



# Creating Universally Accessible Content – The Work Continues

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# **Today's House Keeping**

In person: Sign-in sheet

Online: https://tinyurl.com/Toolkit9May2019

<u>Files for Download:</u> https://tinyurl.com/Toolkit9May2019Files (requires login with JHED ID @jh.edu)

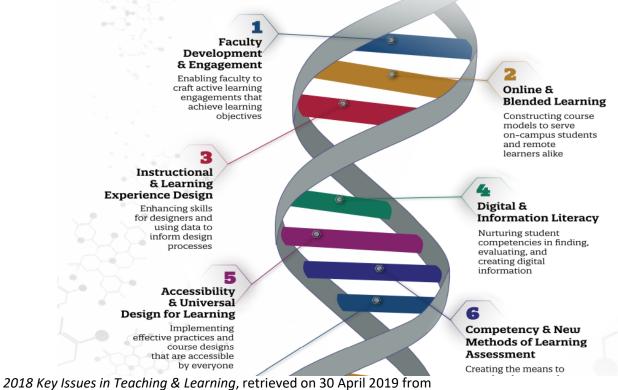




ELI 2019 Key Issues in Teaching and Learning



Each year, the EDUCAUSE Learning Initiative surveys the higher education community to determine key issues and opportunities in postsecondary teaching and learning. These issues serve as the framework, or focal points, for our discussions and programming throughout the coming year. For 2019, more than 1400 community members voted and identified the following:



https://www.educause.edu/~/media/files/educause/eli/eli2019keyissuesinfographic.pdf

#### What is Universally Accessible Content?

### Universally Accessible Content

- Is part of the Universal Design ecosystem
- Is robust (transferable and stable) across platforms and devices
- Is optimized for all individuals, regardless of abilities and limitations – physical, cognitive, communicative and digital
- Meets two of the core principles of Universal Design for Learning (UDL), breaking down barriers to learning and building flexibility into the curriculum:
  - Multiple means of representation
  - Multiple means of engagement

Is considered "good design" and is better for everyone



#### More on UDL

#### The Adjectives of UDL

| Descriptor  | Used in a Sentence   |
|-------------|--|
| Sustainable | UDL is a <i>sustainable</i> practice, eliminating the need for retrofitting.                             |
| Inclusive   | The principles of UDL considers all learners so opportunities are <i>inclusive</i> .                     |
| Equal       | The opportunities afforded by UDL strive to be <i>equal</i> and <i>accessible</i> to all.                |
| Social      | An environment that considers UDL is a <i>social</i> , not medical, model.                               |
| Flexible    | UDL is <i>flexible</i> so when accommodations or other alternatives are required, the effort is minimal. |
| Strong      | UDL is <i>strong</i> on objective; nothing is compromised.   |

#### Best Practices toward Universal, Accessible Content

#### **Best Practices**

Combine and employ both Accessibility standards and Universal Design principles

- Consider levels of effort (human and technical)
  - Potential barriers to sensory, physical, cognition and neurological experiences
  - Ease of translation (integrity and robustness) across platforms, programs, and assistive technologies (AT) such as screen readers, speech recognition software, and alternative input devices
- Employ tools toward efficiency and precision

#### Selected Best Practices in Microsoft Office

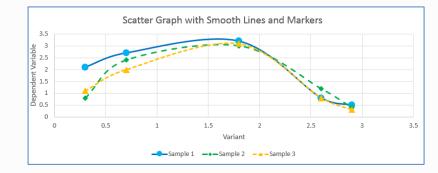
Follow Along with the Practice File (PracticeDoc.docx) found inside: https://tinyurl.com/Toolkit9May2019Files

#### Best Practices – All Documents: Alternative Text

- Simple, succinct text to
  - summarize any complex element (table, chart, embedded multimedia, etc.)
  - describe any non-decorative image
- Alt text should convey the meaning of the object
  - Images should avoid including text if possible; if not, mention it in alt text
  - Do not state the obvious
  - Use appropriate language

#### Best Practices – All Documents: Color

- Do not use color alone to convey meaning
  - Alternatives: shapes, line types, emphasis (underline, bold, italics), etc.
- The contrast (light to dark) of objects next to or overlaying each other must be sufficient (at least 4.5 to 1, in most cases)
  - Text over background images
  - Text inside a table with cell shading
  - Color-coded maps



| Heading 1 | Heading 2 |
|-----------|-----------|
| Item 1    | Item 2    |
| Item 3    | Item 4    |

