Accessible communication for all

**18 November 2024** 

Chiara Gunella chiara.gunella@uab.cat











#### **Themes**

Why Accessibility?

Good practices for accessible communication: The Climate Advocacy Toolkit

3 Al and Communication









#### **Themes**

Why Accessibility?











"Recent environmental campaigns have focused on the use of plastic straws as an easy way to eliminate plastic waste, but many people with mobility impairment or chronic pain are unable to drink without the aid of a straw.

We need to avoid eco-ableism"

(Center For Disability Rights)

When creating communication plans it is crucial not to have only able centric perspectives because this can lead to exclusion and discrimination



#### **Numbers**

of the global population has a disability (WHO, 2023).







People with disabilities are disproportionately affected by climate impacts but are often excluded from policy discussions and accessible climate communication (OHCHR, 2020).

#### **Barriers**

- Exclusion from emergency and risk management plans (WHO,2013) (1)
- Physical and environmental barriers (Abbott & Porter,
   2013)
- Barriers to Accessible information (Sten, 2022)

# Examples

During Hurricanes Katrina and Rita (2005), people with disabilities faced difficulties such as inaccessible emergency communication systems and a lack of appropriate planning for their evacuation

needs (Powell & Gilbert, 2006)

Alerta de Protección Civil Alerta de Protección Civil Elevamos a fase de emergencia, situación operativa 1, el Plan de Emergencia ante el Riesgo de Inundaciones, debido a la evolución de la meteorología con aviso rojo en la campiña gaditana. Recomendamos extremar la prudencia, evitar desplazamientos y seguir los consejos del 112. We raise to emergency phase, operational situation 1, the Emergency Plan for the Risk of Floods, due to the evolution of the weather with red warning in the campiña gaditana. We recommend extreme caution, avoid travel and follow the advice of 112. https://lajunta.es/429vf

Miércoles, 30 de octubre

#### **Themes**

2

Good practices for accessible communication









# 7 Recommendations from the Climate Advocacy Toolkit

(Chiara Gunella and Marina Pujadas Farreras)



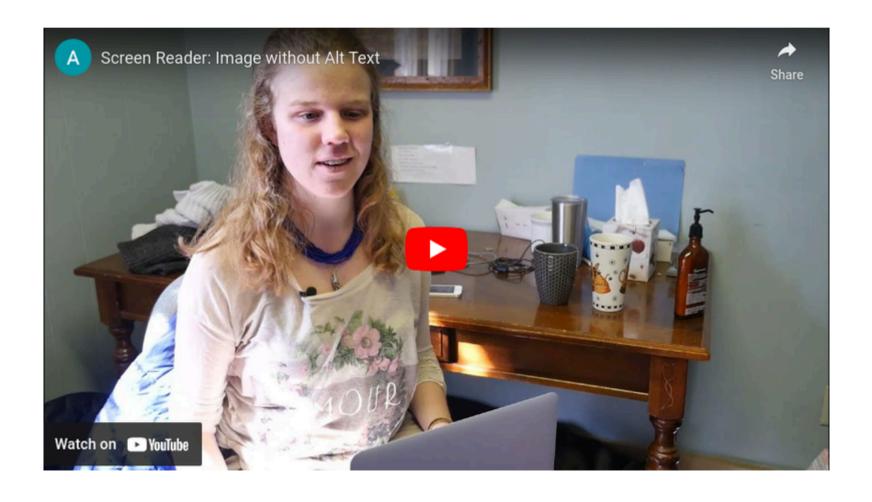




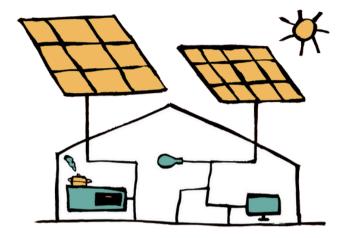


### 1. Alt Text (1/2)

Alt Text, or alternative text, is a textual description of an image that screen readers can read aloud.







Alt text: a drawing depicts a house with two large solar panels on the roof, representing the source of energy.

### 1. Alt Text (2/2)

Alt Text, or alternative text, is a textual description of an image that screen readers can read aloud.

- Be descriptive
- Stay concise
- Avoid redundancy
- Identify the type of image

(example: decorative. If you mark an image as "decorative", the screen reader will skip it. It won't read "decorative", just continue as if the image isn't there.)



# 2. Colour contrast (1/2)

- Colour blindness, or colour vision deficiency, is a condition that makes it challenging for individuals to differentiate between certain colours.
- The most prevalent type is red-green colour blindness, where distinguishing between red and green hues becomes difficult.
- This condition affects about 1 in 12 men and 1 in 200 women worldwide.
- Other types include blue-yellow colour blindness and total colour blindness, though these are less common.









