IO 2: Support Manual for Cultural Heritage Professionals

European Project: Acceasy

Co-funded by the Erasmus+ Programme of the European Union

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1. Introduction

The **"Easy to read, Easy to Access (Acceasy)"** project constitutes a European action funded under the framework of Erasmus+. It belongs to the Key Action 2 Strategic Partnerships for Adult Education "Cooperation for innovation and the exchange of good practices" and it attempts to tackle the basic EU priorities for adult education focusing on the constant improvement and extension of the provision of high-quality learning opportunities.

The project consortium consists of very experienced organizations, and it is coordinated by Fundación Aspanias Burgos (Spain) as lead partner while the rest of the partners are:

- IMS Research & Development (Cyprus)
- Cyprus Autism Association (Cyprus)
- E-Code (Slovakia)
- aCapo società cooperativa sociale integrata (Italy)
- European Grants International Academy SRL (Italy)

The methodological approach of "Acceasy" partnership facilitates the efficient transferring of knowledge in terms of cultural heritage as well as training between different education and training fields which at the end will enrich the final program in a multi beneficial way for all the involved partners and their national contexts.

Particularly, the European project **"Acceasy"** attempts to address the needs of a very specific and at the same time vulnerable target group – that consists of *people with Intellectual Disabilities.* One of the basic project's objectives is to understand in detail the challenges faced by people with intellectual disabilities in terms of social inclusion and being able to enjoy places of cultural heritage, while working to facilitate easy access to such places.

For a widespread impact of Acceasy outputs, awareness among the following stakeholders as well as closer cooperation between them will be fostered in the short and long run:

- **Professionals working with people with Intellectual Disabilities**
- **Policy makers** and **agencies**.
- **Associations and entities working with people with Intellectual Disabilities**
- **Cultural Heritage Professionals**
- **General Public.**

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1.1 The Project and its purposes

According to the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD), persons with disabilities "include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others". The Convention is intended as a human rights instrument with an explicit, social development dimension. It adopts a broad categorization of persons with disabilities and reaffirms that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms. It clarifies and qualifies how all categories of rights apply to persons with disabilities and identifies areas where adaptations have to be made for persons with disabilities to effectively exercise their rights and areas where their rights have been violated, and where protection of rights must be reinforced.

Based on this perspective "Acceasy" project's main aspiration is to create accessible places of cultural heritage and a manual for cultural heritage professionals specially designed in order to meet the needs of people with Intellectual Disabilities, which should:

- **Foster social inclusion and access to cultural heritage.**
- **Increase the quality of life and expand the knowledge of people with Intellectual Disabilities.**
- **Assist professionals in cultural heritage to actively engage with people with Intellectual Disabilities**.
- **Empower professionals in the field of Intellectual disabilities with tools and approaches on Easy-reading methodology**.

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1.2 Support Manual: whom are we reaching to?

The Support Manual of “Acceasy” project is designed in order to meet the needs of professionals in the field of cultural heritage such as tour guides, museum curators, cultural heritage associations and others who are associated with the provision of systematic and integrated support of people with Intellectual Disabilities towards their participation and engagement with places of high historical and cultural value. The planned support provided by cultural heritage professionals will help the final beneficiaries to successfully participate in the realm of cultural heritage.

Particularly, the current manual is guiding cultural heritage professionals through the process of providing support for people with intellectual disabilities by showcasing the required framework and methodological structure of the process while at the same time equipping them with appropriate training material and basic knowledge about the challenges of cognitive difficulties.

It also introduces them to the concept of linguistic accessibility as well as where and how they should utilize easy to read language, by providing in detail the process of adapting and validating texts that can be presented to people with Intellectual disabilities.

In general, the present manual has been designed and developed to serve as guideline for people associated with cultural heritage and intellectual disabilities and will constitute a significant toolbox for the successful implementation of Easy-to-Read language process.

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2. What are Cognitive Difficulties and Intellectual Disabilities?

Intellectual and developmental disability has a new definition The American Association on Intellectual and Developmental Disabilities has just published the translation of the new definition of intellectual and developmental disability, last February 2022.

Intellectual disability is now defined as follows:

- It is the limitation of intellectual functioning. That is, it has difficulty in understanding or reasoning.
- It is a limitation of adaptive behaviour, in areas such as concepts, social relations or practices. For example: you find it difficult to adapt to changes in your family, at work or in the world.
- All this happens before the age of 22.

This new definition is very important because it changes the way of understanding intellectual disabilities, the way of supporting people with intellectual disabilities and the supports given to them.

The new definition is not based on the difficulties of the persons, but on how to support them. The aim is therefore to design and develop support systems that are person-centred, comprehensive, co-ordinated, outcome and decision-oriented, and evidence-based.

Until now, the age of onset of intellectual disability was before the age of 18. This is because people's development continues after the age of 18 and people's needs are better identified in this way.

The term continues to refer to a wide range of clinical diagnoses (can be inherited, congenital, developmental or acquired) that can affect a person's ability to perform certain cognitive functions (Carmien et al., 2005). Cognitive impairment occurs when a person has problems remembering, learning new things, concentrating or making decisions that affect their daily life. Cognitive impairment can range from mild to severe. People with mild impairment may show a noticeable decline in cognitive functions, but are still able to carry out their daily activities. Severe levels of impairment may lead to the loss of the ability to understand the meaning or significance of something and the ability to speak or write, resulting in the inability to live independently.

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Why is this change important?

This is very important for people with intellectual disabilities themselves, their families and the people who support them. It is very important because it changes:

- Our understanding of intellectual disabilities.
- The way we support people with disabilities.
- The support given to people with disabilities.

