



Cognitive Accessibility and Easy-to-Read Methodology

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21 February 2025

**Data Science Seminars
(MSc. In Data Science)**

A pair of words from my CV

Mari Carmen Suárez-Figueroa

- **Profesora Titular de Universidad** (Senior Lecturer) at Artificial Intelligence Department (DIA) at Universidad Politécnica de Madrid (UPM)
- **Secretaria Académica** (Academic Secretary) at DIA (UPM)
- **Senior Researcher** at the Ontology Engineering Group (UPM)

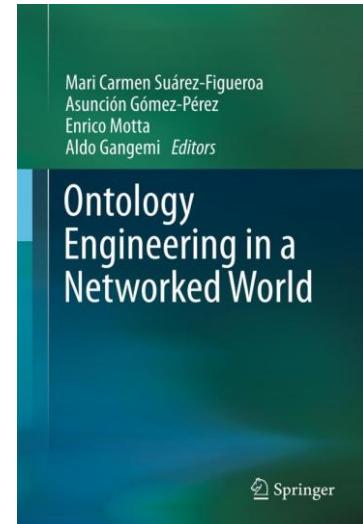


Current Research Work

- Cognitive Accessibility
- Applied and Inclusive Artificial Intelligence (AI)
- Social Aspects in AI

Past Research Work

- Ontology Development Methodologies
- Ontology Design Patterns



- Welcome to this seminar!!



- Please raise your hand if you ever ...
 - Have you got **lost in a hospital or a city** you don't know?
 - Have you tried to **read a law or news** and are you angry for not understanding it?
 - Have you been **unable to find something** you are looking for on a web page?



- <https://www.plenainclusion.org/noticias/7-vinetas-sobre-la-accesibilidad-cognitiva/>
- <https://www.ceacog.es/que-hacemos/encuesta-sobre-temas-dificiles-de-entender-en-espana/>

Sometimes the world is difficult to understand

- Welcome to this seminar!!



You are interested in
Cognitive Accessibility!

Introduction

- Disability
- Accessibility

Cognitive Accessibility

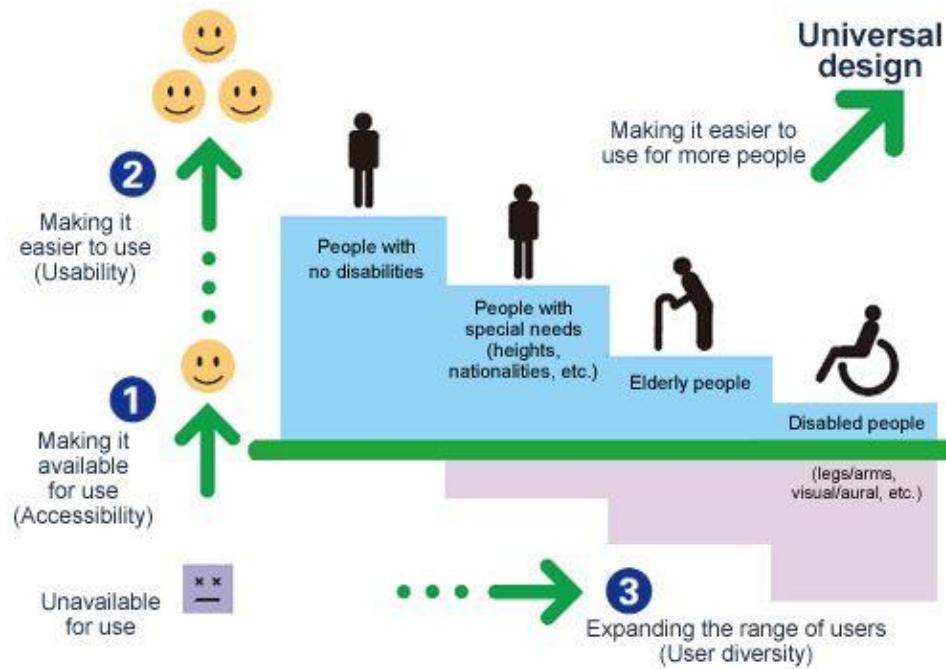
Easy-to-Read Methodology

Applied Research on Cognitive Accessibility

Seminar Assignment (Options)

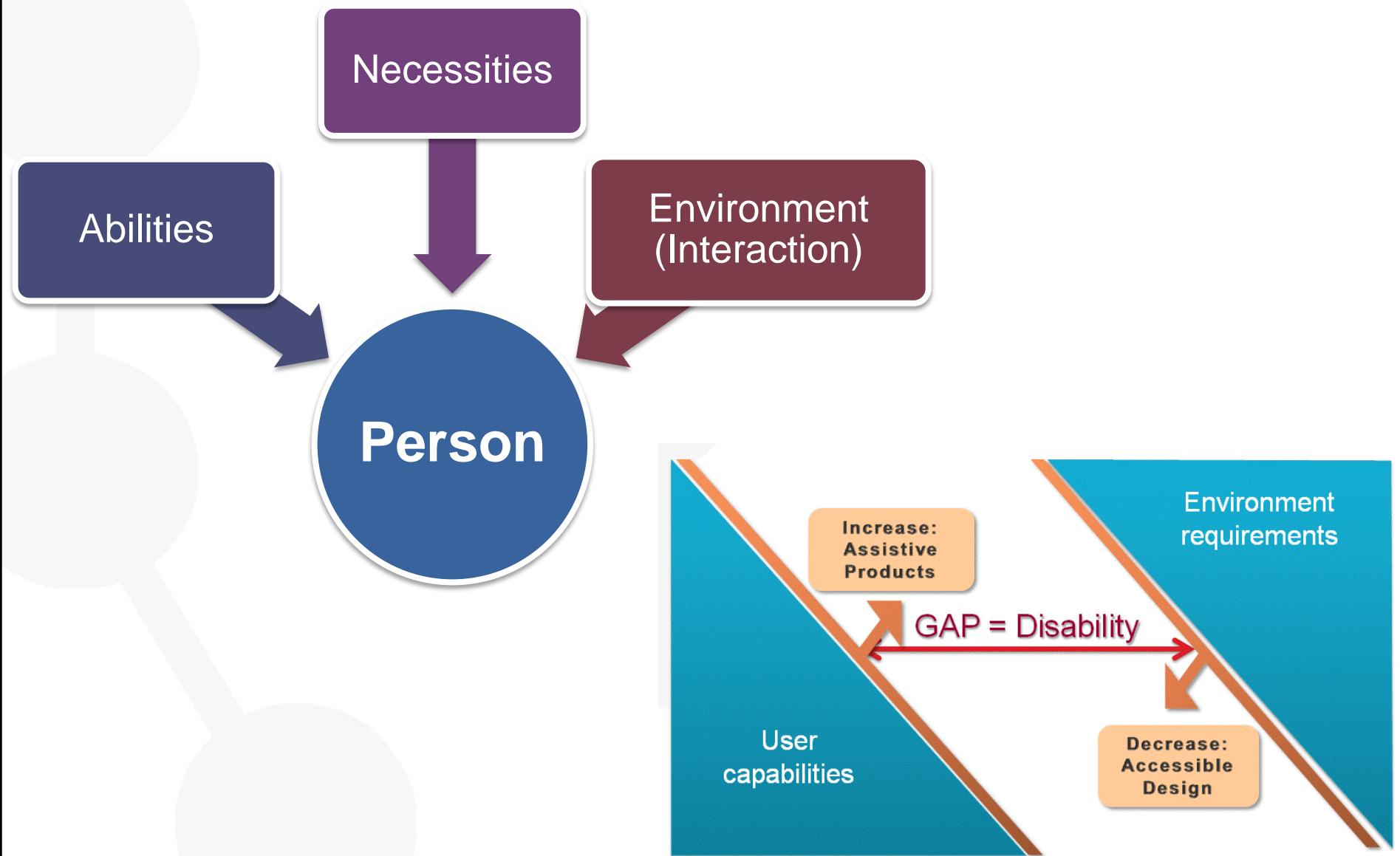
What is Disability?

- **Disability** is understood to arise from the interaction between a person's health condition or impairment and the multitude of influencing factors in their environment.
- **Disability** is related to Accessibility and Usability.



https://www.who.int/health-topics/disability#tab=tab_1

<http://access.ecs.soton.ac.uk/blog/training/universal-design/>



Disability Types

- Mobility/Physical
- Spinal Cord (SCI)
- Head Injuries (TBI)
- Vision
- Hearing
- Cognitive/Learning
- Psychological
- Invisible



<https://www.disabled-world.com/disability/types/>

<https://cpwd.org/the-unseen-understanding-invisible-disabilities/>

What is Cognitive Disability?

- English:
 - (1) <https://www.youtube.com/watch?v=K6WmGhY8Q4I>
 - <https://www.youtube.com/watch?v=9TIs8PyUVKc>
 - (2) <https://www.youtube.com/watch?v=tfkVA2BKlyY>
 - <https://www.youtube.com/watch?v=zzTCrz9Xynw>
- Spanish:
 - <https://www.youtube.com/watch?v=WZj97uGQ37I>
- **Limitations:**
 - Intellectual functioning
 - Adaptive, conceptual, social and practical behaviors of the person
- A **cognitive disability** is not a mental illness.
 - Although a person can have an intellectual disability and also a mental illness.

What is Cognitive Disability?

- **Cognitive disabilities**

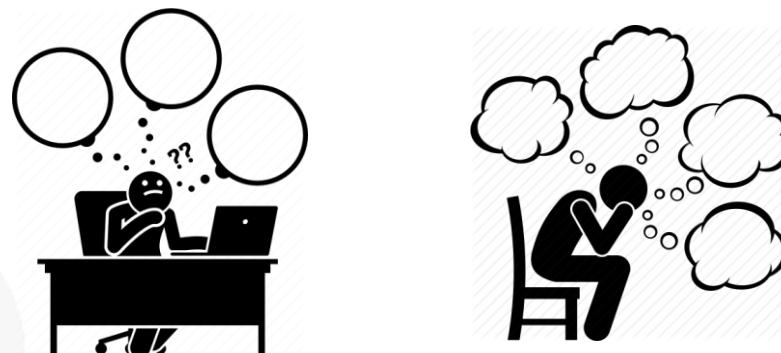
- impact the ability to access, process or remember information;
- and limit the ability to perceive, recognize, understand, interpret or respond to information.

- **Examples** of cognitive disabilities

- Loss of brain function
- Short term memory loss
- Epilepsy - may be subject to epileptic episodes
- Alzheimer's disease
- Parkinson's disease
- Multiple sclerosis

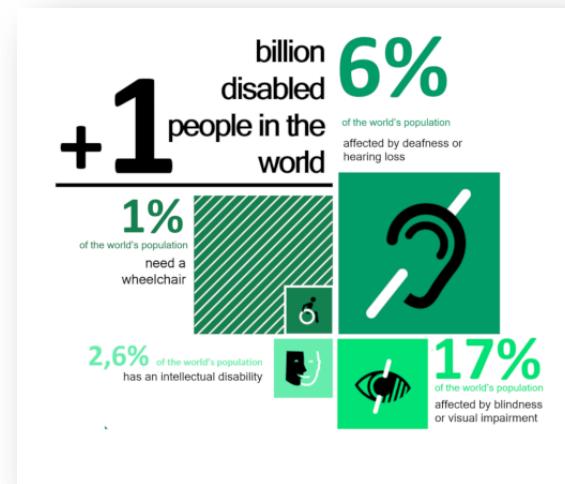
What is Cognitive Disability?

