COOL4Ed ACCESSIBILITY CHECKPOINTS

METHODS FOR HTML FORMATS (ASSISTIVE TECHNOLOGIES)

CUDA

Evaluation time

Estimate evaluation time per book:
- Novice rater: Approx. 3 hours
- Experienced rater: 2.5 ~ 3 hours

Depending on book content and amount of material,
- STEM books
- Books with more pages
- Books with lots of images
- Complex web format

Takes longer to evaluate

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

How to access texts

3.   Search for preferred format and download text

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

| Download on the iBookstore	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.

Introductory Stat-istics

GET THIS BOOK >

MORE RESOURCES >
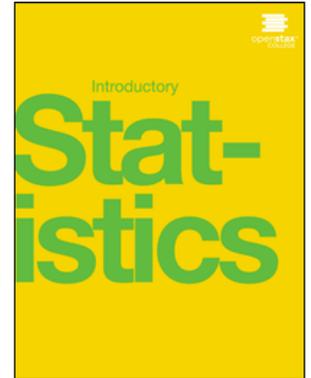
Formats

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

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!

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Download on the iBookstore — 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 <u>is</u> 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!

Download on the **iBookstore**   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!"

How to access texts

Now you can download the EPUB file!

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.

Introductory Statistics

Book by: OpenStax College

ASK US

Contents +   Metadata +   Tools +

Back   Next

Preface

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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/Fa
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	Stuctural Markup	A. Navigation text		
6	Stuctural Markup	B. Lists		
6	Stuctural 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	Stuctural Markup	A. Navigation text			
6	Stuctural Markup	B. Lists			
6	Stuctural 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 <u>Introductory Statistics</u> (PDF version has 863 pages)

Select content type from dropdown list

Select format and OS – note: each format has a different checklist

Only for HTML

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	

Enter name of book in its entirety

Checklist

Note: When certain information is entered such as the <u>number of pages</u> or <u>number of chapters</u>, 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 <u>round up</u> 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.
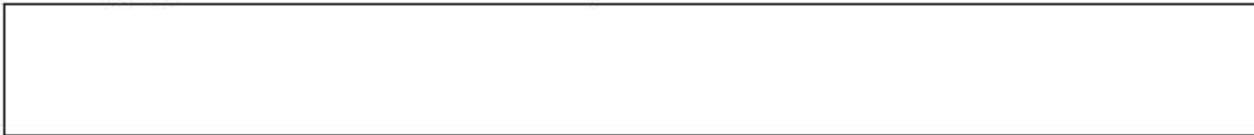
Pass, Fail, or N/A?

- Evaluate material based on the amount of material included in the checklist.
- If there is no related materials, mark N/A for that checkpoint. The only exception are <u>Acc Documentation</u> and <u>Flickering</u>.

No Flickering = Pass

No Acc Doc = Fail
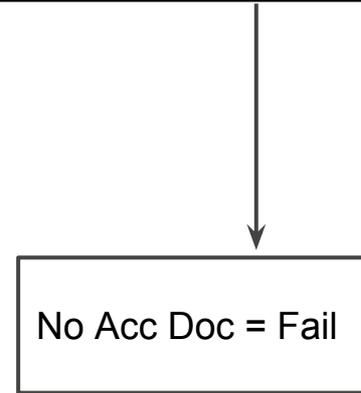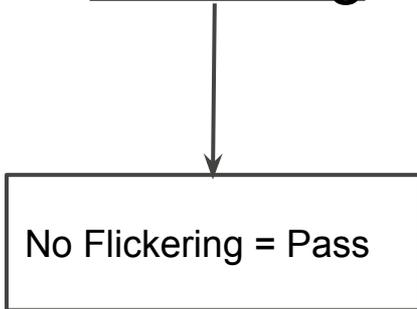
Ratings

