

Creating Universally Accessible Content – The Work Continues

Celine Greene
HUDL (Hopkins UDL Initiative) Ambassador
Instructional Technologist
Center for Teaching and Learning

Today's House Keeping

In person: Sign-in sheet

Online: <https://tinyurl.com/Toolkit9May2019>

Files for Download:

<https://tinyurl.com/Toolkit9May2019Files>

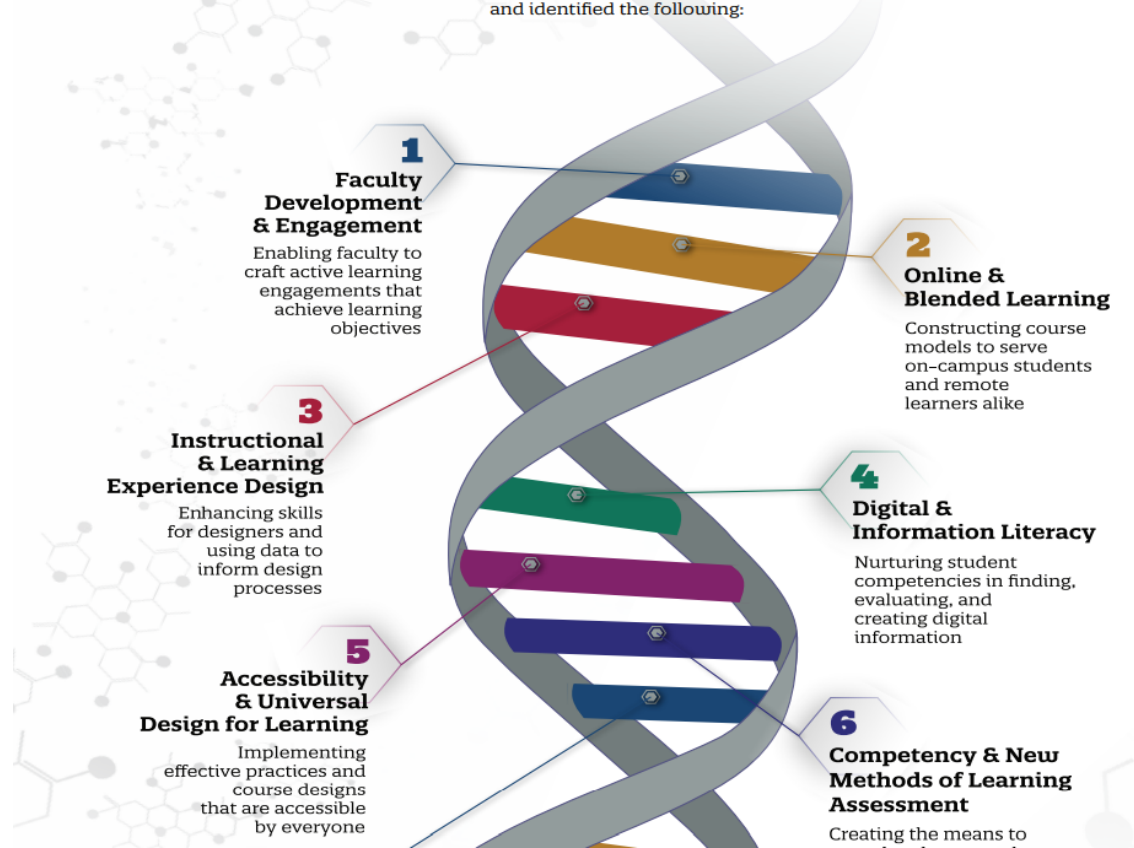
(requires login with JHED ID @jh.edu)



ELI 2019 Key Issues in Teaching and Learning

2019 Key Issues in Teaching & 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:



2018 Key Issues in Teaching & Learning, retrieved on 30 April 2019 from <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:

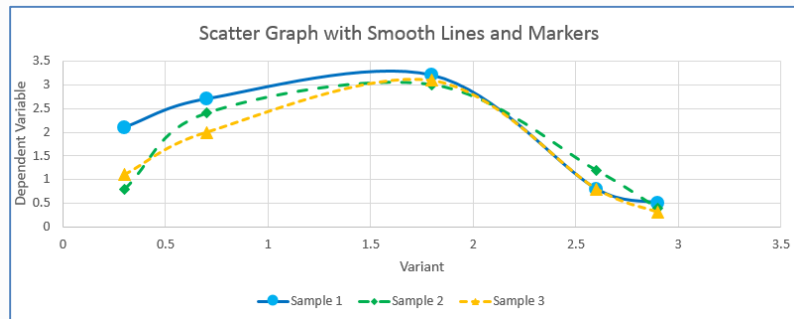
<https://tinyurl.com/Toolkit9May2019Files>

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

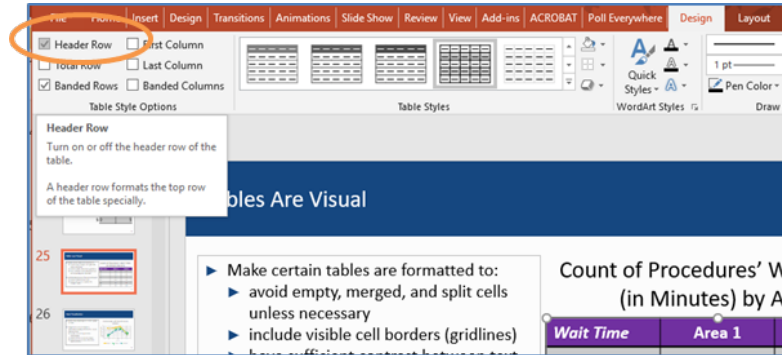
- ▶ Do not use tables for controlling layout!
- ▶ Use formatting: Paragraph, Column, Line spacing
- ▶ Make certain tables are formatted to:
 - ▶ include Table Header Row
 - ▶ avoid empty, merged, and split cells unless necessary
 - ▶ include visible cell borders (gridlines)
 - ▶ have sufficient contrast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



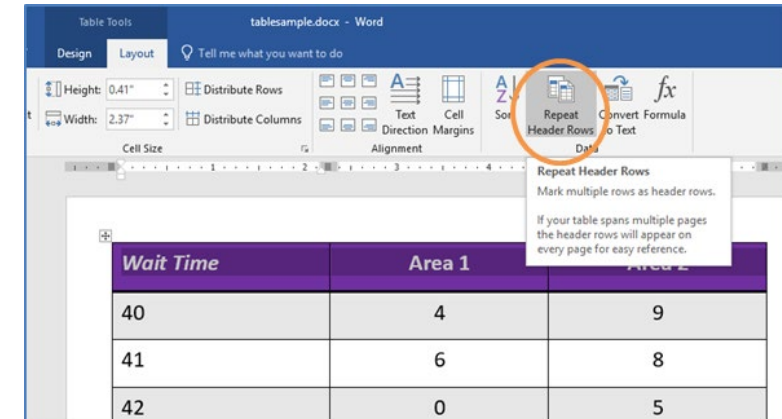
Enrollment Category	Maryland	Nation
% Undergraduate	80.9	85.2
% African American	26.6	12.6
% Hispanic	8	15.7
% Asian	6.8	5.9
% White	45.2	51.7
% All Minorities	41.7	38.3
% Foreign	5.4	4.9