- People with cognitive disabilities have difficulties in
 - reading comprehension
 - communication
 - ability to respond to different situations
- These obstacles become a daily barrier in the understanding, interaction, and use of products and services in different environments.



Cognitive Disability: Some Data (2019)

- Spain: 270.000 people
 - Same as Granada population
- UK: 1.5 million people
- Earth Planet: 2.6% of the world's population
- 10.8% of people with a disability have a **cognition disability** with serious difficulty concentrating, remembering or making decisions.



Reading Comprehension: Some Data (2023)

- According to the UNESCO (United Nations Educational, Scientific and Cultural Organization)
 - At least 754 million young people and adults aged 15+ **lacked basic literacy and numeracy skills** in 2023.
 - Literacy rates increased from 85% to 87% between 2015 and 2023.
 - Progress has been uneven, with 63% of adults **lacking basic literacy skills** being women — that's 475 million.
 - Only 30% of young people living in crisis-affected countries are **literate**.
 - Children and adolescents with disabilities are 42% less likely to have foundational **reading and numeracy skills**.



<https://unesdoc.unesco.org/ark:/48223/pf0000391050/PDF/391050eng.pdf.multi>

Universal Design

Diversity when designing things

To make things properly from the beginning

Design for All

What is Accessibility?

- Accessibility is better understood with examples
 - English:
 - <https://www.youtube.com/watch?v=CfNEMXfdV70>
 - (1) <https://www.youtube.com/watch?v=Nrk5jRYpmfA>
 - Spanish:
 - <https://www.youtube.com/watch?v=25hRs5IH8rA>



Why Accessibility is Important?

- According to the UN Convention on the Rights of Persons with Disabilities, all persons with all types of disabilities must enjoy all human rights and fundamental freedoms.
- This implies that people with disabilities need to have physical and social access to the same spaces, employment, goods, services, information, entertainment, and community participation as everyone else.



<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>

What is Universal Accessibility?

Physical Accessibility

- Curbs, ramps or adapted bathrooms.



Sensory Accessibility

- Braille, sign language, sound of traffic lights or tactile pavement.



Cognitive Accessibility



Universal Accessibility: Related to Legislation

- **Convention on the Rights of Persons with Disabilities (Article 9)**

- “To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas.”

- **European Accessibility Act**

- A directive that aims to improve the functioning of the internal market for accessible products and services, by removing barriers.

<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-9-accessibility.html>

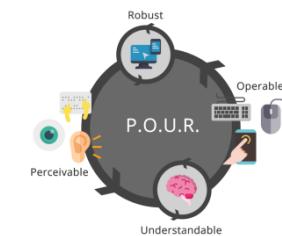


<https://ec.europa.eu/social/main.jsp?catId=1202&langId=en>

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0882>

- We should think on Accessibility as a road
 - It is crucial that every step is accessible
 - This way of thinking is called “**Accessibility Chain**”
- **Accessibility Chain:**
 - To think on all the steps needed for using something
 - To make accessible all of them
 - Accessibility should be a continuous process
- Example in English:
 - <https://www.youtube.com/watch?v=QNH2-9GDdHA>
- Example in Spanish:
 - <https://www.youtube.com/watch?v=5sYdkQizGJ4&feature=youtu.be>

- **Web Accessibility: Essential for some, useful for all**
- **Making the Web Accessible** (<https://www.w3.org/WAI/>)
 - The W3C Web Accessibility Initiative (WAI) develops standards and support materials to help you understand and implement accessibility.
- **Web Accessibility Perspectives**
(<https://www.w3.org/WAI/perspectives/>)
 - Impact of accessibility and the benefits for everyone in a variety of situations.
- **Accessibility 101**
(<https://www.d.umn.edu/itss/training/online/access/>)
 - The "what", "who", "why", "how" and "when" of web accessibility.
- **Constructing a POUR Website**
(<https://webaim.org/articles/pour/>)
 - Putting People at the Center of the Process
 - POUR: Perceivable, Operable, Understandable, Robust



What is Cognitive Accessibility?



- Cognitive Accessibility Examples (Spanish):
 - (1) <https://www.youtube.com/watch?v=eT1NtGWfUeM>
 - <https://www.youtube.com/watch?v=eKbDYO8ovl4>
 - <https://www.youtube.com/watch?v=V9Hs0DYm1ig&feature=youtu.be>

What is Cognitive Accessibility?

- Feature related to things that are **easy to understand**.
- Making your product **better for all** your users
- Cognitive Accessibility may be defined as the **environment understanding**. This implies
 - to have good ways of indicating spaces and directions
 - to provide information in an easy to read way
 - to have Design for All
 - to include support resources in communication
 - to think about personalization issues
- Spanish Definition: “Característica que tienen las cosas, los espacios o los textos que hace que los entiendan todas las personas”
 - <http://diccionariofacil.org/diccionario/A/accesibilidad-cognitiva.html>



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Who benefits from Cognitive Accessibility?

- Cognitive Accessibility **benefits all the people**
 - All of us have found complex things in our life
- Some groups of people needs **more cognitive accessibility**
 - People with intellectual disabilities
 - Dyslexia
 - Low comprehension
 - Low reading
 - Other non-verbal learning difficulties
 - Older people with cognitive impairment
 - Migrants
 - People with mental illness
 - People with cerebral palsy

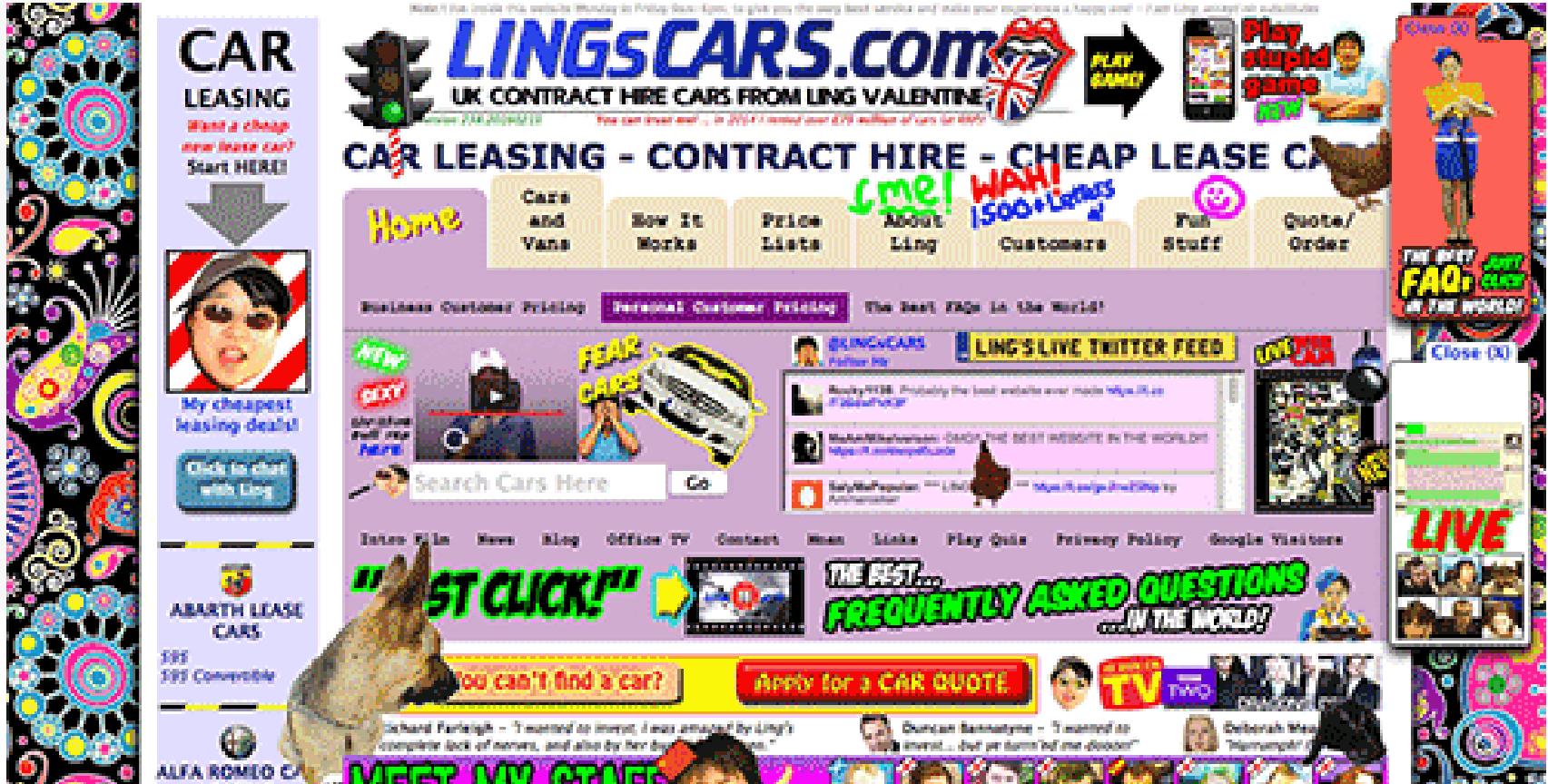
Cognitive Accessibility: Where?

- Any product like a film or book
- Any process like voting in president elections
- Any environment like a hospital or a library
- Any device like a phone or a PC
- Any software application
- Any software service

How Cognitive Accessibility can be measured?

- It seems other types of accessibilities are easier to measure.
 - There are several norms and laws that explain how a ramp or a lift should be to ensure the integrity of a person in wheelchair.
- But, **how do we measure whether a film, an app or a building are easy to understand?**
 - There are several guidelines and recommendations.
 - However, these do not ensure that something is easy to understand.
 - The **opinion of people with cognitive impairments** is key to measure cognitive accessibility.

Examples: Is it understood or not understood?



OVERSTIMULATION

Examples: Is it understood or not understood?

Rakuten.com
Shopping Is Entertainment!

BACK TO SCHOOL

Get Rakuten Super Points! | Login | Email Sign-Up | Feedback | Sell | Help |  | [SELL ON RAKUTEN.COM](#) | [LEARN MORE](#) |  | [Cart \(0\)](#)

Computers & Office	Electronics	Fashion & Beauty	Video Games	Books, Movies, Music	Home & Household	Health & Fitness	Toys & Baby	Deals & More
Home & Outdoor ▾ Home Appliances Kitchen & Dining Furniture More...	Home Appliances ▾ Kitchen Vacuums Cooling & Heating More...	Kitchen & Dining ▾ Cookware Tableware Kitchen Tools More...	Furniture ▾ Living Room Bedroom Dining Room More...	Top Brands Cuisinart Weber Haier LG Miele				
Bedding & Bath ▾ Pillows Sheets Bath More...	Home Décor ▾ Artwork Lighting Rugs More...	Patio & Garden ▾ Ornits Patio Furniture Gardening More...	Top Stores OPO Outlets Zoro					
Luggage & Bags ▾ Handluggage Rolling Spinner Travel Accessories Bags More...	Home Improvement ▾ Plumbing Tools Power Tools Flooring Safety & Security More...	Gift Cards ▾ Dining Entertainment Shopping More...						
Food & Gourmet ▾ Coffee International Foods Organic Foods More...	Everything Else ▾ Pets Musical Instruments Sports & Outdoors Entertainment & Hobbies Automotive, Tools, and More More...							

TOO MANY OPTIONS

 School Supplies ▾
Backpacks & Lunch Bags ▾

 **SHOP NOW**

Examples: Is it understood or not understood?