- Ratings are on a scale of 1-10

Fail   7   Pass

1   5   10
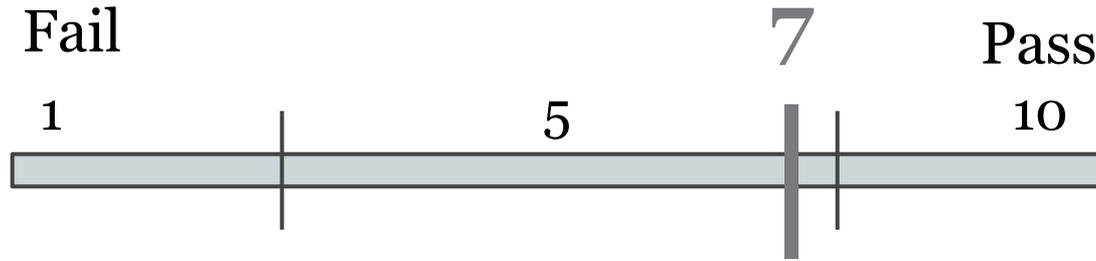
- Failure to meet a checkpoint (Fail) should not be rated above a 7
- Meeting a checkpoint (Pass) should not be rated below a 7

HTML

HTML Evaluation Requirements

OS
- Windows OS (XP or above)

Require Downloading
- NVDA (Download)
- Google Chrome (Download)
- Care your eyes (Google Chrome extensions) (Download)
- Color Contrast Analyzer- CCA (Download)

NVDA

Keep in mind when using NVDA:

- Make sure that NumLock is off.

- Try using only the keyboard.

- For more keyboard shortcut (Click here)

Note

The **NVDA** key is set to the Insert key by default, but it can be changed to the Caps lock key when installing NVDA for the first time. If you want to change your NVDA key preference later, press Ctrl + NVDA + K.

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

Text Access

STEPS:
1. Download NVDA
2. Open the book with Google Chrome
3. Activate NVDA
   (Ctrl + Alt + N)
4. Use NVDA to read from top of the page (Numpad +)
   Use Ctrl to stop

Note: make sure your speaker is on!

3. Text Adjustment (Size)

☑   The text allows the user to adjust the font size

STEPS:
1. Open the book with Google Chrome
2. Click on Menu > Zoom "+" for increase, "-" for decrease

3. Text Adjustment (size)

1. Open the book with Google Chrome
2. Click on Menu > Zoom "+" for increase, "-" for decrease
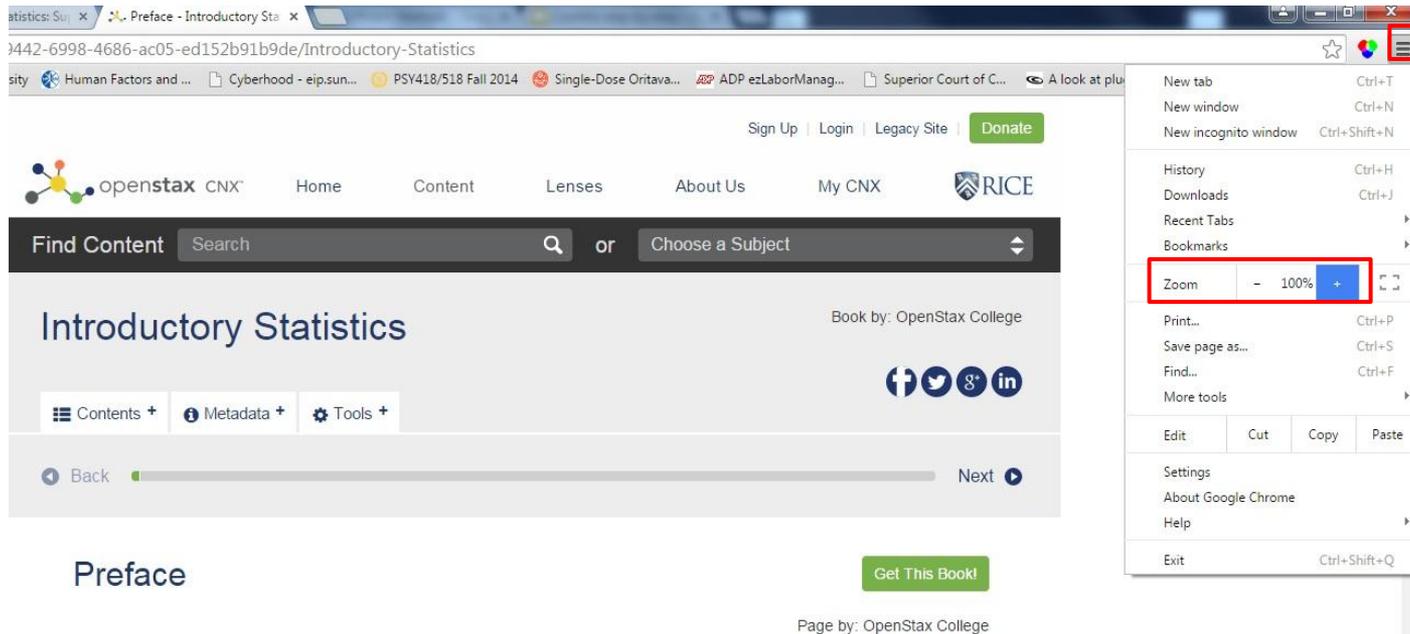
3. Text Adjustment (Color)

