\* Sample 5% of the pages \*\*\*

# 9. Color & Contrast (Contrast Ratio)

- ☑ The visual presentation of text and images of text in the digital resource has a contrast ratio of at least 4.5:1

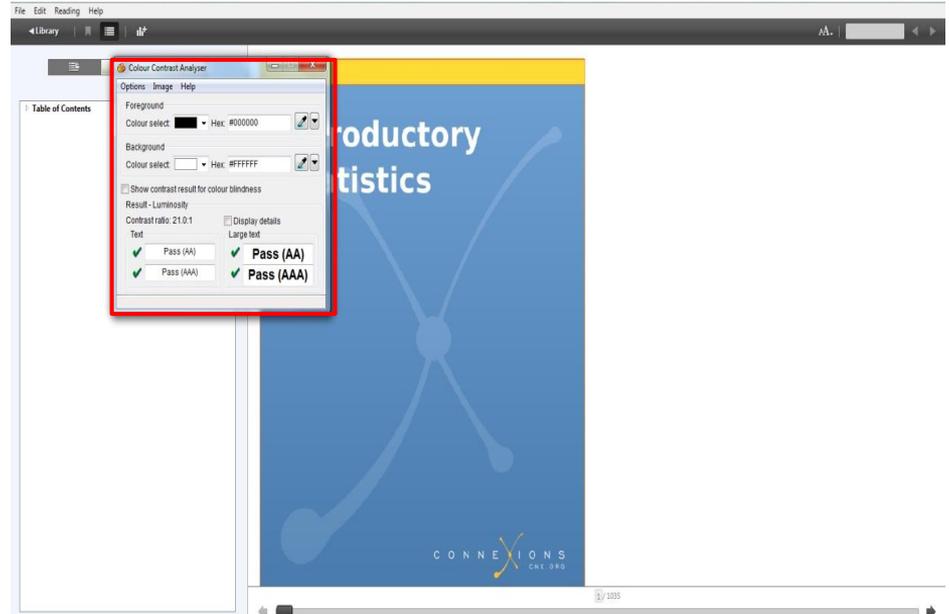
## STEPS:

1. [Download Colour Contrast Analyzer Tool](#)
2. Open the document you want to evaluate
3. Open the application
4. Make sure you are in the **Result --Luminosity** mode.
5. Click the **Foreground eye dropper** tool, hover over and click the foreground color to select it.
6. Click the **Background eye dropper** tool, hover over and click the background color.
7. Check and compare the ratio to 4:5:1

# Color & Contrast (Contrast Ratio)

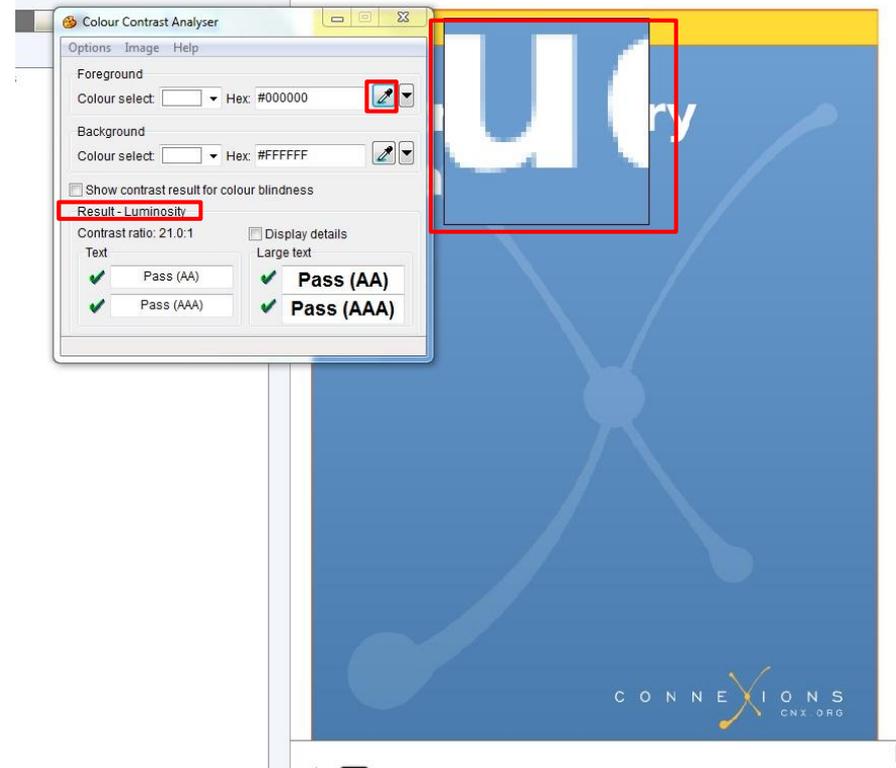
## Colour Contrast Analyzer (CCA)

