



# BOOKLET

TRAINING MODULES FOR  
EDUCATORS ON  
ALTERNATIVE AUGMENTATIVE  
COMMUNICATION FOR  
NATURAL HERITAGE



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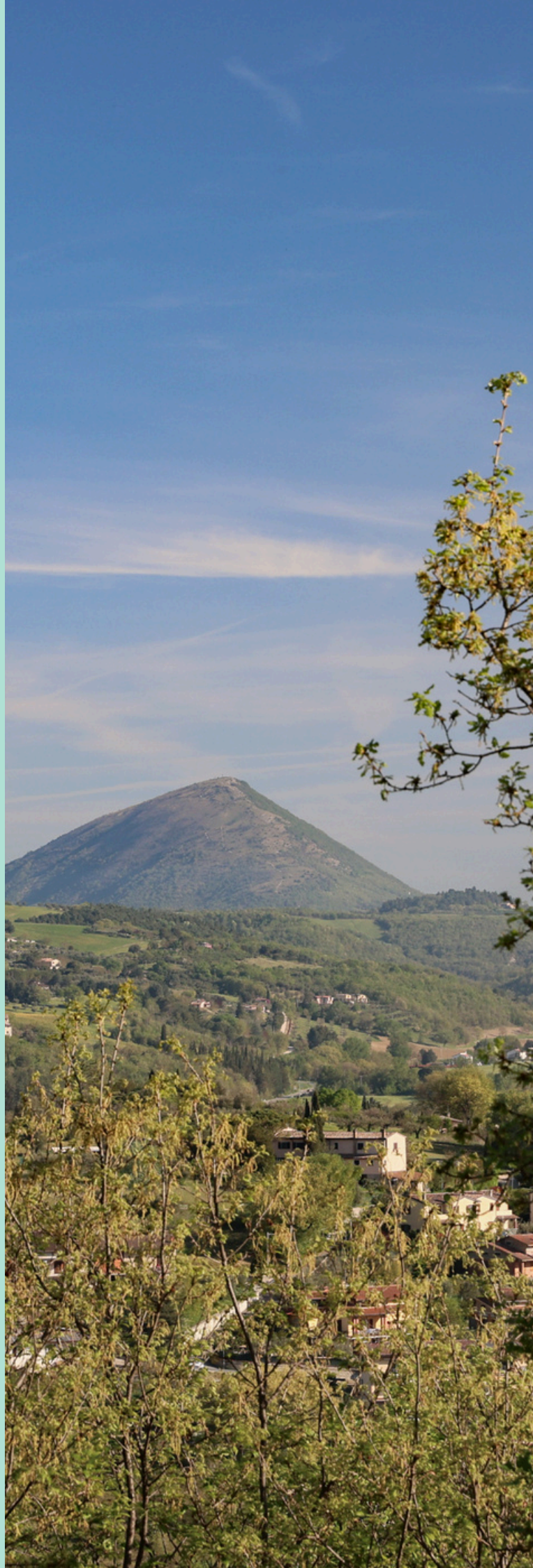
PAINT & QUARTER HORSE  
FOUNDATION BULGARIA



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01

# INTRODUCTION

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People with intellectual disability (PID) in rural areas tend to face even more difficult challenges than their peers in urban areas, due to a lack of support services and lack of accessibility, which can be one of the main barriers to their independent living.

The **general objective** of the "*RURAAC: Alternative Augmented Communication for rural Areas*" project is to promote the social inclusion of PID in rural areas by using alternative augmentative communication (AAC) in outdoor experiences and use of local natural heritage. AAC is a set of strategies and tools to help people who have communication difficulties, for example due to an intellectual disability. Although the RURAAC project focuses on people with intellectual disabilities, AAC materials can make natural heritage sites more accessible for **everyone**.

Although there are many good practices in the field of accessibility of cultural sites, not enough has been invested in the enhancement and accessibility of natural heritage, which, according to the UNESCO definition, is part of the World Heritage.

**RURAAC** aims to promote the social inclusion of PID through a participatory approach focused on the design of AAC material for the promotion of natural assets.

The specific objectives of the project are the following:



To develop the skills of educators working with adults with DI and those working in outdoor education on the topic of AAC.

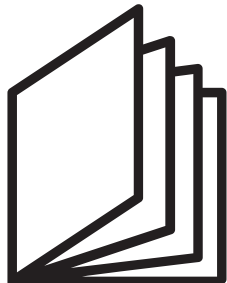


To promote the empowerment of people with DI through the co-design of AAC materials.



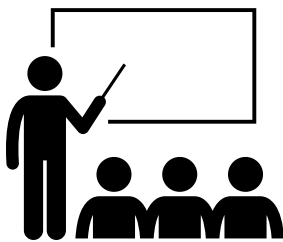
To disseminate the results in the local communities.

In terms of results, RURAAC aims to achieve the following results:



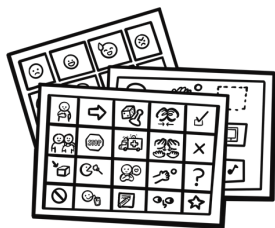
## TRAINING MODULES FOR EDUCATORS

with a specific focus on the promotion of natural assets. The training material will be collected in a Booklet on AAC for natural heritage.



## TRANSNATIONAL TRAINING COURSE ON AAC

dedicated to educators of adults with intellectual disabilities and educators who promote inclusive outdoor activities.



## COMMUNICATION MATERIALS IN AAC

for the promotion of local natural assets (e.g., short guides, signs, posters, etc.).



## PROMOTION EVENTS

in Italy, Bulgaria and Latvia.

## 1.2 RESEARCH ACTIVITIES

The production of this Booklet has been developed in two main phases: the needs analysis phase and the development of training material phase.

The research carried out by project partners aimed at exploring the training needs analysis of educators (both educators of people with intellectual disability and educators active in the field of outdoor) on the topic of *AAC for heritage promotion*.

To this end, and to have a broader knowledge in the field of social inclusion and natural heritage promotion, project partners have been involved in the implementation of a desk and field research.

GEA and Trekkify were responsible for the comparative analysis of all the collected data and the related production of this report. This report leads to the elaboration of the methodology, the definition of the training modules and selection of the learning material of the Booklet.

### ➤ THE DESK RESEARCH


The desk research consisted of the detailed analysis of the institutional and healthcare context in which the educators of PID professionals carry out their activities.

The main findings at country level were summarized in the specific desk research form provided by GEA. One form per country was submitted.

### ➤ THE FIELD RESEARCH

Part of the research was based on the data collected from a set of questionnaires completed by the main target groups: *educators of PID and educators/experts in the field of outdoor education* — both within and outside the partnership. In total, **59 participants** completed the surveys.





The questionnaires aimed at exploring educators' degree of knowledge, skills competences in the field of AAC, as well as their preferences in the delivery of training opportunities to design and implement inclusive outdoor experiences.

The field research also aimed at collecting best practices related to existing events/activities focused on the participation of people with intellectual disabilities in outdoor activities and the valorisation of rural areas (Annex 1).

For more details on the research activities carried out in Italy, Bulgaria and Latvia click [here](#).

## 1.3 FROM THE RESEARCH TO THE RURAAC BOOKLET

The results emerging from the desk and the field research have stressed relevant gaps in the knowledge/use of AAC for the promotion of local natural heritage. The gaps highlighted during the research activities are extremely useful for the design and development of the RURAAC Booklet.

Besides showing that the degree of knowledge of AAC among educators active in the field of outdoor is quite low, our research reveals the obstacles to achieving full inclusion of PID in outdoor activities, as well as the shortage of available materials in accessible or alternative formats (e.g. wayfinding signage, signposting, billboards, brochures) that enable PID to enjoy the local natural heritage. Moreover, the research shows that the idea of using nature as a tool for social inclusion is often linked to physical rather than intellectual disabilities.

In this regard, the creation of a Booklet seems very much needed and innovative. This is also confirmed by the interest the project has aroused among the respondents. Indeed, almost 100% of participants said that they would like to receive updates on the RURAAC project.

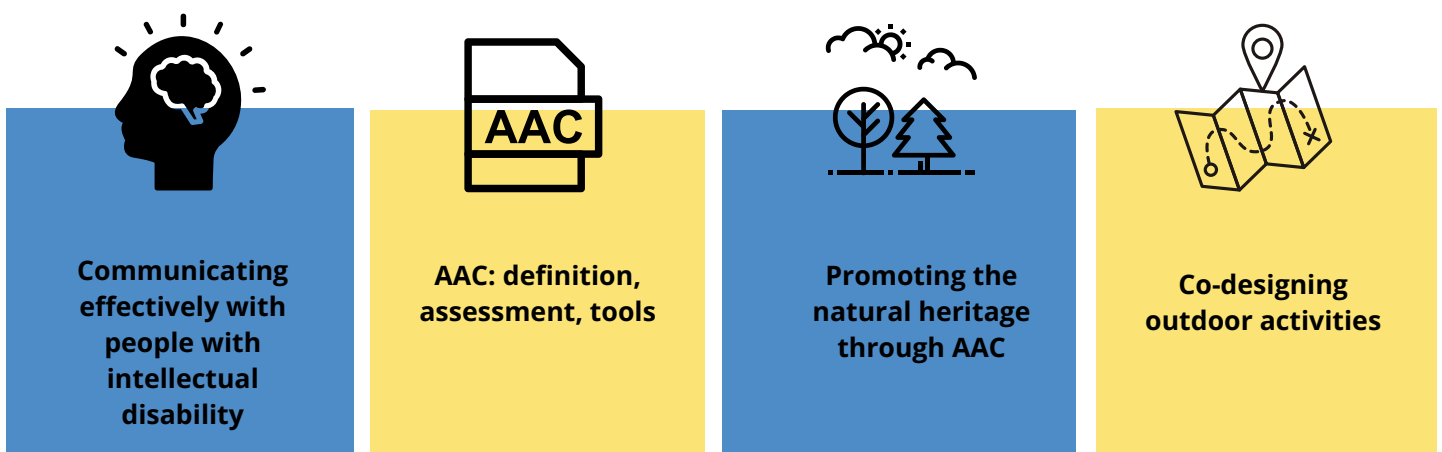
According to the educators, the resources provided in the RURAAC Booklet for educator training should be **practical**. Indeed, most respondents claimed that the Booklet should provide practical guidance on what AAC is and how to use it. Respondents underlined the need to have real examples of AAC material, to get support on how to find resources and support for AAC.

Moving from the research results to the design of the RURAAC Booklet, some key aspects have been considered. First of all, as underlined, educators/experts in the field of outdoor education from Italy and Bulgaria have little to no knowledge of AAC. With this in mind, the Booklet features modules on AAC and its application in promoting the local natural heritage.

For the same reason, communication-related skills have been addressed: a module has been designed to support educators to acquire -specific skills needed to efficiently communicate with people with intellectual disability.

Our Booklet has also been designed to equip the readers with the knowledge, skills and competencies needed to support co-design and PID engagement for designing accessible material. Being addressed to both educators of PID and educators/experts in the field of outdoor education, this document aims to provide theoretical and practical activities which could help contribute to the social inclusion of PID in rural areas by using AAC in outdoor experiences and leveraging local natural heritage.

Based on the findings of the research activities, partners developed the content of this Booklet around 4 main areas:



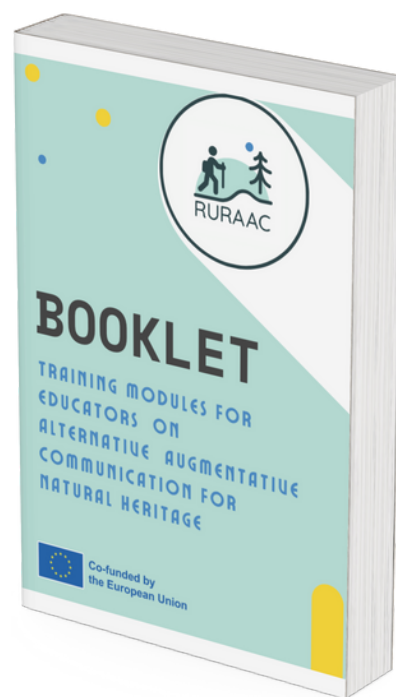
## 1.4

# HOW TO USE THE RURAAC BOOKLET

The Booklet serves as a guide for **adult educators** (*both educators of PID and educators active in the field of outdoor education*) to promote the social inclusion of PID through a co-design approach focused on the design of AAC material for the promotion of natural assets.

The promotion of natural heritage in rural areas is of great importance for various reasons, encompassing environmental, social, economic, and cultural aspects. In the framework of the RURRAC project, promotion of natural heritage in rural areas is essential for two key aspects:

- Health and well-being: access to natural heritage areas promotes physical and mental well-being. Making the outdoors more Inclusive and accessible is a key step in supporting equal opportunities.
- Community Empowerment: cooperating with local communities in the promotion of natural heritage fosters a sense of responsibility and active citizenship. Besides facilitating the social inclusion of PID, community empowerment can also contribute to reducing the stigma associated with intellectual disabilities.



The document has the dual purpose of: 1) training educators to acquire/improve their skills and competencies in engaging PID in outdoor activities and in the promotion of the local natural heritage through AAC and 2) designing training material that can be transferred to other contexts. The Booklet, together with the training material, which can be adapted, updated and expanded by interested users, constitutes a valuable learning package that is prepared for future utilisation by facilitators, educators, learning communities, and interested organisations across Europe.