☑   The text allows the user to adjust the font/background color

STEPS:
1. Download "Care your Eyes"
2. Open the book with Google Chrome and click on the Care your eyes icon
3. Select Night Mode > See if the font/background color changes

3. Text Adjustment (color)

1. Download "Care your Eyes" @ https://chrome.google.com/webstore/detail/care-your-eyes/fidmpnedniahpnkeomejhnepmbdamlhl?hl=en
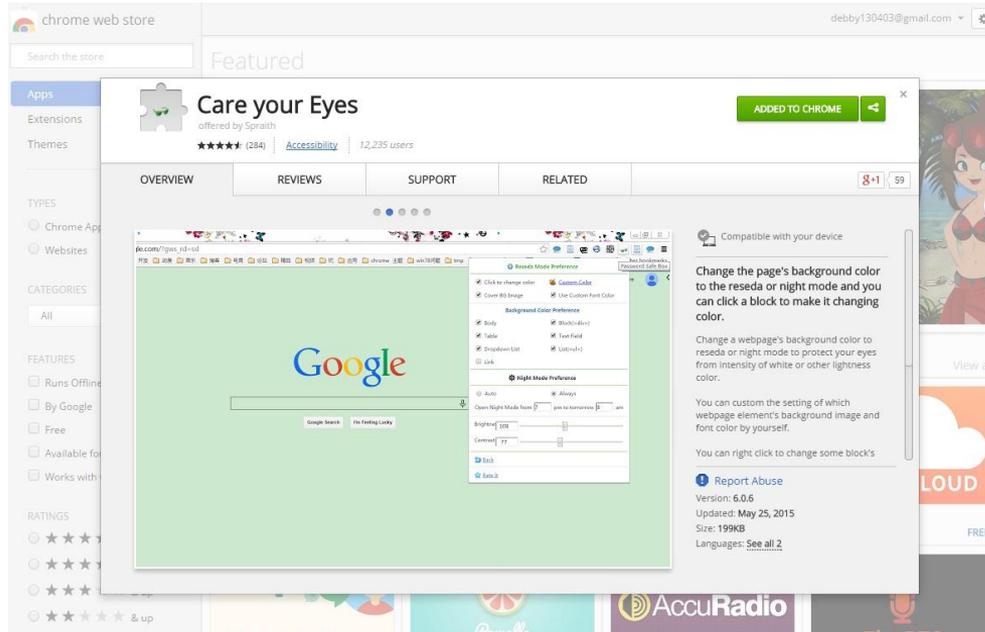
3. Text Adjustment (color)

2.   Open the book with Google Chrome and click on the Care your eyes icon > Select Night Mode > See if the font/background color changes