  **www.ARNGREN.net** 

23 Butikker Index (Fra 07.11.2004) < Frihjel i sin Fly-Bil

Teknologi & Gadgets Index el-retur

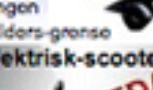
Walkere 
QR X350 PRO

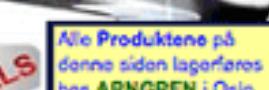
el-moped med skilt (16 år) kr. 10.998,-

el-ATV med Skilt (16 år) kr. 16.998,- **Nyhet!**

Forbruker Elektronikk 
6,7hk

Gressklipper kr. 3998,-

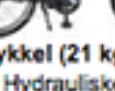
Elektrisk-scooter 
PEDALS

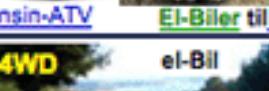
Ingen alders-gronso 
Uten skilter **7998,-**

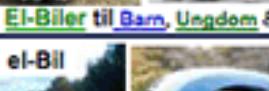
Alle Produktene på denne siden lageres hos ARNGREN i Oslo. Se Lagerkoden etter Prisene (lev. 2 - 5 dager):

- Er på Lager
- Kommer før 3 uker
- Langt over 3 uker

El-ATV til Barn & Voksne fra kr. 3998,- 
kr. 3.998,- 
kr. 9.998,- 
kr. 4998,- 
kr. 4998,- 
kr. 4998,- 
kr. 4998,- 
kr. 4998,-

Mercedes SUV m/ Gummi-Hjul fra kr. 2998,- 
el-ATV 
kr. 2998,- 
kr. 2998,- 
kr. 2998,- 
kr. 2998,- 
kr. 2998,- 
kr. 2998,-

Bensin-ATV 
kr. 2998,-

El-Biler til Barn, Ungdom & Voksne 
el-Bil 
kr. 7.998,-

el-Bil ; Cross-Rider fra kr. 89.998,- 
4WD 
kr. 89.998,- 
el-ATV 
kr. 79.998,- 
el-bil (16 år & moped-Lappen) kr. 29.998,- 
kr. 29.998,-

el-Sykkel (21 kg), med Hydrauliske Skivebremser, Punkteringsfrie-dekk, fra kr. 7.998,- 
el-Sykkel (21 kg),
med Hydrauliske
Skivebremser,
Punkteringsfrie-dekk,
fra kr. 7.998,-

el-bil kr. 59.998,- 

TOO MUCH CONTENT

Examples: Is it understood or not understood?



AMBIGUOUS INTERFACE

Examples: Is it understood or not understood?

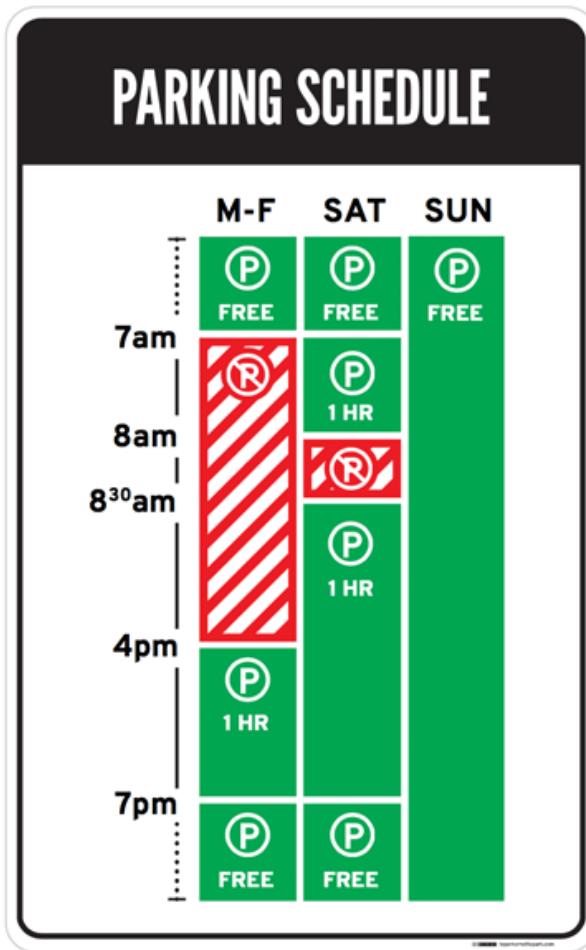
41



INFORMATION OVERLOAD

Examples: Is it understood or not understood?

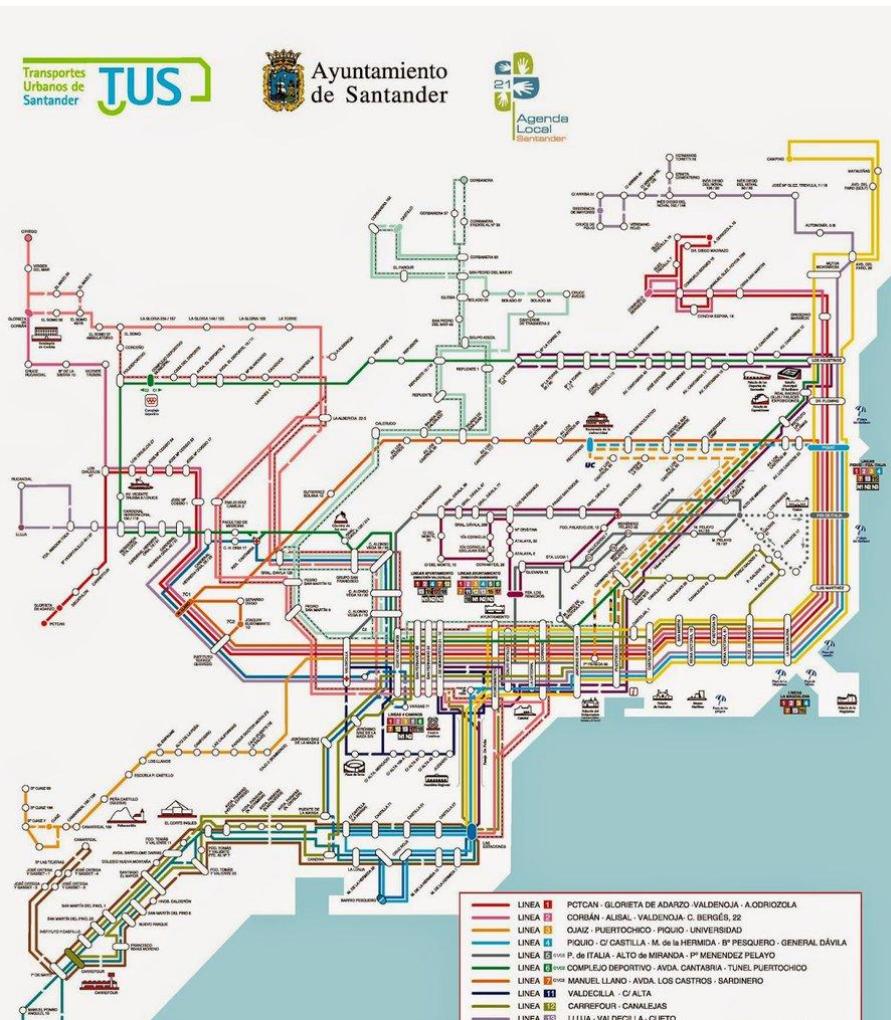
42



SOLVING INFORMATION OVERLOAD

Examples: Is it understood or not understood?

43



INFORMATION OVERLOAD

Examples: Is it understood or not understood?

44



AMBIGUOUS INFORMATION

Examples: Is it understood or not understood?



Please, pull
the chain!

CONFUSING INFORMATION

Examples: Is it understood or not understood?

46



**ONLY TEXTUAL INFORMATION
(SEVERAL LANGUAGES)**

Examples: Is it understood or not understood?

48



**CAOTIC ORGANIZATION,
BAD CONTRAST**

Examples: Is it understood or not understood?

49



CAOTIC ORGANIZATION

Examples: Is it understood or not understood?

50



TOO MUCH INFORMATION

Examples: Is it understood or not understood?

51



One Way to improve Cognitive Accessibility

54



Good Example of Cognitive Accessibility

55

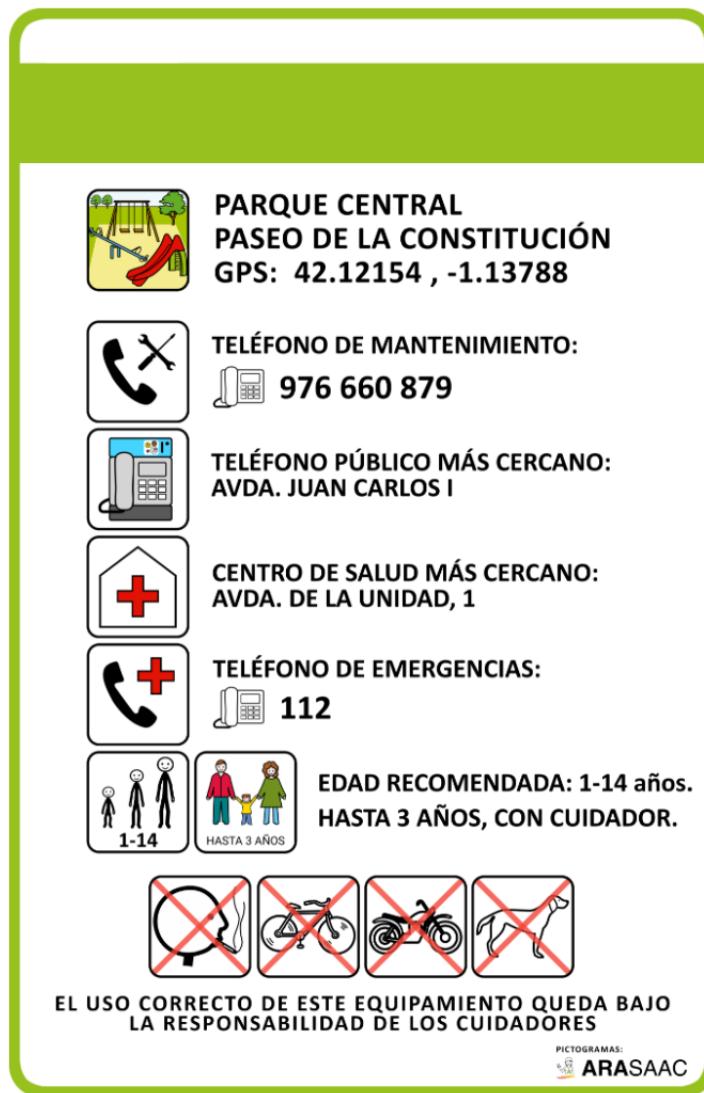


Good Examples of Cognitive Accessibility



Good Example of Cognitive Accessibility

57



How Cognitive Accessibility can be improved?

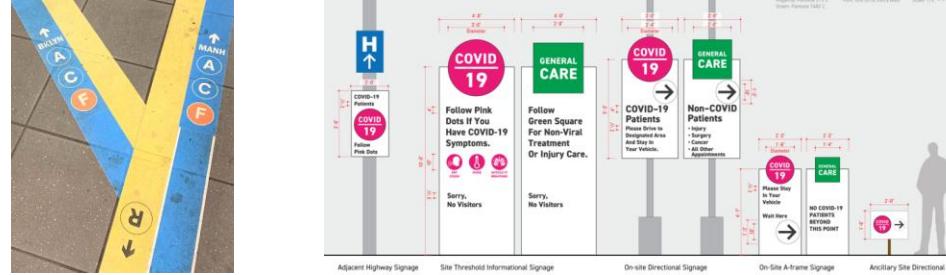
- General actions:
 - Overlap between cognitive accessibility and more traditional means of accessibility
 - Use of color for cognitive accessibility
 - The importance of visual simplicity and white space
 - The importance of simple language and vocabulary
 - The importance of the use of a variety of presentation methods



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How Cognitive Accessibility can be achieved?

