Digital Accessibility & Global Inclusive Education Standard

Karen McCall, M.Ed.

Karlen Communications

UN Sustainable Development Goals

- First five SDG's include many of the worlds' 1 billion + people with disabilities:
  - Eradicate poverty.
  - Eradicate hunger.
  - Good health.
  - Inclusive Education.
  - Gender equality.
- "Checkpoint" is 2030.
- COVID-19 revealed just how much work needs to be done.
- Access to digital ecosystems including education and employment have been left behind or ignored, except at international conferences.

Access to the Internet and LMS/CMS

- Access to broadband.
- Access to affordable data plans with the capacity for educational content.
- Use of standards and guidelines for the creation of both content and applications/LMS.
- If it is not accessible for people with disabilities, it can't be used in any learning environment..
  - In 2015, the US spent $79 billion dollars on LMS/CMS for education.
  - We need to leverage our combined procurement power to establish clear benchmarks for inclusive education/digital accessibility.

Access to Technology

- This means both the base technology needed for learning whether it is online or on-site.
  - Computer, printer, scanner.
  - Is a phone or tablet good enough? Supplemental devices.
- Adaptive technology:
  - Screen reader.
  - Refreshable Braille display.
  - Text-to-Speech tools.
  - Screen magnification.
  - Alternate input devices (switches, head mouse, sip n' puff on-screen keyboard, IntelliKeys keyboard overlay)

We Intentionally Created the Inaccessible Content

We Knew…We Ignored!

- 1997-98 while earning my M.Ed. Research was built on a single article stating that those of us with disabilities could not use computers once we moved from DOS to "GUI" or icon-based interfaces.
  - Several other "research papers" were based on this "assumption" without talking to those of us with disabilities.
- Since WCAG 1.0 we've been asking, begging, demanding that digital content be accessible.
- As of at least 2005, we have known how to create accessible digital content.
- "We" refused to teach teachers how to create accessible content.
  - Can't force document authors to create accessible content.

Then Came the Pandemic...

- As long as online learning was an option, academic institutions could "hide" in plain sight their inaccessible content.
- Once the global community had to shift within a day or two to complete online delivery of learning/education, the sheer volume of inaccessible content was revealed.
  - "We" advocated and shouted and begged and pleaded...
  - "We" said we had a 4-5 month lead time to develop strategy for training, policy and gave models of how training could be accomplished....
- We were ignored.
- Now with the second wave and potential other pandemics on the horizon, we are no better of and haven't advanced any ground.

"The Best Format for You is…."

- I hear this a lot from the various champions of specific formats like PDF, EPUB, HTML and other formats (although these are the top 3).

- This goes back to a medical model of "I know what is good for you and you have no say because I'm the expert".

- We are in the human rights model of disability era – we moved on from the social model of disability about 10 years ago (simply wasn't working).

- **The best format "for me" is an accessible format!**

- **Decide on a format and make sure it is as accessible as it can be and lobby the advocates of that format to improve accessibility!**

Current Battle: Access versus Accessibility

- Has always been a reluctance to make document authors adhere to established publishing standards/document structure.
    - "We can't tell document authors what to do."
    - We can't force them to make accessible digital content."
    - Every document author has the right to create inaccessible content."
- This was an argument when WCAG 1.0 was released.
- This is an argument that has returned in the committees creating the standards for what those of us with disabilities have access to.
    - It is why I left the ISO 14289 or PDF/UA committee.
- "The best you can hope for is equal access to poorly created content."

The Argument Fails

- This argument of positioning those of us with disabilities to "only expect whatever is given to us" fails in the digital ecosystem.

- First, computers and digital environments are, at their core, 1's and 0's –we can make them do whatever we want.

- Second, when someone looks at the visual representation of an inaccessible document, they can decode things that those of us who rely on adaptive technology/accessible content can't.

Which is the Accessible Version?

Background Information

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Historical Perspective

Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme.

Save time in Word with new buttons that show up where you need them. To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign.

Reading is easier, too, in the new Reading view. You can collapse parts of the document and focus on the text you want. If you need to stop reading before you reach the end, Word remembers where you left off - even on another device.

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

Twentieth Century Ontario

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Background Information

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

◢ Historical Perspective

Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme.

Save time in Word with new buttons that show up where you need them. To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign.

Reading is easier, too, in the new Reading view. You can collapse parts of the document and focus on the text you want. If you need to stop reading before you reach the end, Word remembers where you left off - even on another device.