1. Download Colour Contrast Analyzer Tool
2. Open the document you want to evaluate
3. Open the application



# Color & Contrast (Contrast Ratio)

4. Make sure you are in the **Result -- Luminosity** mode.
5. Click the **Foreground eye dropper** tool, hover over and click the foreground color to select it.



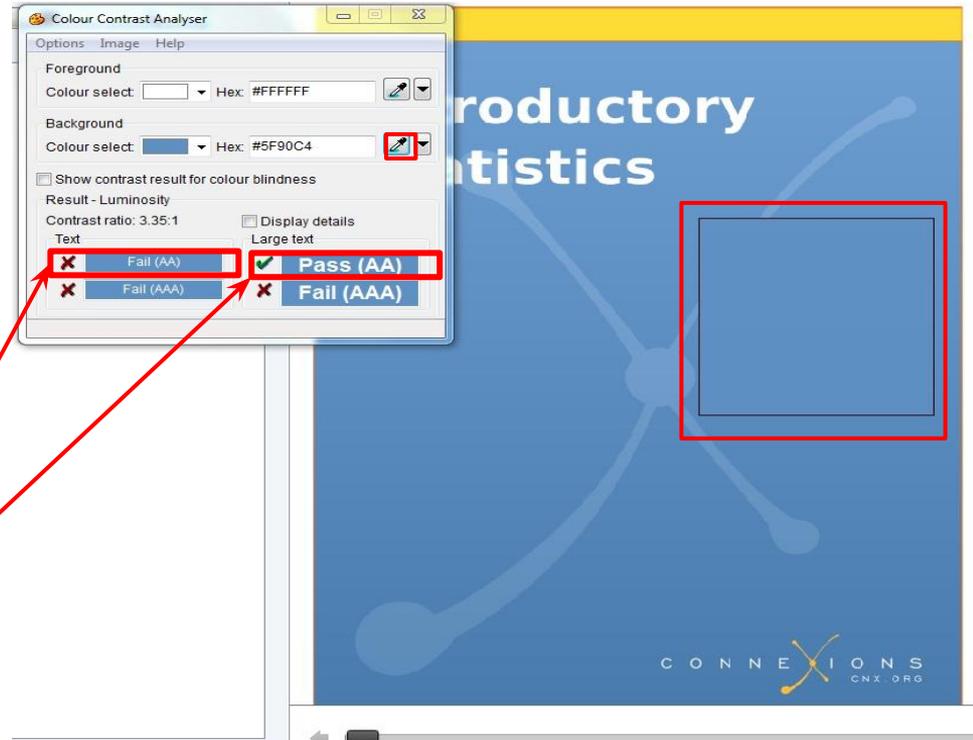
# Color & Contrast (Contrast Ratio)

6. Click the **Background eye dropper** tool, hover over and click the background color.

7. Determine if the text is greater than 18 points (e.g. Header).

Small text: Check under "Text"

Large text (18+): Check under "Large text"



