Web Community Manager
Content Creator Accessibility Training

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Blackboard®

Disclaimer

The information in this presentation was prepared for informational purposes only. The information contained herein is not intended to constitute legal advice and you should consult with your own attorney when developing your online accessibility program and policy. Blackboard assumes no liability in connection to this presentation and any information contained herein.

At the end of the hands-on workshop you will be able to :

- Define accessibility and its importance.

- Describe and understand accessibility challenges.

- Set up a Page in your Web Community Manager

  - Format text with Headings

  - Create accessible links

  - Create alternative tags for images

- Understand how tables interact with screen readers

- Identify supporting document formatting

- Understand how and when to use color

- Understand the different video caption types

- Find Helpful Materials for compliance and accessibility errors

What is Accessibility?

- Accessibility is a word to describe whether or not something can be accessed by people with all abilities and disabilities.

- Examples of Accessibility:

  - Ramps are added to buildings with stairs to ensure the building is physically accessible to people who use wheelchairs.

  - Interpreters use sign language to interpret the Super Bowl Half Time Show on television so that people who are deaf can know the words to the song.

  - Text on a website is black and white rather than yellow and white to ensure people who have vision problems or colorblindness can read the content.

- The goal of accessibility is creating equal access for all.

- Web accessibility refers to the inclusive practice of removing barriers that prevent interaction with, or access to websites, by people with disabilities. When sites are correctly designed, developed and edited, all users have equal access to information and functionality.

- Creating accessible electronic information for your websites extends beyond making sure the actual content created on your website is accessible. You must make sure that any documents, videos etc. that you upload, link or display on your website are also accessible.

By focusing on accessibility when creating content you will make sure that your website

- Gives better access to content for all stakeholders, including those with disabilities

- Able to reach stakeholders with many diverse needs

- Correspondingly increase quality and usability in content

Screen Reader Activity Part 1

Close your eyes and listen the recording of what a person who is visually impaired hears when they are trying to access the document you see to the right.

Nucleic acid sequence

Nucleotides

Nucleic acids consist of a chain of linked units called nucleotides. Each nucleotide consists of three subunits: a phosphate group and a sugar (ribose in the case of RNA, deoxyribose in DNA) make up the backbone of the nucleic acid strand, and attached to the sugar is one of a set of nucleobases.

Biological significance

In biological systems, nucleic acids (https://en.wikipedia.org/wiki/Nucleic_acid) contain information which is used by a living cell to construct specific proteins. The sequence of nucleobases on a nucleic acid strand is translated by cell machinery into a sequence of amino acids making up a protein strand.

- A = adenine
- C = cytosine
- G = guanine
- T = thymine

Apart from adenine (A), cytosine (C), guanine (G), thymine (T) and uracil (U), DNA and RNA also contain bases that have been modified after the nucleic acid chain has been formed. In DNA, the most common modified base is 5-methylcytidine (m5C).

Amino Acid	Codons	Compressed
Ala/A	GCT, GCC, GCA, GCG	GCN
Arg/R	CGT, CGC, CGA, CGG, AGA, AGG	CGN, MGR

Activity can also be found at https://sw00000004.schoolwires.net/accessibility/screenreader

Screen Reader Activity Part 2

Listen to this version being read by the screen reader and take notice of how much easier it is to understand just because of a few simple changes.

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Diverse Accessibility Challenges

Cognitive

- ADHD
- Dyslexia
- Downs Syndrome
- Difficulty concentrating
- Difficulty reasoning and understanding
- Poor comprehension

Visual

- Low/poor vision
- Color blindness
- Total blindness
- Difficulty seeing contrasts
- Seizure sensitivity

Physical

- Lost Limbs
- Poor gross/fine motor controls such as Muscular Dystrophy
- Difficulty communicating struggles
- Partial/full paralysis

Hearing

- Limited Hearing
- Complete deafness
- Difficulty taking notes & reading captions at same time

A Few Common Issues

- Improper use of headers

- Empty links or links without alternative text

- Color contrast issues

- Using tables incorrectly

- Missing alternative text tags in images

- Documents that are not built accessibly

- Videos without captions

1. Write Plainly

    - Keep sentences short
    - Use contractions and simple words
    - Aim for readability level of grade 8 or lower

2. Utilize a built in heading structure rather than creating your own headings with font styles.

    - Screen readers do not identify changes in font size or font type, only heading markings.