- To apply the **Easy-to-Read (E2R) Methodology**
- To use **Wayfinding**
 - A system of text, graphics and tactile information at the right time and the right place to guide people to their destinations.
 - It is a process that people use to navigate unfamiliar surroundings.



- To design **Accessible Technology**

Cognitive Disabilities

- People with cognitive disabilities have difficulties in
 - reading comprehension
 - communication
 - ability to respond to different situations
- These obstacles become a daily barrier in the understanding, interaction, and use of products and services in different environments.



Is this text easy to read?

1

The Master's in Data Science is a one-year programme developed to provide professionals in Informatics Engineering, Computer Science and Computer Technology with the skills and knowledge they need to face the challenges posed by the high demand for solutions to successfully conduct the different stages involved in the data-science workflow: data preparation, actual analysis, report and communication, and considering both the methodological and technological aspects of the process. The ultimate goal is to solve complex problems through innovative methods applicable to fields as varied as Digital Marketing, Social Networks, Human Resources, E-commerce, Internet of Things, Financial Analytics, Biology, and Biomedicine, to name only a few..

Is this text easy to read?

2

The Master's in Data Science is a one-year programme developed to provide professionals in Informatics Engineering, Computer Science and Computer Technology with the skills and knowledge they need to face the challenges posed by the high demand for solutions to successfully conduct the different stages involved in the data-science workflow: data preparation, actual analysis, report and communication, and considering both the methodological and technological aspects of the process. The ultimate goal is to solve complex problems through innovative methods applicable to fields as varied as Digital Marketing, Social Networks, Human Resources, E-commerce, Internet of Things, Financial Analytics, Biology, and Biomedicine, to name only a few.

Is this text easy to read?

③

The Master's in Data Science is a one-year programme developed to provide professionals in Informatics Engineering, Computer Science and Computer Technology with the skills and knowledge they need to face the challenges posed by the high demand for solutions to successfully conduct the different stages involved in the data-science workflow: data preparation, actual analysis, report and communication, and considering both the methodological and technological aspects of the process. The ultimate goal is to solve complex problems through innovative methods applicable to fields as varied as Digital Marketing, Social Networks, Human Resources, E-commerce, Internet of Things, Financial Analytics, Biology, and Biomedicine, to name only a few.

Is this text easy to read?

4

The Master's in Data Science is a one-year programme developed to provide professionals in Informatics Engineering, Computer Science and Computer Technology with the skills and knowledge they need to face the challenges posed by the high demand for solutions to successfully conduct the different stages involved in the data-science workflow: data preparation, actual analysis, report and communication, and considering both the methodological and technological aspects of the process. The ultimate goal is to solve complex problems through innovative methods applicable to fields as varied as Digital Marketing, Social Networks, Human Resources, E-commerce, Internet of Things, Financial Analytics, Biology, and Biomedicine, to name only a few.

Is this text easy to read?

If a text is difficult to read,
the meaning of the text will be lost.

5

The Master's in Data Science is a one-year programme developed to provide professionals in Informatics Engineering, Computer Science and Computer Technology with the skills and knowledge they need to face the challenges posed by the high demand for solutions to successfully conduct the different stages involved in the data-science workflow: data preparation, actual analysis, report and communication, and considering both the methodological and technological aspects of the process. The ultimate goal is to solve complex problems through innovative methods applicable to fields as varied as Digital Marketing, Social Networks, Human Resources, E-commerce, Internet of Things, Financial Analytics, Biology, and Biomedicine, to name only a few.



Cómo mejorar la accesibilidad de tus documentos de forma sencilla.
Olga Carreras Montoto, IX Seminario GATE – 20 junio 2024

Is this text easy to understand?



"The party of the first part shall be known in this contract as the party of the first part."

Salud, Tecnología, Empleo y Medios de información tampoco son del todo claros

Más de la mitad de la población no les entiende bien alguna o todas las veces

5 de cada 10



PERSONAS ENCUESTADAS

NO ENTIENDEN



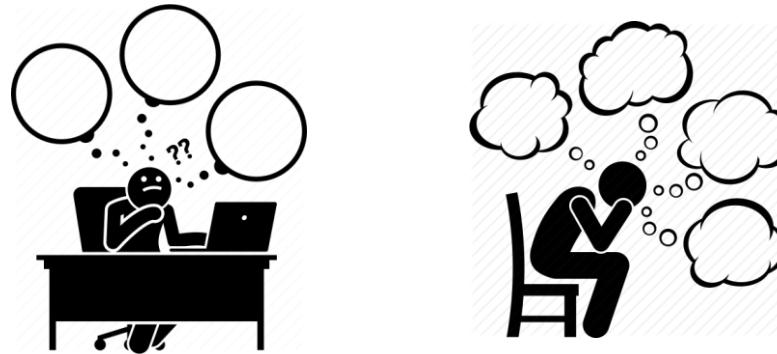
Cómo mejorar la accesibilidad de tus documentos de forma sencilla. Olga Carreras Montoto. IX Seminario GATE – 20 junio 2024



<https://www.ceacog.es/que-hacemos/encuesta-sobre-temas-dificiles-de-entender-en-espana/>

The Easy-to-Read (E2R) Methodology

- People with cognitive disabilities have difficulties in
 - reading comprehension
 - communication
 - ability to respond to different situations



- To overcome the aforementioned barriers and to improve the daily life of people with cognitive disabilities, a **methodology called Easy-to-Read (E2R)** (IFLA, 2010) was created.

The Easy-to-Read Methodology

- The Easy-to-Read Methodology (IFLA, 2010)



- is the result of a social need
- has the general goal of ending the discrimination of people with intellectual disabilities
- helps to guarantee the exercise of rights included in the UN Convention on the Rights of Persons with Disabilities
 - This convention emphasizes that the access to information in Plain or Easy-to-Read Language is a matter of democracy and inclusion



<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-9-accessibility.html>

The Easy-to-Read Methodology

- The **Easy-to-Read Methodology** (IFLA, 2010) aims to have understandable content and accessible information for people with learning difficulties
- The main goal is to present clear and easily understood contents for different sectors of the population

People with a disability

- They have a permanent need for easy-to-read products

Readers with limited language or reading proficiency

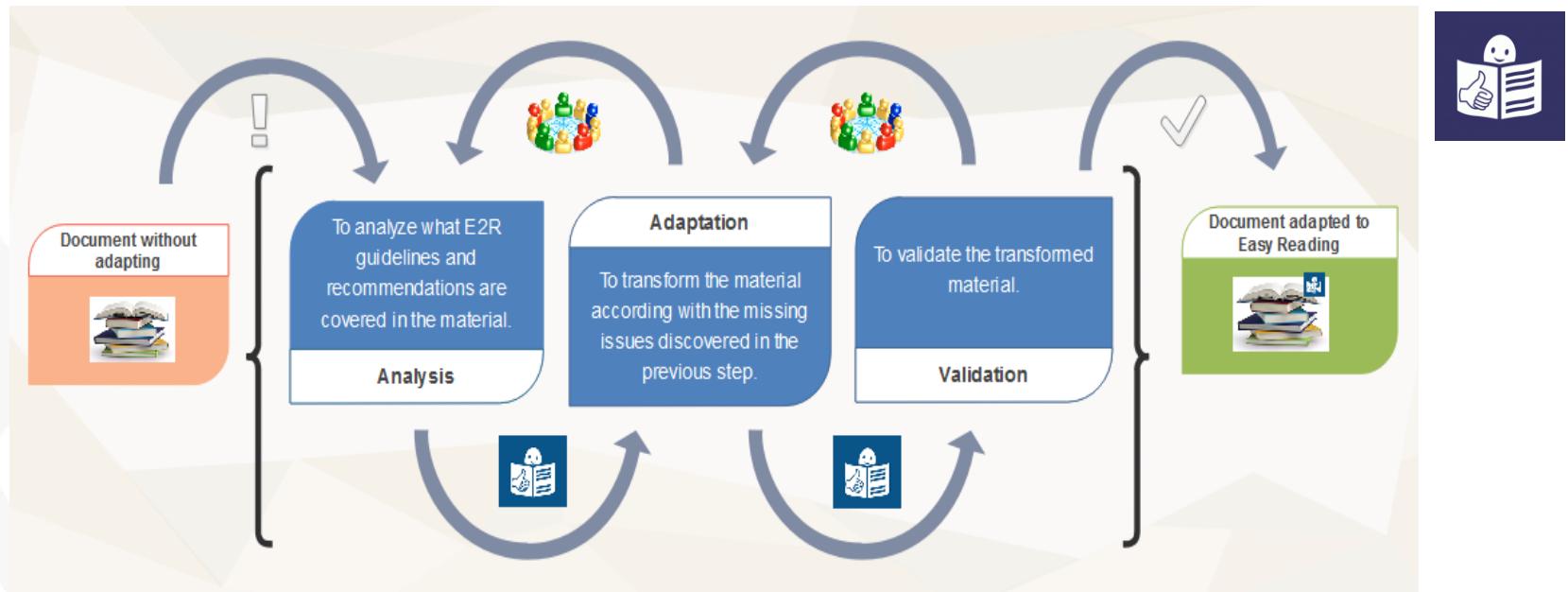
- They may find this kind of material useful, for a period of time

The Easy-to-Read Methodology: Some Videos

- English:
 - (1) <https://www.youtube.com/watch?v=CiPk02sOipE>
 - <https://www.youtube.com/watch?v=02VtiYWPPu4>
- Spanish:
 - <https://www.youtube.com/watch?v=gbPXbMo7NiQ>
 - <https://www.youtube.com/watch?v=0dZ4Lu5hraq>

How the Easy-to-Read Methodology is used

- The process of adapting a particular material to be compliant to E2R guidelines is cyclic
 - Three key activities are performed as part of a cyclic process



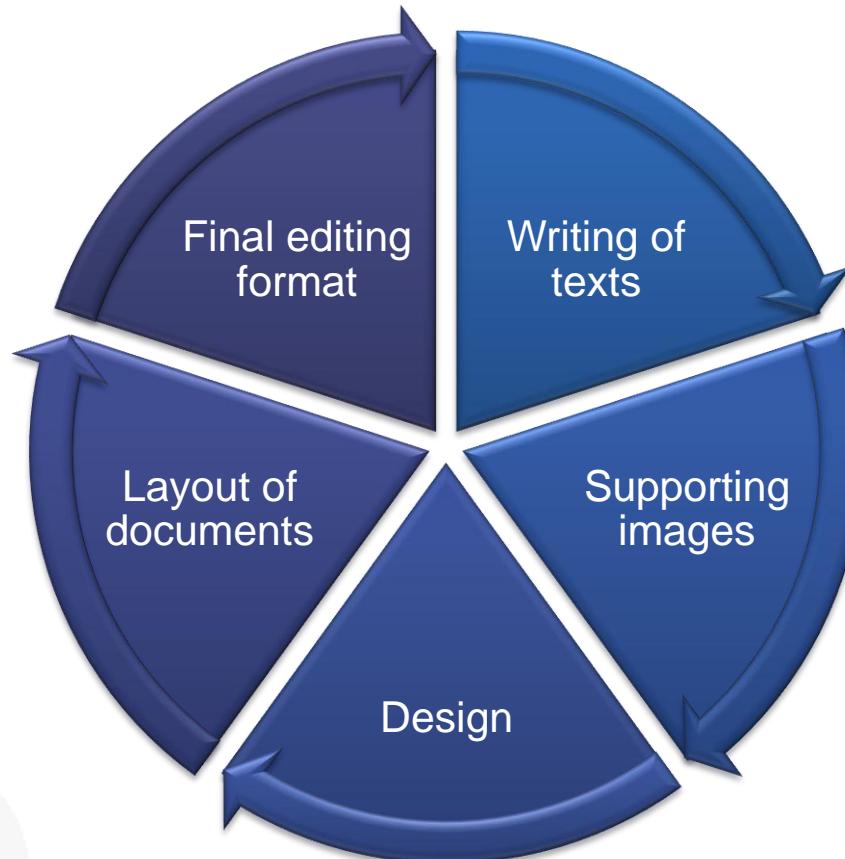
- When the two first activities (analysis and adaptation) are exhaustive and meticulous, the difficulty in the validation process decreases considerably