# Color & Contrast (Contrast Ratio)

- ◉ Amount of Material to Be Evaluated

Contrast Ratio

\*\*\* Sample 10% of the pages \*\*\*

# 10. Language

- ☑ The text of the digital resource includes markup that declares the language of the content in a manner that is compatible with assistive technology
- ☑ 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

**\*\*See Assistive Technologies PowerPoint\*\***

# 11. Images

- ✓ 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)
- ✓ Decorative images are marked with null alternate text or contain markup that allows them to be ignored by assistive technology
- ✓ Complex images, charts, and graphs have longer text descriptions that are compatible with assistive technology

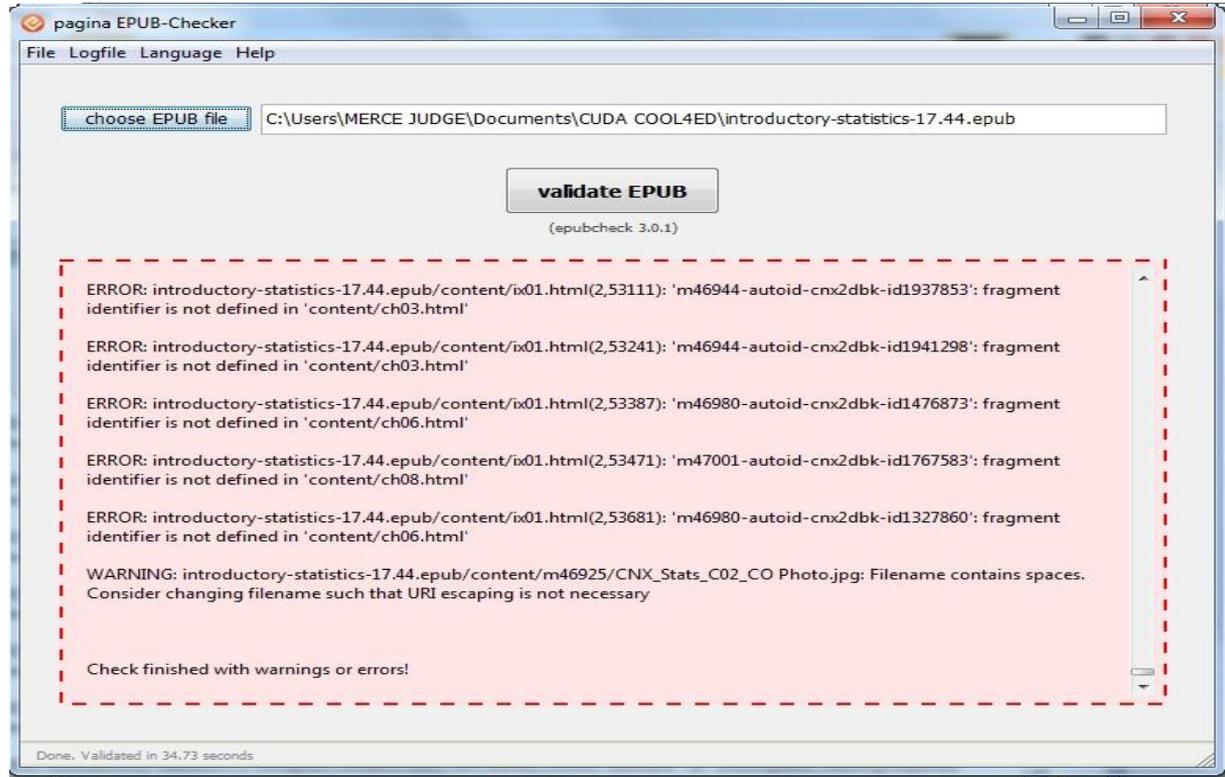
# 11. Images

## STEPS:

1. Open Pagina EPUB-Checker
2. Choose EPUB file
3. Click on Validate
4. Look for error message contains "img" or "media"

# Images

1. Open Pagina EPUB-Checker
2. Choose EPUB file
3. Click on Validate



# Images

## 4. Look for error message contains "img" or "media"

ERROR: Intro Chem.epub/content/ch03.html(248,142): element "img" missing required attribute "alt"

