

Building Accessibility into Digital Content

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Overview

- Digital Resources
- Stavanger Declaration eRead (COST)
- Screen Technologies and Cognition
- Challenges and Tensions: Design and classroom integration
- Irish context: What next?

Stavanger Declaration eRead



“Teachers and other educators must be made aware that rapid and indiscriminate swaps of print, paper, and pencils for digital technologies in primary education are not neutral. Unless accompanied by carefully developed digital learning tools and strategies, they may cause a setback in the development of children’s reading comprehension and emerging critical thinking skills”

<https://ereadcost.eu/wp-content/uploads/2019/01/StavangerDeclaration.pdf>

Web Accessibility Directive

- What is the Web Accessibility Directive?
- December 2016 (EU) and transposed into Irish law in 2020.
- Guidance from the National Disability Authority nda.ie



COST Action LEAD-ME



The main objective of LEAD-ME is to create a fruitful collaboration between stakeholders in the field of Media Accessibility: researchers, engineers, scholars as well as businesses and policymakers will be empowered with a common and unique platform for observing and influencing Media Accessibility, by contributing to existing standards and proposing new ones in Europe.

<https://youtu.be/vYwnYwJgLWw>

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To achieve this, the following objectives have been identified:

- Trace the panorama and develop a roadmap for Media Accessibility across Europe.
- Host EU funded project results to offer resilience to existing solutions.
- Internationally coordinate the development of a knowledge-producing narrative on accessibility related to the multimedia sector.
- Coordination management of policy makers to standardize regulation on accessibility topics starting from UN article 21 and 30, addressing the European Union (EU) Directive on the Accessibility of Websites and Mobile Applications, the Audiovisual Media Services Directive (AVMSD) and the European Accessibility Act.

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- Develop a platform to gather all accessibility information.
- Define both a professional and an academic curriculum for the next accessibility experts in Europe with the related certifications.
- Coordination of new experimentation and testing of innovative tools and technology applied to media content in an accessible way.

Perceivable

- Provide text alternatives for non-text content.
- Provide captions and other alternatives for multimedia.
- Create content that can be presented in different ways, including by assistive technologies, without losing meaning.
- Make it easier for users to see and hear content

Operable

- Make all functionality available from a keyboard.
- Give users enough time to read and use content.
- Do not use content that causes seizures or physical reactions.
- Help users navigate and find content.
- Make it easier to use inputs other than keyboard.

Understandable

- Make text readable and understandable.
- Make content appear and operate in predictable ways.
- Help users avoid and correct mistakes.

Robust

- Maximize compatibility with current and future user tools.

Web Content Accessibility Guidelines (WCAG)

WCAG 2.1 structure

1. Perceivable

Users must be able to perceive the webpage/app in some way, using one or more senses.

- 1.1** Text alternatives
Success criterion 1.1.1
- 1.2** Time-based media
Success criterion 1.2.1 - 1.2.9
- 1.3** Adaptable
Success criterion 1.3.1 - 1.3.6
- 1.4** Distinguishable
Success criterion 1.4.1 - 1.4.13

2. Operable

Users must be able to control and navigate interface elements (buttons, links etc.).

- 2.1** Keyboard accessible
Success criterion 2.1.1 - 2.1.4
- 2.2** Enough time
Success criterion 2.2.1 - 2.2.6
- 2.3** Seizures and physical reactions
Success criterion 2.3.1 - 2.3.3
- 2.4** Navigable
Success criterion 2.4.1 - 2.4.10
- 2.5** Input modalities
Success criterion 2.5.1 - 2.5.5

3. Understandable

The content must be understandable to its users.

- 3.1** Readable
Success criterion 3.1.1 - 3.1.6
- 3.2** Predictable
Success criterion 3.2.1 - 3.2.5
- 3.3** Input assistance
Success criterion 3.3.1 - 3.3.6

4. Robust

The content must be developed using well-adopted web standards that will work across browsers, now and in the future.

- 4.1** Compatible
Success criterion 4.1.1 - 4.1.3

WCAG3: A Working Draft

<https://www.w3.org/WAI/standards-guidelines/wcag/wcag3-intro/#compare>



Standards

- ISO/IEC TS 20071-25:2017 Information technology – User interface component accessibility. Part 25: Guidance on the audio presentation of text in videos, including captions, subtitles and other on-screen text
<https://www.iso.org/standard/69060.html>
- Led by Ester Hedberg and Anna Matamala, with input from multiple experts.
- Published in February 2017.
- Provides guidance on how captions/subtitles and other on-screen text can be transmitted auditorily. Considers other types of text in videos (scrolling titles, graphs with textual information, etc.).
- Offers recommendations on how to create and deliver audio presentations of text in videos.

Web Accessibility Statements

- The 2020 Regulations require that public bodies prepare and regularly update a detailed, comprehensive and clear accessibility statement on the compliance of their websites and mobile applications with the Regulations.
- The Accessibility statement must be available in an accessible format and be based on the model accessibility statement contained in [Commission Implementing Decision \(EU\) 2018/1523](#).
- The Accessibility Statement must include:
 - A Statement of Commitment of the public body to making its websites and mobile apps accessible
 - The Compliance Status of the public sector bodies website and mobile apps with the standards described above

Web Accessibility Statements

- A description of any content of the website or mobile application that is not accessible, the reasons for that inaccessibility and, where appropriate, any accessible alternatives provided,
- a feedback mechanism to enable any person to:
- notify the public sector body concerned of any failure of any of its websites or mobile applications to comply with the accessibility requirements
- request information in relation to those parts of the content that is inaccessible
- a link to the redress or complaint provisions, or both, as the case may be, of the Equal Status Act 2000 (No. 8 of 2000) and the Disability Act 2005 (No. 14 of 2005).