The following disorders cause, among others, intellectual disability:

- **Fragile X Syndrome:** Fragile X Syndrome (FXS) is the leading cause of inherited intellectual disability and the second most common cause of ID after Down's Syndrome. It is an X-linked inherited disorder that mainly affects boys, who show intellectual disability to a greater or lesser degree and characteristic physical features. Hyperactive children, attention deficit, delayed acquisition of motor and language milestones, behavioural disorders (ranging from autistic spectrum behaviour to hyperactivity), sensory dysfunction, low self-esteem and cardiac abnormalities are among the manifestations of this syndrome.
- **Down's Syndrome:** People with Down's Syndrome have an extra chromosome, instead of having 46 chromosomes they have 47, this is called trisomy of the 21st pair. It is the leading cause of Intellectual Disability. As well as ageing early and being more vulnerable to neurodegenerative diseases such as Alzheimer's, they have physical characteristics that make them very recognizable (flattened nose, short neck, small bars, slanted eyes, thick tongue, small hands and feet, palmar crease, weak muscle tone, small little fingers and sometimes curved towards the thumb and shorter stature), as well as having health problems, especially associated with heart disease.
- **Autism**: is a complex neurological and developmental disorder that affects the way a person acts, communicates, learns and interacts with others. It is linked to dysfunction of various brain criteria. People with this disorder have problems with communication (very common language problems), interactions with other people (social skills, lack of empathy), restricted interests, mental and behavioural inflexibility (poor reactions to environmental changes, restricted interests), altered emotional expression and repetitive behaviours (routines, perseverations). They tend to be impulsive individuals, who show problems in inhibiting an inappropriate response. Other conditions that fall on the autistic spectrum are:

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- **Asperger syndrome**: Asperger's syndrome is sometimes said to be a milder version of classic autism. Unlike people with autism, many people with Asperger syndrome have normal or above average intelligence and language skills. They present qualitative alterations in social relationships, restrictive, repetitive, and stereotyped patterns of behaviour, interests and activity, mental and behavioural inflexibility and altered emotional expression among others.
- **Pervasive developmental disorder not otherwise specified** (PDD-NOS, or "atypical" autism). PDD-NOS includes some, but not all, of the features of classic autism and/or Asperger syndrome. This category also includes childhood disintegrative disorder and Rett syndrome, two conditions in which a child develops normally for several months or years, then loses skills related to language, movement and coordination, and other cognitive functions.

- **Cerebral Palsy -** The term cerebral palsy refers to any one of a number of neurological disorders that appear in infancy or early childhood which permanently affects body movement and muscle coordination. People with CP have problems with movement and posture. Many also have related conditions such as intellectual disability; seizures; problems with vision, hearing, or speech

- **Prader-Willi syndrome**: is the most common genetic disorder, but not hereditary. It occurs by chance and the cause is unknown (alteration in chromosome I5, usually of paternal origin) causing life-threatening obesity in children caused by an insatiable appetite (the main medical concern). People with Prader-Willi have different levels of intellectual disability. Learning disabilities are common (difficulty in sustaining attention, inability to understand simple instructions and difficulty formulating abstract thoughts), as are delays in language development, leading to behavioural problems.
- **Complex learning difficulties and disabilities (CLDD)** include those with co-existing conditions (e.g. autism and attention deficit/hyperactivity disorder (ADHD)) or profound and multiple learning disabilities. Children and young people with CLDD are a distinctive group of learners requiring educators to make personalized professional responses to their profile of learning need.

In general, people with cognitive disabilities may experience memory and attention deficits, language comprehension difficulties, difficulties with solving problems, concentrating on a task, understanding

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inference, understanding abstract or metaphorical content, distinguishing important from peripheral information, and reading. All these deficits result in the inability to successfully receive and process information correctly.

2.1 LANGUAGE SKILLS OF PEOPLE WITH INTELLECTUAL DISABILITY

Communication and sharing of information play an essential part in our daily lives. There is a vast amount of information from various sources and platforms that are expressed in a language-based format. However, not all people are able to access the information and absorb its meaning, and in the case of people with Intellectual disabilities, coping with written or spoken information poses a considerable challenge, as they often face difficulties in comprehension of the information presented in such ways.

According to the research of Harris and Rhea, people with intellectual disabilities may experience cognitive difficulties, among which are difficulties In long and short term memory which can affect their ability to acquire complex linguistic structures and to expand their vocabulary; difficulties with cognitive processes such as reasoning, symbolization, generalization and abstraction, understanding concepts like time and quantity and understanding idiomatic or multiple expressions (Harris, 2006, Rhea 2004). Furthermore, Yoder and Warren state that the vocabulary of persons with Intellectual disability consists mostly of concrete nouns and verbs and includes only a small set of descriptive words such as adjectives and adverbs (Yoder and Warren, 2004). Additionally, they tend to generate short, simple sentences. They may find it difficult to produce and understand passive sentences (e.g., the book was written by Danny), sentences with non-canonical word-order (e.g., out jumped the rabbit = The rabbit jumped out), conditional sentences (e.g., if it rains, I will not go for a walk), and complex sentences with relative clauses (e.g., the man [that [Danny met]] is a famous actor), or embedded clauses (e.g., Danny thought [that [tomorrow I will buy him another book]]) (Zukowski, 2004). There are also other challenges that hinder the linguistic and communicative abilities of people with Intellectual disabilities such as *pace*, *complexity*, *literacy and stigma* (Yalon-Chamovitz, 2009)

- ***Rhythm***: People with intellectual disabilities show relatively slow processing and reaction time in many different tasks. Therefore, pace accommodations should be applied both to environmental design and procedures of service provision, e.g., provide instructions at a slower pace, allow more time to complete activities, etc. (Yalon-Chamovitz, 2007, 2009:396)

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- ***Complexity:*** people with intellectual disabilities often experience difficulties in verbal communication, in wayfinding in the physical and virtual environment, in understanding and following product-operating instructions and in coping with procedures. Thus, it is recommended that the procedures and language be simplified to accommodate their needs.