To reach a broader audience expanding the Booklet's impact on a global scale, the document is available in **English, Italian, Bulgarian and Latvian**.

The training content is based on open educational resources (OERs) that partners have developed/selected according to the learning objectives and outcomes to be achieved for each module. Many of the resources developed or selected under open educational licenses are provided in English to allow educators across Europe to adapt them to their context.

**ARE YOU READY TO EMBARK ON A JOURNEY OF  
ACCESSIBILITY AND THE WONDERS OF  
NATURAL HERITAGE?**

**USE THE RURAAC BOOKLET AND ADAPT IT  
TO YOUR CONTEXT!**

02

# EFFECTIVE COMMUNICATION WITH INDIVIDUALS WITH INTELLECTUAL DISABILITY



# INTRODUCTION

Since people with intellectual disability (from now on PID) are usually vulnerable to communication impairments, with consequences for employment and social participation, this module aims to give an overview of the barriers and enablers to communication PID.

## KEY WORDS

- Communication difficulties
- Accessibility
- Individualization

## LEARNING OBJECTIVES

- To understand the concept and importance of communication.
- To explore the communication difficulties faced by PID.
- To promote inclusion for all people regardless of their abilities.
- To discover the main strategies to ensure effective communication.

## LEARNING OBJECTIVES

- Educators will be able to identify the barriers to communication.
- Educators will be able to communicate better with PID.
- Educators will be able to encourage positive and effective interactions with PID.

## 2.1

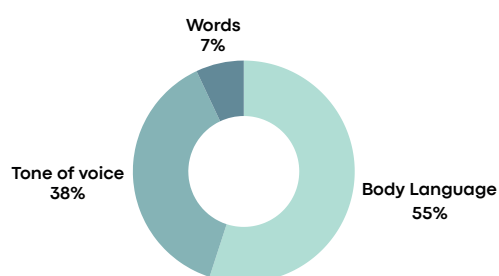
# WHAT IS COMMUNICATION?

*"The silence of those who do not speak is never golden. All of us need to communicate and connect with others — not in just one way, but in every possible way. It is a fundamental human need, a fundamental human right. Moreover, it is a fundamental power of humanity." — Williams, Michael B. & Krezman, Carole Jane. Beneath The Surface, Creative Expressions of Augmented Communicators (2000).*

Whether you're in a professional setting or just having a personal conversation, it is crucial to understand that all communication needs to be done in a compassionate and caring way.

### But first, what is communication?

There are hundreds of definitions of communication. We can define it as the action of passing on information from one person to another using any means possible. It is essential to recognise that communication occurs only when there are two or more communicative partners involved. Therefore, one must consider not only the person with a disability but also the other interlocutors and their communication and relational skills. Indeed, communication requires all participants to be engaged in the conversation. Communication is also more than just the words we use. The way people communicate is made up of:



Intellectual disability is commonly associated with challenges related to the domains of adaptive behaviour and functions related to thinking and learning. People with intellectual disability (e.g. people with autism spectrum disorder, Down syndrome, learning disabilities, etc.) can experience diverse communication difficulties. The communication difficulties faced by PID can involve one (or more) of the following areas: reading, writing, speaking, understanding expression, social communication engagement.

Having challenges in one or more areas can significantly impact the life of PID. Such difficulties can lead to the emergence of problem behaviours, non-adaptability, a limited capacity for social integration, difficulties in expressing and understanding one's needs and desires, frustration, decreased self-esteem, diminished expression of one's personality, and reduced participation in rehabilitation processes.

**The first step to overcoming communication barriers is to know your audience and adapt your communication style to it.** When communicating with PID, it is crucial to consider that each person with intellectual disability communicates in a specific way. This plays a key role in ensuring effective communication!

# UNDERSTANDING COMMUNICATION NEEDS OF PID

## 2.2

Understanding the communication needs of individuals with PID is a complex and nuanced challenge, as they can exhibit a wide range of communication abilities and preferences. Some may be nonverbal, relying on gestures or AAC devices to express themselves, while others may use spoken language with varying degrees of proficiency. The variability extends to how PID understand and interpret language, with some taking language very literally and others struggling with the nuances of social communication.

If we consider people with autism, their sensory experiences can also significantly impact their communication. Many individuals with autism have sensory sensitivities that can affect their ability to process auditory, visual, and tactile information. These sensitivities can influence their communication preferences; for example, some may find verbal communication overwhelming due to auditory sensitivities, preferring visual methods of communication such as picture boards or sign language.

Assessing the communication needs and strengths of PID is crucial for providing effective support. This process involves a combination of observation, direct interaction, and input from those who know the individual well, such as family members and educators.

Standardised assessments can also be useful, but they should be chosen carefully to ensure they are appropriate for the individual's developmental level and communication abilities.

Strategies for supporting communication include creating a supportive environment that minimizes sensory overload, using visual supports to enhance understanding, and employing teaching strategies that build on the individual's strengths.

It's also important to foster a communicative environment that encourages attempts at communication in any form, recognizing and responding to nonverbal cues as legitimate forms of expression.

Effective communication support for PID requires a **personalised approach** that respects their unique preferences and needs. By carefully assessing each individual's strengths and challenges and adopting flexible, responsive communication strategies, caregivers and professionals can significantly enhance the communicative and overall well-being of PID.

Acknowledging and respecting individual preferences for communication methods is crucial when communicating with PID.

In this regard, it is fundamental to consider that "communication includes languages, display of text, Braille, tactile communication, large print, accessible multimedia as well as written, audio, plain-language, human-reader and augmentative



and alternative modes, means and formats of communication, including accessible information and communication technology” (Article 2 of the UN Convention on the Rights of Persons with Disabilities).

Some people use their voice to speak, but others may use hand signals, pictures or other tools to help them communicate without speaking. The most important thing when talking with someone with intellectual disability is to understand and respect their unique way of communicating.



## 2.3

# COMMUNICATION AS A KEY TO SOCIAL INCLUSION

Communication is an essential and very important human need as well as a fundamental human right. Being able to communicate allows people to share needs and desires, form relationships, work and seek support.

For PID, communication barriers can increase their social exclusion. Indeed, PID are vulnerable to communication impairments, with consequences for personal relationships, employment, education, social participation, and independent living.

People with complex communication needs (CCN) encounter daily communication barriers within the community, for example, in public services, businesses, transportation, healthcare settings, banks, exercising the right to vote, legal contexts (e.g. signature recognition issues), access to justice (e.g. reporting a crime to the police), and other areas. Communication barriers can lead to discrimination, abuse and crimes, loss of control (e.g. informed consent in healthcare, drafting a will, etc.), and autonomy loss.

To address these barriers, different interventions are necessary at various levels, such as targeted legislative interventions which involve listening to and involving AAC users and AAC professionals, raising awareness and providing training for staff in relevant settings, specialised training for

AAC expert professionals, mediators and communication assistants, as well as environmental adaptations and other measures.

Environmental adaptations may include adjusting information and signage in public places (hospitals, airports, stations, museums, libraries, sports venues, leisure activities venues, etc.), businesses and other areas, following easy-to-read principles first and/or providing tailored collective AAC support.

As you can see, communication is indeed a fundamental aspect of PID's well-being, promotion of rights, and active participation in society.





Ensuring effective communication with people with PID is critical to:

- Promote inclusion and participation: effective communication promotes inclusion by ensuring that individuals with intellectual disabilities can actively participate in various aspects of life.
- Understand needs and preferences: proper communication enables caregivers, educators, and support systems to understand the unique needs, preferences, and perspectives of individuals with intellectual disabilities.
- Enhance empowerment and autonomy: clear communication empowers individuals with intellectual disabilities to express their thoughts, feelings, and preferences.
- Boost access to information and services: communication is a gateway to accessing information and services. Ensuring effective communication enables individuals with intellectual disabilities to understand and utilise available resources, including healthcare, education, employment opportunities, and social support.

Being committed to effective communication and accessibility is the first step in overcoming barriers to social inclusion. Under the [CRPD](#), States parties recognise the importance of **universal design**, defined in Article 2 as “the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design”.



## 2.4

# COMMUNICATION STRATEGIES

Each person with intellectual disability communicates in specific ways. Communicating effectively with them involves using strategies that consider their unique needs and abilities, understanding the methods they use to get their message across, and working with them by using their unique system. Here are some communication strategies to consider:

- Interact face-to-face;
- Focus on the communicative partner, following their lead;
- Follow the partner's interests (observe what they are observing without proposing unrelated things);
- Provide live commentary, observe, and narrate what the partner is doing;
- Speak at a slow pace with emphasis and frequent pauses (5 seconds between phrases to allow time for response/reaction);
- Take balanced turns (avoid overly long sentences);
- Acknowledge and confirm successful communication (support every verbal or gestural production by repeating what is expressed);
- Ask open-ended questions and observe responses;
- Use simple language/vocabulary and avoid jargon;
- Be direct and say what you mean — avoid implicit meanings, figurative speech, and sarcasm;
- Imitate (repeat all or part of the communicative partner's production);

- Label everything indicated by the partner;
- Describe actions taken/give voice to the partner's actions;
- Imitate and expand (lengthen and complete the spoken phrase);
- Teach a word by repeating it multiple times associated with different subjects if it's an action, or different actions if it's characteristics, etc.
- Reformulate an incomplete sentence, completing and correcting it with articles, prepositions, etc.;
- Provide explanations and suggestions about what is happening;
- Voice feelings and desires even if unexpressed or incomplete

For **successfully communicating** with a person with intellectual disability, remember to always focus on the person and not on the disability. It is also crucial to use age-appropriate tone and not treat adults like children. Moreover, being able to implement an alternative communication style as needed, rather than the spoken word (e.g. sign language, written text, visual cues, communication devices etc.) plays a key role in ensuring effective communication. Additionally, always consider that PID may encounter challenges in maintaining focus or concentration during communication. It's crucial to consider how the surroundings might impact their communication abilities and to reduce distractions, when possible, as noisy and unfamiliar environments can pose difficulties in effective communication.

## WRAPPING UP

Communication is conveying information (words, sounds, pictures etc.) between persons or from one place to another. But it is much more than this! Communication is how we connect with the world.

Successful communication can deepen relations in personal life or professional life. We do know that communication challenges are extensive within the intellectual disability field.

Given the diverse communication abilities and methods of people with intellectual disabilities, it is paramount to enable inclusive communication to ensure effective communication. The first step towards effective communication with PID is acknowledging and respecting their individual needs and preferences for communication methods.

The next section aims to unlock the power of AAC for enhancing PID's communication skills and enabling inclusive communication.

## PRACTICAL ACTIVITIES

### **ACTIVITY 1: DOS & DON'TS**

Based on your experience with PID (if any) make a list of DOs & DON'Ts of effective communication and compare it with the tips provided in [this video](#).

If you have never communicated with a person with intellectual disability, think about the main challenges you may face and how you could overcome them.

### **ACTIVITY 2: RESEARCH ON COMMUNICATION PROBLEMS**

Choose a specific type of intellectual disability and research the most common communication problems usually faced by people with that particular disability.

03

# INTRODUCTION TO AAC



# INTRODUCTION

This module gives an overview about Augmentative Alternative Communication (AAC), including its principles and strategies for implementation.

## KEY WORDS

- AAC
- AC strategies
- AAC tools

## LEARNING OBJECTIVES

- To become familiar with the world of AAC.
- To differentiate between different types of AAC systems.
- To identify the key principles of AAC.
- To familiarise with the most common linguistic symbolic systems.

## LEARNING OBJECTIVES

- Educators will be able to identify the main characteristics of AAC.
- Educators will be able to recognize to explore the advantages of AAC.
- Educators will be able to recognize linguistic symbolic systems.
- Educators will be able to use some key AAC tools and apply it to the field of outdoor.

## 3.1

# INTRODUCTION TO AAC

Let's explore the world of AAC!

Augmentative and Alternative Communication refers to a range of communication methods used to overcome challenges associated with typical speech.

In everyday life, everyone utilises augmentative communication through facial expressions and gestures alongside verbal speech. However, for individuals confronting severe communication obstacles, relying on AAC becomes essential to meet their communication requirements.

For AAC users it is crucial to have a method to convey desires and necessities, share information, foster social bonds, and participate in social events.

The situations in which AAC can be put into practice are truly diverse and all important: from supporting independent living, to receiving typically written or verbal messages, to managing time and space, to expressing needs, desires, requests, and more generally, interacting with the environment and therefore with other communicative partners.

It is important to consider that the final extent of an AAC intervention "is not simply the increase in vocabulary or linguistic output but the degree of increased access and participation in specific activities and experiences of everyday life" ( Light & McNaughton 2012).

AAC methods encompass basic approaches like pictures, gestures, line drawings, letters and words, as well as advanced techniques utilising sophisticated computer technology.

AAC includes three key concepts:

- **Augmentative** communication which involves enhancing speech by incorporating additional elements to facilitate clearer and more efficient information transmission. The term "augmentative" indicates how AAC techniques, methods, and tools are primarily aimed not at replacing existing communication modalities but at enhancing natural communication through strengthening present skills and valorising natural modalities (oral, facial, gestural, visual, etc.).
- **Alternative** communication, on the other hand, provides a means of expressing thoughts, ideas, feelings, desires, and needs without relying on speech. The term "alternative" indicates how AAC resorts, when necessary, to special modes and means of communication, substitutive of oral language (modes that may include aids, techniques, strategies, and tools such as graphic symbols, writing, and gestures).