Where Can I get Advice?

- <https://universaldesign.ie/technology-ict/web-and-mobile-app-accessibility/accessibility-statement1/>
- <https://www.ahead.ie/userfiles/files/The%20Web%20Accessibility%20Directive-digital.pdf>



Sample Accessibility Statement

<https://www.ul.ie/accessibility/accessibility-statement>

Known Compliance Issues: format of documents and issues with links

E-Learning Materials and Web Accessibility

- Universal use of captioning is not currently “mandatory”
- Software and Training necessary
- Captions increase accessibility for viewers who are deaf and hard-of-hearing, boost user engagement, comprehension, and learning, and help you comply with legal requirements for live video.

What Can I Do?

Easier to plan for accessibility rather than retrofit!

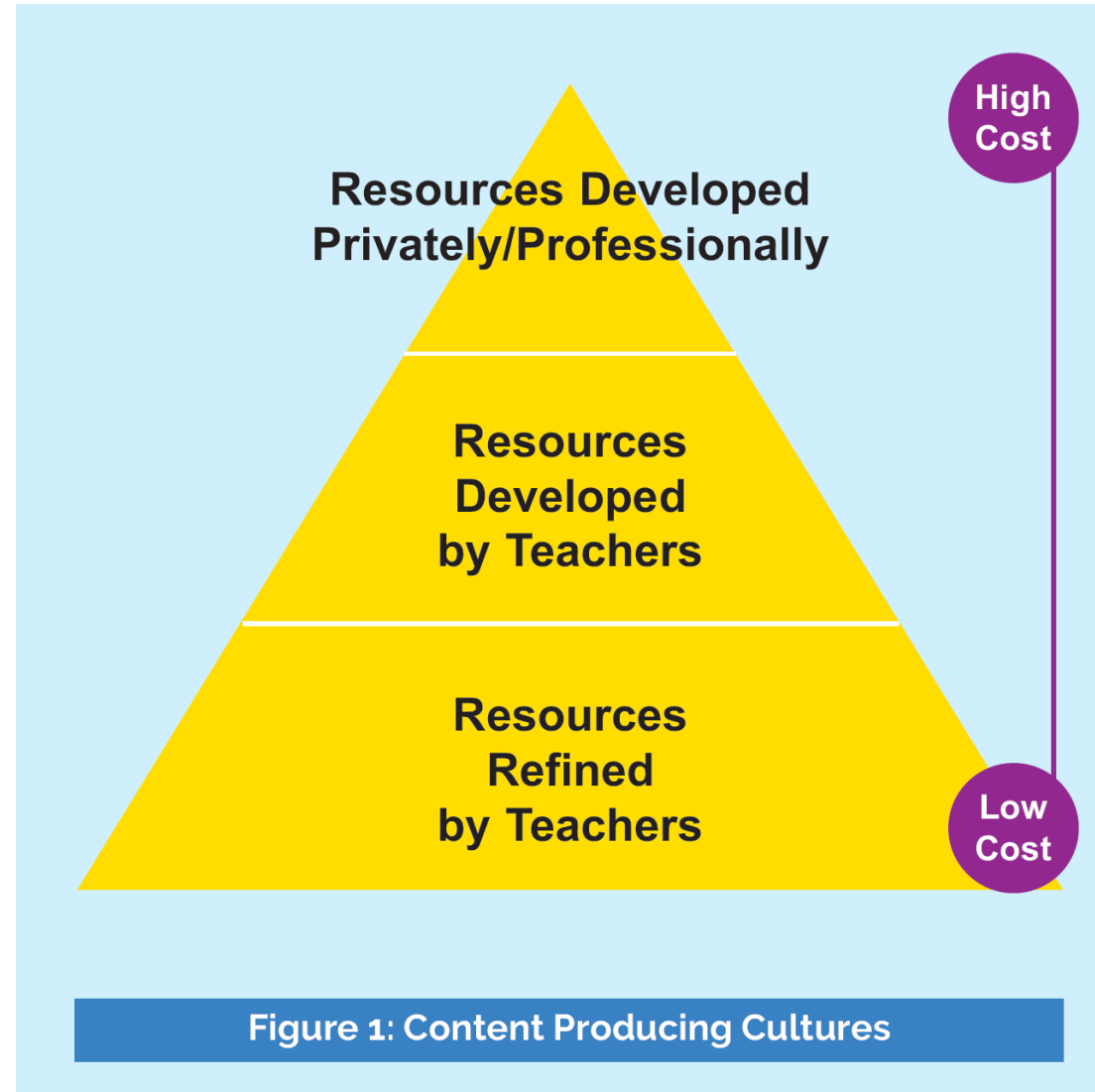
- Provide meaningful link texts....
- Provide ALT text for images....
- Use clear and simple language....
- Structure your content well....
- Use real headings....
- Make your titles meaningful and unique....
- Provide videos and audios with transcripts or captions....
- Make documents accessible...

<https://www.funka.com>



Cost of Digital

- Recurring expenses
- Provision of hardware
- Internet Access
- Software
- Human Cost



Reading

Matamala, Anna; Orero, Pilar (2018) "Standardising accessibility: Transferring knowledge to society". *Journal of Audiovisual Translation*, 1(1), 139-154. <https://doi.org/10.47476/jat.v1i1.49>

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