The Easy-to-Read Methodology: References

- IFLA: Guidelines for Easy-to-Read Materials. International Federation of Library Association and Institutions IFLA Professional Reports 120. (2010).
- Inclusion Europe: Information for All. European standards for making information easy to read and understand. (2009)
- In 2018, the Spanish Association for Standardization (UNE) has published the experimental standard “UNE 153101 EX: Easy to read. Guidelines and recommendations for the elaboration of documents”
 - This is the first technical norm related to the E2R Methodology

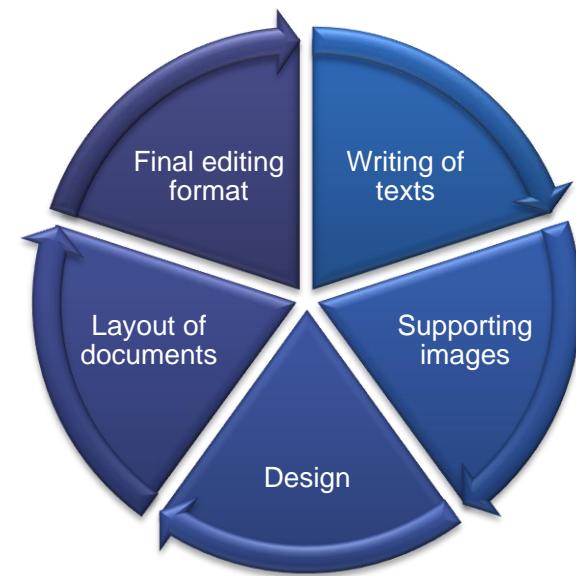
The Easy-to-Read Methodology: Aspects

- The E2R Methodology provides guidelines, requirements, and recommendations for different aspects of a document



E2R Methodology: Some Guidelines

COMPONENTS	LEVELS	ASPECTS
Writing	Spelling	Capital letters
		Punctuation
		Other punctuation marks
		Numbers
		Numerical figures
		Monetary amounts
		Phone numbers
		Dates
	Grammar	Verbs
		Parts of the sentence
		Sentences
	Vocabulary	Complexity of vocabulary
		Lexical units
		Semantic accidents
	Style	General guidelines



COMPONENTS	LEVELS	ASPECTS
Design and Layout	Images	Semantic features
		Technical features
	Typography	Layout
Composition of Text	Typographic variety	Typographic variety
		Typographic features
	Lines	Lines
		Paragraphs
		Material
	Layout details	Layout details
		Space distribution



Based on the catalogue presented in "Lectura fácil: Métodos de redacción y evaluación" (2012)

E2R Methodology: Guidelines about Spelling

- Keep the punctuation simple.
- Avoid all special characters where possible, like \, &, <, § or #.
- Avoid all abbreviations like “e.g.” or “etc.”.
- Be careful with numbers.
 - Write numbers as digits, not as words.
 - Never use Roman numerals like V, X or XVI.
- Percentages (63%) and big numbers (1,758,625) are hard to understand.
 - Try not to use percentages and big numbers.
 - Instead, use words like “few” and “many” to explain what you mean.

E2R Methodology: Guidelines about Grammar

- Always keep your sentences short.
- Use positive sentences rather than negative ones where possible.
- Use active language rather than passive language where possible.
- Speak to people directly.
 - Use words like “you” to do this.
- Be careful when you use pronouns.
- Always start a new sentence on a new line.
- Never split 1 word over 2 lines.
 - This means never use a hyphen (-) to split a word over 2 lines.
- Where possible, use the present tense rather than the past tense.

E2R Methodology: Guidelines about Vocabulary

- Use **easy to understand words** that people know well.
 - Do not use difficult words.
 - If you need to use difficult words, make sure you always **explain them clearly**.
- Do not **use words from other languages** unless they are very well known.
- Use **the same word to describe the same thing** throughout your document.
- Use **examples** to explain things.
 - Try to use examples that people know from their everyday lives.
- Avoid using **initials**.
 - Use the word in full where possible.
 - If you have to use initials, explain them.
- Do not use difficult ideas such as **metaphors**.
 - E.g.: It is raining cats and dogs.

E2R Methodology: Guidelines about Typography

- Always use a font that is clear and easy to read.
 - For example, Arial or Tahoma are clear and easy to read fonts.
 - Try to use only 1 type of writing in your text.
- Always use large writing.
 - You should use writing which is at least the size of Arial 14.
- Do not write whole words in capitals.
 - Lower case letters are easier to read.
- Use underlining with caution.
- Where possible, avoid writing in colour because some people cannot tell the difference between colours.
 - People might need to photocopy your document in black and white.
 - Some colours do not stand out well against certain backgrounds.

E2R Methodology: Guidelines about Composition of Text

- Do not put too much **text**.
- Leave **space** between paragraphs.
- Do not write in **columns**.
- Align your text to the **left of the page**.
 - Never justify your text. Justified text has big gaps between words and is harder to read.
- Try not to use too many **layers of subtitles or bullet points**.
- Use **bullet points** to list things.
 - A list of words separated by commas is not easy to read.
- **Graphs and tables** can be very hard to understand.
 - When you use graphs or tables, make them simple and explain them well.

E2R Methodology: Guidelines about Images

- Include **images** to describe what the text is about.
 - Many people find it hard to read text.
 - Always choose images that are **clear, easy to understand** and go well with the piece of text they are helping to explain.
 - Images are things like photographs, drawings, pictograms, or symbols.
- Always use images that are good and right for the people you are writing for.
- Where possible, try to use the **same style of images** throughout your document.

E2R Guidelines Compliance

- E2R guidelines in a document can be evaluated manually
 - by means of **using checklists**
 - by **involving E2R experts and people with cognitive disabilities.**
- Manual approaches are labour-intensive and costly.
- Semi-automatic tools (the so-called **validators**) could be used to analyze E2R guidelines in document.
- Existing approaches are mainly focused on E2R guidelines related to writing aspects.
 - Aspects related to the design and layout of a document have not been yet considered.

Simple Examples

Por ejemplo: mascarillas quirúrgicas, guantes o gel hidroalcohólico.



También tenemos que hacer adaptaciones para cumplir las normas del Gobierno: colocar mamparas, señales o información accesible.

En estos servicios participan y viven muchas personas.

Si no tenemos todo esto, hay más riesgo de contagios y muertes en estos centros.



Inclusion Europe published a new edition of [Europe for Us](#) of 2021!

Europe for us is our newsletter for [self-advocates](#). It is published in [easy-to-read](#).

The newsletter is available in English, French, German, Hungarian, Italian, Romanian, and Spanish.

We hope that you enjoy it and find it useful.

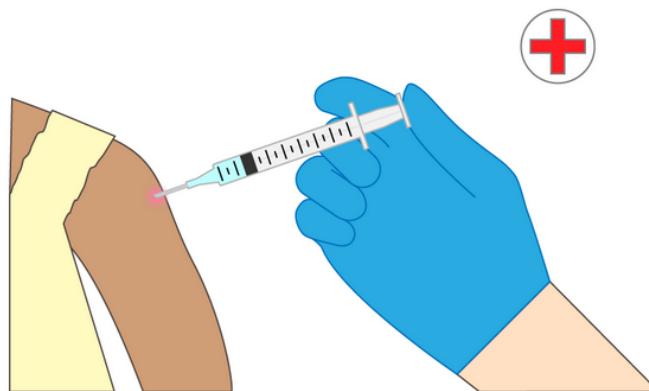


Difficult words

Some important words might be hard for people to read and understand. A difficult word might have 3 or more syllables.

- If you need to use a difficult word, write it in **bold**.
- Define the difficult word in the next sentence or phrase.
- If you have defined a lot of words, include a glossary at the end of your document. Call it a word list.

Example



Immunisation protects your baby from some diseases.

Immunisation means a doctor or nurse gives your baby a needle with a **vaccine** inside.

The vaccine is the medicine that protects your baby from some diseases.

Journal in Easy-to-Read

Easy for Me
Issue 03
June 2020

The arts and crafts issue
Meet our readers. Get creative. Have fun at home.

Cooking at home

Here are some healthy meals you can make with ingredients you might already have at home.



Vegetable stir fry

Ingredients

- 2 teaspoons of vegetable oil
- 2 cloves of garlic, crushed
- 3 cups of vegetables
- 200-300 g of protein – meat, chicken or tofu
- 2 tablespoons of a sauce you like, such as soy, oyster or sweet chilli

Steps

1. Chop the vegetables that you want to use. Try to make all the pieces the same size.
2. Chop up the protein if you want to add it.
3. Heat the oil in a large frying pan or a wok.
4. Fry the onion first, if you're using it.
5. Add the chicken, meat or tofu if you are using it. Fry it until it is brown on most sides.
6. Add any hard vegetables such as carrots, capsicum and zucchini first. They can take a while to cook.
7. Add the garlic now.
8. Add any other vegetables like mushrooms, broccoli or leafy greens such as bok choy. Stir them through until they go soft.
9. Add the sauce and stir it through.



Making a dreamcatcher



Did you know that dreamcatchers come from the Native Americans?

Their legend says that there was a woman who looked after all the children at night.



But when families moved away, she couldn't reach them anymore.

So the children's mothers made dreamcatchers to help protect them.

They would hang the dreamcatchers above the children's beds.



They said the dreamcatchers would:

- catch bad dreams
- only let good dreams through.



We explain how to make your own dreamcatcher on the next page.



What you will need

- Beads
- 3 different colours of thick thread
- A metal hoop



<https://www.easyforme.com.au/>

Scientific Dissemination in Easy-to-Read



Las ballenas jorobadas pueden aprender canciones

Las ballenas jorobadas macho pueden aprender canciones de ballenas que están en otras zonas del océano.

Los investigadores descubrieron que la dificultad de las canciones se podía ver midiendo la cantidad y la duración de los sonidos que emiten las ballenas.

Es importante proteger a las ballenas jorobadas

Las ballenas jorobadas aprenden el canto cuando comen en las mismas zonas o en las mismas **rutas migratorias** que otras ballenas. Estas zonas son la Antártida y Nueva Zelanda.

Esto demuestra que es muy importante defender estas zonas porque las ballenas jorobadas han estado en peligro de extinción y hay que protegerlas.

Audiodescripción



Ruta migratoria



Ruta migratoria

Trayecto que siguen algunos animales para cambiar de zona según la estación del año.

Una inteligencia artificial traduce textos griegos antiguos

La inteligencia artificial son programas informáticos que funcionan como la mente humana.

Un equipo de investigadores ha desarrollado una inteligencia artificial que se llama Ithaca. Ithaca puede traducir textos griegos antiguos y llenar frases con palabras que faltan en el texto.