### Best Practices – All Documents: Hyperlinks

- Use "Meaningful" text
  - Inform users where link navigates them
  - Indicate purpose of linked resource
  - Consider [PIC], [VIDEO], or [AUDIO] alongside the link if format isn't obvious
  - The exception is when the URL is the meaningful text
- Screen reader might read a hyperlink text followed by the actual URL
  - Consider a URL shortener when sharing websites
- Distinguish from the surrounding text by something other than color, e.g. make certain hyperlinks are underlined

### Best Practices – All Documents: Tables

- Do <u>not</u> use tables for controlling layout!
  - Use formatting: Paragraph, Column, Line spacing
- Make certain tables are formatted to:
  - include Table Header Row
  - avoid empty, merged, and split cells unless necessary
  - include visible cell borders (gridlines)
  - have sufficient contrast between text and any background fill colors
  - include a caption for complex tables



It's also common to think of accessibility in terms of assistive technologies and breaking down barriers for specific groups of

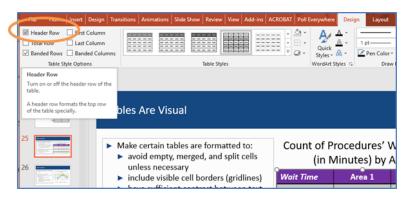
| Enrollment Category | Maryland | Nation |
|---------------------|----------|--------|
| % Undergraduate     | 80.9     | 85.2   |
| % African American  | 26.6     | 12.6   |
| % Hispanic          | 8        | 15.7   |
| % Asian             | 6.8      | 5.9    |
| % White             | 45.2     | 51.7   |
| % All Minorities    | 41.7     | 38.3   |
| % Foreign           | 5.4      | 4.9    |

# Tables: Header Rows in Microsoft Office

 PowerPoint: Tables
 Table Tools → Design: Header Row

• Word: Tables

- ► Table Tools → Design: Header Row
- ► Table Tools → Layout: Repeat Header Rows



|               | tablesample            | e.docx - Word                               |  |
|---------------|------------------------|---|--|
| Design Layout | 💡 Tell me what you wan |   | ~  |
| Cell Size     | Distribute Columns     | Text Cell<br>Direction Margins<br>Alignment | Repeat Convert Formula<br>Header Rows to Text<br>Data  |
| *             |                        |   | Repeat Header Rows<br>Mark multiple rows as header rows.<br>If your table spans multiple pages<br>the header rows will appear on<br>every page for easy reference. |
| Wait          | Time                   | Area 1                                      | AIGUL  |
| 40            |                        | 4   | 9  |
| 41            |                        | 6   | 8  |
| 42            |                        | 0   | 5  |

#### Best Practices – All Documents: Document Structure

- Document structure is the way the parts of a document are programmatically organized in relation to each other
- Use STYLES (Headings, Lists, Tables, Paragraphs, Column breaks, etc.) to
  - Control appearance/layout and reading order
  - Serve as a navigation aid
  - Ensure "robustness" across formats and platforms

| Heading Level 1                                   |  |  |  |
|---|--|--|--|
| Heading Level 2                                   |  |  |  |
| Content   | Title in a top Level Hea   | ader   |  |
| List<br>List item 1<br>List item 2<br>List item 3 | Section Title in a 2nd Level Head<br>Generic context bits an explosibly formation<br>in Level instantial and a specially formation<br>do dotose et en rebun. Ster cite Las d polegners, Hos<br>situinta sancue at enrice misum dotor sit amer. An<br>et en 1<br>8 ma 1<br>8 km 2<br>1 km 3<br>1 km 3<br>1 km 5<br>1 km 5 | Section Title in a 2nd I are<br>Generic content that is not sy<br>list. Lorem ipsum dolor sit an<br>diam nonumy eimod tempo<br>aliguyam erat, sed diam volu                                  | Al bin-der<br>S, honis is bov a<br>re-tig certain a log for the state of t |
| Heading Level 3<br>Content                        | Lorem ipsum dolor sit amet, conseteur sadipoing eliry,<br>nonumy eirma dempoi inviduur ut labore et dolore ma<br>aliquyam erat, sed dam voluptua.<br>Second Section with 2 <sup>nd</sup> Lavel Header<br>Lorem ipsum dolor sit amet, conseteur sadipoing elir,<br>nonum elimot tempoi invidut ut labore et dolore ma<br>aliquyam erat, sed diam voluptua.  | Item 1     Item 2     Item 3     Back to generic text. Lorem ipsum do     sadipscing elitr, sed diam nonumy eir     labore et dolore magna aliquyam era     A 3rd Level Header separates moo | clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. And now the list:<br>term 1 term 2   |
| Heading Level 2                                   |  | Lorem ipsum dolor sit amet, conseter<br>nonumy eirmod tempor invidunt ut l<br>aliquyam erat, sed diam voluptua.  | the second se  |
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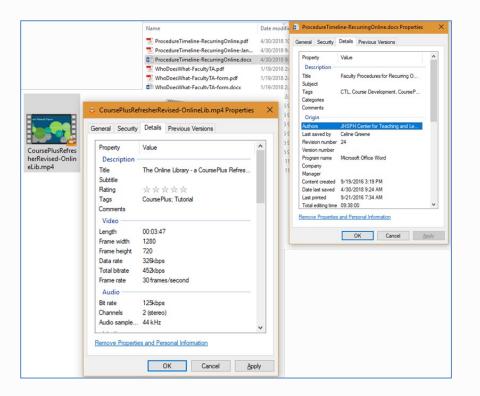
#### Structure in Microsoft Office