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

Twentieth Century Ontario

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

What Screen readers/Text-to-Speech Tools see

Background Information

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Historical Perspective

Themes and styles also help keep your document coordinated. When you click Design and choose a new Theme, the pictures, charts, and SmartArt graphics change to match your new theme. When you apply styles, your headings change to match the new theme.

Save time in Word with new buttons that show up where you need them. To change the way a picture fits in your document, click it and a button for layout options appears next to it. When you work on a table, click where you want to add a row or a column, and then click the plus sign.

Reading is easier, too, in the new Reading view. You can collapse parts of the document and focus on the text you want. If you need to stop reading before you reach the end, Word remembers where you left off - even on another device.

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document.

Twentieth Century Ontario

To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar. Click Insert and then choose the elements you want from the different galleries.

Direct Formatting as an Accessibility Barrier
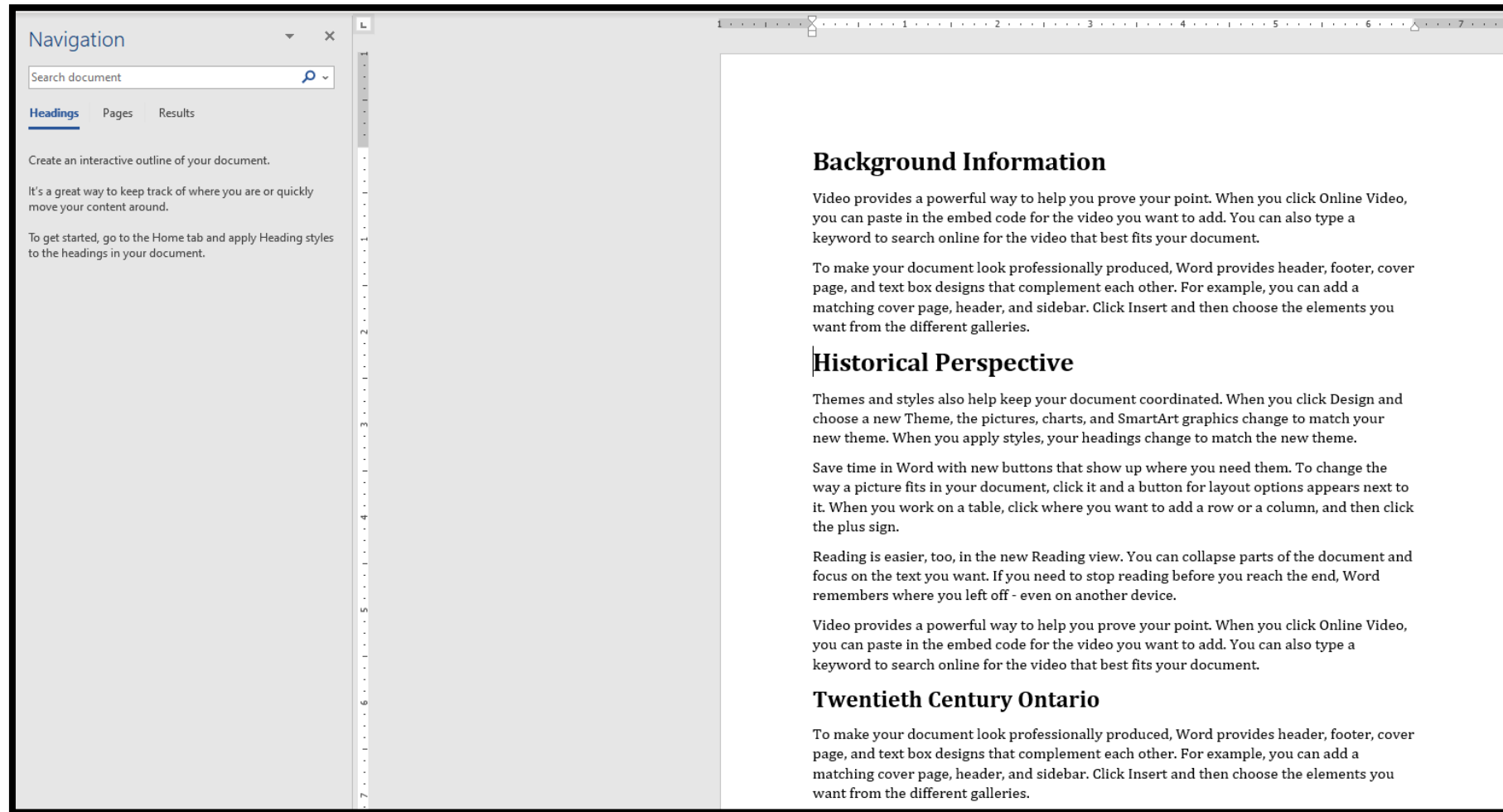
Accessible Documents Remove Barriers
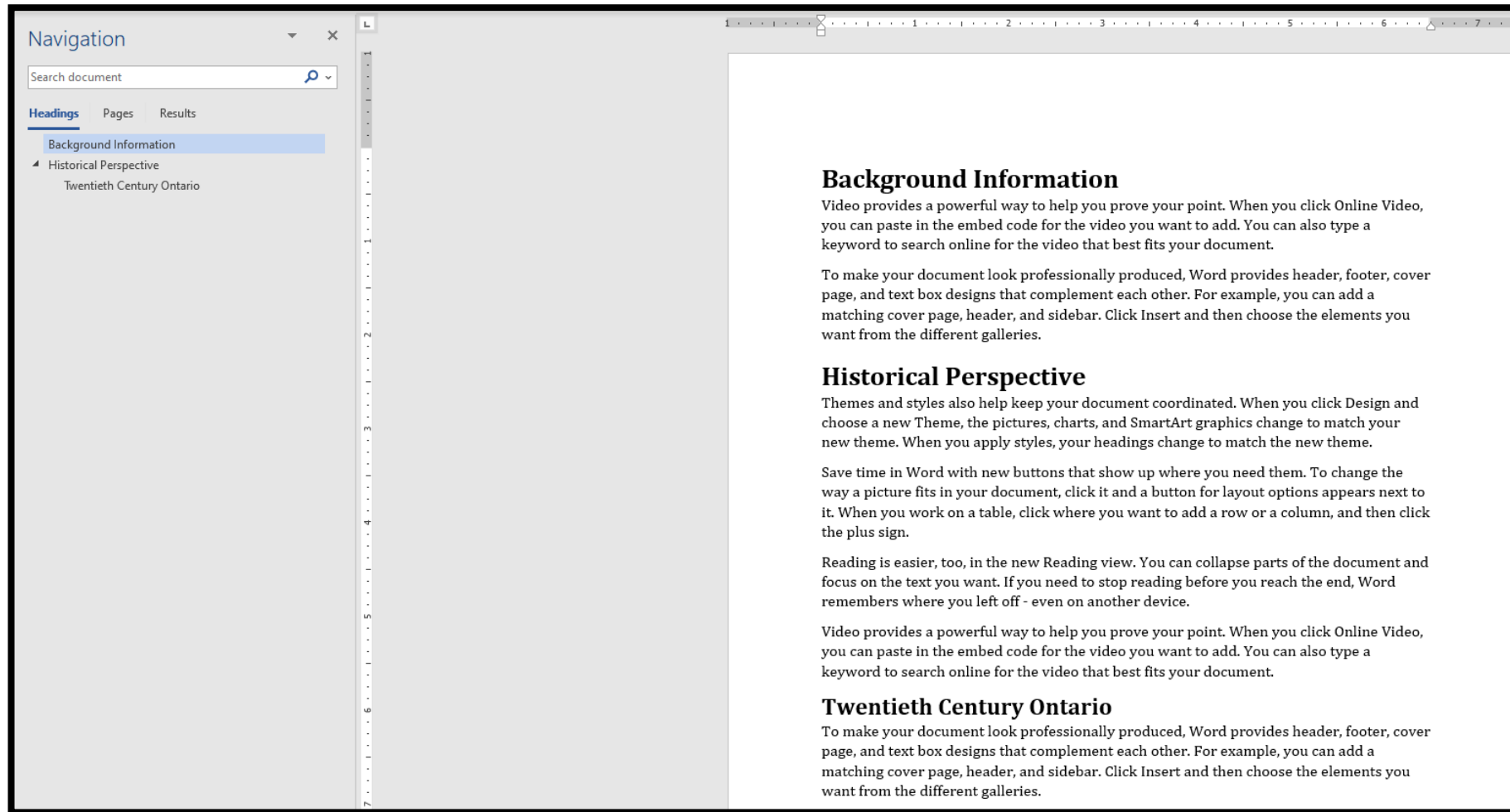
Plain Language/Accessible Definition

""A communication is in plain language if its wording, structure, and design are so clear that the intended readers can

- easily find what they need,

- understand what they find,

- and use that information."