Tables: Header Rows in Microsoft Office

- ▶ PowerPoint: Tables
 - ▶ Table Tools → Design: Header Row

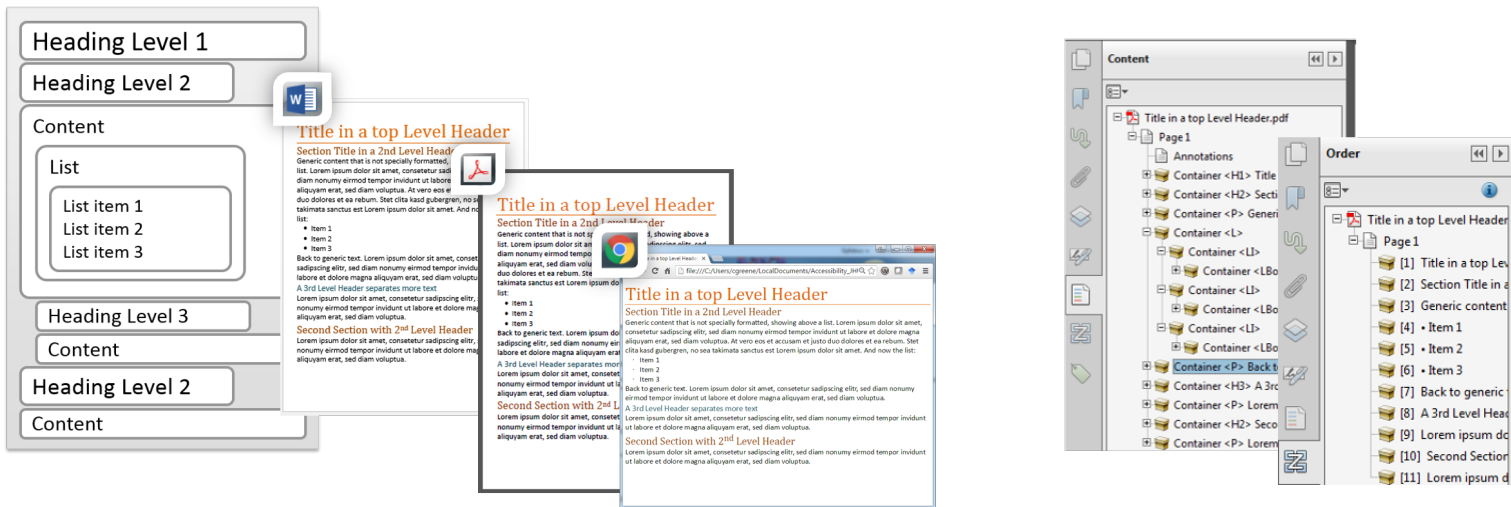


- ▶ Word: Tables
 - ▶ Table Tools → Design: Header Row
 - ▶ Table Tools → Layout: Repeat Header Rows



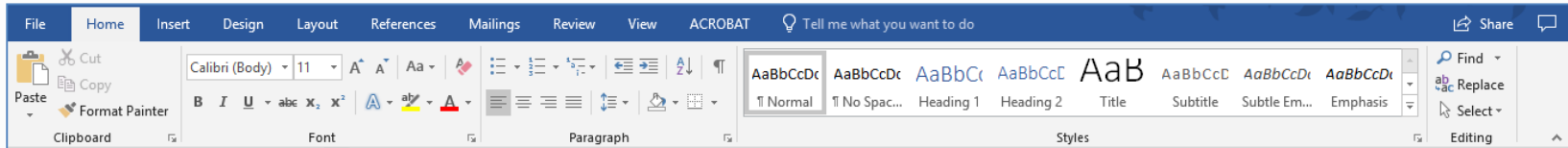
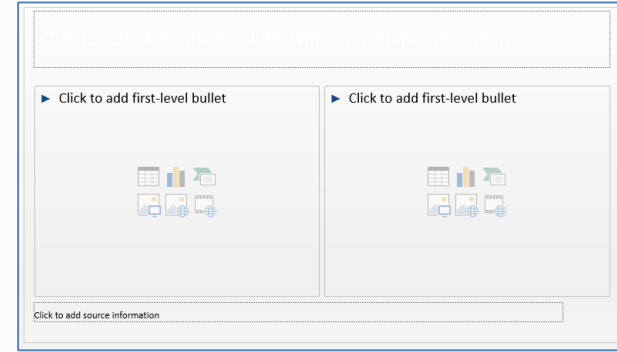
Best Practices – All Documents: Document Structure