– ***Literacy***: Literacy is an important means for independent functioning, and for improving the quality of life of people with intellectual disability (Downing, 2005; Shengross, 2011). People with intellectual disabilities often exemplify low literacy level, and many of them experience difficulties reading simple texts (Yong et al. 2004). People with intellectual disability may also experience difficulties receiving and integrating information, organizing knowledge and planning agenda, which might increase the need to receive external support daily to perform tasks that require literacy skills.

-***Stigma***: is perhaps the predominant barrier to accessibility. Despite rights granted by legislation, in practice, people with intellectual disabilities cannot actively claim or implement their rights. They are often still treated as patients or people in need of protection and are expected to be escorted or supervised when accessing community programs and services.

3. Cognitive Accessibility for persons with Intellectual disabilities

Accessibility is the degree to which a product, device, service, or environment is available to as many people as possible. Accessibility can be viewed as the "ability to access" and benefit from some system or entity. The concept often focuses on people with disabilities or special needs (such as the **Convention on the Rights of Persons with Disabilities**) and their right of access, enabling the use of **assistive technology**. Accessibility plays in important role in social inclusion of people with disabilities of any kind, enabling them to engage and participate actively in the society.

On the other hand, **Linguistic accessibility** refers to the process of adapting written or spoken information to the needs of people with disabilities in order to make it clear, understandable and inviting for them, using diverse linguistic and sensory means such as visual, audio and tactile means of delivery. Visual means rely on sight for communication and transmission of information (e.g., accessible print and symbols). Audio means rely on hearing for communication and transmission of information (e.g., screen readers, public address systems). Tactile means rely on touch to communicate and transfer information (e.g., embossed signs, maps). The outcome of this process is accessible information adapted to the needs of the target audience. (Uzier-Karl, 2018)

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Web "accessibility" means that the design and development of websites, technologies and tools ensures that people with disabilities can use them. Specifically, the expectation is that people with disabilities must be able to understand, perceive, navigate, interact with and contribute to the Web. It encompasses all disabilities that affect access to the Web such as auditory, speech, visual, cognitive, neurological and physical.

Accessible communication is the basis of Cognitive accessibility and encompasses three major notions that facilitate interaction with the environment:

- Easy Reading/Easy speaking,
- Wayfinding
- Signage.

The process of making information linguistically accessible to persons with intellectual disabilities consists of three main phases:

- 1ª Planning – a preparatory phase which includes formulating ideas, selecting the mode of information transfer (spoken or written) and the appropriate means of delivering the message to the target audience.
- 2ª Implementation – adapting various linguistic aspects of the message to the needs of the target audience (e.g., vocabulary, sentence structure). This process is also known as easy-to-read or language simplification; Printed easy-to-read materials are marked as such with a designated symbol and caption to allow easy identification (see Figure 1)
- 3ª Quality assurance – ensures that the simplified information suits the needs of the target population. (Uziel-Karl, 2018)

Figure 1
Easy to Read symbol

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3.1 EASY TO READ/EASY TO SPEAK LANGUAGE

Easy to read language refers to the method of creating linguistically accessible texts and documents that can be easily understood by people with Intellectual disabilities and learning difficulties. Easy to read language does not use professional terms or jargon and can be supported by pictures that enhance the comprehensibility of the information to those with cognitive difficulties. It is part of a global strategy that aims to eliminate barriers to comprehension, interaction and the use of products and services in different settings, thus creating universal access to information and promoting social inclusion.

In order to create an easy-to-read document the author must adhere to a set of guidelines that encompass the easy to read methodology.

To better understand the process of developing easy to read documents, below is a list of terms that are commonly used and will help authors get familiarized with the concept and overall approach:

Adapter: A person who adapts a document to Easy Read language. Therefore, ***adaptation*** refers to the process of modifying an existing document to an easy-to-read document.

Author: A person who creates an easy-to-read document based on an original idea.

Paratextual compliments: The set of verbal elements (titles, glossaries, tables of contents) and iconic elements (graphs, maps) accompanying the main text of the document in order to facilitate its comprehension.

Validation phase: The evaluation of an easy-to-read document regarding the degree of its comprehension by the end – user

Dynamiser: The person conducting and managing the validation phase.

Gloss: The explanation of a word of expression of certain complexity, located close to said word or expression.

End-user: The person benefiting from easy-to-read documents.

Validator: The end-user (in our case people with Intellectual disabilities) who participates in the validation phase and possesses reading and communication skills.

Designer/Layout editor: The person who designs and lays out the easy-to-read documents with respect to the guidelines of the process.

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Pictograms: A symbol that conveys meaning through its resemblance to a physical object.

3.2 Key Guidelines for adapting and creating Easy to Read text

Below is a list of the key guidelines that must be followed in order to produce easy to read text, relating to content, structure, design, pictograms and orthotypography.

Content

When preparing an easy-to-read document, the author or adapter must take into consideration the final target group and the challenges they might face. In general, the content of the documents must:

- Present only necessary and important information.
- Present information in a logical sequence and a continuity that makes sense.
- Express only one main idea per sentence.
- Use appropriate language as well as age-appropriate language.
- Simplify complex information and try to explain it in a simple form.