International Plain Language Federation

Standard for Word Processed/Desktop Published Content

Move Best Practices/Publishing to a Standard

- We need to take the structure of documents as identified by centuries and decades of print publishing and combine them with the best practices of the past 20+ years of digital content creation to establish an international standard for word processed and desktop published digital content.

- For example, The PC is not a Typewriter. Still in print!

- Standards committee formed from industry leaders, adaptive technology vendors AND those of us with disabilities.

- While technology neutral or technology agnostic standards and guidelines can cover some word processed elements, there are differences between HTML and word processed/desktop published content.

The Problem in Not Establishing this Standard

- Whose best practices do we go by?
- Organizations create their own best practices taking a bit from column 1 and a bit from column 2.
- New advances in word processing tools are not backward compatible.
  - For example, text boxes. While improvements have been made in Microsoft Office 365, text boxes are still floating objects over the text layer of the document and the enhancements are not backward compatible.
  - Until everyone moves to a supported version of Word and adaptive technology vendors support the enhancements, can we say they are accessible?

Global Inclusive Education Standard

"Accommodation For" versus "Inclusion Of"

- In 2012 the Ontario government passed legislation on the Accessibility for Ontarians with Disabilities Act, Integrated Accessibility Standards Regulations (AODA and IASR respectively).
  - The section on Education was all about reinforcing that those of us with disabilities should be accommodated for.
- 2012 we were well into the digital age, yet legislation was still focused on accommodation being the norm rather than the exception.

Mainstreaming and Integration

- For those of us with disabilities who survived the mainstreaming experiment, the use of this term to describe inclusion or integration is painful and disrespectful of our experiences and voices.

- Mainstreaming was a failed experiment.

- Integration does not mean inclusion.

- Both concepts plunk those of us with disabilities into learning ecosystems with little or no support and maintain the "equal but separate" approach to learning.

Students

- Students should start creating accessible content when they first touch a mouse and keyboard.
- Curriculum must be updated to reflect inclusive design.
- Includes.
  - Documents, presentations and spreadsheets.
  - Multimedia.
  - Architecture/built-environment.
  - Open Spaces.
  - Healthcare – access to one's own records..
  - Appliances.
  - Vehicles.
  - EVERYTHING!

Teachers

- Teachers MUST be taught to seamlessly incorporate universal/accessible design in what they teach and what they provide as learning material.
- Curriculum must be updated to reflect inclusive design.
- Includes.
  - Documents, presentations and spreadsheets.
  - Multimedia.
  - Architecture/built-environment.
  - Open Spaces.
  - Healthcare – access to one's own records..
  - Appliances.
  - Vehicles.
  - EVERYTHING!

Teachers with Disabilities

- We must start hiring teachers with disabilities!
- Students with disabilities (and other teachers) need to se those of us with disabilities as equals/professionals.
- Role Model Challenge.
  - We need more Creative Commons images of people with disabilities in professional roles.
  - Those who use service animals aren't bringing pets to work!

"Bring a Pet to Work Day"

Can "We" do it in 10 years?

- The Salamanca Statement (completely inaccessible and not updated/not made accessible for its 25 anniversary).
  - Set a framework for inclusive education that still stands.
- As a global community, we have 10 years until the realization and evaluation of the SDG's is "up".
- How do we spend that time?
  - More conferences on inclusive education illustrating ad hoc implementations?
  - Starting to organize committees and task forces to take what has been presented at conferences/summits AND international standards and create a global baseline that can be implemented by or shortly after 2030.

Timeframe

- If we don't set a timeframe to incorporate accessible document design/accessible digital content, when will we do it?

- What is going to be the motivation?
  - Currently the number of people with disabilities in the world is about equal to the entire population of India.
  - How many more people with disabilities who have the need to access digital ecosystems in education/learning before "we" determine it is "worthwhile"?

Baseline for All

- As a global community of people with disabilities, educators and policy makers (with disabilities), we need to establish a baseline so that when we say that education is "inclusive" we all know what that means.

- Since 2015, we are still attempting to define inclusive education…just around disability.
  - Other aspects to a global inclusive education standard.

- Everything is ad hoc and piece meal…no cohesion.

- Several companies have solutions but no integration of the solutions to form a working model.