    - Using set heading structures provide screen reader users with the ability to jump to specific content

3. Add alternative descriptions for images and links.

4.   Only use tables for tabular data not display structure.

5.   When creating lists use the built in list formatting.

6.   Make sure that any documents you upload, link or display on your website are accessible as well before adding them.

7.   Make sure videos that you are embedding include some sort of captioning.

URL for Training

tx02216513.schoolwires.net/BbTraining

Activity: Build WCM Page with Accessibility in Mind

1. Sign in to website

2. Open Site Manager

3. Navigate on back end of site to a Section Workspace

4. Build a Blank Page named "Accessibility Practice" (Hit Save and Exit)

5. Set Page Options to "Hide this page from website navigation"

6. Click on page name to edit page.

7. Add Apps to Page

   A. Content App

   B. Shortcuts App

   C. Image App
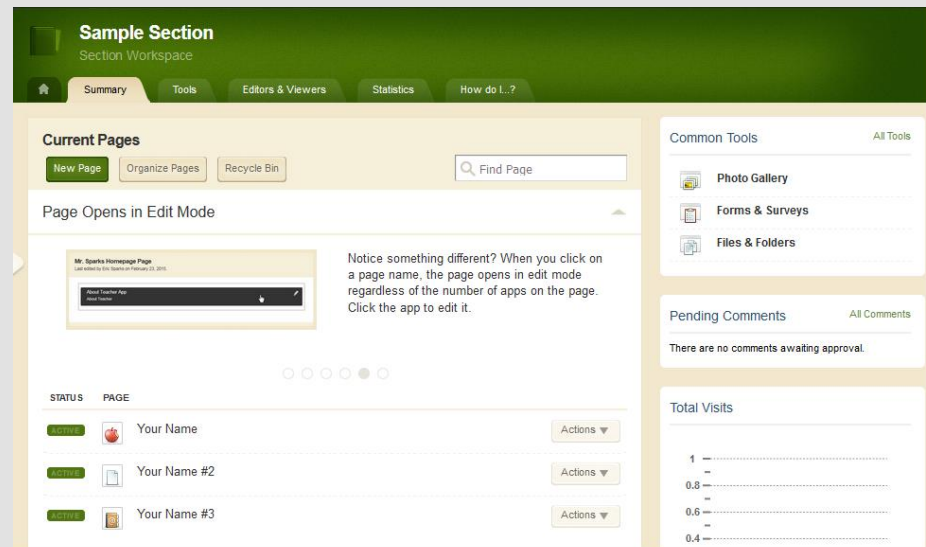
Activity: Content App: Paste as Plain Text
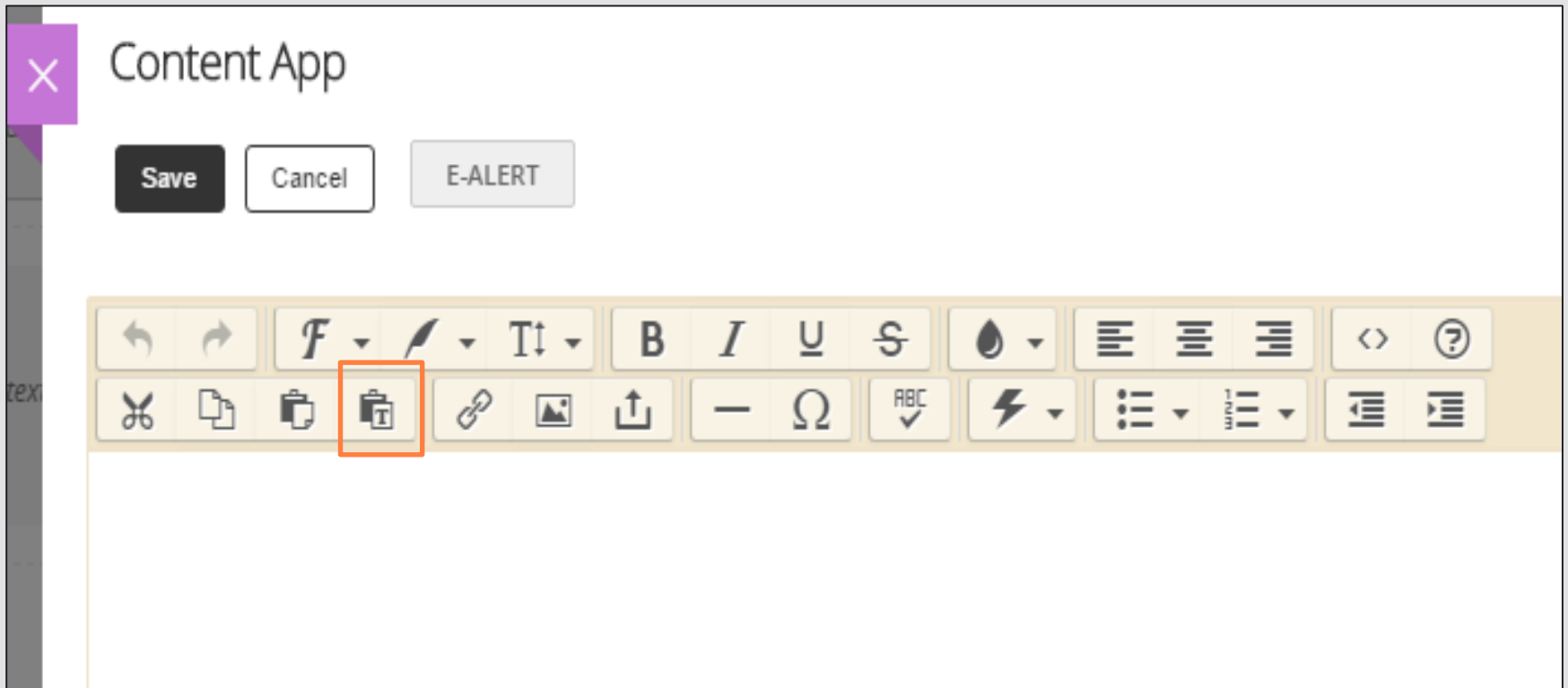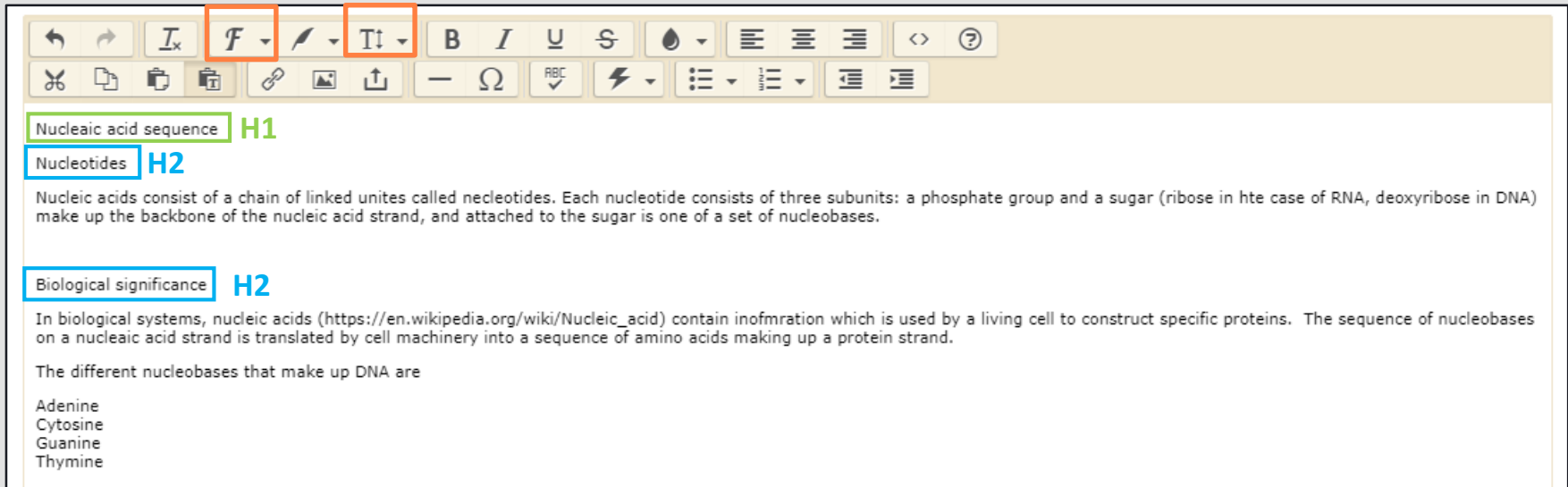
Headings