Para saber más sobre las culturas y pueblos antiguos los historiadores estudian inscripciones que nuestros antepasados escribieron sobre piedras, cerámica o metal.

Algunas inscripciones son muy antiguas y hay partes de ellas que no se pueden leer porque con los años se han borrado algunas palabras. La inteligencia artificial Ithaca permite:

- Descubrir las palabras borradas de las inscripciones.
- Traducir los textos de las inscripciones completas.
- Entender mejor la historia.
- Conocer el lugar y la fecha en la que se escribió la **inscripción**.

Los resultados de Ithaca se publican en una revista que se llama "Nature".

Inscripción

Escrito o texto.

Inscripción



London Tube Examples

The screenshot shows the official Transport for London (TfL) website. At the top, there's a banner with the TfL logo and a link to 'You must wear a face covering'. Below the banner, the main navigation menu includes 'Tube', 'Bus', 'DLR', 'Overground', 'Ferry', 'Help & contacts', and 'More'. The 'Tube' section is expanded, showing sub-links like 'How we're improving the Tube', 'Travel times', 'TfL Go app', 'Contact us', 'Emergency evacuation', 'Service changes', 'Fares', 'Transport accessibility', 'Station WiFi', 'Tube station car parks', and 'Cycles on public transport'. On the right side of the page, there's a large 'Please offer me a seat' badge.

A graphic featuring a white line-art illustration of a person wearing a face mask against a solid blue background. Below the illustration, the text 'Coronavirus: safer travel' is displayed in a bold, sans-serif font. Underneath that, a larger text block reads: 'Latest travel advice and what we are doing to keep you safe on our services' followed by a right-pointing arrow.

A photograph of a person's shoulder and arm. They are wearing a grey blazer over a white shirt. A blue circular badge with the text 'Please offer me a seat' and the TfL logo is pinned to their blazer. To the right of the image, the text 'Please offer me a seat' is written in a bold, sans-serif font, followed by another text block: 'We've launched a new badge and card to help people who are less able to stand' with a right-pointing arrow.

A dark-themed sidebar containing several links in a light-colored sans-serif font. The links are arranged vertically and include: 'Help & contacts', 'Careers', 'About TfL', 'Safety & security', 'Transparency', 'Publications & reports', and 'Social media & email updates'.

London Tube Examples

The screenshot shows the Transport for London website with several key features highlighted:

- A prominent banner at the top says "You must wear a face covering".
- A "Please offer me a seat" badge is visible on the left sidebar.
- A "Coronavirus: safer travel" section is prominently displayed in the center.
- The website has a clear, easy-to-read layout with large text and high contrast colors.

Please offer me a seat

A blue circular badge with white text that reads "Please offer me a seat" and features the TfL logo.

Coronavirus: safer travel

A graphic featuring a white line-art illustration of a person wearing a face mask against a dark blue background. Below the illustration, the text reads "Coronavirus: safer travel" and "Latest travel advice and what we are doing to keep you safe on our services".



<https://pngpart.com/png/good-bad.html>

Help & contacts

Careers

About TfL

Safety & security

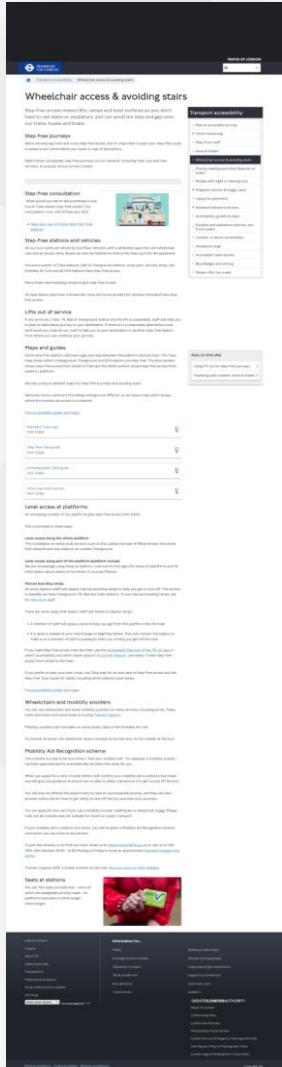
Transparency

Publications & reports

Social media & email updates



London Tube Examples



Step-free consultation

What would you like to see prioritised in any future Tube station step-free works? Our consultation runs until 10 February 2022.

- [Have your say on future step-free Tube stations](#)

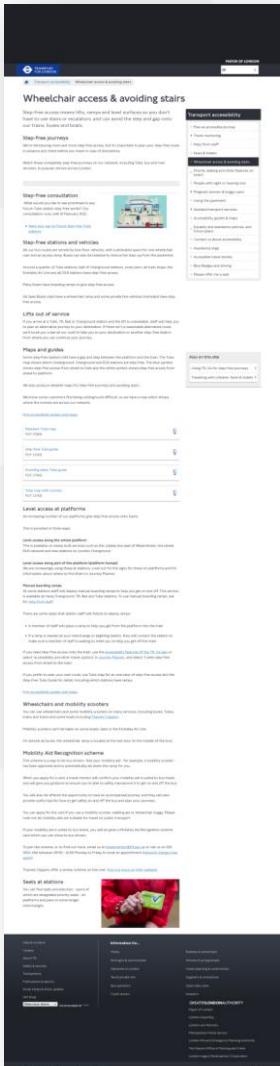


Step-free stations and vehicles

All our bus routes are served by low-floor vehicles, with a dedicated space for one wheelchair user and an access ramp. Buses can also be lowered to reduce the step-up from the pavement.

Around a quarter of Tube stations, half of Overground stations, most piers, all tram stops, the Emirates Air Line and all DLR stations have step-free access.

London Tube Examples



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<https://pngpart.com/png/good-bad.html>

Museum of Ontario Archaeology: Examples

We will be pausing booking tours from now until after January 10th please visit our Pre-Booked Tours page for more information.

 Museum of Ontario Archaeology
History In Your Hands

Plan Your Visit Exhibitions Collections Programs Resources About Us MOA Blog

Accessibility

The Museum of Ontario Archaeology welcomes visitors back at a reduced capacity. We are currently offering pre-booked guided tours of the museum. All visitors must pre-book tours at least 24 hours in advance.

[Learn More!](#)

The Museum of Ontario Archaeology recognizes the diversity of our visitors, and is committed to providing an inclusive museum experience for all visitors. The Museum offers a variety of services to support access to our resources, programs, and collections. Our staff are available via phone at 519-473-1360 or email at info@archaeologymuseum.ca to help you plan your visit.

- Self-guided tour brochures are available in English, Large Print English, French, Spanish, German, Dutch, Italian, Polish, Simple and Traditional Chinese, and Swedish at the front desk.
- An MP3 Descriptive Audio Tour of the Permanent Galleries is available in English.
- The Museum and washrooms are mobility accessible through the Sustainable Archaeology Entrance. Paved accessible parking is available.
- Support Persons and Attendants supporting persons with disabilities receive free admission.
- The grounds of the outdoor [Lawson Site](#) are laid with wood chips and pose difficulties for some visitors to travel across.
- Guide dogs and service dogs are welcome in all public-facing areas of the museum.

Visiting the Museum

A visit to the Museum of Ontario Archaeology will take you back in time 500 years ago as you explore the Lawson Site and the collection of southwestern Ontario's archaeological discoveries. A museum tour is the perfect way to experience the [history of Ontario](#).

Enter the Museum and you will be greeted by friendly Museum staff who will introduce you to the galleries and answer your questions. Take a self-guided tour through 12,000 years of history of First Nations peoples using archaeological artifacts that help uncover the evolving technologies and culture over thousands of years. The [Indians gallery](#), located at the back of the museum, is a "can't-miss" stop featuring temporary and travelling exhibits that

Head outdoors to the [Lawson Site](#) located next to the Museum. As you enter the Palaceau and wind around the mounds, you will discover a reconstructed longhouse built alongside the Medicine Wheel garden. Finish your walk outdoors with a hike through the forest covering some un-excavated areas of the site.

[Twitter](#) [Facebook](#) [YouTube](#) [Instagram](#) [LinkedIn](#)

[Leave a comment](#)

name: _____
email* (not published)
website: _____

[Send »](#)

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[Facebook](#) [Twitter](#) [Instagram](#) [LinkedIn](#)

MUSEUM OF ONTARIO ARCHAEOLOGY
1000 Pitt Street East
London, ON N6G 3M6
T 519-473-1360 F 519-850-2983
info@archaeologymuseum.ca

[Sponsor & Partners](#)

Western Ontario Heritage London

Museum of Ontario Archaeology: Examples

We will be pausing booking tours from now until after January 10th please visit our Pre-Booked Tours page for more information.

 Museum of Ontario Archaeology
History In Your Hands

[Plan Your Visit](#) [Exhibitions](#) [Collections](#) [Programs](#) [Resources](#) [About Us](#) [MOA Blog](#)

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name: _____
email* (not published)
website: _____

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info@archaeologymuseum.ca

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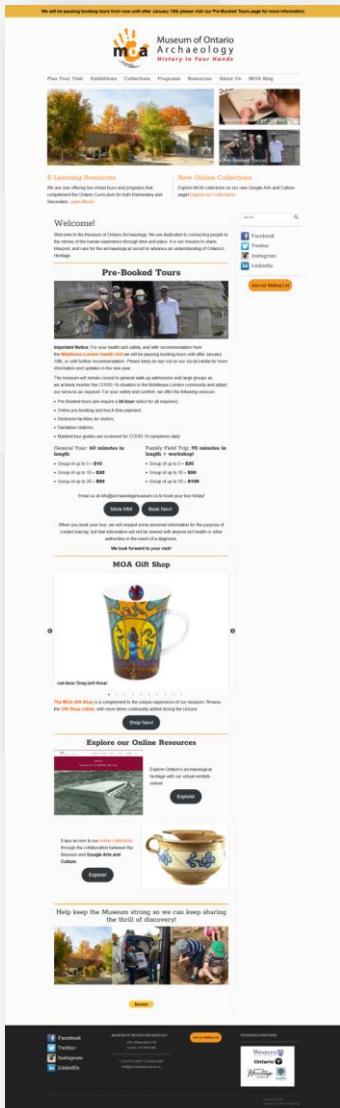
© Copyright 2008
Museum of Ontario Archaeology

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<https://pngpart.com/png/good-bad.html>

Museum of Ontario Archaeology: Examples



- Masked tour-guides are screened for COVID-19 symptoms daily.

General Tour: **60 minutes in length**

- Group of up to 5 – **\$15**
- Group of up to 10 – **\$30**
- Group of up to 20 – **\$60**

Family Field Trip; **90 minutes in length + workshop!**

- Group of up to 5 – **\$25**
- Group of up to 10 – **\$50**
- Group of up to 20 – **\$100**

Email us at info@archaeologymuseum.ca to book your tour today!

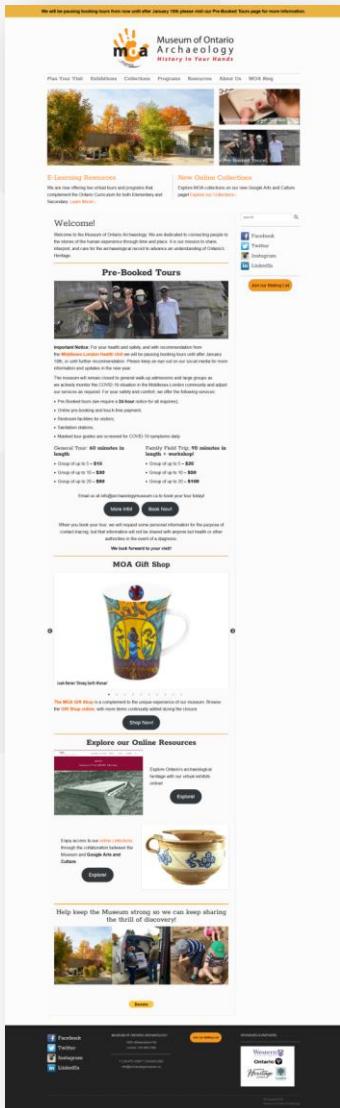
More Info!