3. Text Adjustment (color)

Example: Accessible website for font/background
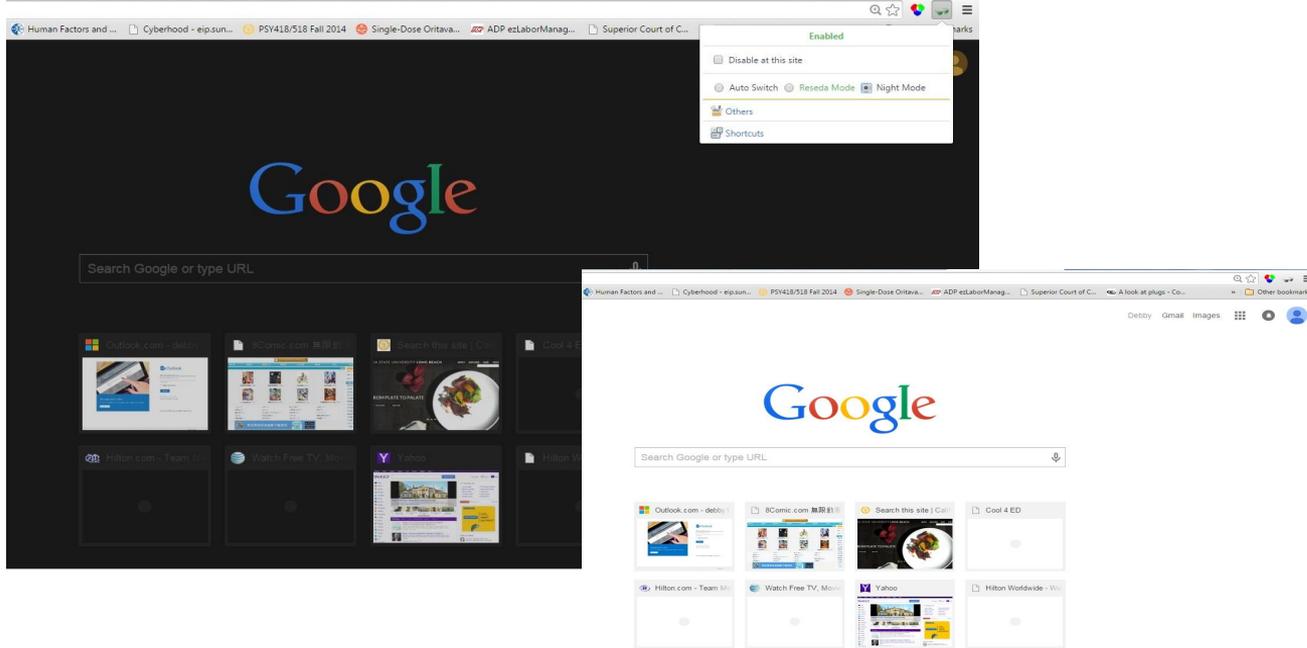
4. Reading Layout (Reflow)

☑ 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

STEPS:
1. Open the book with Google Chrome
2. Click on Menu > Zoom "+" for increase, "-" for decrease
3. Check if the text reflows

4. Reading Layout (Page # match)

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

***Compare pages with printed material (PDF if no hard copy)
***If printed material not available, mark N/A

4. Reading Layout

Do the page numbers correspond to the printed text?

STEPS:
1. Randomly select TEN pages from your online text from each third of the book (i.e., middle, beginning, and end. 30 pages total)
2. Find corresponding pages in printed book or in PDF version
3. Determine if page numbers are the same in both versions

4. Reading Layout

HTML Book – Page 44

De Anza College

	Number	Percent
Full-time	9,200	40.9%
Part-time	13,296	59.1%
Total	22,496	100%

Foothill College

	Number	Percent
Full-time	4,059	28.6%
Part-time	10,124	71.4%
Total	14,183	100%

Fall Term 2007 (Census day)

Tables are a good way of organizing and displaying data. But graphs can be even more helpful in understanding the data. There are no strict rules concerning which graphs to use. Two graphs that are used to display qualitative data are pie charts and bar graphs.

In a **pie chart**, categories of data are represented by wedges in a circle and are proportional in size to the percent of individuals in each category.

In a **bar graph**, the length of the bar for each category is proportional to the number or percent of individuals in each category. Bars may be vertical or horizontal.

A **Pareto chart** consists of bars that are sorted into order by category size (largest to smallest).

Look at Figure and Figure and determine which graph (pie or bar) you think displays the comparisons better.

It is a good idea to look at a variety of graphs to see which is the most helpful in displaying the data. We might make different choices of what we think is the "best" graph depending on the data and the context. Our choice also depends on what we are using the data for.

De Anza College

59.1% 40.9%
- Part time
- Full time

Foothill College

28.6
71.4%
- Part time
- Full time

Figure 3.
(a)
(b)

≠

Printed Book – Page 14

Qualitative Data Discussion

Below are tables comparing the number of part-time and full-time students at De Anza College and Foothill College enrolled for the spring 2010 quarter. The tables display counts (frequencies) and percentages or proportions (relative frequencies). The percent columns make comparing the same categories in the colleges easier. Displaying percentages along with the numbers is often helpful, but it is particularly important when comparing sets of data that do not have the same totals, such as the total enrollments for both colleges in this example. Notice how much larger the percentage for part-time students at Foothill College is compared to De Anza College.