- Why use heading Structure?

  – Makes content especially in longer documents easier to access.

  – Allows screen reader to jump around within the article

  – Provides additional benefits of Consistency & Automated generation of Table of Contents

- Guidelines for Heading Structure:

  – Use a logical and consistent heading structure

  – Use built-in heading styles

  – Don't use bold, italic, underline, color or font size/style to emulate headings

Activity: Content App: Format text with headings

Use the F & T buttons in the content app to format the text with logical headings.

- F button text styles are styles built directly into your template (varies from site to site)

- T button text styles are styles that are standard for everyone.

- When formatting with these tools always check your page preview to see what they actually look like

Additional Text Formatting For Emphasis

- Emphasize text with punctuation rather than font styles like color, bold, italics, underline and strikethrough. (Screen readers change their intonation based upon punctuation but do not identify any of the font styles.)

- Adding lists is also a great way to emphasize text when adding a list to the content app in order have it be formatted properly and acknowledged properly by screen readers and assistive devices you must use the built-in list functionality (Don't emulate lists through special characters).

Activity: Content App: Other formatting options

Use punctuation, and the automatic bulleted and numbered list formatting to add additional emphasis to the text in your content app.

Links

- Links should be marked up as actual links (do not just list a URL out in plain text)

- Making the clickable text on links longer makes them easier to access by people who may have motility issues.

- The link should have alt text that describes:
  - the target (opens in a new window or not)
  - Context about the link (what it is beyond the URL and name)

Activity: Content App: Adding links

1. Copy the link in the second paragraph of the text without the parenthesis
https://en.wikipedia.org/wiki/Nucleic_acid

2. Highlight the link in the text again.

3. Hit the Insert Link Button.

4. Choose the option for a "Web Address Link"

5. Paste copied URL in the Web Address Field.

6. Double check that your "Text to Display" is correct

7. Choose a target for your link (open in a new window or the same window)

8. Hit the "Insert Link" button

9. After inserting link right click on it and choose the link option from the menu.

10. Add the alternative text describing your link to the "Title" field. (include context for the link and the target in the alt text).
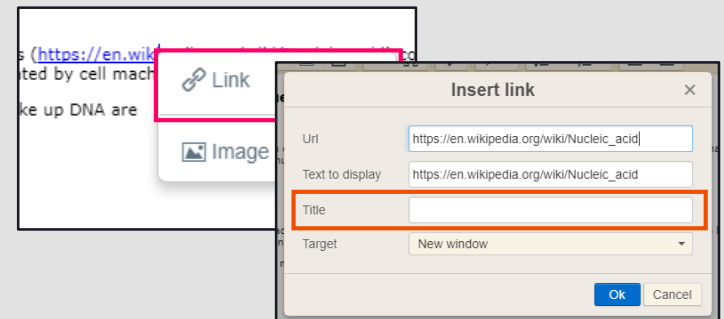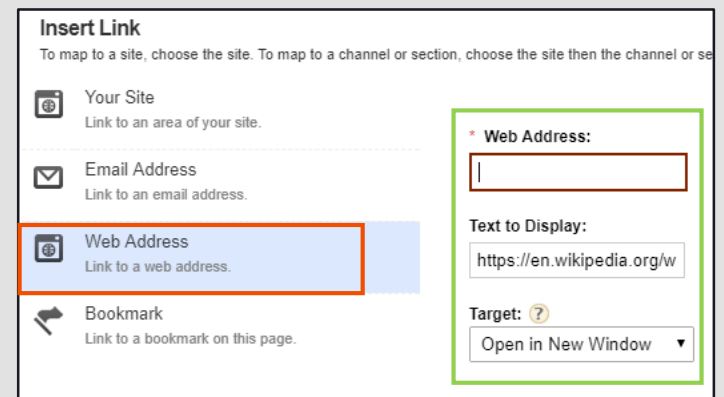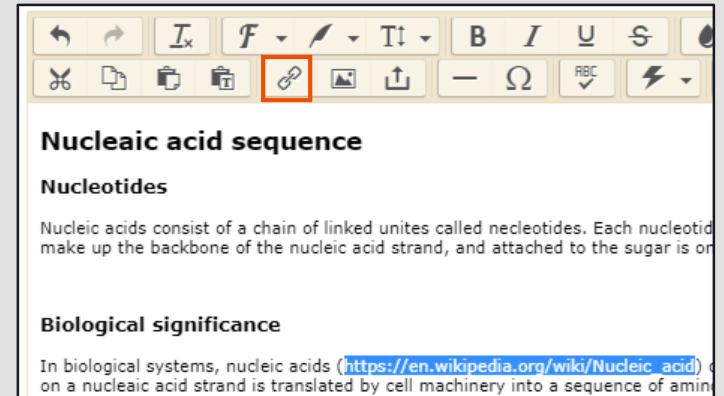
Inserting Accessible Files
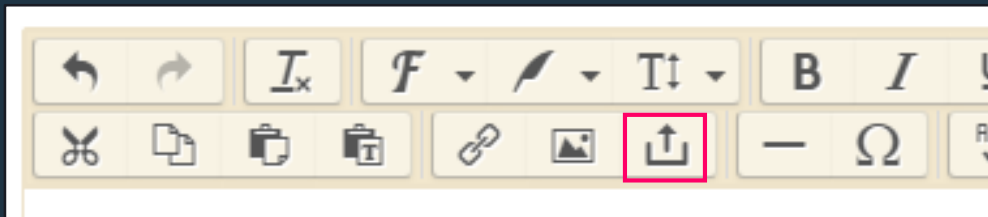
- Before you upload a file in any of these ways you need to be sure that the file itself is accessible, otherwise stakeholders who utilize screen readers will not be able to understand it.

Images

- When adding an image into any app on your website you need to be sure to add alternative text to describe what that image is.