Structure

When it comes to the structure of the document, the author or adapter must adapt the language to the needs of the target group regarding vocabulary and sentence structure. In general, the structure of the document should:

- Avoid jargon, professional terms, and difficult words (instead of “litigation” use “legal action”, instead of “contemplate” use “think”)
- Use words that are common in everyday life and are easy to understand.
- Avoid abstracts words, concepts, terms, and definitions.
- Explain difficult words when necessary (the word “referendum” should be simplified to “asking the public to vote”)
- Avoid using symbolic language and metaphors.

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- Avoid complex sentences and be as short as possible.
- Avoid the use of Passive voice.
- Be consistent with the words used throughout the text.
- If there are many terms that are difficult to understand, the document must include a glossary or glosses.
- Impersonal sentences should be avoided (Instead of “the form will be sent by mail” use “citizens will send the form by mail”)

Design

The design of an easy-to-read document must be adapted to the needs of the target group and must generally follow these guidelines:

- Make sure the layout and text-flow of the document supports the content of the text
- Use clear and easy to read fonts such as Arial. Fonts must not have serifs or unusual letter shapes.
- The text should always be aligned to the left.
- Avoid shiny paper that might impose difficulties on the readers. Use matt paper instead
- Make sure that the paper you intend to use is not too thin.
- Do not fill a page of the text with too much information.
- Lines of text should not be too short or too long.
- Add extra space between the lines of the text. Instead of single line spacing, use 1.5 line spacing.
- The fonts that you use should be at least 14 pt or bigger.
- Pictures should be placed on the left of the document. Therefore, make a wide margin on your document to include pictures.
- The text background should have a flat color.
- Italics, shading, underlining should be avoided.

Orthotypography

Orthotypography is an integral part of document editing and refers to the set of rules that must be applied in the presentation of written documents regarding spelling, punctuation, page formatting, abbreviations, acronyms etc. When producing an easy-to-read text, the following guidelines must be followed:

- Words should not be written in Capital letters. Only the initial letter must be capital after a period or at the beginning of a sentence.
- Full stop must be used to separate phrases and sentences.

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- Related ideas should be separated by a full stop rather than a comma. (Instead of “Since it was raining yesterday, John took an umbrella” use “It was raining yesterday. So, John took an umbrella”)
- Avoid the use of parenthesis, brackets, and certain types of punctuation in your text as they might not be recognizable by the target group. (avoid #, &, ~, %, ^, /, £, $, €, {})
- Etcetera and ellipses should be avoided and substituted with “among others” or “many more”
- Quotation marks should not be used. In case you must include quotation marks, you must provide an explanation of what the quotation marked content means.
- Superlatives should be avoided (Instead of “bigger” you should write “very big”)
- Abbreviations should be avoided. (Instead of “Liberty Av.” Use “Liberty Avenue”)
- Acronyms should be avoided. However, acronyms that are widely used and recognized can be used, but always with an explanation. (Instead of “UN” use “United Nations”)
- Hyphenation (the process of splitting a word into parts if does not fit in one line) should be avoided.
- Sentences should not stretch from one page to another.
- Use “do not”, “cannot”, “should not” instead of “don’t”, “can’t”, “shouldn’t”
- Colon (:) must be used in introducing lists that enumerate more than three elements.
- Use digits rather than words to describe quantity (instead of “three” use “3”)

Pictograms

Pictograms (symbols that convey meaning through their resemblance to physical objects) are an essential part of easy reading and everyday life in general. Pictograms are used everywhere around us in order to convey a particular message and provide information. Pictograms can be understood by anyone regardless of the language they speak and can be more inviting compared to text. The use of pictograms must adhere to the guidelines below:

- The pictogram must be as big as possible
- Pictures should be placed on the left margin or in the upper part of the text
- When pictograms are used, they must complement the text accurately
- Images should be clear without abstractions
- The same images shall be used to convey the same concepts
- Colored pictograms should not be confusing
- Do not use symbols, symbolic pictures, or abstract graphics as they can be confusing.
- The background of the pictogram must be flat to avoid distractions.

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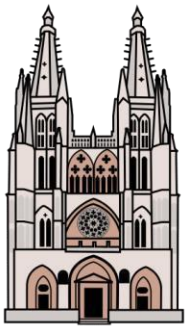
Finding Pictograms on Arasaac.com

ARASAAC offers graphic and material resources, shared with Creative Commons license (BY-NC-SA), to facilitate communication and cognitive accessibility to all people who, due to different factors (autism, intellectual disability, lack of language, elderly people, etc.), present serious difficulties in these areas, which hinder their inclusion in any area of daily life. This project has been financed by the Department of Education, Culture and Sports of the Aragonese Government and coordinated by the General Directorate of Innovation and Vocational Training of this department.

On Arasaac.com you can find an extensive database of validated pictograms that can be used in your next easy to read document. The procedure is very simple, just type the item you would like to find on the search tab and choose the pictogram that best fit your needs. On the figure below you can see how the Arasaac website looks like.

It should be noted that Arasaac has created for this project the pictogram of the "Burgos Cathedral", one of the five monuments chosen by the Acceasy project to make it cognitively accessible. Here is the pictogram created



3.3 The process of creating and adapting easy to read documents

Adapting an existing document into easy reading

The ***adaptation process*** is conducted by the adaptor, the designer and layout editor. As a first step the adaptor must:

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- Compile all data of the original text to be adapted.
- Analyze the content and structure of the document (identification of topics, vocabulary and main ideas)
- Organize the information based on the aims of the document (length of document, end users, essential parts, degree of adaptation
- Prepare the adapted document with respect to the guidelines of the process.
- Provide the text to the dynamiser for validation.