Examples

- Huawei has portable cell towers to provide Internet access in rural/remote areas.
  - How does this work with affordable data plans/access?
- Microsoft and Google have their own ecosystems, but the product/documents don't necessarily talk to each other.
  - Forcing regions to choose one ecosystem over another. (Best for me?)
  - Closed systems.
- Apple, Google and Microsoft App Stores don't mandate accessible apps.
  - "We" are optional.

Nothing Without Us!

- The global standard for inclusive education MUST include those of us with disabilities.
    - Not just those working for UN affiliated organizations or governments.
    - There are those of us in the educational field, in the trenches.
- It includes other groups that are isolated or prevented from learning and achieving their dreams and goals.
    - We all have the right to try…to change…to adapt our dreams and goals.
- Without inclusive education, our "dreams" are fantasies not based in the current reality.
- We need to stop talking and start acting or it will be 2070 and we'll still be rearranging the deck chairs on the Titanic.

ATEND
Australian Tertiary Education Network on Disability

Resources!

- Want to know more about accessible document design or inclusive assessment? Here are some resources.

Resources – 1

- International Plain Language Federation.
  - http://www.iplfederation.org/plain-language/
- WCAG 2.x (Web Content Accessibility Guidelines).
  - https://www.w3.org/WAI/standards-guidelines/wcag/
- PDF Techniques for WCAG 2.x.
  - https://www.w3.org/WAI/GL/WCAG20-TECHS/pdf
- ISO 14289 or PDF/UA are specifications for developers of software and machines…not human consumption.
  - https://www.pdfa.org/resource/iso-14289-pdfua/

Resources – 2

- Government of Canada, Technical Standards Committee on Plain Language.
  - https://accessible.canada.ca/creating-accessibility-standards/technical-committee-plain-language
  - Part of the Accessible Canada Act standards.
- The Role of Design in Discrimination with Claudio Luis Vera
  - Meetup session, November 2020.
 - Articulated the geographical barriers we build around versus the digital barriers we created.

Resources in Sway

- I've started a series of videos in Sway that show what it is like for someone who uses a screen reader or Text-to-Speech tool to read inaccessible digital content.
  - https://sway.office.com/VSzO6U5HfOUDFCPH?ref=Link
- This is the first in the series and ironically is on the Salamanca Statement of 1994 that provides a framework for Inclusive Education.
- The links will be posted on the Karlen Communications website as I add more content.
- They will be on the Initiatives toward an Inclusive Community page.
  - https://www.karlencommunications.com/DisabilityRights.html

Karen McCall School on Teachable

- Styles in Word: A Primer for Accessible Document Design
  - Self-paced online course + book.
  - Book only.
- Accessible Fillable PDF Forms:
  - Self-paced online course + book.
  - Book only.
- Accessible and Usable PDF Documents: Techniques for Document Authors, Fourth Edition
  - Book only.

https://karen-mccall.teachable.com/
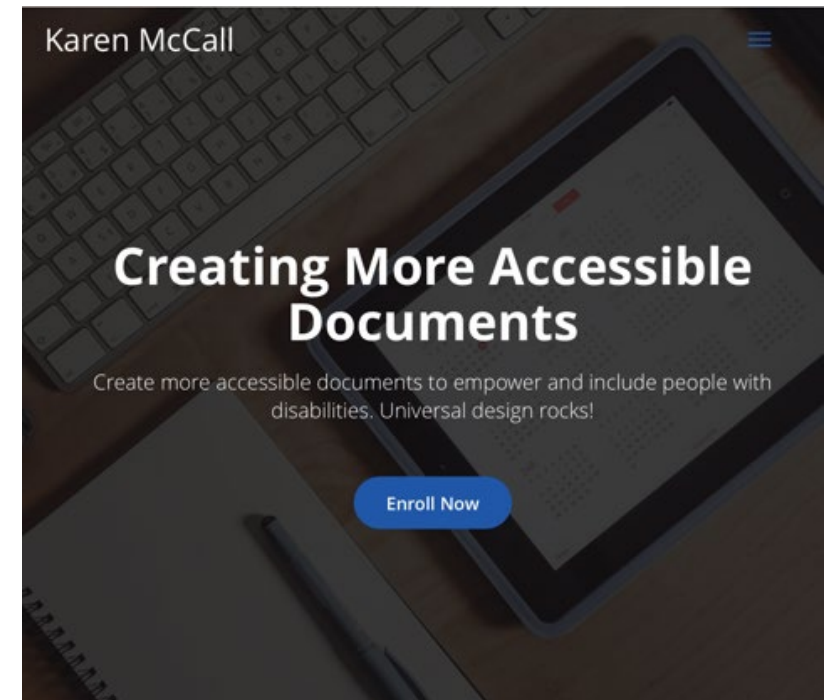
Microsoft Office Resources and Tutorials

Also available at the Karen McCall School on Teachable.