De Anza College			Foothill College		
	Number	Percent		Number	Percent
Full-time	9,200	40.9%	Full-time	4,059	28.6%
Part-time	13,296	59.1%	Part-time	10,124	71.4%
Total	22,496	100%	Total	14,183	100%

Table 1.2 Fall Term 2007 (Census day)

Tables are a good way of organizing and displaying data. But graphs can be even more helpful in understanding the data. There are no strict rules concerning which graphs to use. Two graphs that are used to display qualitative data are pie charts and bar graphs.

In a **pie chart**, categories of data are represented by wedges in a circle and are proportional in size to the percent of individuals in each category.

In a **bar graph**, the length of the bar for each category is proportional to the number or percent of individuals in each category. Bars may be vertical or horizontal.

A **Pareto chart** consists of bars that are sorted into order by category size (largest to smallest).

Look at **Figure 1.5** and **Figure 1.6** and determine which graph (pie or bar) you think displays the comparisons better.

It is a good idea to look at a variety of graphs to see which is the most helpful in displaying the data. We might make different choices of what we think is the "best" graph depending on the data and the context. Our choice also depends on what we are using the data for.

De Anza College

59.1% 40.9%
- Part time
- Full time

Foothill College

28.6
71.4%
- Part time
- Full time

(a)
(b)
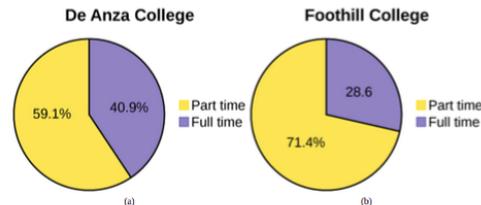
Figure 1.5

5. Reading Order

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

STEPS:
1. Open the book with Google Chrome
2. Locate 5 pages (include page # in the reports) that contains a more complicated layout
3. Use the NVDA to read from top of the page (Numpad +) and check if the reading order is logical

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

STEPS:
1. Open the book with Google Chrome and activate NVDA
2. Use heading quick keys (H & 1-6) to check for all heading levels

Headings and Lists

Command	Description
H	Headings Quick Key
1-6	Headings level 1-6
L	List Quick Key
I	List Item Quick Key

Structural Markup / Navigation

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

STEPS:
1. Open the book with Google Chrome and activate NVDA
2. Locate a list
3. Use List quick keys (L) to check if the program can recognize it as a list.

Repeat the steps for 10 lists*

Headings and Lists

Command	Description
H	Headings Quick Key
1-6	Headings level 1-6
L	List Quick Key
I	List Item Quick Key

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

Not using reader application, mark N/A on the reports

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

STEPS:
1. Open the book with Google Chrome and activate NVDA
2. Locate a table
3. Use Table quick keys (T) to check if the program can recognize it as a table, then use other quick keys to check for all cells.

Repeat the steps for 10 tables*

Tables

Command	Description
[T]	Table Quick Key
[Ctrl] + [Alt] + [→]	Cell to Right
[Ctrl] + [Alt] + [←]	Cell to Left
[Ctrl] + [Alt] + [↓]	Cell Below
[Ctrl] + [Alt] + [↑]	Cell Above

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.

  ○ E.g. CSULB homepage   O
         www.csulb.edu   X

☑ Checking for <u>live</u> hyperlinks (in-book links are live too)

Hyperlinks

1. Open the book with Google Chrome and activate NVDA
2. Locate a few hyperlinks
3. Use Links quick keys (TAB or Shift TAB) to check if the program can recognize it as a link, then press enter to see if the link function correctly (take you to the right location)
4. Tab through a total of 50 links from different section of the book to check for both <u>functionality</u> and <u>descriptive</u> name.