Please choose: Greenblindness (Deuteranopia)

Simulation info (1)





- Colour blindness, or colour vision deficiency, is a condition that makes it challenging for individuals to differentiate between certain colours.
- The most prevalent type is red-green colour blindness, where distinguishing between red and green hues becomes difficult.
- This condition affects about 1 in 12 men and 1 in 200 women worldwide.
- Other types include blue-yellow colour blindness and total colour blindness, though these are less common.





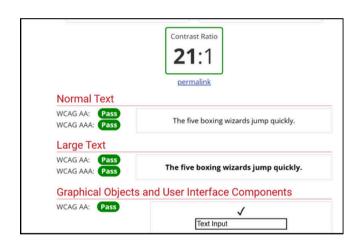


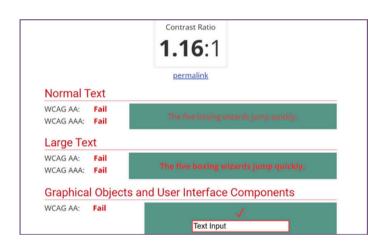


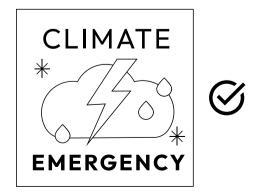


# 2. Colour contrast (2/2)

<u>Use https://webaim.org/resources/contrastchecker/</u> to check the contract of the resources you create













# 3. #CamelCase hashtags



- Using CamelCase (capitalising the first letter of each word in a hashtag) improves readability, especially for people using screen readers.
- This format helps screen readers distinguish and pronounce each word separately, enhancing clarity.
- For example, #ClimateActionNow is easier to read and understand than #climateactionnow.

# 4. The use of emojis



Each emoji has an alternative text and is converted into descriptive text for individuals using screen readers



- 1. Limit emoji use. Keep it minimal and meaningful
- 2. Placement matters: place emojis either at the beginning or at the end of your text
- 3. Choose wisely: pick emojis that directly related to your message

**5.** Audio description for Accessibility (1/2)

Audio description provides a verbal narrative that conveys what is visible on a screen, stage, image, or in a physical space for individuals who are unable to access the visual elements.

#### WITHOUT AUDIO DESCRIPTION

#### 5. Audio description for Accessibility (2/2)

- Integrate audio description directly within the video's narration, rather than as a separate audio track.
- Clearly describe the visuals, including actions, colors, context, and emotions when relevant.
- Be concise; focus on essential details and avoid excessive descriptions.
- If an element is understandable through sound alone, there's no need to describe it.
- Read aloud any written text and graphs.
- For more information, check the ebook Pictures painted in Words ADLAB Audio Description guidelines and the ISO standard ISO/IEC TS 20071



#### 6. **Subtitles (1/2)**

Subtitles are text overlays that appear on videos to convey spoken dialogue, improving accessibility and understanding for viewers.

They tackle various challenges that can obstruct audio information access, such as noisy environments, low audio quality, language differences, and hearing impairments.

Subtitles guarantee that everyone, regardless of their circumstances or abilities, can comprehend and interact with the content.

- Interlingual: translate the spoken dialogue into a different language.
- Intralingual: not only dialogue but also auditory information like background noices and music.



#### 6. Subtitles (2/2)



- Limit subtitles to a maximum of two lines per display.
- Aim for 37–40 characters per line.
- Display subtitles for a minimum of 1 second and a maximum of 6 seconds.
- Ensure readability by setting the reading speed to no more than 17 characters per second.
- Sync subtitles accurately with the audio.
- Divide two-line subtitles thoughtfully, keeping related phrases or syntactic units together.
- Ensure subtitles are grammatically correct and coherent, as they represent written text.
- Use .srt format for compatibility across platforms.

For additional guidance, refer to standards from broadcasters like the BBC or the ISO standard ISO/IEC TS 20071-25:2017.

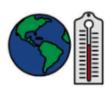


Several free platforms and software options are available for creating subtitles. Subtitle Edit is a versatile, open-source tool for Windows and Linux users, and Aegisub, another open-source option, is compatible with Mac as well. These programs offer a range of features for synchronizing, editing, and formatting subtitles.

# 7. Easy Language for accessibility (1/2)

Easy Language, often referred to as Easy-to-Read or Easy Read, is a simplified form of language designed to enhance comprehension for a wide audience. This includes individuals reading and with language challenges, seniors, language learners, and those with cognitive disabilities.

# 7. Easy Language for accessibility (2/2)



Climate change is about changes to the earth we live on.

The earth is getting warmer.

This is causing big problems for people and the planet we live on.



For example, climate change can cause weather problems like floods, too much heat and bad storms.

It can also cause problems for animals and plants.