- **Communication:** as explored in the first chapter, human communication is by nature cooperative and multimodal. AAC — Augmentative and Alternative Communication — fits entirely within this framework as it uses a combination of various communication modalities (Beukelman & Mirenda, 2013) depending on communicative purposes and contexts.

When combined, these terms represent a **comprehensive system of communication methods designed to supplement or replace speech for individuals who may face difficulties using it effectively.**



## 3.2

# THE POWER OF AAC FOR EVERYONE

AAC can be a highly effective means of communication for individuals of all ages. It enables people with communication disorders to use a range of tools, from low to high technology, to convey their wishes, needs, and ideas.

Despite its immense potential, caregivers, educators and other team members occasionally hesitate to explore AAC. As with all new things, it takes time to get used to a new technology. Nevertheless, the **advantages** of AAC are numerous and can significantly improve individuals' lives. Let's see some of them:

- **Enhanced communication:** AAC contributes positively to language development.
- **Improved independence:** AAC helps individuals assimilate into society, fostering strong interpersonal connections, such as friendships.
- AAC can serve as a valuable and easily accessible tool for professionals and parents to **collaborate with PID** who experience communication challenges.
- **Flexibility and customization:** AAC systems can be tailored to meet individual needs and preferences, accommodating diverse communication styles, languages, and abilities.

In the field of **outdoor education**, there are numerous reasons for educators/associations to start exploring and learning about the concept of AAC. Learning about AAC can lead to greater inclusivity, effective communication,

awareness, and support for people with disabilities during outdoor activities. In detail:

- **Inclusivity:** introducing AAC ensures that the outdoor experience is inclusive for individuals with communication disabilities. By incorporating AAC strategies and tools, associations can accommodate a wider range of participants, including those with speech or verbal communication difficulties.
- **Safety:** in outdoor environments, effective communication is crucial for ensuring the safety and well-being of all participants. Being familiar with AAC equips trekking guides and staff with the knowledge and skills to communicate with AAC system users in emergency situations or to convey important information during the hiking.
- **Empowerment:** introducing AAC empowers individuals with communication disabilities to participate more actively and independently in outdoor adventures. By providing access to communication support, associations promote self-expression, autonomy, and inclusion among all participants
- **Opportunities for growth:** Being able to welcome and support people with a wider range of communication needs can open up new opportunities for participation and involvement in an association. This could lead to greater diversity of members and overall growth of the association.

### 3.3

## BUT...HOW DIFFICULT IS IT TO COMMUNICATE WITH SOMEONE WHO USES AAC?

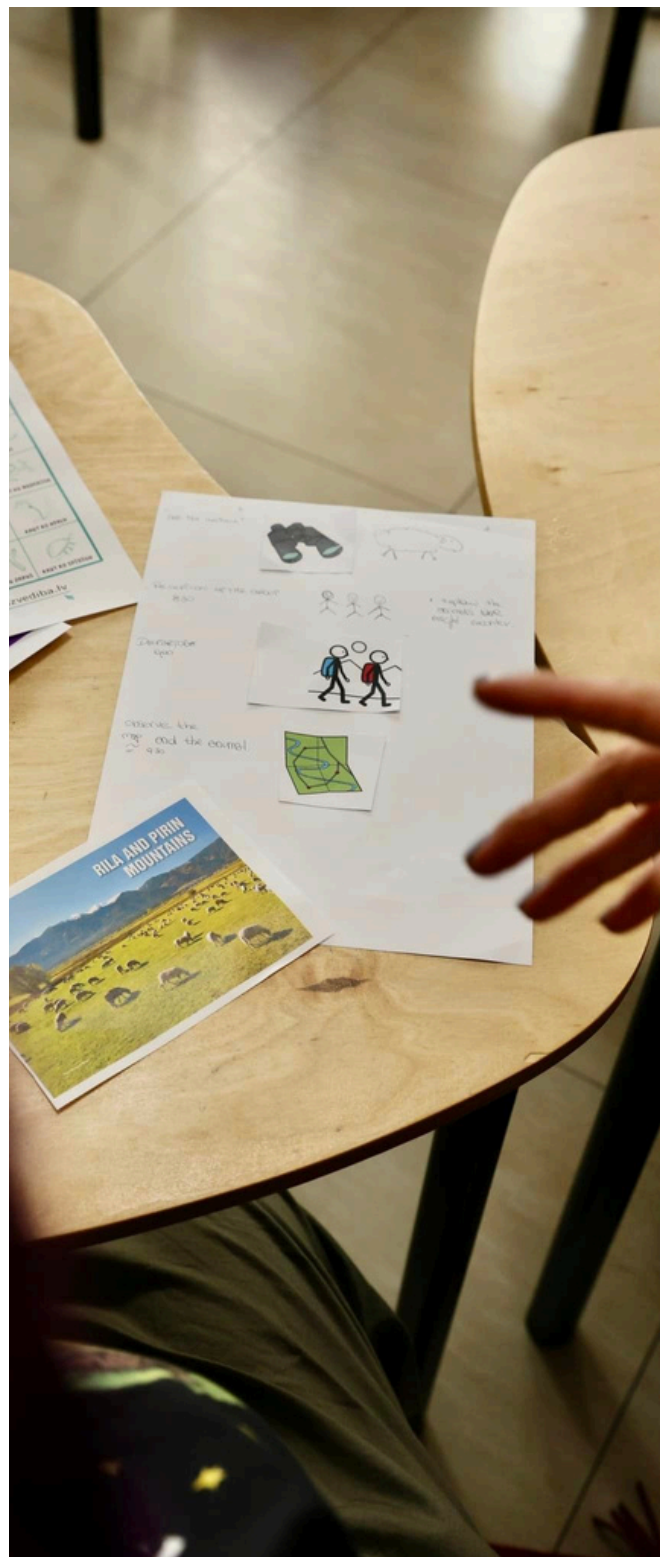
The first conversation with a person using AAC can feel slightly uncomfortable, particularly for those who are just beginning to familiarise themselves with the world of AAC.

**The key is to not focus on the AAC system or worry about its mechanisms, but to concentrate on the person using it and actively listen to their message.** It may require effort on both sides, but the investment is worth it. Any AAC system is far superior to the inability to communicate completely.

Moreover, it is important to consider that there are numerous **false beliefs** about AAC's limitations and obstacles. Despite past assumptions, there are no specific requirements for utilising AAC: individuals of various ages and cognitive abilities can benefit from AAC tools. Another myth is that adopting an AAC solution immediately facilitates communication.

The reality is that implementing AAC is not just providing a device and expecting immediate results. AAC requires dedication and patience.

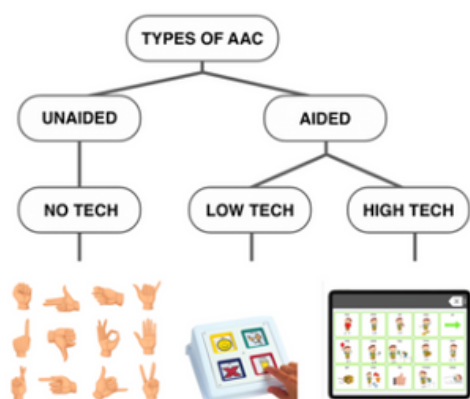
So being **patient** and **persistent** is crucial!



## 3.4 PRINCIPLES OF AAC

AAC encompasses strategies and tools designed to aid those who face challenges with typical speech.

We often categorise AAC systems into **two groups**: unaided AAC and aided AAC systems. Aided AAC can further be classified into high-tech solutions, such as computerised devices that generate speech, and low-tech solutions, like picture boards or communication books.



From: [Fluent AAC](#)

Let's see the main characteristics in detail:

**Unaided AAC system:** it refers to a method of communication that does not require external aids or devices. Instead, it relies solely on the user's body to convey messages. It includes:

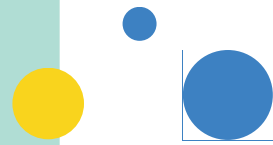
- *Gestures and body language:* Using body movements to convey messages. Facial expressions or manual gestures expand information and convey messages even without using voice.

Body movements enable the expression of a wide range of emotions or moods, enriching the context of a conversation. For example, it's essential to emphasise the significance of deictic gestures, such as pointing or indicating. Deictic gestures can be divided into directive and demonstrative.

Directive gestures indicate something desired or requested (e.g. "I want water" becomes pointing at the water bottle). Demonstrative gestures, indicate something for another person to see (e.g. "Look, there's a plane in the sky!" becomes pointing at the sky, toward the plane). Demonstratives inherently involve an important social aspect, showing something to someone that is assumed to be of interest to them.



From: [VEASYT](#)



- *Sign Language*: Utilising hand shapes, movements, and facial expressions to communicate. By utilising the visual-gestural channel, sign language can also become a communication system within AAC when individual signs are used to support comprehension and production. Its gestural-spatial configuration and visual perception provide a means of communication and complete grammatical structures. Other methods are widely used with deafblind individuals.



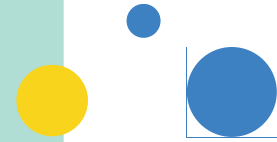
From: [16 tipi di emozioni di base](#)

**Aided AAC system:** it includes any device, either electronic or non-electronic, that is used to transmit or receive messages. It is divided into three categories:

- *Low-Tech Solutions* (e.g. Pictures, objects, photographs, writing communication boards/books): Non-electronic devices or simple electronic devices that provide basic communication support through tangible items like picture cards or simple voice output buttons.

Here there are some examples:

- a. *Picture Communication Boards*: Boards with symbols or pictures to represent words or phrases.
  - b. *Communication Books*: Binders or notebooks with symbols, pictures, or words.
  - c. *PECS (Picture Exchange Communication System)*: A form of communication using pictures to teach requesting and other communicative functions.
- *High-Tech Solutions* (e.g. *Speech Generating Devices (SGD)*, *single Message Devices* and *Recordable/Digitized Devices*, AAC software that enables dynamic symbol/language representation and that is used with a computer/tablet/smartphone): advanced electronic devices, including dynamic display screen devices and software applications, capable of generating speech, providing a wide range of communication options, and being customised to the user's needs. Here are some examples:
    - a. *Speech-Generating Devices (SGDs)*: Electronic devices that produce speech when a symbol, letter, or button is pressed.
    - b. *Tablet Applications*: Apps designed for communication support, often customizable for the user's needs.
    - c. *Computer-Based AAC*: Software on coSoftware on computers or tablets that supports various forms of communication, from text-to-speech to complex symbol systems. Certain common applications can be considered alternative communication systems.



The same applies to specific applications designed to collect, categorise, and organise symbols useful for producing or understanding requests and needs. Tablets or computers with customised and adapted applications are also used. Some of these applications allow downloading the image for printing, creating a paper-based support where high technology use is not possible.

Among hi-tech tools, several software solutions have gained significant recognition. Grid 3, GoTalks, and Widgit Go stand out as some of the most well-known and widely used options.

For PID, AAC serves as a vital support mechanism, enabling them to express their needs, preferences, and emotions more effectively. It plays a crucial role in enhancing autonomy by providing them with alternative means to communicate, thereby increasing their ability to participate in various social, educational, and daily activities.

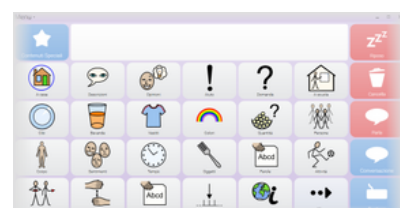
## WIDGIT GO



## GOTALKS



## GRID 3



## 3.5

# IMPLEMENTING AAC STRATEGIES

Implementing AAC strategies with PID, involves a thoughtful, step-by-step approach tailored to each individual's unique communication needs and preferences.

**Customization** is key in AAC implementation. This means selecting tools that resonate with the individual's interests, cognitive levels, and sensory preferences. For instance, some might respond better to visual aids like tablets with speech-generating applications, while others might find physical objects or tactile symbols more engaging.

**There isn't a singular "optimal" AAC system.** Each system has advantages and disadvantages, and the most appropriate choice for an individual hinges on their abilities, requirements, and personal preferences. Often, individuals utilize multiple AAC methods, selecting the most suitable one based on the listener and specific circumstances. In instances where high-tech options encounter malfunctions, low-tech alternatives may become necessary.

Let's explore the best criteria that can be used for selecting the most appropriate AAC devices and systems (for a further overview of the initial assessment of skills for access to AAC tools please see next chapter):

- **Communication needs:** consider the complexity of the individual's communication needs, including the range of messages they wish to convey, the contexts in which communication will occur, and the need for portability.
- **Cognitive abilities:** the user's ability to understand symbols, navigate menus, or remember sequences can influence the complexity of the device that would best suit their needs.
- **Physical abilities:** motor skills, including the ability to touch, swipe, or press buttons, are crucial in determining the most accessible device.
- **Sensory abilities:** visual and auditory processing abilities may affect how well an individual can use certain devices, impacting the choice of screen size, audio output, or visual complexity.
- **Environmental considerations:** the environments in which the AAC device will be used—such as noisy classrooms, outdoor settings, or different lighting conditions—should influence the selection process.
- **Personal references:** the individual's interests, preferences, and motivation to use a particular tool or technology can significantly affect their engagement and success with AAC.

## 3.6

# THE MOST COMMON SYMBOLIC SYSTEMS

The symbolic system includes both a simple collection of images and a system of linguistic representation rules. In the absence of these rules, it is referred to as a symbolic set; in general, symbolic systems can also represent linguistic elements at a more abstract level (including morphosyntactic aspects, articles, conjunctions, prepositions, etc.). However, *"the symbolic system cannot be a simple collection of graphic elements, images. There is a need for internal coherence in representing concepts, semantic classes, and pragmatic ones"* (Adolfo Corti, 1997).