Book Now!

When you book your tour, we will request some personal information for the purpose of contact-tracing, but that information will not be shared with anyone but health or other authorities in the event of a diagnosis.

We look forward to your visit!

Museum of Ontario Archaeology: Examples



The screenshot shows the homepage of the Museum of Ontario Archaeology (MOA) website. The header features the MOA logo and the tagline "History In Your Hands". Below the header, there are sections for "Plan Your Visit", "Collections", "Programs", "Resources", and "About Us". A "MOA Ring" section is also present. The main content area includes a "New Online Collections" section with a link to "Explore MOA's collections on our new Google Arts & Culture project". There is also a "Pre-Booked Tours" section with a link to "Get a tour today!". The footer contains social media links for Facebook, Twitter, Instagram, and LinkedIn.

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Liverpool Tourism Information: Examples

The screenshot shows the Liverpool City Council website's tourism section. It includes a navigation bar with links for Accessibility, Read me aloud, and Latest news. Below the navigation is a search bar and a sign-in/register button. The main content area has sections for CORONAVIRUS: latest guidance and advice, a Liverpool City Council logo, and a search icon. A sidebar on the left lists categories such as Heritage assets, World Heritage site, Liverpool Ropewalks, Listed buildings, Conservation areas, Historic Parks and Gardens, and Scheduled monuments. Each category has a brief description and a link to more information. At the bottom, there are links for Follow us (Twitter, Facebook, Instagram) and Using this site (Privacy, Support, Contact), along with a sign-up form for Liverpool Express.

World Heritage site

The [Liverpool Maritime Mercantile World Heritage Site](#) was inscribed by UNESCO in July 2004 under the 1972 World Heritage Convention. It is one of only 28 world heritage sites in the UK (2010).

Liverpool Ropewalks

Liverpool Ropewalks is the Duke Street Conservation Area - the old Georgian merchants' area of the city centre built as a result of the 'Old Dock' of 1715 that launched Liverpool as a global port.

Listed buildings

The last full review of Liverpool's historic buildings occurred in the early 1980s.

There have been over 130 subsequent amendments to the list and it now has 1,541 list entries representing some 2,753 separate buildings and monuments. Of these, 27 are grade I listed; 105 grade II*, and 1,409 grade II.

Liverpool Tourism Information: Examples

CORONAVIRUS: latest guidance and advice [Accessibility](#) [Read me aloud](#) [Latest news](#)

Liverpool City Council Search [Sign in / register](#)

Heritage assets [Related pages](#) [Parks and green spaces](#)

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[View the list of buildings of special architectural or historic interest](#) (please note that we are currently working to update this list).

Check if a building is listed

Our postcode lookup is temporarily unavailable. We apologise for any inconvenience this may cause.

Conservation areas

Liverpool has 36 designated conservation areas covering about 1,000 hectares of the city's total 11,160 hectares - about 9 per cent of the city's area. This protects approximately 19,000 properties.

Historic Parks and Gardens

The 1983 National Heritage Act introduced a national register for parks, gardens and other designed landscapes, including cemeteries.

Liverpool has a fine legacy of parks, gardens and cemeteries of which 10 are included on the national list, one of which is Grade I listed (St James Cemetery and Gardens); three Grade II* and six Grade II. The full list is:

- St James Cemetery and Park (Grade I).
- Allerton Cemetery (Grade II*).
- Princes Park (Grade II*).
- Selton Park (Grade II*).
- Allerton Cemetery (grade II).
- Mount Pleasant Park (grade II).
- Newman Park (grade II).
- Stanley Park (grade II).
- Hindpool Cemetery (grade II).
- Wavertree Botanic Garden (grade II).

Scheduled monuments

Safeguarding historic monuments dates back to the earliest UK heritage protection legislation from 1882.

Liverpool has only four scheduled monuments:

- The Calderstones, Allerton.
- Robin Hood's Stone, Allerton.
- Site of motte and bailey castle, West Derby.
- Speke Hall and moated site.

A to Z of services [a](#) [b](#) [c](#) [d](#) [e](#) [f](#) [g](#) [h](#) [i](#) [j](#) [k](#) [l](#) [m](#) [n](#) [o](#) [p](#) [q](#) [r](#) [s](#) [t](#) [u](#) [v](#) [w](#) [x](#) [y](#) [z](#)

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<https://pngpart.com/png/good-bad.html>



Safeguarding area of the Diocese of Chichester Website: Example

The Diocese | Education | Safeguarding | Youth & Children

Login to SQP tool | Documents |  Search



About

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Quality
Protects

What
do I
do if?

Training

Policies

Useful
Links

Resources

Past Case
Review 2
(PCR2)

Disclosure and Barring
Service (DBS)
Information for
Parishes'

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Explore

I HAVE BEEN ABUSED

I AM WORRIED ABOUT THE
SAFETY OF A CHILD

I AM WORRIED ABOUT THE
SAFETY OF AN ADULT

I AM WORRIED ABOUT A
SITUATION INVOLVING
DOMESTIC ABUSE

I AM WORRIED THAT THE
BEHAVIOUR OF AN ADULT IN

What to do if...

Safeguarding is everyone's responsibility. This section helps you respond to some of the most common safeguarding situations that you might encounter. Each section gives some straightforward advice, and some links that you can follow to seek further help or to make a report.

What is important to remember is that acting on your concerns and seeking help or advice is hardly ever a bad idea. People sometimes hesitate because they think "What if I'm wrong?". The response to that is simply to ask, "What if you're right?" If you are unsure - seek advice.

Safeguarding area of the Diocese of Chichester Website: Example

The Diocese | Education | Safeguarding | Youth & Children

Login to SQP tool | Documents |  Search



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BEHAVIOUR OF AN ADULT IN

What to do if...

Safeguarding is everyone's responsibility. This section helps you respond to some of the most common safeguarding situations that you might encounter. Each section gives some straightforward advice, and some links that you can follow to seek further help or to make a report.

What is important to remember is that acting on your concerns and seeking help or advice is hardly ever a bad idea. People sometimes hesitate because they think "What if I'm wrong?". The response to that is simply to ask, "What if you're right?" If you are unsure - seek advice.



<https://pngpart.com/png/good-bad.html>

National Archaeological Museum: Examples

Domingo | Domingo | Sábado | Domingo | Ocio | Eventos | Welcome | Domingo

MAN MUSEO ARQUEOLÓGICO NACIONAL

Visit Museum Exhibition Activities Educación Collection Study MAN Digital

You are here: Inicio > Visita > Visita > Accessibility

Visita Getting Here Opening hours Prices Groups Services Rules Accessibility Multimedia Guides Café Shop Exhibition map Venta online

Accessibility

Access

Universal access is one of the museum's top priorities.

To achieve this objective there are adapted spaces and services, specific aids and tactile resources for people with hearing, visual and mobility impairments.

Guided tours for the visually impaired, with advance booking:

- Student and adult group booking
- Adult group booking

Interior spaces with no architectural barriers

Wheelchair adapted toilets

Wheelchairs available on request in the cloakroom

Induction loops

Tactile maps of the permanent exhibition

Tactile displays

Multimedia guides

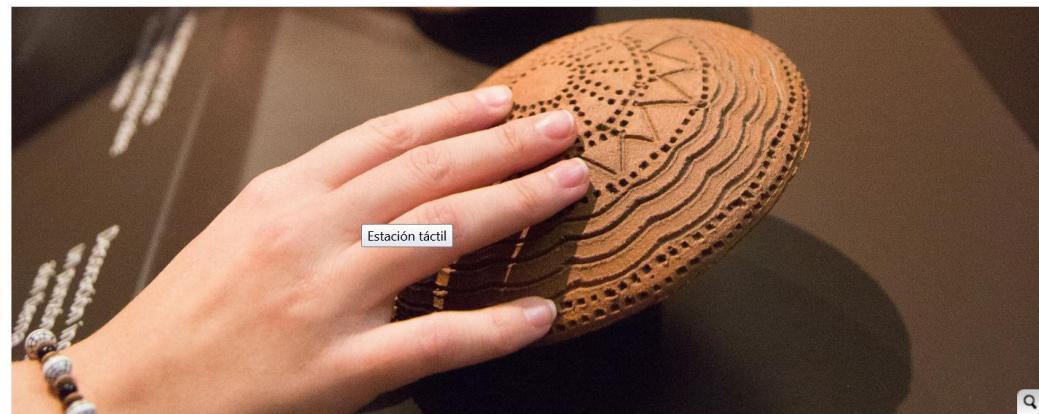
Museo Arqueológico Nacional
Ctra de Alcalá, 3

28001 Madrid

© Ministerio de Cultura y Deporte - Gobierno de España

Mapa Web | Accessibility | Aviso Legal |

Accessibility



Access

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National Archaeological Museum: Examples

The screenshot shows the 'Accessibility' section of the National Archaeological Museum's website. The top navigation bar includes links for Visit, Museum, Exhibition, Activities, Education, Collection, Study, and MAN Digital. The 'Accessibility' link is highlighted in orange. The main content area features a large image of a hand touching a textured object. To the left is a sidebar with links for Visita, Getting Here, Opening hours, Prices, Groups, Services, Rules, and Accessibility (which is also highlighted). Below these are sections for Access, Multimedia Guides, Café, Shop, Exhibition map, and Venta online. There are also icons for various accessibility features like ramps, wheelchairs, induction loops, and tactile displays.

Accessibility



Access

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Guided tours for the visually impaired, with advance booking:

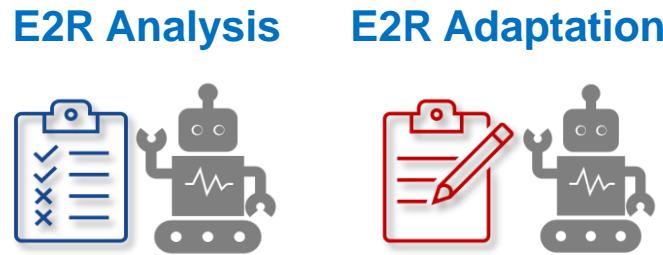


<https://pngpart.com/png/good-bad.html>

Applied Research on Cognitive Accessibility



- We are developing methods, based on Artificial Intelligence (AI), to support the **E2R adaptation of documents** in a (semi)-automatic fashion.



- Our main goals are
 - to **help E2R experts** in their daily tasks of (a) **analyzing documents** with respect to the E2R guidelines and (b) **adapting** such documents according to the E2R methodology
 - to **offer assistance to people with reading comprehension difficulties** through a tool that obtains **easy-to-read versions** of complicated texts

FACILE: Your App for E2R Adaptation

[Inicio](#)[Motivación](#)[Objetivo](#)[Cómo usar](#)[Nosotros](#)[Contacto](#)

Selecciona las pautas con las que quieras trabajar:

*Más pautas de Lectura Fácil estarán disponibles pronto.

Frases y palabras (0) ▾

- Oraciones con Doble Negación
- Oraciones Negativas
- Voz pasiva

Vocabulario y expresiones (0) ▾

- Acrónimos
- Siglas
- Abreviaturas
- Fracciones y Porcentajes

Escribe o pega aquí el texto original.