- ► Word, Outlook:
  - Use Styles and document parts (e.g. Footer)
  - Use Page Setup and Formatting for controlling layout
- PowerPoint
  - Use templates and only rely on a slide master layout's placeholders

| File  | Home                               | nsert | Design Lay        | out R                              | eferences                  | Mailings | Review  | View | ACROB | AT Q Tell | l me what you | want to do |           |       |          |           |          | 🖻 Share  | $\Box$ |
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### Best Practices – All Documents: Properties/Attributes

- Document Properties (Meta Data) assist users and technologies to search, navigate, and comprehend a file without having to open it
  - Complete title, key words ("tags"), & author
- Save files with no restrictions



#### The Microsoft Office Accessibility Checker

#### Microsoft "How to"

# "Use the Accessibility Checker to find accessibility issues"

# https://bit.ly/2LIOKUJ

| €                    |                           |  | Acc                 |
|----------------------|---------------------------|--|---------------------|
| Info                 | Info                      |  |                     |
| New                  | AccessibleC               | Outreach-draft   |                     |
| Open                 | OneDrive - Johns H        | lopkins University » WorkshopMaterials » a   | AccessibleCommu     |
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| Save as Adobe<br>PDF |                           |  |                     |
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| Account              |                           | ilities might find difficult to read.<br>mpatibility                                     |                     |
| Feedback             | Check for<br>versions o   | features not supported by earlier<br>f PowerPoint.                                       |                     |

Review

#### **MS Accessibility Checker**

# Classifies:

- Errors
- Warnings
- Tips

#### Errors:

- Images alt text
- Slides unique titles
- Tables headers
- Structure Styles, Table of Contents

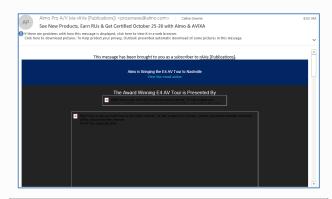
#### Warnings:

- Meaningful hyperlinks
- Tables no split, empty cells
- Meaningful sheet names/links (Excel)
- Blank characters
- Color contrast

#### Why We All Should Be Concerned with Accessibility & UDL

## Why Be Concerned? -1

- Routinely employing practices that consider universal accessibility puts your best foot forward
  - Professional
  - Conscientious
  - Considers sustainability
    - Hides "the complexity of technology"
  - Reaches a larger audience



| Enrollment Category | Maryland | Nation |
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| % Foreign           | 5.4      | 4.9    |

Poorly formatted table compares higher ed enrollment in Maryland vs. the Nation across demographic categories. See source for details. Source: Maryland Higher Education Commission. 2018 Data Book. "Comparative Higher Education Statistics: Maryland and the Nation".

### Why Be Concerned? – 2

*"Every member of the Johns Hopkins University community deserves equal access to the abundant educational and employment opportunities we offer."*<sup>1</sup>

- Accessibility is part of Inclusivity
  - Can everyone participate equally and independently?
  - Are potential barriers removed?
- Accessible environments are enhanced environments
  - Is this the best we can offer to the widest range of people?
  - Is this sustainable?

We all have an ethical and moral responsibility



# Why Be Concerned? – 3

- Universally accessible content meets legal obligations of Civil Rights laws
  - ► ADA (1990)
    - Standards for Accessible Design (2010)
  - Rehabilitation Act of 1973
    - Section 504 (1973)
    - Section 508 (1998)
      - 508 Refresh (2018)



### And Furthermore...

- Universally accessible content allows for flexibility in access and engagement. For example:
  - Opting to stream a video or read a transcript
  - Navigating a familiar layout on a lecture page to quickly find the associated readings linked from the online library
  - Understanding a document's scope by reviewing its structure/outline in the Navigation pane
  - Viewing a presentation's slides on a computer or mobile device

# **THANK YOU & Please Remember...**

- In person: Sign-up sheet
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