Transparency is among the most important characteristics of symbolic systems, as it refers to the degree of immediate recognisability of symbol elements. Because of the diverse pathologies and problems that can cause language difficulties, different AAC systems have been invented over the years. Personalised according to each individual's physical and cognitive abilities, these systems aim to provide people with a way to communicate.

Symbols are graphic elements often enclosed in a square with a symbol (pictogram) inside and the text it represents, essentially presenting us with the meaning of the word.

The most common linguistic symbolic systems used in AAC include:

- **Bliss:** it is the first of the symbolic languages, created with the intention of being a simple-to-learn international

auxiliary language, not necessarily related to disability. It is a "semantographic" system, inspired by ideograms. The strength of Bliss lies in its expressive power through the use of modifiers: plural, verb tenses, concretisation of concepts, e.g. the same symbol, with appropriate modifiers, can mean brain, mind, thinking. It uses 26 elementary graphic signs as primitive elements, which can be combined in countless ways to create new words, similarly to what happens with sounds in language. The position of the symbol itself determines the meaning. This makes it non-transparent.

- **PCS (Picture Communication Symbols)** are a widely used set of symbols originating from the USA, comprising over 40,000 symbols used across 42 different languages. Despite their stylized nature, they offer good graphic clarity, making them easily identifiable.
- **WLS - Widgit Literacy Symbols** are a set of symbols designed to support literacy and communication for individuals with learning difficulties, autism, or communication disorders. Compared to PCS, the WLS symbol system has a greater level of maturity, with well-defined rules.
- **ARASAAC**, born in Spain, is a reference point that provides graphic resources and adapted materials with a Creative Commons licence (BY-NC-SA) to facilitate communication and cognitive accessibility.



## 3.7

# A FEW EXAMPLES OF AAC USED IN OUTDOOR SPOTS

### SPADA LAKES: THE AAC GUIDE



The first tourist guide in Umbria created by people with disabilities: it's a pioneering initiative in Italy, crafted using alternative augmentative communication methods implemented by young people with disabilities together with educators (Cooperativa La Rondine). This guide is specifically dedicated to the Spada Lakes (Città di Castello, Italy), inviting both adults and children to explore the natural marvels embedded in this community-designated site, known for its rich flora and fauna, protected under the European Union. The guide offers an inclusive opportunity for all to discover and appreciate the region's biodiversity.

### FORTE DEI MARMI... IN OTHER WORDS!

This project aims at creating the first Augmentative Communication Park in Versilia (Sabin Park, Italy).

With 23 explanatory panels installed alongside each game, it provides support for individuals facing challenges in verbal communication or reading, enabling them to understand and participate fully. The objective of the "Forte dei Marmi...in other words!" project is clear: to ensure that everyone, aided by images, can fully enjoy the park's games and to enhance the town's accessibility.



From: [Versilia Today Redazione](#)

### AAC PANELS IN THE GREEN AREAS OF PRATO

The project included the installation of 510 new informational panels across the green spaces of the Municipality of Prato (Italy). These signs delineate children's play areas, gardens, parks, dog-walking zones, and sports facilities. The project utilised ARASAAC resources for the pictorial material.



From: [Visualforall](https://www.visualforall.com/)

As an inspiration, you can also see the [Pictography of the city of Badajoz](#) project aimed to promote an understanding of the immediate environment, easy and safe movement in public spaces, access to information and participation in community life of all people as full citizens

## 3.8

# AAC TOOLS

In this section, the most commonly used and most effective augmentative and alternative communication (AAC) tools will be presented. These tools are considered valid because they allow for extensive customization, which is crucial in any educational and rehabilitative intervention. Always keeping in mind that, based on the individual's characteristics, the systems used can be unaided or aided, meaning they either do not or do rely on external means apart from the body, various different tools, more or less simple, more or less immediate, will be presented. The choice will be up to the educator who, based on observation, will select, adapt, or create the most useful tool.

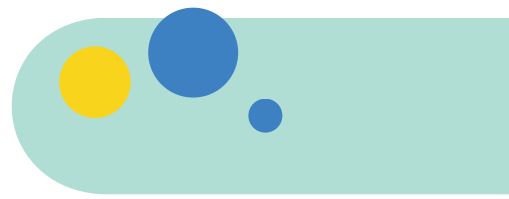
- **Low-tech communication tools** are those that educators can more easily create themselves using objects, cardboard, Velcro, starting from models like those presented at the end of the module and/or searching for images/pictograms/symbols on apps and websites.
- **High-tech communication tools** still require the intervention, at least initially, of specialized technicians, who can then provide the necessary information to the educator, who must in the meantime be aware of the existence and usability of various tools, apps, and software.

The use of these tools is fundamental for structuring, sequencing and making predictable, spaces and times in the life of the person with intellectual disabilities who may in many cases find themselves disoriented, unsure, in the unpredictability, in the sequencing of different actions, in the autonomous conduct of one's own life. They also give the possibility to express one's own choice, to express a request, to ask for help. AAC tools also give the possibility to narrate or understand a tale, an experience, a story fostering exchange and growth, thus playing a key role in a person with intellectual disability's autonomy.

Since 2007, ARASAAC has become an Augmentative and Alternative Communication System (AAC) of recognized national and international prestige and, currently, it is used in many countries as a reference AAC and its resources are basic in the adaptation and development of materials for people with serious difficulties in communication and with functional diversity (autism, intellectual disability etc.).



From: ARASAAC



The ARASAAC Open Classroom is a repository of quality content related to AAC, in which any professional or family can freely access documents, free software tools and resources that use ARASAAC pictograms. The platform provides examples of materials developed by the users themselves organised by contents of the area of language, communication and other adapted curricular areas, as well as tutorials and video tutorials that explain the operation of the different programs, applications and tools that use the resources of ARASAAC.

## COMMUNICATION BOARDS

Communication boards are a form of AAC that can be used in different settings. The boards display images, symbols, or illustrations to assist individuals with restricted verbal communication in expressing themselves through gestures or pointing at the visuals for effective communication. There are numerous ways to use a communication board (e.g. to express their immediate needs, ask questions, indicate a preference).

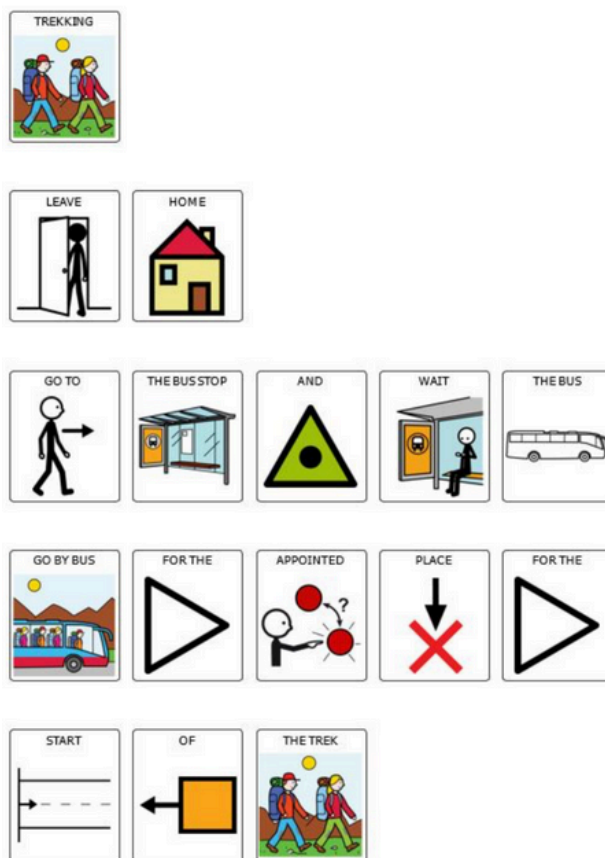


From: AAC Community

## VISUAL AGENDA

A visual agenda aims to enhance functional communication through the identification and evocation of the activities that are going to be carried out or have been carried out during a specific period of time.

Below you can find two visual agenda strips to prepare for an outdoor activity:





a scenic viewpoint, close observation of flowers, followed by lunch with a sandwich).



Click [here](#) to see further examples of visual agendas provided by ARASAAC.

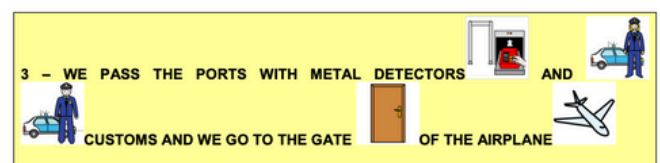
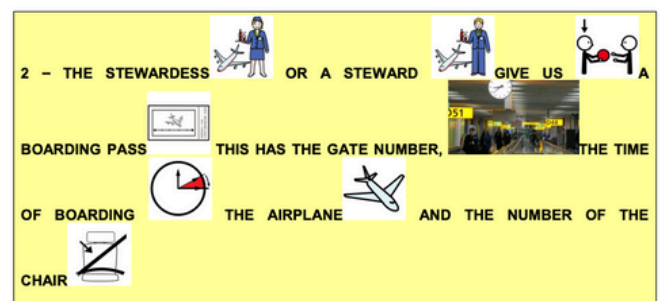
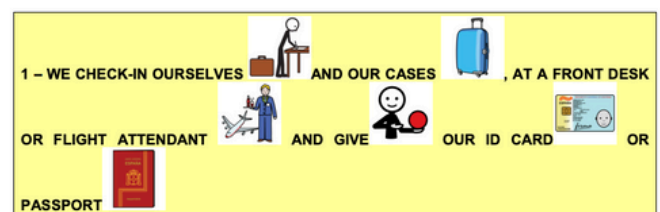
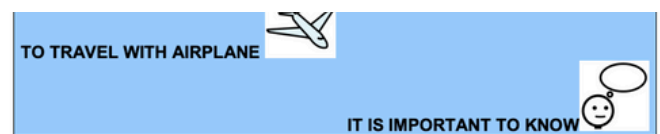
## REMNANT BOOK

it aims to enhance functional communication through the identification and evocation of the activities that are going to be carried out or have been carried out during a specific period. Once activities are finished and tasks completed, the remainder diary is a useful tool to synthetically and concretely track what has been accomplished.

For example, it can list the three main activities done during the morning. Description can be provided through photos and brief captions, symbols representing the activities, or enriched with three-dimensional objects exemplifying what has been done, experienced, seen (e.g. 3 morning activities: trekking outing reaching

## SOCIAL STORIES

It is a learning material written in a narrative way with visual support (symbols) that focuses on social skills, situations, concepts, and behavioural rules. The purposes can vary, such as managing new situations, getting used to them, and reacting appropriately, or providing information regarding correct social behaviour. The title of the story indicates the main topic being addressed, using positive language and enriched with illustrations that enhance comprehension of the text. Click [here](#) to see a few examples of social stories provided by ARASAAC.



From: [ARASAAC](#)

## WRAPPING UP

AAC is not just about providing a means of communication; it is about giving individuals a voice, enabling them to express themselves, connect with others, and live their lives to the fullest.

By exploring AAC and its strategies, we have gained valuable insights into how individuals with communication difficulties can effectively express themselves and engage with the world around them. We have learned about the principles underlying AAC intervention, emphasising the importance of customization and individualised approaches.

We have also examined the different types of AAC systems and explored a few examples of AAC tools, such as visual agenda, remnant book and social stories. Our next module will provide you with the knowledge and understanding of the key principles when assessing the communicative needs of a person with intellectual disability.

## PRACTICAL ACTIVITIES

### ACTIVITY 1: PICTOGRAM KEY RING

Create a Key ring with AAC pictograms to facilitate communication with people with intellectual disabilities during outdoor activities.

Material needed:

- Computer/Laptop
- printer to print pictogram cards
- Keychain

## Activity steps:

- Identify the needs that may arise during outdoor activities or excursions. This could include basic needs such as food, water, restroom, safety.
- Select pictograms: Choose pictograms or symbols that represent each identified need or activity. You can find pictograms online in one of the most common Linguistic symbolic systems that you have learnt in the module.
- Print the the cards
- Laminate Cards (Optional): To increase durability and weather resistance, consider laminating the printed pictogram cards. This will help protect them from moisture, dirt, and wear and tear during outdoor use.
- Punch holes in the cards: Use a hole puncher to create a hole near the top of each laminated card. Make sure the hole is large enough to accommodate a key ring or binder ring;
- Assemble the key ring: Gather the punched pictogram cards and a key ring or binder ring. Thread the ring through the holes of each card, stacking them in the desired order.



This activity has been adapted from [ARASAAC](#).



## ACTIVITY 2: VISUAL AGENDA

Following [this tutorial](#), draft a visual agenda related to a half day hiking.

## ACTIVITY 3: OUTDOOR WAYFINDING SIGNAGE DESIGN

Living independently within a community often involves navigating various unfamiliar public and private spaces. When we find ourselves in unfamiliar locations, we typically rely on signage to guide us, helping us orient ourselves, navigate effectively, and reach our intended destination. For individuals facing language difficulties, enhancing traditional text-based signs with a universally recognized symbol set such as ARASAAC proves beneficial in aiding their navigation and orientation within their surroundings.

Imagine you have to organise an outdoor event. This activity aims at creating accessible wayfinding signage using AAC symbols for PID within an outdoor context.