Validation of easy-to-read documents

The ***validation phase*** of the process is conducted by the validators (end-users) under the coordination of the dynamiser. The following tasks should be performed during this phase:

- The dynamiser receives the draft of the document.
- The dynamiser should Plan and organize the validation sessions. (minimum 3 validators, duration of sessions, materials)
- The dynamiser should Lead and coordinate the validation sessions by providing information about the document, the easy reading process, explanation and duration of the activity and finally validating the document
- The validators participate in the process by reading the document, providing feedback about the document in terms of comprehension and design, indicating words or phrases that need to be changed, indentifying missing information.
- The dynamiser takes notes on the feedback provided by validators and forwards it to the adaptor in order to make the necessary changes

The document is validated once all validators have read the document and approved it.

Creating an easy-to-read document

The creation of an easy-to-read document is conducted by the author, design and layout editor, dynamiser, and finally, the validators. The following tasks must be performed during the creation process:

- Planning of the creation phase with regards to the idea, the end users, the properties of the documents such as main topic, length, document type.
- Establish the structure of the document based on content. (vocabulary, main ideas, paratextual images

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- Prepare the document draft by following the recommended guidelines
- Provide the dynamiser with the document draft for validation

The **validation phase** of the process is the same as above.

4. Accessibility of Spaces and the Environment

In order to accommodate the needs of people with Intellectual disabilities and achieve the goal of social inclusion, we have to make sure that the environment which they operate is cognitive accessible and facilitates orientation and interaction. Therefore, building designs needs to incorporate features that will aid orientation and wayfinding for person with Intellectual disabilities by providing assistance to both the *obtaining* and the *processing* of information.

In the following section it can find suggestions and recommendations on how to alter the design of a building or an environment in order to facilitate access for people with Intellectual disabilities.

4.1 WAYFINDING

Wayfinding refers to information systems that guide people through physical environments and improve their understanding and experience of space. It focuses on the person and, specifically, on the existing diversity of people and their capacities and physical variables, cultural, social, etc., in relation to the environment in which it operates. It is basically the process of accessing a building or a specific environment, navigating through it to a given destination and then retracing the process to leave the building/environment. To be able to successfully way-find through an environment a person needs to learn "spatial characteristics in either an on-route or distant environment using only information perceived and memorized while traveling" (Golledge 2003).

Wayfinding for a person with Intellectual disability can be a complicated and frustrating process. They may not understand that information needs to be gathered in order to navigate the building, and even if they do, they may not know where or how to find it. This can lead to high levels of anxiety and frustration which subsequently results in unwanted behavior.

The man principles of Wayfinding were established in 1998 by Mark A. Foltz and are summarized below:

- Create an identity in each place, different from all the others.

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- Use landmarks to provide orientation signs and memorable places.
- Create well-structured routes.
- Create regions, subdividing the space, with a different visual character.
- Do not give people too many options in navigation
- Provide maps.
- Provide signs at decision-making points to help make decisions on the way forward.
- Show what is coming, that is, what we will find next.

SIGNAGE

Signs are a major component of any wayfinding system. Their layout, clarity, continuity and consistency are fundamental to finding the required destination. It is a discipline of environmental communication and information, which aims to guide decisions and actions of individuals in places where services are provided.

The signage aims to inform the different types of users for a correct interrelation with the environment or the performance of the functions provided in it, either:

- Alerting about the situation.
- Calling attention to certain aspects of it.
- Facilitating the location and identification of certain media and / or facilities.
- Orienting.
- Regulating.

Recommendations for Accessible signage

To be ***effective***, signs should be clear, concise, and consistent.

- A clear and simple signage favors the safe and autonomous circulation of all. If the message is only in text, we exclude those unable to interpret the text.
- The text / image association is mandatory at the main points of the signage. Directional signage requires this text / image association.
- Information marking can be limited to the image (e.g. toilets). The image can be a pictogram or a photo.

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- The pictograms must be simple and understandable, designed according to agreed criteria and known to the greatest number of people.
- In the information panels, the indications must be located in a homogeneous way. Good signage offers greater visual comfort for everyone.

- Signs need to be placed at an appropriate height so that they can be read and in a location that avoids glare or reflections that could confuse or distract.
- Signs should use an appropriate typeface, have sufficiently large text and have good color contrast
- A color code helps to understand, to orient oneself. In this case the color code must be kept in the entire place.
- The typography should be as simple as possible (dry stick, without edges), with upper and lower case letters and respecting the sufficient line spacing between each line.
- Adapt the size of messages and signals to be viewed from a distance.
- Each space is named with the help of a word associated with a pictogram that reflects the space well. For the comfort of all, it is convenient, when possible, to duplicate sound announcements in visuals and vice versa.

MAPS

The use of maps requires a capacity to process two-dimensional information and relate it to a three-dimensional world. However, due to limited cognitive processing capability, persons with intellectual disability will find map reading a complex, difficult, and sometimes impossible task.

Recommendations for accessible maps

- Maps should be less cluttered
- Contain a “you are here” locator

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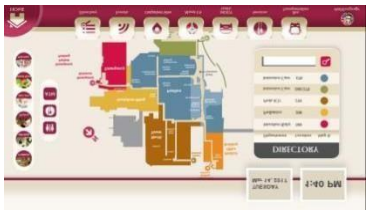
- Standardize the names of all buildings, services and destinations, and display them consistently across all graphics applications.
- Place maps in all exits, entry and main decision or intersection points inside buildings.
- Relate only to the floor they serve in a multi-story building
- Identify key facilities such as toilets using recognizable symbols
- Use color as a reinforce
- Avoid glare from the maps surface
-

DIRECTORIES

Directories present similar problems as maps, in the sense that they tend to contain too much information that are most times not easily understandable.



Recommendations for accessible directories

- Directories must not be complicated
- Contain meaningful information.
- Use easy reading text.
- Use contrasting colors.
- Color can be used to direct the person to different floor of environment locations.
- Establish a numbering system in the directories at the main entrance and on each floor, clearly indicating which floors are above and below the floor on which they are located.