WARNING: Intro Chem.epub/content/ch03.html(248): Token ';' not allowed here, expecting a property value

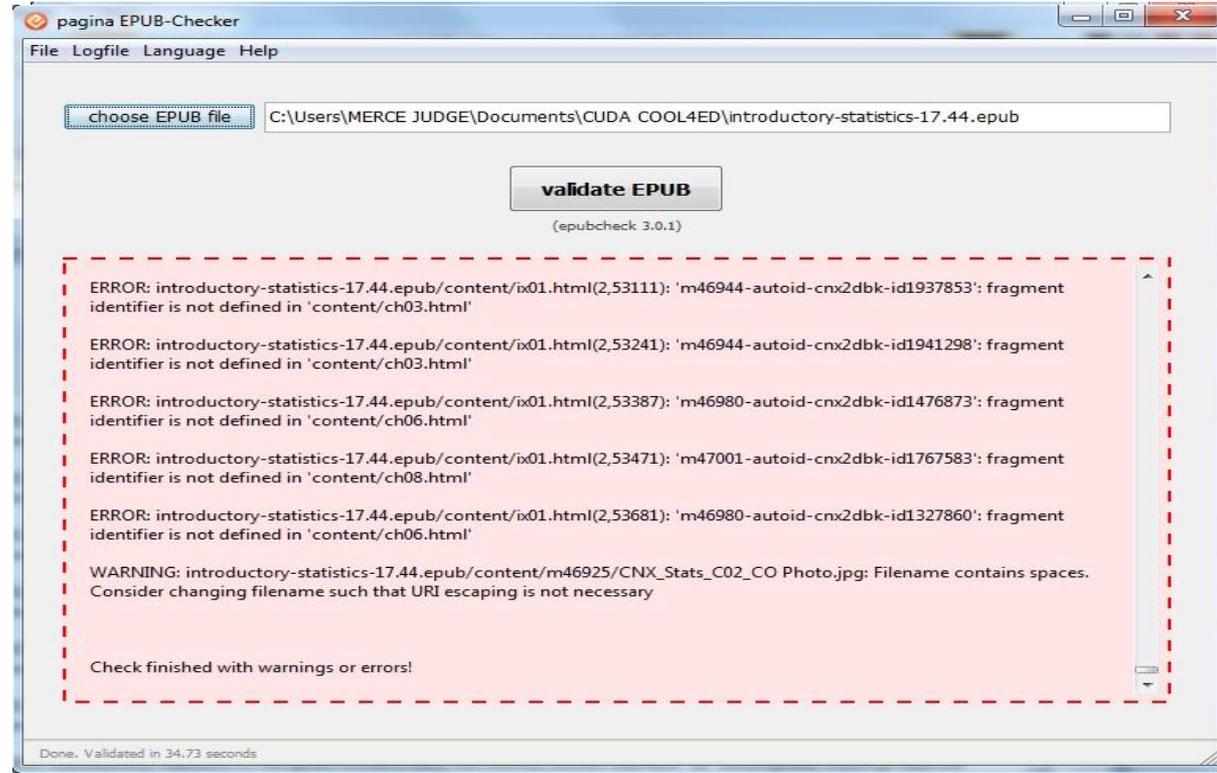
ERROR: Intro Chem.epub/content/ch03.html(256,129): element "img" missing required attribute "alt"

WARNING: Intro Chem.epub/content/ch03.html(256): Token ';' not allowed here, expecting a property value

ERROR: Intro Chem.epub/content/ch03.html(397,132): element "img" missing required attribute "alt"

WARNING: Intro Chem.epub/content/ch03.html(397): Token ';' not allowed here, expecting a property value

ERROR: Intro Chem.epub/content/ch03.html(399,148): element "img" missing required attribute "alt"