### Activity steps:

- **Brainstorming:** think and discuss common symbols and signs used along a hiking path (e.g. belvedere, drinking fountain, waterfalls, etc..) or outdoor spots (e.g. park, lake etc).
- **Follow the steps** provided by ARASAAC and design the signage of the path using the pictograms of ARASAAC.



From: [GIS, Genitori per l'inclusione sociale](#)

### ACTIVITY 4: NATURE-THEMED COMMUNICATION BOARDS WORKSHOP

This activity focuses on creating AAC communication boards inspired by local natural heritage. Participants, including PID, educators and experts in the field of outdoors, collaborate to identify common themes and symbols related to the local environment, wildlife, and activities. They then design and assemble that incorporate these elements, making the AAC tools both functional and personally meaningful.





04

# INITIAL ASSESSMENT OF SKILLS



PILASTRENTIS	LAIKS	AKTIVITĀTE	JĀNĒ
1	9:00	PIRMAISĀS ĀRĀPĀRĀSĀNĀS	
2	9:30	INTERVĪJA AR TĀVU	
3	10:30	SKATĀK 4 BINGO	
4	11:00	...	

DIFERENȚIA  
ÎNTR-UN  
ZILE

# INTRODUCTION

This module aims to outline a structured approach to evaluate an individual's current communication abilities and needs. This process is crucial for identifying the most appropriate AAC strategies and tools to enhance communication for individuals with communication challenges. *Although the initial assessment is typically conducted by a multidisciplinary team of professionals, it is important to learn about it because it can play a key role in enhancing communication. Indeed, understanding the basics of AAC assessments allows you to engage more effectively with individuals who use AAC. You can adapt your communication style, offer appropriate support, and create an inclusive environment that fosters effective communication.*

## KEY WORDS

- Assessment
- Assessing communication skills
- Individual plan

## LEARNING OBJECTIVES

- To introduce the goals of the initial assessment.
- To introduce the skills assessment and evaluation methods.
- To explore the process of matching AAC Tools to individual needs.

## LEARNING OUTCOMES

- Educators will be able to identify the main steps needed to conduct comprehensive assessments of individuals requiring AAC, considering the full spectrum of communication needs, abilities, and environmental factors.

# ASSESSMENT FRAMEWORKS

## 4.1

As highlighted in the previous chapters, it is important to note that there are no prerequisites for the use of AAC, but it is important to know that before exposing an individual with complex communication needs (CCN) to this type of communication, a primary assessment of their global skills is necessary: motor, linguistic, cognitive, and relational; only secondarily will the alphabetical or symbolic code that best meets their needs be chosen. The objectives of such assessment are multifaceted. They aim to understand the individual's current **communication abilities and challenges**, ascertain the most **suitable AAC methods and tools**, and establish a clear set of goals and objectives for AAC **intervention**. This process involves a **detailed evaluation** of the individual's language skills, cognitive function, physical abilities, and social environment, providing a comprehensive profile that guides the selection of AAC tools.

The initial assessment is typically conducted by a **multidisciplinary team** of professionals with expertise in communication, language, and assistive technology.

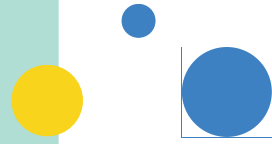
**Person-centered planning** plays a pivotal role in the AAC assessment process. This approach ensures that the preferences, interests, and participation of the AAC user are central to the planning and decision-making processes.

It recognises the individual as the primary decision-maker in their AAC journey, with professionals and caregivers acting as facilitators and supporters. This approach fosters a sense of ownership and empowerment among AAC users, contributing to more successful and meaningful communication outcomes.

**Short-Term Goals** are immediate objectives that can be accomplished within a few weeks to a few months. Short-term goals often focus on learning specific functions of the AAC device, mastering a set number of symbols or phrases, or improving interaction in specific settings (e.g. classroom, outdoors, home). They provide stepping stones towards more complex communication tasks.

**Long-Term Goals** envision the broader outcomes that individuals aim to achieve over the years. They might include achieving fluent communication across all settings, integrating AAC use in vocational or educational pursuits, or enhancing social interactions and relationships. Long-term goals reflect the overarching aspirations of the individual and their support network.

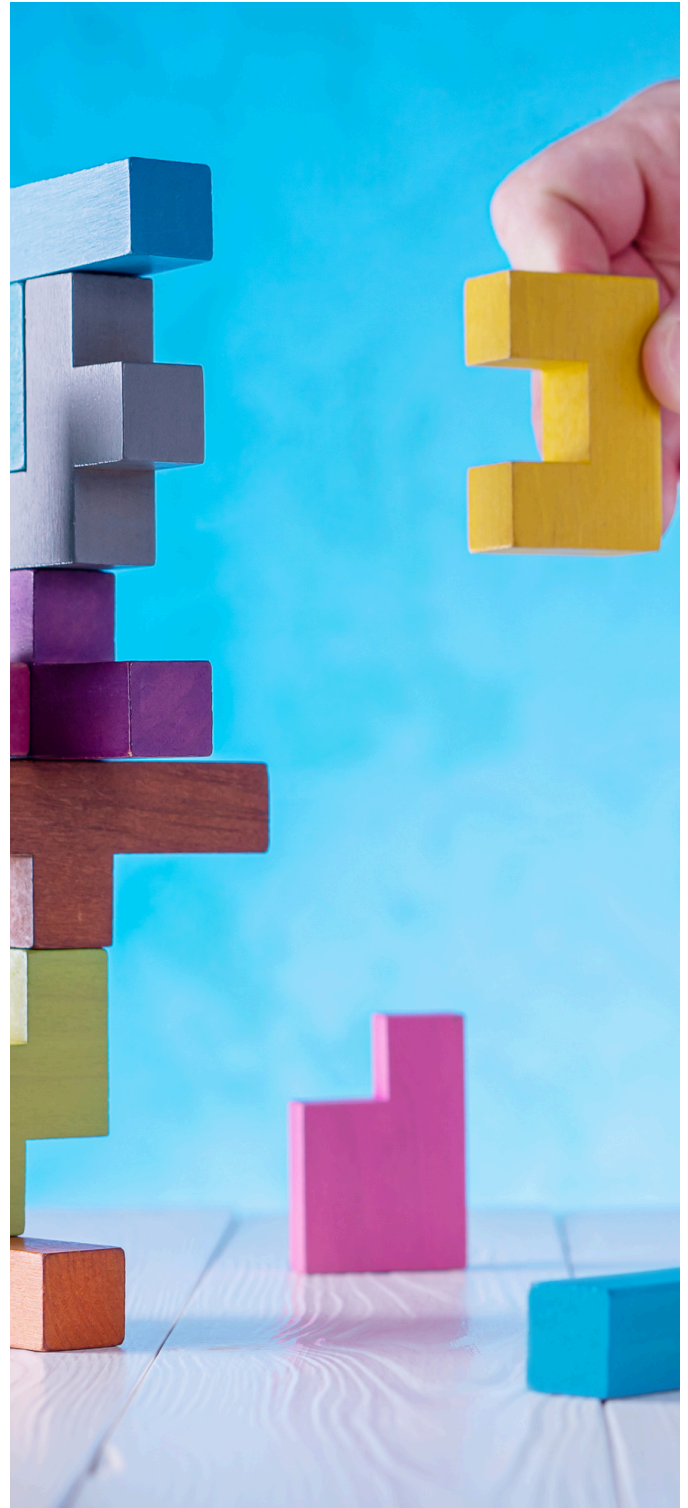
Several **assessment frameworks** are designed to guide professionals in evaluating individuals' needs and selecting the most appropriate AAC tools and strategies.



- **Participation Model** emphasises assessing the individual's participation across different environments and identifying communication demands within those contexts. This model aims to enhance the user's participation in social, educational, and vocational activities by identifying and addressing barriers to effective communication. It underscores the importance of environmental considerations and supports needed to facilitate communication access.
- **SETT Framework** (Student, Environment, Tasks, and Tools) is particularly useful in educational settings. It focuses on the person's current abilities and challenges, the learning environment, the tasks that the student needs to perform, and the tools that can support these tasks. This framework encourages a collaborative approach, involving teachers, therapists, and family members in the decision-making process to ensure that the selected AAC system aligns with the student's needs and educational goals.
- **Decision-Making Process for AAC** (DMPAAC) is a framework that provides a systematic approach to AAC assessment and decision-making. It guides professionals through a comprehensive evaluation of communication needs, consideration of potential AAC systems, and selection of the most suitable options. This process involves detailed consideration of the

individual's preferences, capabilities, and the contexts in which the AAC system will be used.

This assessment is essential for ensuring that the selected AAC strategies and tools are tailored to the individual's abilities, preferences, and goals.



## 4.2 CONSIDERATIONS FOR MATCHING AAC TOOLS TO INDIVIDUAL SKILLS, NEEDS, AND ENVIRONMENTS

Matching AAC tools to an individual involves a holistic view of their life, including:

- **Trial and Error:** It may be necessary to try multiple devices or systems to find the best fit, as practical experience with the tools can provide invaluable insights.
- **Adaptability and Growth:** Choose visuals and tools that can adapt to the changing needs and skills of the individual over time, allowing for adjustments in vocabulary, access methods, or complexity.
- **Support and Training:** ensure that both the user and their support network (family, educators and others) have access to training and ongoing support for the chosen AAC system.
- **Integration with other Technologies:** consider how the AAC system integrates with other technologies the individual uses, such as educational software or environmental control systems



# DEVELOPING A PERSONALISED

## 4.3 AAC PLAN BASED ON ASSESSMENT OUTCOMES

A personalised AAC plan is a dynamic document that outlines the specific strategies, tools, and support mechanisms required to achieve the identified communication goals. Developing an AAC progression plan involves starting from simpler, more concrete forms of communication and gradually moving towards more abstract and complex systems. This progression supports the individual's understanding and use of AAC, catering to evolving communication needs. Here's a structured approach:

### STAGE 1 REAL OBJECTS AND TANGIBLES

- Description: The use of physical objects and tangible items that are part of the individual's daily life.
- Purpose: To introduce the concept of using items to communicate needs and preferences directly.
- Example: Holding a cup to indicate thirst or presenting a favourite toy to initiate play.

### STAGE 2 PHOTOS OF REAL OBJECTS

- Description: Transition to using photographs of objects, people, and places that are familiar to the individual.
- Purpose: To develop the understanding that pictures can represent real-life items and concepts.

- Using a photo album or a board with pictures of food, family members, or daily activities to make choices or express desires.

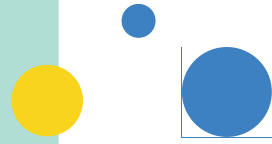
### STAGE 3 SYMBOLIC REPRESENTATIONS

- Description: The introduction of symbols or simple line drawings that represent objects, actions, and concepts.
- Purpose: To bridge the gap between concrete objects and more abstract forms of communication.
- Example: Symbols for "eat," "drink," or "toilet" on a communication board or device, allowing for basic requests and expressions.

### STAGE 4 BRIDGING WITH PICTURE AND TEXT LABELS

After establishing a foundation with tangible objects and photographs, the next step involves bridging these visual aids with language development by integrating text labels. This stage is crucial for enhancing literacy skills and further expanding communication abilities.

- Description: Pictures of objects, people, and activities are paired with corresponding text labels. These can be names, simple phrases, or key vocabulary that the individual is encouraged to learn and use.



- Implementation: Begin with pictures that the individual already knows already familiar with and frequently uses for communication. Underneath each picture, add a clear, legible label with the word or short phrase that describes the picture. Use consistent, straightforward fonts and colours to maintain attention and reduce visual distraction. Engage in activities that encourage the individual to match pictures with text labels, read aloud the labels, and gradually use the text labels as prompts for communication. For example, you might create a matching game where the individual pairs pictures with their corresponding words, or use flashcards to practice naming and reading. Gradually increase the complexity of the text as the individual becomes more comfortable with basic words, moving from single words to short phrases or sentences that describe actions or preferences.

### STAGE 5 WORD- AND LETTER- BASED SYSTEMS

- Description: Use of written words and alphabets to construct messages.
- Purpose: To enable more precise and complex communication, including the formation of sentences and original thoughts.
- Example: Typing messages on a keyboard or selecting words from a list to communicate specific needs, questions, or comments.

### STAGE 6 SPEECH-GENERATING DEVICES (SGDS)

- Description: Advanced AAC tools that convert text or symbol input into spoken words.
- Purpose: To facilitate verbal communication for individuals who are non-speaking or have significant speech challenges.
- Example: High-tech SGDS with dynamic displays that allow users to create varied messages through touchscreens, switches, or eye-tracking technology.

### STAGE 7 COMPLEX COMMUNICATION SOFTWARE AND APPS

- Description: Software applications that offer extensive vocabulary libraries, grammatical tools, and customisation options.
- Purpose: To support nuanced, sophisticated communication across contexts, including social interactions, educational environments, and vocational settings.
- Example: Apps that adapt to the user's communication style and grow with their skills, offering features like email, internet browsing, and environmental control.
- It's important to emphasise that the stages of AAC development, ranging from tangible objects to complex systems, are not rigid pathways but flexible guides that can adapt to the unique needs and preferences of each individual.

Combining stages or incorporating technology at early stages of AAC learning is not only possible but often beneficial, depending on the individual's abilities, interests, and goals.