LIGHTING

Lighting is an important aid for good accessibility by all users of a particular environment. Most importantly, it can assist persons with Intellectual disabilities read signs, find pathways and feel safe and oriented in public spaces. The placement and type of lighting can also be used to help direct users through an environment. The type of light fittings should be carefully chosen to suit the environment in which they are used. For example, buildings used by autistic children and/or adults should avoid lights that flicker or emit buzzing sounds as these can cause significant distress.

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Color

Color is an important factor in the provision of good wayfinding advice. It can be used to enhance and highlight signs, differentiate areas within a building and raise awareness of pertinent features, such as landmarks, within a building. Interestingly research by DSC (Disability Rights Commission 2004) highlighted that using unfamiliar colors in common signs such as fire exits may mean they are misunderstood or missed altogether. Consistently using internationally recognized colors for warning signs, for instance, could help to reduce misunderstanding, so long as the user can be taught to recognize the significance of those colors.

Recommendations to make good use of the architectural elements:

- Clearly identify arrival points.
- Provide waiting spaces and access hallways next to each entrance to the building.
- See that public information counters at each entrance to the building are visible from the access door.
- Use architectural features that define different areas such as archways, columns, varied ceiling heights and differentiated fenestration.
- Locate or signal the elevators so that they can be seen when entering the building.
- Place memorable milestones along hallways and at major decision / intersection points.
- Design waiting areas for users visually open to runners.
- Distinguish public areas from those with restricted access through the use of various finishes, colors or lighting.
- Harmonize signs and directional elements with the building and / or spaces.

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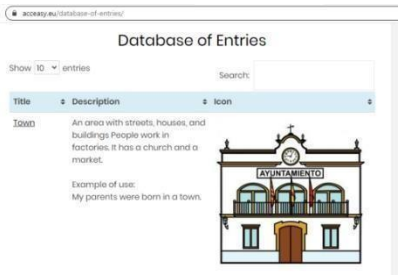
Building Designed for everyone

Each wing has a color – Information colors according to panel

5. ACCEASY RESOURCES

In the framework of the project's activities and main goals, the ACCEASY partnership has established resources that are designed to enable professionals in the field of intellectual disabilities and cultural heritage to learn more about easy reading/easy speaking methodology and familiarize themselves with the notion of cognitive accessibility and relevant modalities. As such, the partnership has created a database, a support manual for cultural heritage professionals and training activities regarding easy reading/easy speaking techniques. This is the website where some of the above-mentioned resources can be found http://acceasyproject.eu



- **Database**

The database consists of at least 410 terms and definitions related to cultural heritage elements in easy-to-read format, complete with pictograms and images. The database is open and free to access for everyone wishing to utilize the terms and definitions in their respective scope of work and are available in 5 languages (English, Italian, Slovakian, Greek and Spanish). All the entries of the database are designed by the participating organizations of the project and validated by groups of persons with intellectual disability in each country.

- **Support Manual**

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The support manual is aimed towards cultural heritage professionals and is designed to equip professionals with basic knowledge about cognitive disabilities, cognitive accessibility, and easy reading/easy speaking methodology. It is a useful resource aimed to assist cultural heritage professionals understand and incorporate easy reading /easy speaking techniques into their practice.

- **Training and Collaboration**

Training activities are designed to help facilitate information to people with cognitive difficulties. The main focus of these activities is to train professionals to speak and write in easy-to-understand method and to make environments accessible to people with cognitive difficulties

Universal accessibility logo

6. Practical examples of cognitive accessibility for places of Cultural Heritage

The main goal of the "Acceasy" project is to make places of cultural heritage accessible to people with Intellectual disabilities. As such, the participating organizations of the project were tasked to select a location of cultural heritage in their respective countries and work towards the goal of making it cognitively accessible. In this section, we will share the overall process that each partner followed towards the realization of the project's main aims by providing the overall methodology to enable professionals in the cultural heritage sector to develop their knowledge and competences regarding cognitive accessibility.

6.1 IMS Research & Development – Amathus, Limassol, Cyprus

Step 1: Location selection

The first step of the process encompasses the selection of a location with significant cultural heritage value. In this regard, IMS selected ***"Amathus"*** archaeological site, which is considered one of the most

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important ancient and historical sites in Cyprus and can be found 7 km east of the city of Limassol. Additionally, Amathus is listed as a UNESCO world heritage site.

Step 2: Creation of a database

As a second step, we examined the historical facts about Amathus in order to extract the most important and relevant information associated with the Ancient city. The goal was to identify at least 100 terms in order to create a database of entries with information and facts in easy reading format. The database consists of terms about mythology associated with Amathus, physical objects (artifacts) excavated from the site, different areas of the ancient city, Ancient deities associated with Amathus and other important historical facts.

Example of database entries: Amathus, Agora, Column, Basilica, Aphrodite, Ritual, Port, Figurine.