- ▶ 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



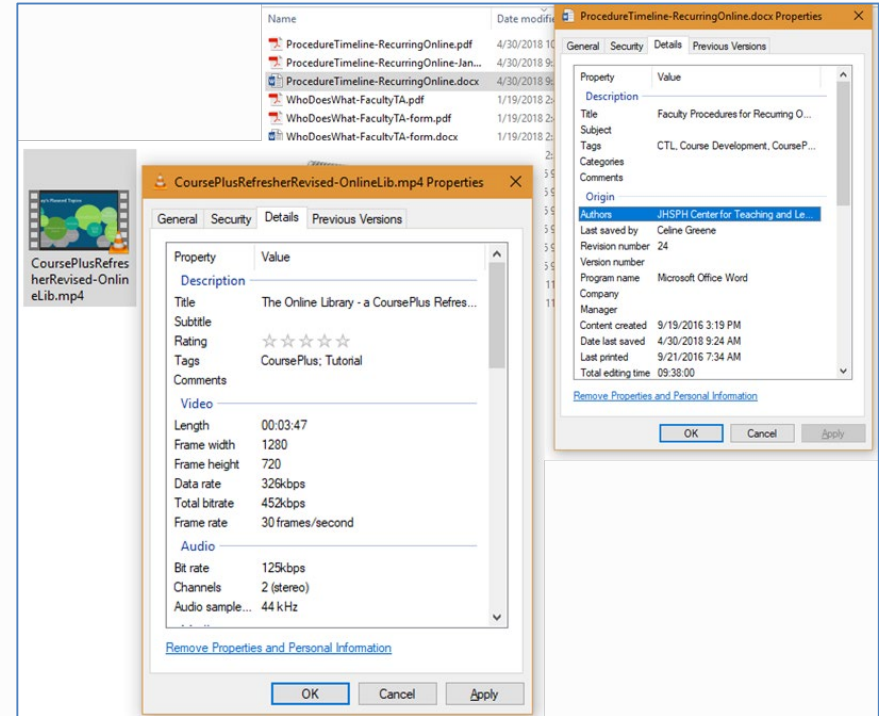
Structure in Microsoft Office

- ▶ 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



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**

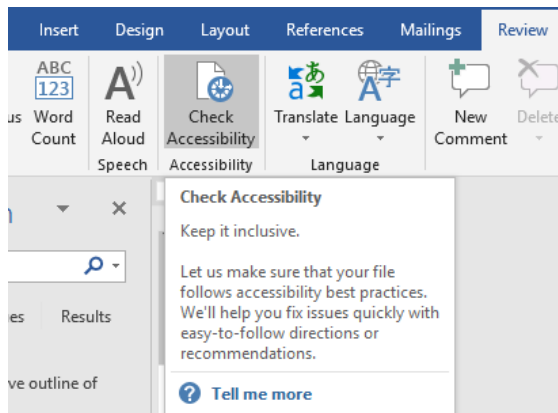
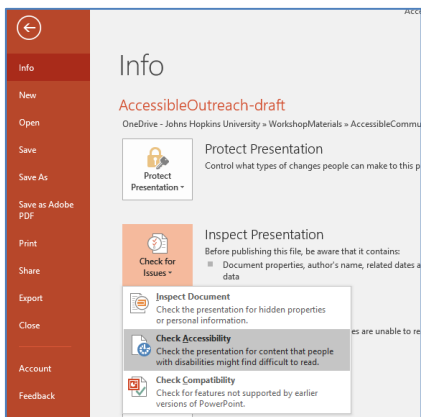


The Microsoft Office Accessibility Checker

Microsoft “How to”

“Use the Accessibility Checker to find accessibility issues”

<https://bit.ly/2LlOKUJ>



MS Accessibility Checker

▶ Classifies:

- ▶ Errors
- ▶ Warnings
- ▶ Tips

Errors:

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

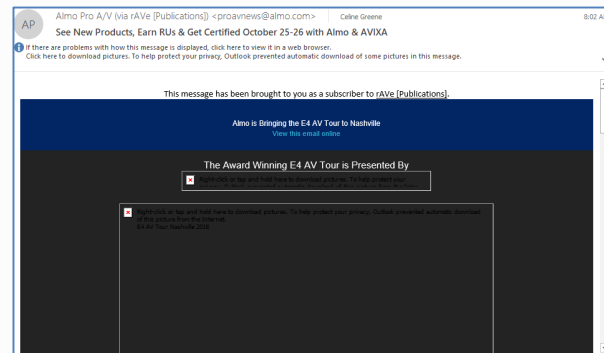
Warnings:

- ▶ 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
% Undergraduate	80.9	85.2
% African American	26.6	12.6
% Hispanic	8	15.7
% Asian	6.8	5.9
% White		51.7
% All Minorities	41.7	38.3
% 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.”¹

- ▶ 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



¹ JHU Office of Institutional Equity <<http://oie.jhu.edu/>>

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
- ▶ Online: <https://tinyurl.com/Toolkit9May2019>
- ▶ Files for Download:
<https://tinyurl.com/Toolkit9May2019Files>