# WRAPPING UP

The objectives of the initial assessment of skills for access to AAC tools are to understand the individual's current communication abilities and challenges, ascertain the most suitable AAC methods and tools, and establish a clear set of goals and objectives for AAC intervention. This assessment is a fundamental step in providing personalised and effective communication support, fostering independence, social inclusion, and overall well-being for individuals with communication challenges.

# PRACTICAL ACTIVITIES

## ACTIVITY 1

**Objective:** Enhance awareness and sensitivity towards the needs of people with autism when visiting recreational or nature spots.

- **Materials Needed:** Information packets on autism and special needs requirements; role cards detailing the scenarios and roles; writing materials (notebooks, pens).

Participants are divided in three teams and they have to role-play the three parts of the task and the reflection part.

- **Part 1: Experiencing the Challenge**

Each team assumes the role of a person with autism visiting a nature spot. They are invited to create a list of observed deficiencies and how they impacted their visit and write a review to the manager of that rural area.

- **Part 2: Responding to the Challenge**

Participants are told that their new role will be a manager of the resort. The group leader gives a claim, received from another group. They need to study the letter and write an excuse letter. This letter should acknowledge the shortcomings experienced during the visit, explain why these issues occurred, and express empathy.



- Part 3: Planning for Improvement

Teams now become investors ready to fund improvement and they are receiving a claim and the response letter. They are invited to review both papers - review the experiences listed by the 'visitors' and the managers response. Each team prepares a proposal outlining a significant investment to make the facility more accommodating to individuals with autism.

After the role-play, hold a discussion to reflect on the learning experience. Allow participants to share how changing roles impacted their understanding and feelings towards the needs of people with autism and place holders.

When implementing this exercise, the roles may change to apply better to the actual area which is discussed (ex. social media manger or government agencies).

## **ACTIVITY 2**

Use journals to cut off and select 50 words/phrases related to natural heritage (e.g. specific plant and animal names, habitats, conservation terms) by using the AAC system.

# 05

## HOW TO PROMOTE THE NATURAL HERITAGE: A FEW EXAMPLES ON HOW TO USE AAC TOOLS IN OUTDOOR SETTINGS



# INTRODUCTION

Including PID in outdoor activities is both rewarding and challenging. Exploring and promoting the natural heritages in the rural areas can provide lots of opportunities for the development of knowledge and skills. This training module equips educators with all necessary tools to apply AAC in outdoor settings.

## KEY WORDS

- Natural heritage
- Skill building
- Discovery

## LEARNING OBJECTIVES

- To apply AAC tools to outdoor settings.
- To provide guidelines for AAC-based activities in the outdoors.
- To promote natural heritage in rural areas.

## LEARNING OBJECTIVES

- Educators will be able to design an AAC activity.
- Educators will be able to promote natural heritage in rural areas through AAC.

## 5.1

# WHAT IS NATURAL HERITAGE?

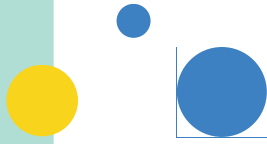
Natural heritage refers to the sum total of the Earth's biodiversity, ecosystems, geological structures, and other features that have been formed over millions of years through natural processes. It encompasses both living organisms and non-living elements such as mountains, rivers, forests, and other natural landscapes. Natural heritage sites often hold significant cultural, scientific, educational, and aesthetic value. These areas are typically conserved and protected to maintain their ecological integrity and ensure they can be enjoyed by present and future generations, such as national parks, wildlife reserves, biosphere reserves, and UNESCO World Heritage Sites designated for their outstanding universal value.

These are 6 main types of natural heritage:

- **Biodiversity:** Natural heritage includes the immense variety of life forms on Earth, ranging from microscopic bacteria to towering trees and everything in between. This encompasses species diversity, genetic diversity within species, and ecosystem diversity.
- **Ecosystems:** These are complex, interconnected communities of living organisms and their physical environments. Ecosystems provide essential services such as clean air, fresh water, pollination, and soil fertility.
- **Geological Features:** Natural heritage also includes geological formations shaped by natural processes over millions of years, such as mountains, caves, canyons, and rock formations.
- **Landscapes:** These encompass the overall appearance of a region, including its topography, vegetation, water bodies, and other physical features.
- **Water Bodies:** Rivers, lakes, wetlands, and oceans are integral components of natural heritage, providing habitats for aquatic life and sustaining ecosystems.
- **Protected Areas:** Many natural heritage sites are designated as protected areas to conserve their ecological, cultural, and recreational values.

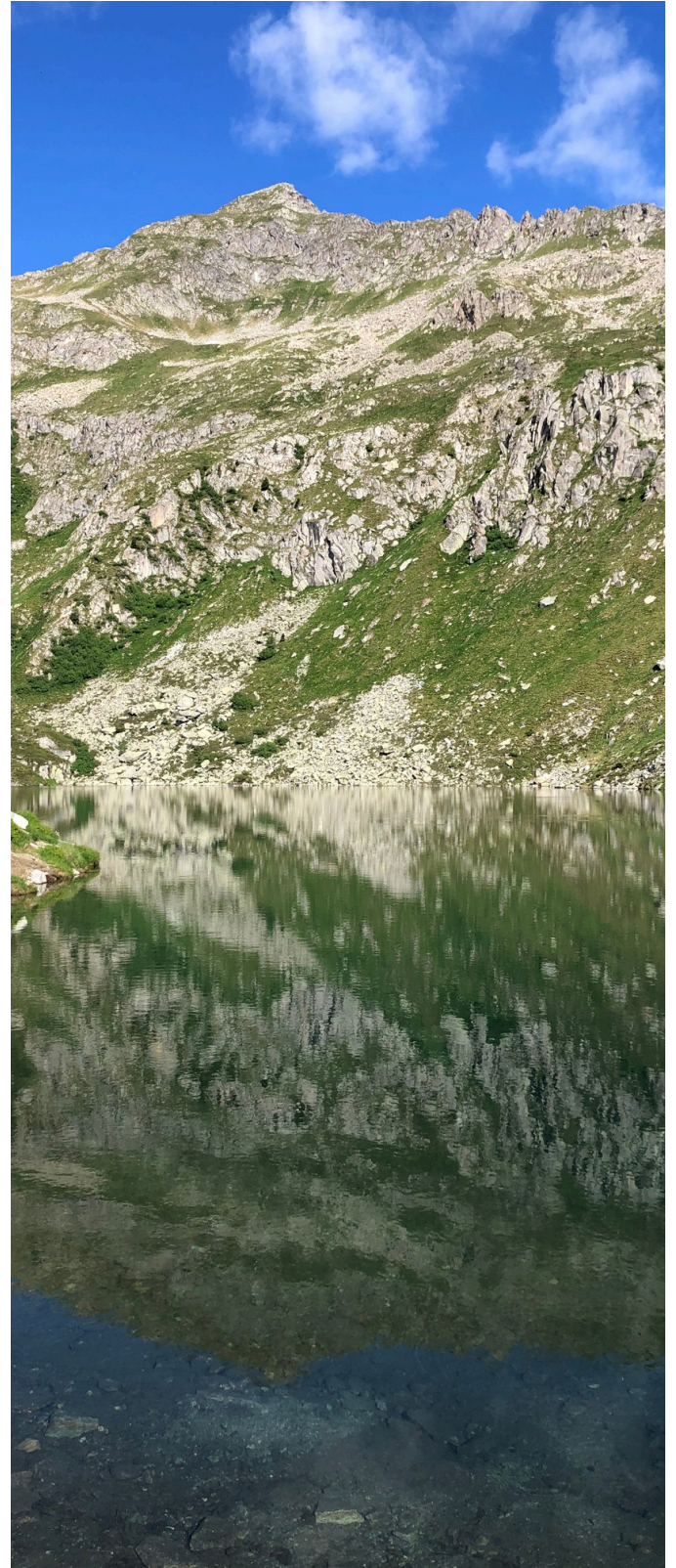
Preserving natural heritage is crucial for maintaining the health of ecosystems, supporting biodiversity, mitigating climate change, and providing essential resources for human well-being. Conservation efforts aim to safeguard these precious natural resources for future generations to enjoy and benefit from.

Below are a few examples of the natural heritage that can be found throughout Europe, showcasing the continent's diverse landscapes and ecosystems. Each of these sites plays a vital role in preserving Europe's natural beauty and ecological diversity.



- Mont Blanc Massif, France/Italy/Switzerland: This majestic mountain range is the highest in Western Europe, with Mont Blanc itself reaching 4,810 meters (15,781 feet). The area is known for its glaciers, alpine meadows, and rich biodiversity, including rare plant and animal species.
- Plitvice Lakes National Park, Croatia: A UNESCO World Heritage Site, Plitvice Lakes is famous for its cascading series of interconnected lakes, waterfalls, and lush forests. The park's turquoise-coloured lakes and crystal-clear waters attract visitors from around the world.
- Sarek National Park, Sweden: Located in the Lapland region of northern Sweden, Sarek is one of Europe's last true wilderness areas. It features rugged mountains, deep valleys, and vast expanses of untouched wilderness, providing habitat for bears, wolves, and reindeer.
- Danube Delta, Romania: The Danube Delta is the second-largest river delta in Europe and one of the continent's most important wetland ecosystems. It is home to a rich array of birdlife, including pelicans, herons, and swans, as well as diverse fish species.
- Loch Ness, Scotland: While Loch Ness is perhaps best known for its legendary monster, it is also a stunning natural heritage site. This deep, freshwater loch is surrounded by rugged Highland scenery, with opportunities for hiking, boating, and wildlife spotting.

- Matterhorn, Switzerland/Italy: One of the most iconic peaks in the Alps, the Matterhorn is known for its distinctive pyramid shape. It attracts mountaineers and outdoor enthusiasts seeking breathtaking scenery and challenging climbs.



## 5.2

# PROTECTING AND VALORISING NATURAL HERITAGE

Protecting natural heritage involves a combination of conservation efforts, sustainable management practices, legal protections, and public engagement. Key strategies in protecting natural heritages are the establishment of protected areas, conservation planning, enforcing environmental laws and regulations, promoting sustainable development, restoration and rehabilitation, engaging local communities, educating and raising awareness, promoting sustainable tourism, international cooperation, research and monitoring, and others. By implementing these strategies in a coordinated and holistic manner, it is possible to effectively protect and conserve natural heritage for future generations to enjoy and benefit from.

PID can participate in protecting and valorising natural heritage in outdoor activities through various means:

- **Guided Tours and Interpretive programmes:** Engage in guided tours and interpretive programmes designed to make outdoor activities accessible and educational.
- **Adaptive Equipment and Technology:** Use adaptive equipment and technology to facilitate participation in outdoor activities such as hiking, birdwatching, and nature walks.
- **Sensory Experiences:** Create sensory-rich experiences that allow individuals to explore and connect with nature through touch, smell, sight, and sound.

- **Environmental Monitoring:** Assist in environmental monitoring activities, such as tracking wildlife populations, monitoring water quality, or conducting habitat assessments.
- **Conservation Projects:** Participate in conservation projects such as tree planting, invasive species removal, and habitat restoration under supervision and with appropriate support.
- **Citizen Science Initiatives:** Contribute to citizen science initiatives by collecting data on biodiversity, phenology, or environmental changes in collaboration with scientists and researchers.
- **Outdoor Education and Skill Building:** Engage in outdoor education programmes that focus on building outdoor skills, environmental stewardship, and conservation ethics.
- **Promoting Inclusivity:** Advocate for inclusive outdoor spaces and activities, ensuring that individuals with intellectual disabilities have equal access to outdoor recreation opportunities.

By actively participating in outdoor activities and conservation efforts, PID can contribute to protecting natural heritage while enjoying the benefits of connecting with nature.

## 5.3

# EXPLORING NATURAL HERITAGE SIGHTS

Exploring natural heritage can take many forms, ranging from leisurely hikes through scenic landscapes to educational guided tours led by experts. Here are some examples of how to explore natural heritage:

- **Hiking and Nature Trails:** Embark on hikes or nature walks along designated trails within natural heritage sites. These trails often offer opportunities to observe wildlife, appreciate scenic vistas, and discover unique geological features while immersing yourself in nature.
  - **Wildlife Watching:** Bring binoculars and cameras to observe wildlife in their natural habitats. Look for birds, mammals, reptiles, and other species that inhabit the area, and learn about their behaviours, habitats, and ecological roles from guidebooks or interpretive signage.
  - **Boat Tours and Kayaking:** Take a boat tour or kayak excursion to explore waterways, lakes, or coastal areas within natural heritage sites. These guided tours offer opportunities to observe aquatic wildlife, learn about wetland ecosystems, and appreciate scenic shoreline landscapes from a different perspective.
  - **Geological Exploration:** Explore geological features such as rock formations, caves, canyons, or coastal cliffs within natural heritage sites.
- Join guided geology walks or self-guided interpretive trails that highlight the geological history, formation processes, and unique geological formations of the area.
- **Stargazing and Astronomy Programmes:** Experience the night sky by participating in stargazing events or astronomy programmes offered within natural heritage sites. Learn about constellations, planets, and celestial phenomena from astronomers or park interpreters while enjoying the tranquillity and beauty of the nocturnal environment.
  - **Cultural Heritage Tours:** Discover the cultural heritage of natural sites by joining guided tours or visiting cultural landmarks, archaeological sites, or indigenous heritage sites within the area. Learn about the history, traditions, and cultural significance of the landscape to indigenous peoples or local communities.