- Using Alternative Text:

    - Essential for students with visual impartments (screen readers and other assistive technologies can't convert images into words)

    - Facilitates searching

    - Provides better context

Examples of Alt. Text

Alternative Text = Cat

Alternative Text = Male Lion

Guidelines for Alt. Text - Images

- Text should be clear, concise, and descriptive.

- Image text should be unique.

- Images should be associated with the text on the pages.

- Images with Decorative text should not be included.

- If image is an example of something mentioned in the content then the description needs to describe what it is based upon the relationship to the content.

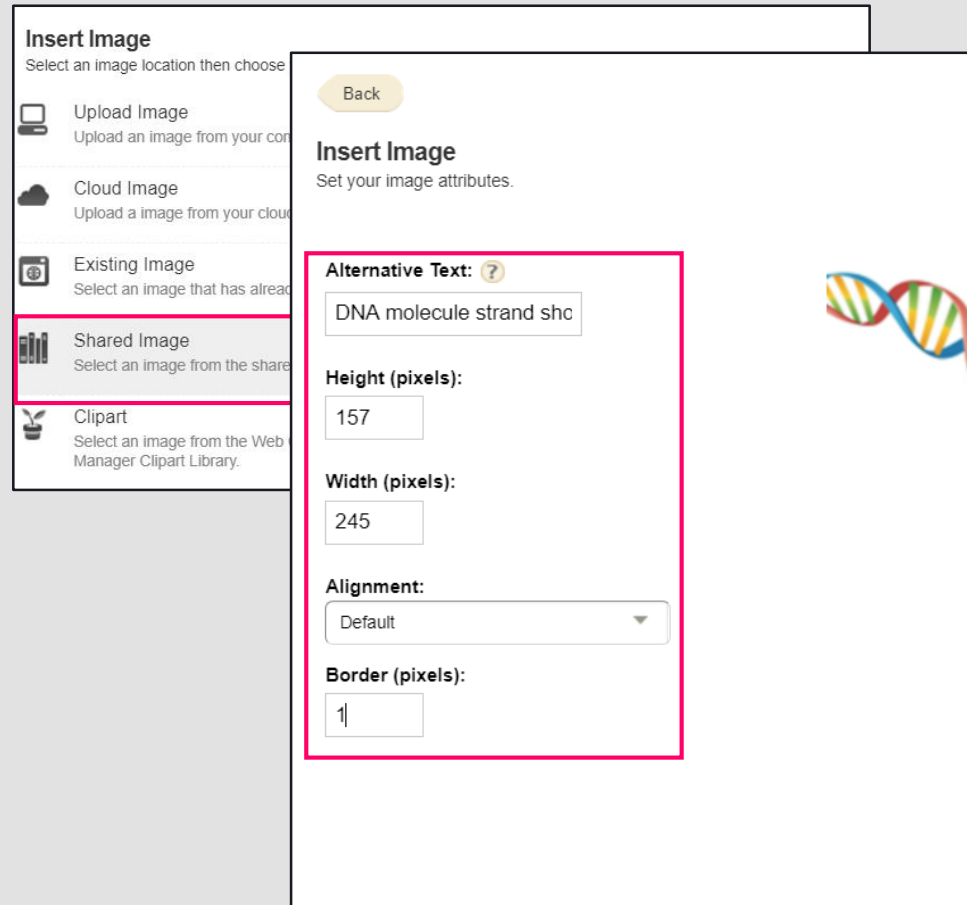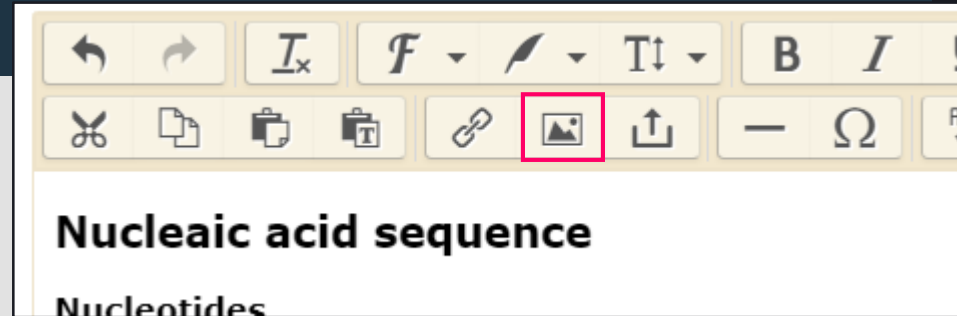- If image is used to provide more information, supplement or accompany content then a comprehensive description that contains all information present in the image and should also include any non decorative text present in the image.