**If nothing happens then the link doesn't work

9. Color & Contrast (Color Redundancy)

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

n changes in classrooms has several other effects. One, for example, is that it can tempt teachers to think that what is taught is equivalent to what is learned—even e different. If I assign a reading to my students about the Russian Revolution, it would be nice to assume not only that they have read the same words, but also lear read and learned all of what I assigned; others may have read everything but misunderstood the material or remembered only some of it; and still others, unfortunat firm this picture, if asked confidentially. There are ways, of course, to deal helpfully with such diversity of outcomes; for suggestions, see especially Section 10.1 ctional strategies I adopt, they cannot include assuming that what I teach is the same as what students understand or retain of what I teach.

as dependent on sequencing and readiness

veen teaching and learning creates a secondary issue for teachers, that of educational **readiness**. Traditionally the concept referred to students' preparedness to c start school, for example, if he or she was in good health, showed moderately good social skills, could take care of personal physical needs (like eating lunch or Table 2.6 shows a similar set of criteria for determining whether a child is "ready" to learn to read (Copple & Bredekamp, 2006). At older ages (such as in high To take a course in physics, for example, a student must first have certain prerequisite experiences, such as studying advanced algebra or calculus. To begin work to mention also studying educational psychology!).

E.g.
Links are presented with color (blue) and underline.

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 (AA)

☑ Large text (18 point +) has a contrast ratio of at least 3:1 (AA)

Normal text

Large text

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
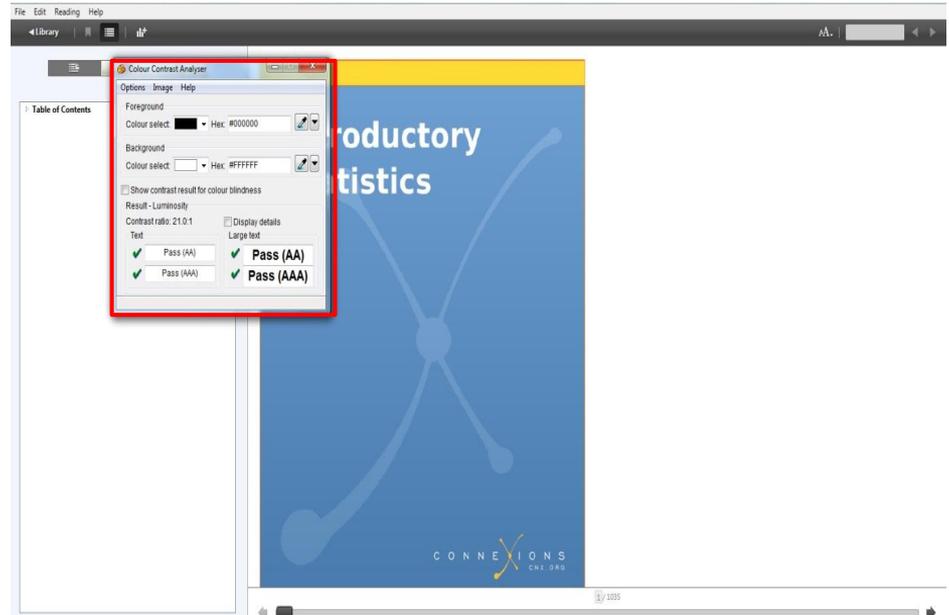
Color & Contrast (Contrast Ratio)

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.
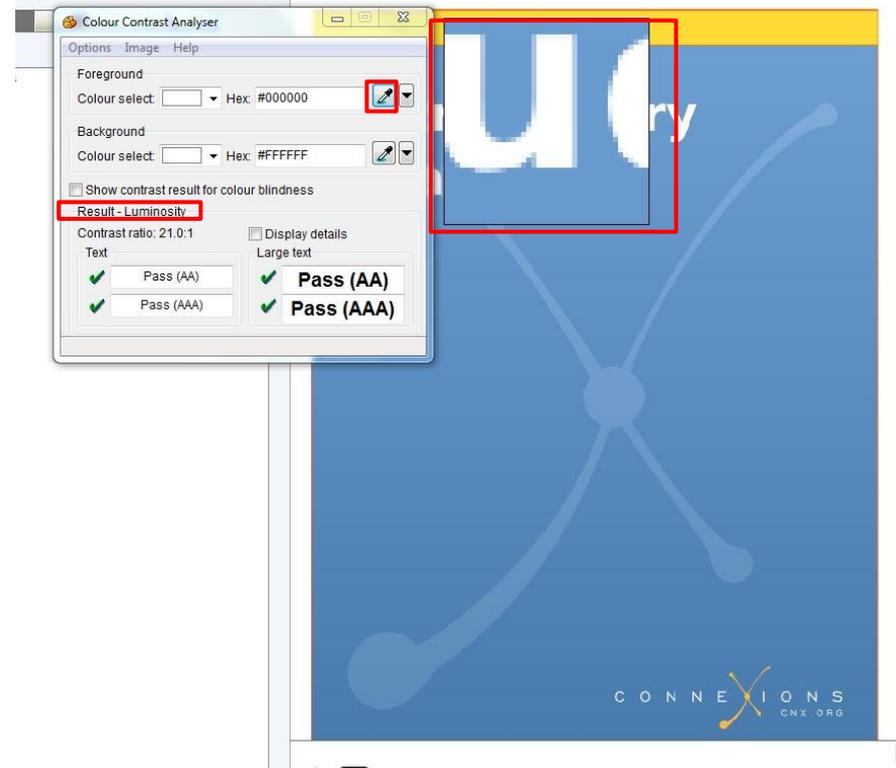
Color & Contrast (Contrast Ratio)