- **Photography and Artistic Exploration:** Bring along a camera, sketchbook, or painting supplies to capture the beauty and inspiration of natural heritage sites through photography or artistic expression. Use your creativity to document landscapes, wildlife, and natural phenomena while connecting with the environment on a deeper level.
- **Educational Workshops and Demonstrations:** Participate in educational workshops, demonstrations, or hands-on activities offered within natural heritage sites. Learn about topics such as plant identification, birdwatching techniques, wilderness survival skills, or traditional crafts from skilled instructors or local artisans.

By exploring natural heritage in these ways, you can deepen your connection with the natural world, gain a greater appreciation for its beauty and diversity, and contribute to its conservation and stewardship for future generations to enjoy.





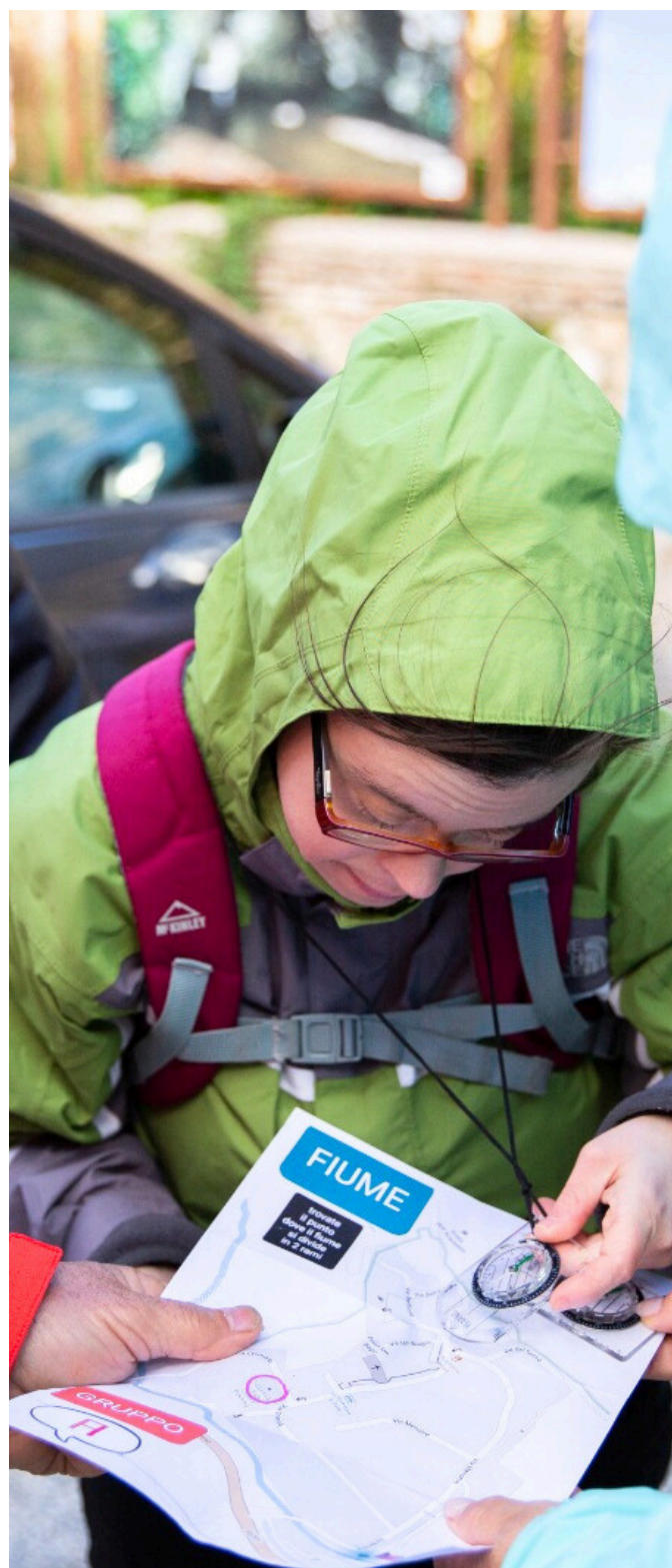
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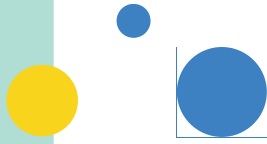
# EXPLORING NATURAL HERITAGE SIGHTS WITH PID USING AAC

Engaging adults with intellectual disabilities in outdoor activities with AAC requires thoughtful planning and consideration of their communication needs.

Here are some examples of outdoor activities adapted for individuals with intellectual disabilities using AAC:

- **Nature Walks with Visual Supports:** organise guided nature walks in natural heritage sites, such as parks or nature reserves, accompanied by visual supports such as picture cards, symbol boards, or communication books. Use AAC devices or apps with pre-programmed symbols to facilitate communication about what participants observe during the walk, such as plants, animals, or landmarks.
- **Scavenger Hunts with AAC:** plan scavenger hunts in outdoor settings where participants use AAC devices or communication boards to receive clues, ask questions, and communicate with peers or staff members. Include a variety of sensory-rich items or natural objects for participants to find, such as leaves, rocks, or animal tracks, and encourage them to use their AAC tools to describe or label their discoveries.





- **Outdoor Picnics with Choice Boards:** arrange outdoor picnics or cookouts in accessible locations, providing participants with choice boards or menus featuring pictures or symbols of food and beverage options. Allow individuals to use their AAC devices to request items, express preferences, or communicate with others during the mealtime socialisation.
- **Gardening Activities with AAC:** create accessible garden spaces where participants can engage in gardening activities such as planting, watering, or harvesting vegetables, herbs, or flowers. Use AAC tools to label plants, discuss gardening tasks, or communicate about sensory experiences related to gardening, such as touching soil or smelling flowers.
- **Outdoor Art and Craft Sessions with AAC:** set up outdoor art stations or craft workshops where participants can engage in creative activities using tactile materials, natural objects, or recycled materials. Provide AAC support such as visual instructions, communication boards, or AAC apps to facilitate communication about artistic ideas, preferences, or requests for assistance.
- **Outdoor Music and Movement Sessions with AAC:** arrange outdoor music and movement sessions where participants can engage in rhythmic activities, dancing, or singing along to favourite songs or nature-inspired music. Use AAC devices or communication boards with symbol-supported song lyrics, dance instructions, or movement cues to encourage participation and communication.
- **Photography Expeditions with AAC:** organise photography expeditions or nature walks where participants use AAC devices or communication boards to express their observations, preferences, or reactions to the outdoor environment through photography. Provide opportunities for participants to capture images of interesting sights, textures, or colours using adapted cameras or smartphones equipped with AAC apps.
- **Animal-Assisted Therapy Sessions with AAC:** arrange outdoor animal-assisted therapy sessions or interactions with therapy animals in natural settings, such as petting farms or animal sanctuaries. Use AAC tools to support communication about participants' experiences, emotions, or interactions with animals, allowing them to express their feelings or ask questions about the animals.

- **Outdoor Storytelling Sessions with AAC:** host outdoor storytelling sessions or circle time activities where participants gather around a designated storytelling area to listen to or participate in storytelling using AAC-supported storytelling props, picture books, or storytelling apps. Encourage participants to use their AAC devices to contribute to the storytelling process by sharing their own stories, ideas, or responses to the narratives.
- **Environmental Conservation Projects with AAC:** engage participants in outdoor environmental conservation projects, such as litter clean-ups, tree plantings, or habitat restoration activities, using AAC tools to support communication about project goals, tasks, or safety instructions. Provide opportunities for participants to use their AAC devices to collaborate with peers, ask questions, or share their contributions to the conservation efforts.

By incorporating AAC supports into outdoor activities, PID can enhance their communication skills, social interactions, and participation in meaningful outdoor experiences while enjoying the benefits of connecting with nature.



# STEP-BY-STEP IN DEVELOPING

## 5.5 OUTDOOR ACTIVITIES FOR PID USING AAC

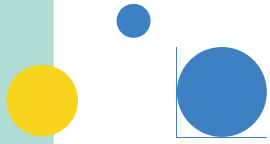
The following steps should be taken in developing an outdoor activity for PID and applying AAC in promoting natural heritage:

- 1 The educator(s) and his/her team shall become familiar with the communication challenges PID may face in general and the specifics of the PID the same are working with. In the instances of having teams working with the PID it is important to ensure all members of the team have the necessary knowledge about communicating with the PID. For reference the Communication with PID module of the Booklet can be used where information is provided in a concise and understandable manner. It would be useful also to do individually or together the proposed activities under the same module.
- 2 The second step is to introduce AAC to the educator(s) and their team. That includes making sure everyone has sufficient information on what AAC is, what are the main advantages of AAC, have basic knowledge of linguistic symbolic systems, and become familiar with the available AAC tools and their application.
- 3 The third step is to introduce assessment of individual abilities and needs in the context of AAC to the educator(s) and their team.

Most often that assessment is done by other professionals working with PID, not the educators. However, once the educators are familiar with the process their choice and application of the necessary AAC tools would be most accurate and useful for the PID they are working with.

- 4 The fourth step is to choose the natural heritage to be promoted. The choice of the natural heritage depends on the location of the organisers and beneficiaries. The most important aspect is to consider its accessibility and the environment to be suitable for the PID the educators are working with.





- 5 Considering all of the above, it is time to choose the activity to organise that will introduce the natural heritage, best suits the environment, the way to incorporate AAC in it, and of course the participants in the activity. When it comes to outdoor activities with PID a variety of options are available all depending on the profile of the participants and the educator(s). In the above sections there are a lot of examples that can be an inspiration for the organisers. The activities can be combined to introduce the natural heritage to make the process more engaging.
- 6 In designing the activity, the next step is to ensure all necessary materials for organising the activity are prepared including the AAC materials to communicate the necessary information to the participants.
- 7 Finally, following the execution of the activity, both internal and external evaluations should be performed to assess the activity and its outcomes, as well as the impact on PID and other participants.



## WRAPPING UP

In conclusion, natural heritage encompasses the rich tapestry of life on Earth, including biodiversity, ecosystems, geological formations, and landscapes shaped by millions of years of natural processes. These invaluable resources hold significant cultural, scientific, and aesthetic value and are crucial for maintaining ecosystem health and supporting human well-being. Through conservation efforts and sustainable management practices, we can protect and preserve natural heritage sites for future generations to enjoy. By valuing and promoting natural heritage through a variety of outdoor activities, we can deepen our connection with the natural world and foster a sense of stewardship towards our planet's precious ecosystems. Incorporating alternative augmentative communication tools ensures inclusivity and accessibility, allowing individuals with intellectual disabilities to fully participate in and benefit from these outdoor experiences. Ultimately, by recognising the importance of natural heritage and engaging in meaningful activities to explore and protect it, we can contribute to a more sustainable and harmonious relationship between humanity and the environment.

## PRACTICAL ACTIVITIES

### ACTIVITY 1: GROUP CAMPING IN THE FOREST

An activity that can be organised to promote natural heritage is camping in the forest. Camping in a group is a bonding experience which brings the participants close together and gives them the benefit of connecting with nature. The educators should follow the above steps to prepare and organise the event. In selecting the most appropriate AAC tools as described in the Module Introduction to AAC in this Booklet the following are suggested:

- Create a visual agenda of the experience. Any of the suggested tools can be used in the process.
- Outdoor wayfinding signature designs will be useful to mark the most important sights at the venue of the camping.

- Types of natural heritage to explore: The activity is suitable to introduce national parks and protected areas to PID. By organising this activity, participants have the opportunity to immerse themselves in the natural environment, experience the biodiversity of the forest, and learn about the importance of conserving such areas. Educators can utilise AAC tools such as visual agendas and outdoor wayfinding signature designs to enhance communication and facilitate understanding of the natural surroundings. Camping in the forest allows participants to appreciate the beauty of nature firsthand and fosters a sense of stewardship towards protected areas.
- Duration: Camping in the forest can be an activity varying from 3-4 hours, half-day, 1 day, or 2 and more days.
- Materials: Camping equipment for the participants and organisers, such as tents, proper clothing, cutlery, food, etc.; Materials for communication with PID – AAC cards, boards, and others as selected by the educators.

## **ACTIVITY 2: FINDING THE HORSE FIELD**

Finding the horse field is an activity that can be a fun and engaging activity for PID. It is organised in partnership with a farm, ranch or equestrian centre located in the rural areas. The activity allows the participants to get to know the environment and meet with horses. Depending on the landscape, the activity can involve trekking, hiking and other exploration of the area until the final point – the horse field — is reached. That allows time and space to get to know the local natural heritage sights. In addition, activities with horses can be added to the experience.

- Types of natural heritage to explore: The activity is suitable to introduce national parks and protected areas to PID. By partnering with farms, ranches, or equestrian centres in rural areas, participants can engage in exploration activities such as trekking and hiking, leading them to the horse field where they can interact with horses and learn about the local environment. Educators can use AAC tools like cards and boards to facilitate communication throughout the activity. This experience not only allows participants to connect with nature but also introduces them to the importance of conserving natural habitats and protected areas where horses and other wildlife reside.
- Duration: Finding the horse field can be an activity varying from 1 hour, half-day or 1 day.
- Materials: Proper clothing, especially if at the end horse-assisted activities are anticipated; Materials for communication with the PID – AAC cards, boards, and others as selected by the educators.

06

# CO-DESIGNING OUTDOOR ACTIVITIES WITH PID







# INTRODUCTION

This short module introduces you to the principles of co-design, and how to co-design outdoor activities with PID.

## KEY WORDS

- Co-design
- Engagement
- Social inclusion

## LEARNING OBJECTIVES

- Explain what co-design is
- Discover the potential of co-design
- Explain how co-design can improve social inclusion
- Identify the main steps needed to run a co-design process
- Apply the guiding principles of co-designing to the outdoor.