- If the image is an infographic you should

  - Write a narrative telling the same story users get from the visual

  - Provide a link to view the text alternative

Activity: Content App: Adding Image

1. Place your curser where you want the image to go.

2. Hit the insert image button

3. Select the shared image option.

4. Choose the image that goes along with the article from the <u>shared image</u> library.

5. Hit "Continue"

6. Add alternative text describing the image:

DNA molecule strand showing double helix structure with deoxyribose and nucleobases.

7. Select alignment as default for this image (no text wrapping)

8. Add 1 pixel border.

9. Hit "Insert Image" button.

Nucleaic acid sequence

Nucleotides

Insert Image
Select an image location then choose

Upload Image
Upload an image from your com

Cloud Image
Upload a image from your cloud

Existing Image
Select an image that has alread

Shared Image
Select an image from the share

Clipart
Select an image from the Web
Manager Clipart Library.

Back

Insert Image
Set your image attributes.

Alternative Text: ?
DNA molecule strand sho

Height (pixels):
157

Width (pixels):
245

Alignment:
Default

Border (pixels):
1

Activity: Image App

1. Save and exit content app if you haven't already.

2. Find the image app on your page (the icon looks like a picture with mountains and sun).

3. Hover over the image app to see editing choices. Select the green pencil.

4. Editing Options will appear to the right.

5. Add image from shared library by clicking on "Select File" button

6. Add alternative text describing image.

7. Hit "Save".
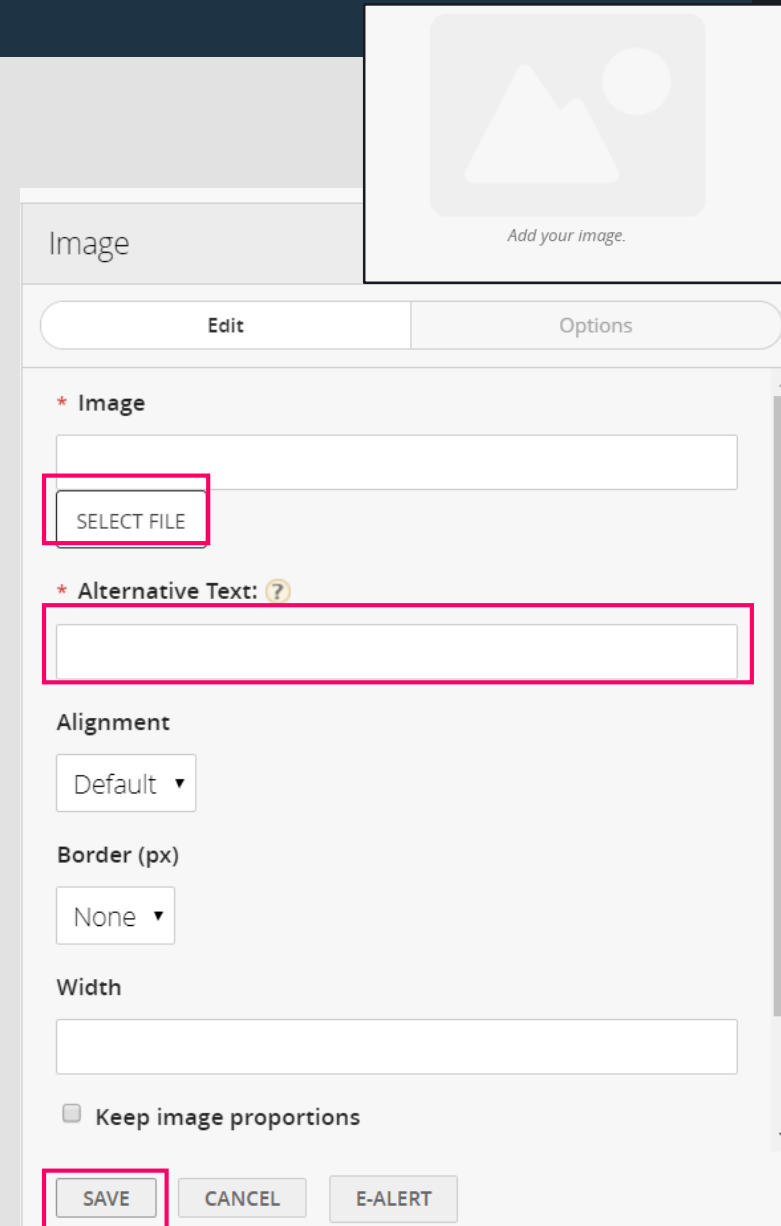
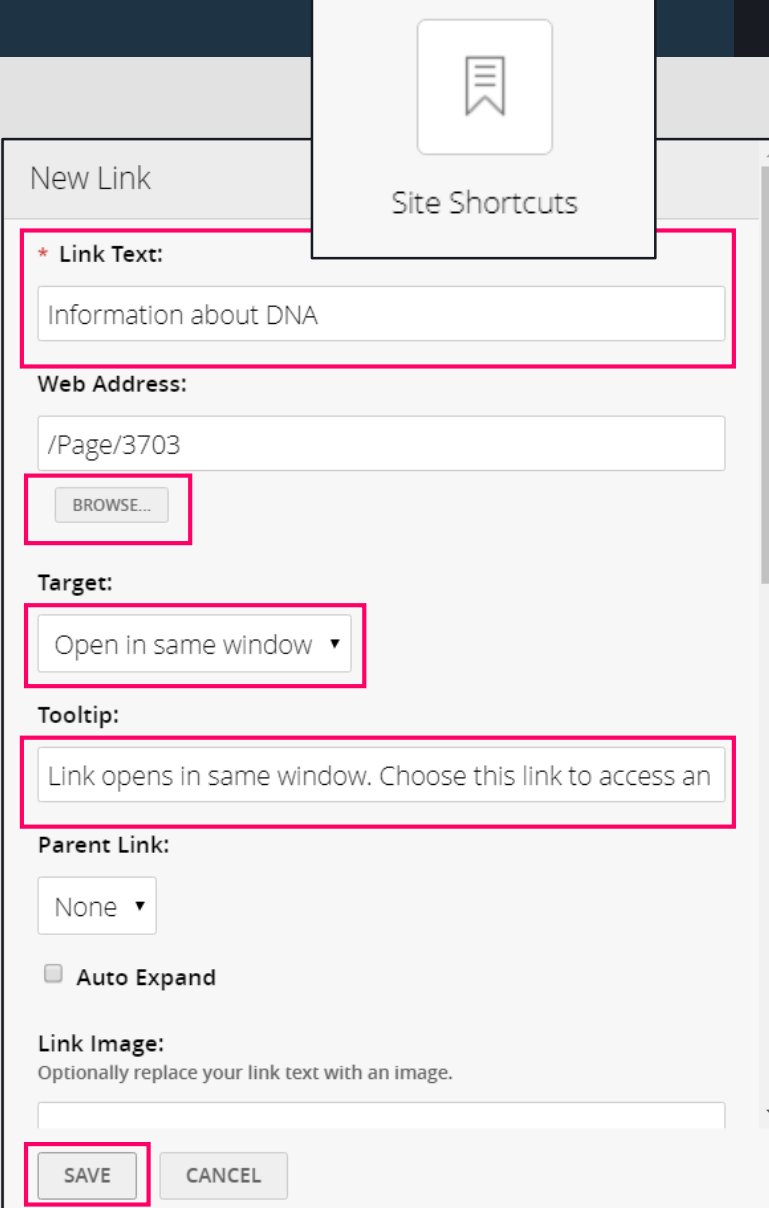# Activity: Site Shortcuts Link