# Images

- ◉ Amount of Material to Be Evaluated  
For Complex images:  
Make sure the descriptions for the images are descriptive enough
- ◉ Rule of thumb: if the image cannot be described in one sentence, it's complex!
- ◉ Dependent on intentions of text - if included in text, may be helpful to simply link them back

\*\*\* Sample 10% of the pages \*\*\*

# 12. Multimedia

- ✓ A synchronized text track (e.g. open or closed captions) is provided with all video content
- ✓ A transcript is provided with all audio content
- ✓ Audio/video content is delivered via a media player that is compatible with assistive technology

*Note: No examples have been found for this format*

# 13. Flickering

- ☑ Resources should not contain anything that flashes more than three times in any one-second period

*Note: No examples have been found for this format*

# 14. STEM

STEM: Science, Technology, Engineering, and Math

- ☑ STEM content is marked up in a manner that is compatible with assistive technology

**\*\*See Assistive Technologies PowerPoint\*\***

# 13. STEM

- ☑ The resource conveys both the notation (presentation) and meaning (semantics) of the STEM content

## STEPS:

1. Manually check that the following have a description that conveys notation and meaning
  - Figures
  - Graphs
  - Tables

# STEM

Manually check that all figures, graphs, and tables have a description that conveys notation and meaning



**Figure 1.15** Biologists may choose to study *Escherichia coli* (*E. coli*), a bacterium that is a normal resident of our digestive tracts but which is also sometimes responsible for disease outbreaks. In this micrograph, the bacterium is visualized using a scanning electron microscope and digital colorization. (credit: Eric Erbe; digital colorization by Christopher Pooley, USDA-ARS)

# STEM

Successive Ionization Energies (kJ/mol)

	Na	Mg	Al	Si	P	S	Cl	Ar
IE <sub>1</sub>	496	738	578	787	1012	1000	1251	1520
IE <sub>2</sub>	4562	1451	1817	1577	1903	2251	2297	2665
IE <sub>3</sub>	6912	7733	2745	3231	2912	3361	3822	3931
IE <sub>4</sub>	9543	10540	11575	4356	4956	4564	5158	5770
IE <sub>5</sub>	13353	13630	14830	16091	6273	7013	6542	7238
IE <sub>6</sub>	16610	17995	18376	19784	22233	8495	9458	8781
IE <sub>7</sub>	20114	21703	23293	23783	25397	27106	11020	11995

Table 4.1

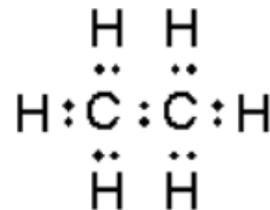
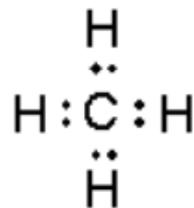


Figure 6.2

Labels, descriptions, or tags should be descriptive

# STEM

- ◉ Amount of Material to Be Evaluated

For BOTH Markup and Notation, find:

10 figures

10 graphs

10 equations

(as applicable)

# 15. Interactive Elements

- ☑ Keyboard  
Interactive elements allow for keyboard-only operation  
WITH and WITHOUT assistive tech

# 15. Interactive Elements

- Without assistive technology, use the TAB key to navigate the menu
- Items that are selected will have a box around the link
- Use the ENTER key to select a link or other item

# 15. Interactive Elements

- For navigation with assistive technologies..

**\*\*See Assistive Technologies PowerPoint\*\***

# Interactive Elements

- ✓ Markup
  - Each interactive element conveys information to assistive technology regarding the element's
    - ✓ name
    - ✓ type
    - ✓ status

**\*\*See Assistive Technologies PowerPoint\*\***

# Interactive Elements

- ✓ Text prompts

The following are conveyed with assistive technology:

- ✓ Instructions
- ✓ Prompts
- ✓ Error messages

**\*\*See Assistive Technologies PowerPoint\*\***