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" (AA)

Large text (18+): Check under "Large text" (AA)
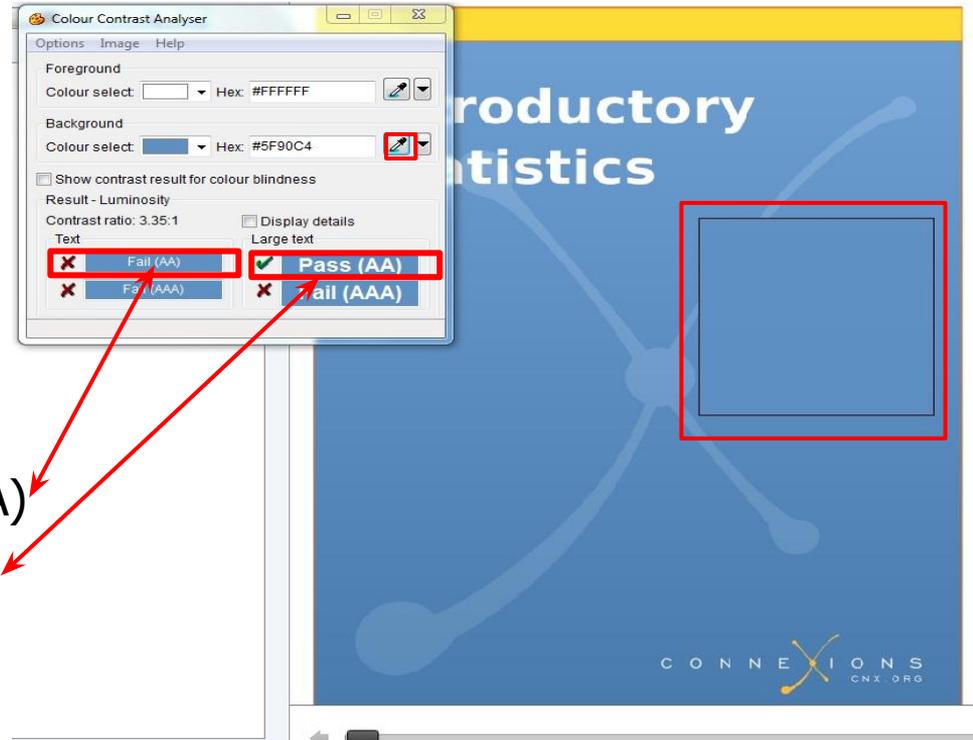
10. Language

☑ 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

10. Language

STEPS:

1. Open the book you want to evaluate in your browser

2. Click on Browser Menu > more tools > view source

   Or Ctrl + U

3. Press on Ctrl + F to search

4. Type in <u>lang="</u>

5. Look for lang="<u>language code</u>"
   ex: lang="en"

10. Language

1. Open the book you want to evaluate in your browser

2. Click on Browser Menu > more tools > view source (or Ctrl+U)

10. Language

4. Press on Ctrl + F to search

5. Type in lang="

6. Look for lang="language code"
             ex: lang="en"

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

Images

STEPS:

1. Open the book with Google Chrome and activate NVDA
2. Locate an image
3. Use Image quick key (G) or Link quick key (TAB) to check if the program recognize it as an image or link.
4. Check if the image have alternative text

Practice and examples

Images (Additional Manual Check)

◉ Check manually: Make sure the descriptions for the images are descriptive enough for both non-decorative images and complex images.