Ten en cuenta que FACILE está en desarrollo. Sus resultados son provisionales.

[Otro texto](#) [Identificar](#) 

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de Madrid, Julio 2022

SOBRE FACILE

- [Motivación](#)
- [Objetivo](#)
- [Nosotros](#)

HERRAMIENTA

- [Identificar problemáticas](#)
- [Obtener sugerencias de adaptación](#)
- [Cómo usar](#)

CONTACTO

easy2read@delicias.dia.fi.upm.es



First steps in the development of a support application for easy-to-read adaptation
MC Suárez-Figueroa, I Diab, E Ruckhaus, I Cano - Universal Access in the Information Society, 2022

FACILE: E2R Analysis

Texto Original

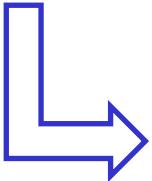


La decisión fue tomada por el comité después de largas deliberaciones. El 75% de los miembros de la ONU aceptó dicha decisión inmediatamente. Ya en el siglo XIX se había tratado ese tema.

Hay un informe a continuación sobre las pautas de lectura fácil

Otro texto

Identificar



FACILE

Tu aplicación para adaptar textos



UNE
Normalización
Española

Comunidad
de Madrid

INFORME

! Adverbios (-mente)

La pauta 7 de la recomendación sobre Vocabulario y expresiones de la UNE indica "Evitar el uso de adverbios terminados en -mente."

Elementos que no siguen la norma UNE:

- inmediatamente

✓ Superlativos

✓ Abreviaturas

! Acrónimos

La pauta 13 de la recomendación sobre Vocabulario y expresiones de la UNE indica "Se pueden utilizar acrónimos cuando su uso esté extendido en el idioma. No obstante, la primera vez que se utilicen se debería explicar su significado."

Elementos que no siguen la norma UNE:

- ONU

! Fracciones y Porcentajes

La pauta 22 de la recomendación sobre Vocabulario y expresiones de la UNE indica "Se debería evitar el uso de fracciones y de porcentajes. Si es necesario incluirlos se debería describir su equivalencia o explicación."

Elementos que no siguen la norma UNE:

- 75%

! Números Romanos

La pauta 25 de la recomendación sobre Vocabulario y expresiones de la UNE indica "Se debería evitar el uso de los números romanos. En el caso de siglos, reyes y papas se recomienda poner el número romano e indicar cómo se lee."

Elementos que no siguen la norma UNE:

- XIX

! Voz pasiva

La pauta 4 de la recomendación sobre Frases y oraciones de la UNE indica "Se debe evitar la voz pasiva."

Elementos que no siguen la norma UNE:

- La decisión fue tomada por el comité

✓ Explicaciones entre comas

FACILE: E2R Adaptation

FACILE



Tu aplicación para adaptar textos

UNE
Normalización
Española

Comunidad
de Madrid



Identificar problemáticas
Siguiendo la norma UNE



Obtener sugerencias
Para adaptar el texto

Selecciona las pautas con las que quieres trabajar:

*Más pautas de Lectura Fácil estarán disponibles pronto.

Redacción del texto en Lectura Fácil

- Ortografía (2)
 - Punto y seguido
 - Puntos suspensivos / etc
- Vocabulario y expresiones (2)
 - Adverbios (-mente)
 - Superlativos
 - Abreviaturas
 - Siglas
 - Acrónimos
 - Números
 - Números Ordinales
 - Fracciones y Porcentajes
 - Fechas
 - Números Romanos
- Frases y oraciones (1)
 - Voz pasiva
 - Gerundios
 - Oraciones Negativas
 - Oraciones con Doble Negación
 - Explicaciones entre comas

Seleccionar archivo...

Ningún archivo seleccionado

Guardar como PDF

El Duero, el río de mi pueblo, fluía lentamente entre las montañas, serpenteando sinuosamente a través del valle. El valle era bellísimo. Por las mañanas podías encontrar águilas, liebres, ovejas, etcétera.

El Duero es el río de mi pueblo. El Duero flúia de manera lenta entre las montañas, serpenteando de manera sinuosa a través del valle.

El valle era muy bello.

Por las mañanas podías encontrar águilas, liebres, ovejas, y demás.



Otro texto



Sugerir



Este texto podría necesitar una adaptación manual
Tu texto se puede adaptar usando la sugerencia propuesta
Hay más de una sugerencia para adaptar tu texto

More Assets to Improve Cognitive Accessibility

- Focus on **Slides** (English)
 - <https://accessibility.colostate.edu/ud-powerpoint/>
- **Dictionary** with explanations in Easy-to-Read (English)
 - <https://www.inclusion-europe.eu/easy-to-read-term/>
- Easy **Dictionary** (Spanish)
 - <http://diccionariofacil.org/>
- **Easier** Application (Spanish)
 - <http://163.117.129.208:8080/>

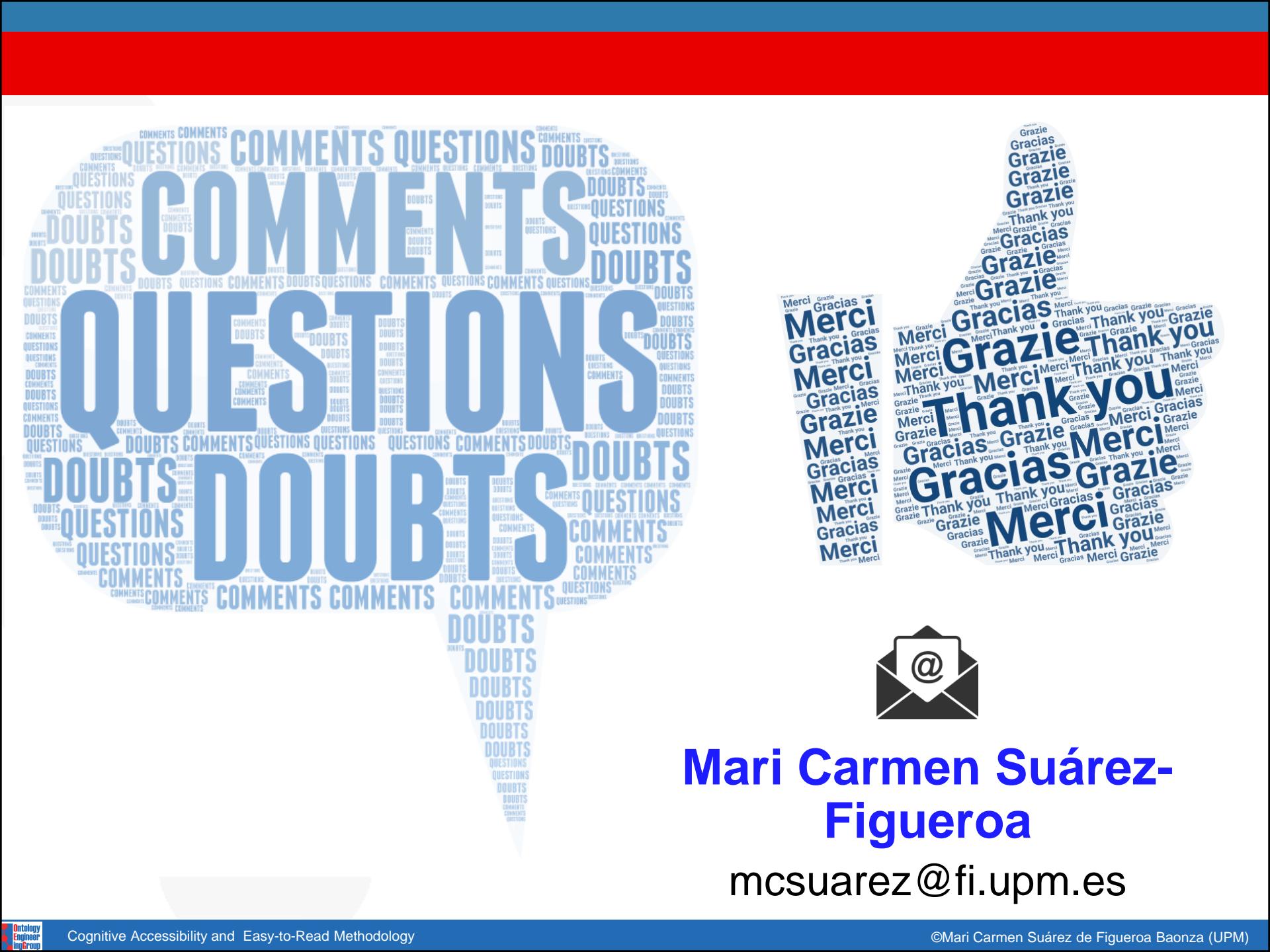
Acknowledgments

- Olga Berrios from Plena Inclusion España
- Oscar Garcia Muñoz from Plena Inclusion Madrid
- Isabel Cano from ACCEDES
- Some of the slides has been based on the contents available at the MOOC “Accesibilidad Cognitiva” (2019)
- Related projects that help on some issues presented in this seminar:
 - Datos 4.0 (TIN2016-78011-C4-4-R), de la Agencia Estatal de Investigación del MINECO y Fondos FEDER
 - Internal Project at UPM about Sustainable Development Goals (2019). XIX Convocatoria UPM para Acciones ODSs
 - Project funded by the Artificial Intelligence in the World of Languages Programme (University of Oxford) (2019)
 - Collaboration with Fundacion ONCE in the context of a project called AccessJobs (2021)

- Slides entitled “Cognitive Accessibility and Easy-to-Read Methodology”
 - 2025. Mari Carmen Suárez de Figueroa Baonza
 - Slides for Data Science Seminars (MSc. In Data Science)
-
- Reference:
 - Mari Carmen Suárez-Figueroa. Cognitive Accessibility and Easy-to-Read Methodology. Slides 2025. Artificial Intelligence Department. Universidad Politécnica de Madrid.

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Mari Carmen Suárez-
Figueroa

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- **Individual Report** that includes:
 - 2 examples (web pages, apps, etc.) of **Good Cognitive Accessibility**, with the corresponding explanation
 - 2 examples (web pages, apps, etc.) of **Bad Cognitive Accessibility**, with the corresponding explanation
 - Some paragraphs explaining where/how **you could apply the Easy-to-Read Methodology** in your work
- **Deadline:** 31st March 2025



- **Use FACILE** (only for Spanish) for
 - identifying problems in an input text and
 - adapting a text that is not written in E2R
- <https://facile-test.linkeddata.es/>
- Use FACILE with text from **two web pages** from the list provided in Moodle
- **Individual Report** about issues found while using FACILE
- Fill out a **Survey** (link available in Moodle)
- Deadline: 31st March 2025

■ **Important Notes:**

- FACILE is in a development phase, so problems related to time response and possible strange behaviour can occur.
- In the identification functionality (Identificar Problemáticas), FACILE is able to manage an input text with several paragraphs (in most of the cases) and to manage at the same time the selection of several guidelines (pautas) (in most of the cases).
- In the adaptation functionality (Obtener sugerencias), it is better to provide as input text independent paragraphs. FACILE could occasionally work in an inappropriate way when several guidelines (pautas) are selected at the same time.



Cognitive Accessibility and Easy-to-Read Methodology

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Ontology Engineering Group (OEG)
Universidad Politécnica de Madrid (UPM)

21 February 2025

**Data Science Seminars
(MSc. In Data Science)**



Cognitive Accessibility and Easy-to-Read Methodology

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Universidad Politécnica de Madrid (UPM)

**19 April 2024
Data Science Seminars
(MSc. In Data Science)**