1. Save and exit image if you haven't already.

2. Find the site shortcuts app on your page (the icon looks like a bookmark).

3. Hover over the site shortcuts app to see editing choices. Select the Green Plus Sign.

4. Editing Options will appear to the right.

5. Add Link Text: Information about DNA

6. Add Web Address by either pasting or browsing. For this example use the browse button and select the accessibility practice page from the menus.

7. Choose target for link to open in. In this case choose same window because it's an internal link.

8. Add in tooltip describing target and context of link beyond the name and URL.

9. Hit "Save".

Site Shortcuts

New Link

* Link Text:

Information about DNA

Web Address:

/Page/3703

BROWSE...

Target:

Open in same window ▾

Tooltip:

Link opens in same window. Choose this link to access an

Parent Link:

None ▾

☐ Auto Expand

Link Image:
Optionally replace your link text with an image.

SAVE   CANCEL

Tables

- When you adding information to your website and want to use a table consider why you are wanting to use a table? If possible use a list to present information (lists are preferred to tables for accessibility) because often table are hard for screen readers to navigate.

- Consider the following before using a table:

  - Are you using the table to present tabular data rather than for formatting purposes?

  - It is easy to make associations between the data you are presenting?

  - Can you include column headings (<th>) to make the table easier to read and easier to work through using assistive technologies?

  - Did you add a table to the WCM using the Table app that way it is also completely responsive and can be easily read on multiple devices?

Accessible Table - Table App (page 1 of 2)

When using the table app always make sure you:

- Add in headers for your data: check the appropriate boxes for the types of headers you have added.

- Set Table Style: Go to the "Edit Table Options" area and choose a "table style" that allows people to easily read the data

- Add a "Table Caption": Under "Edit Table Options" to give brief overview about table. (Shows)

- Add in a "Table Summary": Under "Edit Table Options" to help describe data and relationships in table in detail (Doesn't Show)

Table example lives on: https://sw00000004.schoolwires.net/accessibility/table

Accessible Table - Table App (page 2 of 2)

EXAMPLE OF TABLE APP

This table displays data from a nucleobase analysis of both sides of a DNA strand.