◉ <u>Rule of thumb</u>: if the image cannot be described in one sentence, it's complex!

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

STEPS:

1. Search webpages for multimedia content
2. Search for synchronized text tracks or transcripts

12. Multimedia

☑ Audio/video content is delivered via a media player that is compatible with assistive technology

Not using additional assistive tech to open audio/video content, mark N/A in all reports for this sub-category.

12. Multimedia (Synchronized Text)

1. Find multimedia
2. Search for availability of a text track (e.g., CC)

12. Multimedia (Transcript)

1. Find multimedia
2. Search for availability of a transcript

12. Multimedia (Transcript)

Why look at art? This was the question we posed to several of our colleagues at a conference for museum professionals. Special thanks to Laura Mann, Anna Velez, an anonymous professional, and David Torgersen whose voices and insights are included here.

⚙ Options ▾   ↪ Share ▾   ⓘ Info

0:00 [MUSIC PLAYING]
0:05 SPEAKER 1: I think it's important
0:07 that people look at art because we live in a visual world.
0:11 And understanding, and looking at,
0:14 and thinking about the way images
0:16 communicate in all kinds of ways is important to being alive
0:21 today.
0:22 SPEAKER 2: If one has heightened visual acumen, which
0:26 you get from spending time looking at things, whether it's

13. Flickering

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

Note: No examples have been found for this format

If there is no flickering = Pass this checkpoint

14. STEM

STEM: Science, Technology, Engineering, and Math

- ☑ STEM content is marked up in a manner that is compatible with assistive technology
- ☑ The resource conveys both the notation (presentation) and meaning (semantics) of the STEM content
- ☑ Including but not limited to:
  - ☑ Figures
  - ☑ Graphs
  - ☑ Tables
  - ☑ Equations

13. STEM

STEPS:

1. Open up the book with Google Chrome
2. Locate a STEM content
3. Select the sentence right before the content
4. Use Numpad + to start reading at current location
5. Check if the reader reads the content correctly

Reading Text

Command	Description
← or Numpad 1	Say Prior Character
→ or Numpad 3	Say Next Character
Numpad 2	Say Current Character
Numpad 5	Say Word
Numpad 5 twice quickly	Spell Word
Ctrl + ← or Numpad 4	Say Prior Word
Ctrl + → or Numpad 6	Say Next Word
↑ or Numpad 7	Say Prior Line
↓ or Numpad 9	Say Next Line
NVDA + ↑ or Numpad 8	Say Current Line
NVDA + ↑ twice quickly	Spell Current Line
NVDA + ↓ or Numpad +	Read all starting at current position
Shift + Numpad 7	Top line
Shift + Numpad 9	Bottom Line
Shift + Numpad 1	Start of Line
Shift + Numpad 3	End of Line

STEM

If the image itself does not contain an Alt tag but the content/text around it does have a notation (presentation) and meaning (semantics) of the STEM content with good description then we may PASS it with a note included.

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_1	496	738	578	787	1012	1000	1251	1520
IE_2	4562	1451	1817	1577	1903	2251	2297	2665
IE_3	6912	7733	2745	3231	2912	3361	3822	3931
IE_4	9543	10540	11575	4356	4956	4564	5158	5770
IE_5	13353	13630	14830	16091	6273	7013	6542	7238
IE_6	16610	17995	18376	19784	22233	8495	9458	8781
IE_7	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
  10 tables

***As Applicable:
  If there is no STEM content, mark N/A on the report***

15. Interactive Elements

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

STEPS:
1. Use the TAB key to navigate the menu
2. Items that are selected will have a box around the link
3. Use the ENTER key to select a link or other item

***As Applicable:
If there is no Interactive Elements, mark N/A on the report***

Interactive Elements

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

 ***As Applicable:
   If there is no Interactive Elements, mark N/A on the report***

Interactive Elements

☑ Text prompts
   The following are conveyed with assistive technology:
   ☑ Instructions
   ☑ Prompts
   ☑ Error messages

***As Applicable:
   If there is no Interactive Elements, mark N/A on the report***