- Use short and simple sentences
- Use common vocabulary. If you need to use complex terms, explain them.
- Avoid metaphors and figurative language
- Do not infantilise the text if it is addressed to adults
- Do not take background knowledge for granted
- If possible, let users check your Easy Language version

For more information, refer to ISO/IEC 23859:2023, the recommendations from Inclusion Europe, or the EASIT platform.

This example is from the United Nations Human Rights Council and United Nations High Commissioner for Human Rights.

#### **Themes**

3 Al and Accessibility









# Al can assist with brainstorming in communication



Generate written content

- Post for social media
- Newsletters
- Blogs
- Summarise complex documents
- Contents for website

Generate images

- Images for social media
- Images for website
- Images for conferences
- Icons for presentations

Generate audios

- Podcasts
- Songs

But...

#### Is it ethical and unbiased?



Generate written content

Check for Gender
Bias: Are pronouns
and gendered
language
appropriate and
inclusive? (e.g.,
avoiding
assumptions like
"doctor" = "he"
and "nurse" =
"she")

Generate images

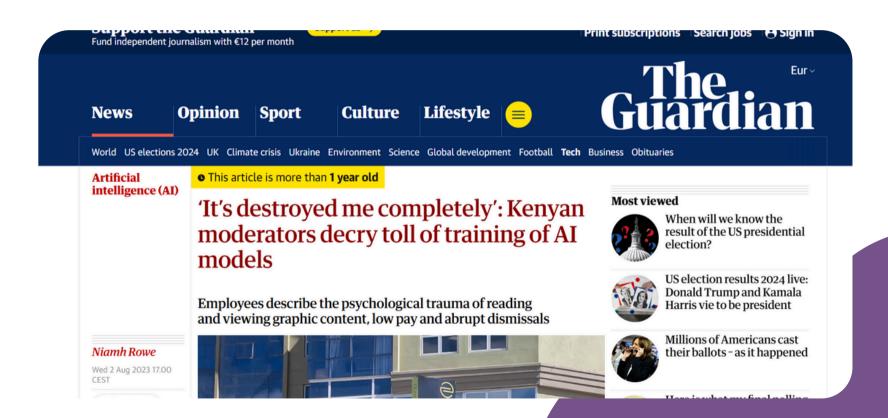
Be mindful not to associate certain backgrounds with specific clothing or environments that may reinforce stereotypes Generate audios

Check that diverse voice options are used (genders, ages, tones) to ensure inclusivity and prevent overreliance on stereotypical voices accents types.

#### What's behind AI?



The role of content moderators



Accessible communication for all

**18 November 2024** 

Chiara Gunella chiara.gunella@uab.cat











#### References



- Abbott, D., & Porter, S. (2013). Environmental hazard and disabled people: from vulnerable to expert to interconnected. Disability & Society, 28(6), 839-852.
- Larrington-Spencer, H., Fenney, D., Middlemiss, L., & Kosanic, A. (2021). Disabled environmentalisms. In Diversity and inclusion in environmentalism (pp. 15-33). Routledge.
- OHCHR, 2020. Analytical study on the promotion and protection of the rights of persons with disabilities in the context of climate change. Report of the Office of the United Nations High Commissioner for Human Rights (No. A/HRC/44/30). UN General Assembly.
- Powell, R., & Gilbert, S. (2006). The Impact of Hurricanes Katrina and Rita on People with Disabilities: A Look Back and Remaining Challenges. National Council on Disability.
- Stein, P. J., & Stein, M. A. (2022). Disability, human rights, and climate justice. Human Rights Quarterly, 44(1), 81-110.
- Uddin, T., Tasnim, A., Islam, M. R., Islam, M. T., Salek, A. K. M., Khan, M. M., ... & Haque, M. A. (2024).
   Health Impacts of Climate-change Related Natural Disasters on Persons with Disabilities in Developing Countries: A literature review. The Journal of Climate Change and Health, 100332.
- World Health Organization. (2013). Guidance note on disability and emergency risk management for health.
- World Wide Web Consortium (W3C). (2018). Web content accessibility guidelines (WCAG) 2.1. https://www.w3.org/TR/WCAG21/

TransMedia Catalonia is a research group funded by Secretaria d'Universitats i Recerca del Departament d'Empresa i Coneixement de la Generalitat de Catalunya, under the SGR funding scheme (Ref. Code 2021SGR00077). It is part of AccessCat, a knowledge transfer network supported by the Department of Research and Universities of the Generalitat of Catalonia (2021XARDI00007).

GreenSCENT is a European project, and it has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036480.

Clear Climate is a European project, and it has received funding from the European Union through the Marie Skłodowska-Curie Actions under grant agreement No. 101059546.

Alfie is a European project, and it has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement n.101177912