Name of Nucleobase	Percentage on Side 1 of DNA	Percentage on Side 2 of DNA
Adenine	32%	17%
Cytosine	11%	40%
Guanine	40%	11%
Thymine	17%	32%

Table example lives on: https://sw00000004.schoolwires.net/accessibility/table

Alternative Text From Other Apps

- **Headlines & Features** – Alt. Text on Headline Tab.

- **About the teacher** – Name of Person

- **Booklist** – Alt Text on Cover Image Tab.

Formatting accessible Word documents

The exact process for this will be different based upon whatever programs you have.

Structure & Formatting	Proper use of tables	Alt Text for Images & Links
(Headings, Lists etc.)		

Building accessible PDFs

- The exact process for this will be different based on whatever programs you have.

- As a note most documents on your website should be formatted as PDFs that way everyone can view them even if they don't have Microsoft Office etc.

- Scanned PDFs are not accessible, they are essentially just a large image.

Start from a well formatted source file.

Include accessibility tags when saved to PDF.

Invest in Acrobat Pro and use it's accessibility tools

*Read full article about Formatting Accessible Documents (look for PDF section) on Blackboard Help

Principles of PowerPoint Accessibility

Slide Titles

Reading Order
(Check on this in Outline view)

Alt Text for Images

Self-describing links

Color & Accessibility

- In any sort of content you create color plays a very important role in its accessibility.

- Low contrast between text and its background can make content difficult to read for everyone, especially low-vision and colorblind students.

- These are some resources to help you analyze and find acceptable levels of color contrast.

  – Color Contest Analyzer:

  - https://www.paciellogroup.com/resources/contrastanalyser/

  – Web-based Color Contrast Analyzers:

  - WebAim - web accessibility in mind

  - Accessible Colors

Captioning Videos

Make sure any videos you embed on your site include captioning. Whether that means finding already captioned videos to use or creating your own captioned videos.

Find already captioned videos

To make self captioning easier start with a storyboard

Upload videos to YouTube.

Edit automatic captions on YouTube before posting on your website.

*Read full article about Captioning Video on Blackboard Help

5 Kinds of Captions (page 1 of 2)

- **Closed Captions** are optional: they can be turned on or off with video controls.

Videos with closed captions will have double CC icon. If you use closed captions, keep in mind, users who want access to closed captions will need to know how to turn them on, so it is important to include instructions for users.

- – (Example of CC: https://www.youtube.com/watch?v=7SYnAJg1Cig)

- **Open Captions** are always displayed because it is part of the video stream. Users don't have to know how to turn these captions on.

- – (Example of Open Captions: https://www.youtube.com/watch?v=eTrkysvC8QA)

5 Kinds of Captions (page 2 of 2)

- **Audio Descriptions** provide users with sound descriptions, such as "door creaking", and they give a better experience.

  - (Example of Audio Description: https://www.youtube.com/watch?v=eTrkysvC8QA)

- **Real-time Captions** used for live events or sessions. These services are separate from Blackboard. There is typically a cost for this service and would need to be arranged prior to event or session.

- **Subtitle**s translate spoken dialog, usually translated into a different language, and don't include audio descriptions. Subtitles assume that the user can see and here.

Accessibility Checklist

Don't plan to fix these things afterward. Make them part of your workflow.

- ✓ Use Template Font
- ✓ Text and Background Contrast
- ✓ Proper heading styles
- ✓ Logical heading structure
- ✓ Alt descriptions for images
- ✓ Tables used for tabular data and table columns have a column heading.

- ✓ Use built-in list functionality
- ✓ Links describes the target
- ✓ Documents are properly tagged (PDFs, MSWord, Google Docs, etc.)
- ✓ Use PowerPoint slide templates
- ✓ Add Captioning to videos

Tools and Resources

Helpful links to tools and articles for applying inclusive techniques to your work

Building Content

- Microsoft Office
- Adobe Acrobat
- Bb best practices for accessible content
- Hemingway text analyser

Tools for Evaluating

- Firefox and Chrome developer toolbars
- Wave & Wave Toolbar
- AXE Extension
- Color contrast checker WebAIM Contrast Checker or Tanaguru Contrast Finder
- Your keyboard
- Browser magnification (CTRL +/- and CTRL 0)

Keyboard Navigation

- Firefox shortcuts
- Chrome shortcuts
- Google shortcuts

Accessibility in K-12

- Blackboard CERC Accessibility help and best practices.
- WCAG 2.0 Guidelines
- Blackboard's WCM VPAT
- Webinars: Blackboard on Accessibility or Deque Digital Accessibility

We hope you've enjoyed today's Workshop.

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Let us know how we're doing!