Access to this "course" is free.

Updates to the tutorials currently on the Karlen Communications website.

Direct link:

https://karen-mccall.teachable.com/p/microsoft-office-tutorials-and-resource-documents
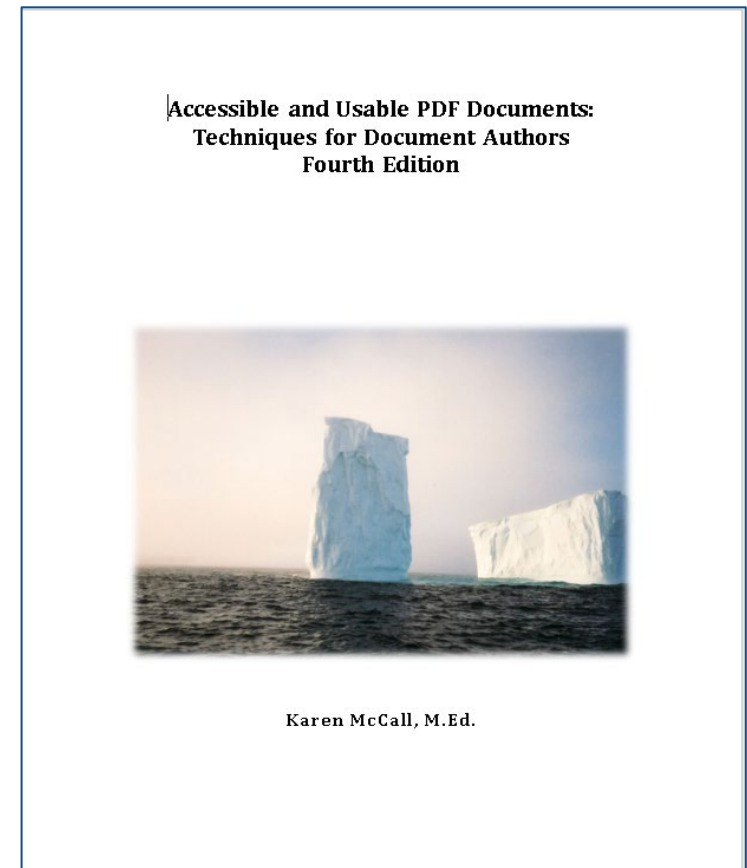
Accessible and Usable PDF Documents

Accessible and Usable PDF Documents: Techniques for Document Authors, Fourth Edition.

First published in 2005, this edition of Karen's book continues to provide tips, techniques and "why are we doing this" information about the accessibility of PDF documents.

If you are remediating PDF documents to be accessible, this is a "must have" for your reference library!

https://karen-mccall.teachable.com/

Accessible and Usable PDF Documents:
Techniques for Document Authors
Fourth Edition

Karen McCall, M.Ed.

Webinars on Inclusive Education

I've been advocating for a global inclusive education standard since 2009 when I published a white paper on the topic.

Actually, I've been an advocate for inclusive education during my own educational experiences.

In the late 1990's with the advent of the Internet, the need for a global inclusive education standard became more urgent.

Learn about the issues and barriers:

http://www.karlencommunications.com/handouts.html

Accessible and Usable PDF Documents:
Techniques for Document Authors
Fourth Edition

Karen McCall, M.Ed.

Contributions to Other Books

- Disability at the University: A Disabled Students' Manifesto, published by Peter Lang International, expected publication date: August 2019.

- Since the 1960's students with disabilities have demanded a place at the table. Now, almost 60 years later, they say 'enough is enough.' Disability at the University: A Disabled Students' Manifesto contains twenty chapters on the student experience in today's universities, from all over the globe. To the university they say, this is what you should be providing (and how). To the student they say, this is what you should expect (and demand). Manifesto will prove to be a clarion call, as well as an essential resource, for both students and institutions.

Contact!

Karen McCall, M.Ed.

Karen Communications

info@karlencommunications.com

There are free tutorials on the Karlen Communications website:

http://www.karlencommunications.com

@KarlenInfo

Consulting and training on accessible document design (Word, PowerPoint, Excel and PDF).

Accessible and Usable PDF Documents:
Techniques for Document Authors
Fourth Edition

Karen McCall, M.Ed.