Step 3: Defining the terms in easy-to-read format

After the identification of entries for the creation of the database, authors from the organization proceeded to define the terms in easy-to-read format, having in mind the guidelines that must be followed when producing easy to read documents. Below, you can see an example of how a term is defined in easy reading format along with the structure and layout of the document. (Note: The example below is a first draft that had not been validated)

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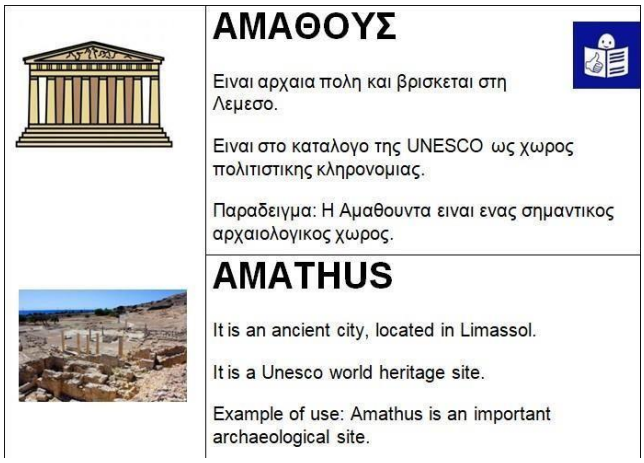
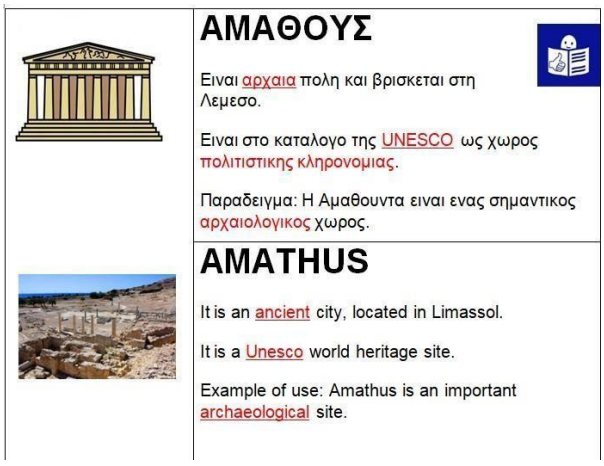


Step 4: Validation of entries

After creating the document and defining the entries, all work must be validated by the end users. Therefore, a group of five (5) people with Intellectual disabilities was formed in order to assist in the validation process. Under the direction of the dynamiser, each of the end users reads the document and provides feedback regarding the structure and vocabulary of the text. If an end user finds it difficult to comprehend the text, the dynamiser facilitates a group discussion on how to make the text more understandable by receiving suggestions from the end users. The document is validated after all end users have read it and approved its content.

In the figure below you can see in red what changes were decided by our validation group.



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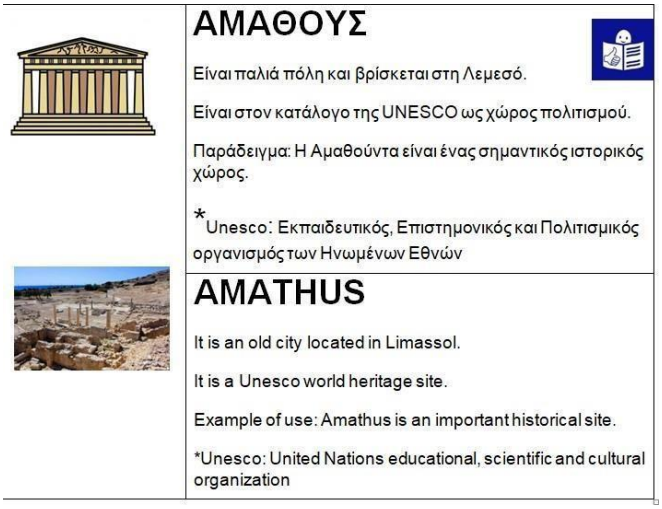
Step 5: Finalization of entries

After the validation process has taken place, the dynamiser then forwards the document to the author citing the changes that must be made. The author then takes into consideration the suggestions of the dynamiser and end users and adjusts the text accordingly. Below you can see the validated version of the term “Amathus”.

In the figure below you can see the final validated text with all necessary adjustments.



6.2 EGInA Srl Research & Development – Giostra della Quintana, Foligno, Italy

Step 1: Location selection

According to UNESCO “cultural heritage does not end at monuments and collections of objects. It also includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts. While fragile, intangible cultural heritage is an important factor in maintaining cultural diversity in the face of growing globalization.”

Considering the relevance of the intangible heritage, EGInA selected “**Giostra della Quintana di Foligno” (Quintana Tournament)** the medieval tournament that sees neighborhoods challenging each other in a friendly jousting competition at the start of June and September.

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The Quintana Tournament also satisfies the criteria identified by the UNESCO for the intangible heritage. It is:

- Traditional, contemporary, and living at the same time

- Inclusive

- Representative

- Community-based

Step 2: Creation of a database

We then came along with the identification of the most relevant terms associated with the Quintana Tournament. The goal was to select around 50 terms to be included in the ACCEASY database.

Example of database entries: Baroque, Knight, Historical Parade, Spears etc.

Step 3: Defining the terms in easy-to-read format

After identifying the entries for the database, we adapted the terms into easy-to-read format. Below, you can see an example.

Arasaac picto not available	**Statua del Dio Marte** La Statua è fatta in legno e rappresenta il dio Marte, il Dio della guerra. Sulla mano sinistra il dio Marte ha uno scudo, sulla mano destra c'è un gancio sul quale vengono messi degli anelli. I cavalieri devono usare la loro lancia per inflare gli anelli
	God Mars Statue The Statue is made of wood. It represents the god Mars, the god of war. On his left hand, the god Mars has a shield, on the right hand there is a hook where the rings are placed. The knights have to use their lance to tuck the rings.

Step 4: Validation of entries

We then send the entries adapted in easy to read to aCapo, the project partner in charge of validating the Italian entries. aCapo organizes different sessions, validating around 10 terms per session. The participants have been divided into two small groups of 6 persons each. The validation process followed the same rules highlighted in the previous section (Step 4).

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In the figure below you can see in red what changes were decided by our validation group.

Arasaac picto not available	**Statua del Dio Marte** La Statua è fatta in legno e ~~rappresenta~~ mostra il dio Marte, il Dio della guerra. Sulla mano sinistra il dio Marte ha uno scudo, sulla mano destra c'è un gancio sul quale vengono messi degli anelli. I cavalieri devono usare la loro lancia per inflare gli anelli
	God Mars Statue The Statue is made of wood. It ~~represents~~ shows the god Mars, the god of war. On his left hand, the god Mars has a shield, on the right hand there is a hook where the rings are placed. The knights have to use their lance to tuck the rings.

Step 5: Finalization of entries

After the validation process has taken place, the dynamiser then forwards the document to the author citing the changes that must be made. The author then takes into consideration the suggestions of the dynamiser and end users and adjusts the text accordingly.

6.3 FAB Fundación Aspanias Burgos – Burgos, España

Step 1: Site selection

The first step of the process involves the selection of a site with significant cultural heritage value. In this sense, FAB selected "La Catedral de Burgos", a UNESCO World Heritage Site since 1984, is considered the first Spanish Gothic Cathedral and used as an example by Notre Dame de Paris. It is one of the most important Cathedrals in Spain and can be found in the city centre of Burgos.

Step 2: Creation of a database

As a second step, we examined the historical facts about Burgos Cathedral in order to extract the most important and relevant information associated with this monument. The aim was to identify at least 100 terms (of which we have come up with about 60) to create a database of entries with information and

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facts in an easy-to-read format. The database consists of terms about architecture, sculpture, painting, interiors, style, materials, physical objects (paintings, tombs, chairs, sculptures...).

Example of database entries: Altarpiece, Stained glass, flying buttresses, Burgos Cathedral, spire, clerestory, dome, flycatcher, triforium, coffered ceiling, Gothic style, girola, gargoyles, transept.

Step 3: Definition of terms in Easy-to-Read format

After the identification of entries for the creation of the database, the authors of the organisation proceeded to define the terms in Easy-to-Read format, taking into account the guidelines to be followed when producing documents in Easy-to-Read format.

Step 4: Validation of entries

After creating the document and defining the inputs, all the work needs to be validated by the end users. Therefore, a group of five (3) persons with intellectual disabilities was formed in order to assist in the validation process. Under the guidance of the facilitator (Natalia), each of the end-users reads the document and provides feedback on the structure and vocabulary of the text. If an end-user finds the text difficult to understand, the facilitator facilitates a group discussion on how to make the text more understandable by receiving suggestions from the end-users. The document is validated after all end-users have read it and approved its content.

Step 5: Finalising the entries

Once the validation process has been carried out, the facilitator sends the document to the author citing the changes to be made. The author then takes into account the suggestions of the facilitator and the end-users and adjusts the text accordingly. Below, you can see the validated version of the term "Altarpiece" and "Stained glass window". These definitions were also reviewed and validated by professional tour guides who regularly explain these elements on their guided tours of the Cathedral.

In the following figure you can see the final validated text with all the necessary adjustments.

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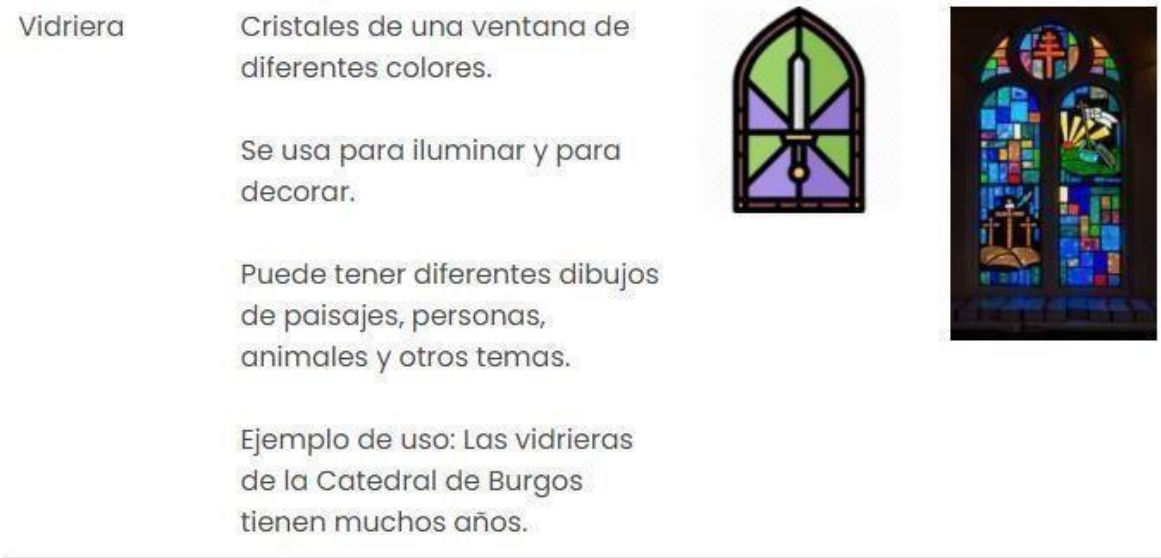
In the following figure you can see the final validated text in the database of the website http://acceasyproject.eu with all the necessary adjustments, both in English and Spanish.



Stained Glass Window	Window with coloured crystals. It is used to illuminate the interior and for decoration.		
Altarpiece	Set of painted carved figures of wood, stone or marble representing a religious story or religious images or from the Bible. It is usually located at the bottom of a chapel or behind the altar of a church. Example of use: There are many altarpieces in the churches.		
Retablo	Conjunto de figuras pintadas o talladas sobre madera, piedra o mármol que representan una historia religiosa e imágenes religiosas o de la biblia. Suele estar al fondo de una capilla o detrás del altar de las iglesias. Ejemplo de uso: En las iglesias hay muchos retablos.		

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