## LEARNING OBJECTIVES

- Educators will be able to identify the guiding principles of co-design.
- Educators will be able to use the co-design approach as a tool for promoting social inclusion of PID.
- Educators will be able to co-design outdoor activities with PID.

# 6.1 THE GUIDING PRINCIPLES OF CO-DESIGN

*"Participatory experience is not simply a method or set of methodologies, it is a mindset and an attitude about people. It is the belief that all people have something to offer to the design process and that they can be both articulate and creative when given appropriate tools with which to express themselves" (Liz Sanders, MakeTools, 2002).*

**Co-design** can be defined as an approach for "engaging consumers and users of products and services in the design process, with the idea that this will ultimately lead to improvements and innovation" (An Introduction to Co-design, Ingrid Burkett).

'Co-design' is also referred to as 'co-creation' and 'co-production.' Although some argue that these terms differ a bit, at the core of all these terms is the belief that adopting collaborative, cooperative, and community-centered approaches to generate social benefits will result in more efficient services and increased social impact.

The main features of codesign are:

- 1 Co-design is **person-centred**.
- 2 Co-design starts with a **desired end**.
- 3 Co-design is focussed on developing **practical, real-world solutions** to issues facing individuals, families and communities
- 4 Co-design makes **ideas, experiences and possibilities visible and tangible** using a variety of media, graphic, kinesthetic and experiential methods.

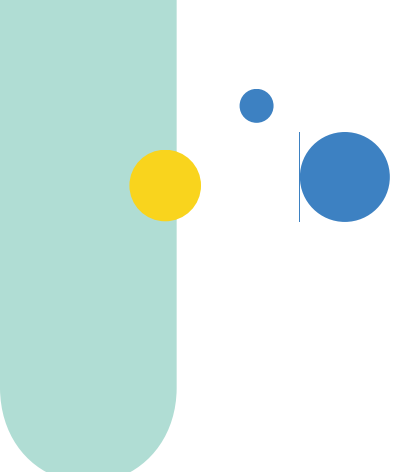
- 5 Co-design processes are inclusive and draw on **many perspectives, people, experts, disciplines and sectors**.

*Source: Based on the transformative design model developed by RED, UK Design Council, and also influenced by Bate and Robert, 2007; and the work of Liz Sanders from Make Tools.*

Many studies show that a hands-on approach such as co-design, which relates the personal experiences of individuals with the processes of design, can promote the inclusion of people living with disabilities. Indeed, by involving PID in the design process, we ensure that their perspectives, needs, and preferences are considered from the outset, leading to solutions that are more inclusive and responsive to diverse requirements. Such an approach also empowers them to actively participate in shaping the services, products, or environments that directly impact their lives. It also contributes to a more inclusive society where PID are not just recipients of services but active contributors.

Besides fostering **empowerment and participation** of PID, the co-design approach allows for the customization of solutions to meet the specific needs of PID, offering tailored solutions.

Indeed, one of the key benefits of co-design is that some groups and individuals who do not normally have a 'voice' may become included in negotiations and dialogue.



Co-design can also play a key role in **breaking barriers**: it helps identify and eliminate physical, communication, and attitudinal barriers that may hinder the full inclusion of PID. This collaborative approach fosters a deeper understanding of the challenges faced and facilitates the creation of environments and services that are accessible to all.

As pointed out in the [Guide on Co-Design with People Living with Disability](#), co-design should be used by any individual, group, organisation or government body that is making decisions or undertaking work that will affect the lives of people living with disability. The co-design approach is applied across various sectors, outdoor included! In fact, co-design can be a great tool to ensure that outdoor activities are inclusive for PID.

Here's how co-design can be applied in this context:



### Community involvement

- Co-design encourages active involvement of local communities, outdoor enthusiasts, and relevant stakeholders in the design process.
- Local residents and frequent visitors can provide valuable insights into the unique features, cultural aspects, and environmental considerations of the area.



### Understanding user needs

- By engaging with the end-users (PID), designers can gain a deeper understanding of the preferences, expectations, and requirements of those who will be participating in outdoor activities.
- Users may have specific insights into the types of trails, landscapes, or amenities that would enhance their outdoor experience.



### Cultural and environmental sensitivity

- Co-design emphasizes cultural and environmental sustainability by considering the local context.
- Participants can contribute ideas on how to preserve and showcase the natural beauty, historical significance, or ecological balance of the area during the design process.



### Inclusive Design

- Co-design promotes inclusivity by involving diverse groups of people in the decision-making process.
- Ensuring accessibility and considering the needs of different user groups, such as individuals with disabilities, families, or varying skill levels, can enhance the overall appeal of outdoor activities.



## Unique and Authentic Experiences

- Co-design promotes inclusivity by involving diverse groups of people in the decision-making process.
- Ensuring accessibility and considering the needs of different user groups, such as individuals with disabilities, families, or varying skill levels, can enhance the overall appeal of outdoor activities.



## Sustainable development

- The co-design process can explore sustainable practices in the development and maintenance of outdoor activities.
- Design decisions can be made with a focus on minimising environmental impact, promoting responsible tourism, and ensuring the long-term viability of the area.



# WHAT TO CONSIDER BEFORE RUNNING A CO-DESIGN WORKSHOP WITH PID

## 6.2

When interacting (and co-designing) with adults with intellectual disability, we should consider these 3 basic rules:

1

**NETWORKING IS THE  
KEY TO SUCCESS!**

As highlighted in the Co-Create Handbook, one of the main aims in co-design is organising projects with identifiable stakeholders within communities, collectives, human groups, etc., considering the existing power relations. It is very important to understand that these power relationships are often a form of hidden and modulate participation. The first step is to involve members of your community! So, if you cooperate with an organization active in the field of outdoor education and you are interested in making your activities accessible to PID through co-design, the very first step is to get in touch with the local organizations active in the field of social inclusion/representing PID. If you are an educator of PID and you want to involve them in engaging outdoor activities, the first thing to do is to connect with local outdoor organisations.

2

**EVERY PERSON IS  
DIFFERENT**

Ability levels can be very nuanced. This is the reason why adopting a person-centred and strengths based orientations is crucial.

Consideration of PID preferences, abilities and interests is critical for their engagement and empowerment. Planning outdoor activities with PID needs flexibility and tailoring for individuals.

3

**ADOPT A STRENGTHS-  
BASED APPROACH!**

Emphasizing strengths helps PID develop a positive self-image. Building on strengths also allows for the development and enhancement of existing skills.



## 6.3

# HOW TO RUN A CO-DESIGN WORKSHOP WITH PID

Let's consider the following scenario: a group of PID, their educators and a local outdoor organization come together in a few meetings to discuss the identification of a local natural area and its promotion using a poster in AAC. You are a staff member of an outdoor organization and, with the support of the educators of PID, you will facilitate the workshop.

For the implementation of this workshop, we will use (and adapt) the Co-Create methodology:

- Know your participants before the workshop.
- Prepare your agenda, tools, methods, location and materials in advance: the knowledge of participants (age, interest, level of fitness, previous hiking experience if any) will play a key role in planning and delivering tailored activities. To this end, the close cooperation with the educators of PID is crucial!
- Make sure to prepare participants before the workshop.
- Establishing shared goals: it is important to identify the challenges, issues, or topic areas you wish to co-design around (e.g. identify a local natural area and create a poster in AAC to promote it).
- Define the methodology: in collaboration with the educators of PID, define the methodology that best fits your participants.

- Coming up with solutions: prototype and test: the goal of prototyping is the production of an artifact. To this end, you should facilitate collaborative brainstorming sessions where participants (PID, with the support of their educators) can contribute ideas for outdoor activities. You should encourage creativity and consider both traditional and innovative approaches to design activities that cater to a wide range of interests and abilities. This step aims to develop prototypes based on the co-created ideas. Test these activities with a small group of participants to gather feedback on their experiences. Use this feedback to refine and improve the design.
- Evaluation of the workshop: gather feedback from participants, making adjustments as necessary. This ensures that the outdoor activities evolve to better meet their needs and preferences.

By incorporating these steps, a co-design approach can lead to the development of outdoor activities that are not only enjoyable but also inclusive and responsive to the diverse needs of the community.

## WRAPPING UP

Co-design is a methodology focused on the collaboration between designers and the end-users or stakeholders throughout the design process. In the context of outdoor activities (e.g. hiking, cycling, climbing, horse riding etc.).

Co-design can be a powerful approach to create experiences that not only cater to the users' needs and preferences but also contribute to the valorization of local areas.

Indeed, involving PID in the design of activities and services allows for the customization of solutions to meet their specific needs, offering tailored solutions.

The use of co-design in the field of outdoor activities enables a collaborative and inclusive approach to create experiences that not only meet PID's needs but also contribute to the sustainable development and valorization of local areas. By involving the community and stakeholders in the design process, the resulting outdoor activities can be more meaningful, culturally rich, and environmentally sustainable.

## PRACTICAL ACTIVITIES

### ACTIVITY 1: CO-DESIGN AGENDA

You are asked to run a co-design workshop with a group of 10 adults with intellectual disability and local stakeholders aimed to plan an accessible hiking tour in your surroundings. Draft the agenda of the workshop, prepare a list of local stakeholders to involve (explaining their role/support), and define the type of material in AAC to develop.

### ACTIVITY 2: REFLECTIVE ACTIVITY - EMPATHY MAPPING FOR INCLUSIVE OUTDOOR ACTIVITIES

Objective: To help educators deeply understand the needs, experiences, and preferences of PID in the context of outdoor activities.

### Materials Needed:

- Paper or digital template for empathy maps;
- Writing tools (pens, markers) or a digital device;
- Research materials (articles, videos, interviews with experts or PID and their caregivers).

### Activity Steps:

1. Research and gather Insights: start by researching the experiences of PID, engaging in outdoor activities. Look for direct quotes, stories, and any available data.
2. Create an Empathy Map: divide your empathy map into sections such as Thinking, Feeling, Seeing, Hearing, and Doing. Based on your research, fill in each section with insights into what PID might think, feel, see, hear, and do before, during, and after participating in outdoor activities.
3. Identify Needs and Challenges: From the empathy map, identify specific needs and challenges that people with intellectual disabilities might face when engaging in outdoor activities.
4. Reflect on Co-design Principles: Reflect on how co-design principles can address these needs and challenges. Consider how involving individuals with intellectual disabilities in the planning process can lead to more inclusive and enjoyable activities.
5. Plan for Inclusion: Based on the insights from the empathy map and principles of co-design, draft a plan for an inclusive outdoor activity. Think about adaptations, supports, and how to facilitate engagement and enjoyment for all participants.
6. Feedback and Iteration: Consider how you might gather feedback from individuals with intellectual disabilities and other stakeholders to refine your activity plan.

### Reflection Questions

This reflective activity encourages educators to deeply understand the perspectives of PWD and to apply co-design methodologies in creating meaningful and inclusive outdoor activities.

- What new insights did I gain about the experiences of PWD through this activity?
- How can co-design principles enhance the planning and execution of outdoor activities? What are the potential challenges in applying co-design methodologies, and how might I address them?
- How do you think this activity could impact the way you plan and implement outdoor activities for PWD?



# ANNEXES

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## ★ BEST PRACTICES ★

The research activities allowed us to identify some good practices in the field of outdoor activities addressed to PID:



### MONTAGNE SUPERABILI (ITALY)

A full day of outdoor activities and inclusion organized by Trekkify where all the participants (people with/without intellectual disability) have the chance to discover the power of outdoors. 'Montagne superabili', now in its 3rd edition, aims to gather tens of people spending quality time together no matter what their abilities or disabilities are.



### MOUNTAIN THERAPY (ITALY)

Implemented by CAI (The Italian Alpine Club) to promote social inclusion through hiking.



### HI-ABILITY (EU FUNDED PROJECT)

The project adopts an original methodological approach, where the therapeutic-rehabilitation programme focuses on the socio-educational value of the natural environment. The general objective is to promote the empowerment and the social inclusion of people with cognitive disabilities, by enhancing their abilities in the field of outdoor touring and hiking.

# RESOURCES



# MODULE 1

## EFFECTIVE COMMUNICATION WITH INDIVIDUALS WITH INTELLECTUAL DISABILITY



[How to Communicate with People with Intellectual Disabilities](#)



[Intellectual disability and communication](#)



[Effective communication with people with disability](#)



[Communicating with people with a learning disability](#)



[Guide to Communicating with people with a learning disability](#)



[Communication: speaking to people with a learning disability](#)

# MODULE 2

## INTRODUCTION TO AUGMENTATIVE ALTERNATIVE COMMUNICATION (AAC)



[What is AAC?](#)



[The Myth of Augmentative and Alternative Communication \(AAC\) Pre-Requisite Skills](#)



[Top 5 Reasons to Give AAC a Try](#)



[Augmentative and Alternative Communication \(AAC\)](#)



[What is AAC?](#)



[Focus on...AAC](#)



[4 things every AAC system needs](#)



[4 things every AAC system needs](#)



[Learn how to attribute meaning with your AAC user](#)



[Augmentative and Alternative Communication Handbook](#)



[Widgit Symbol Resource Packs](#)



[PCS \(Picture Communication Symbols\)](#)



[RURAAC Hiking visual agenda template](#)



[Augmentative and Alternative Communication \(AAC\)](#)



[Augmentative and Alternative Communication](#)



["Hello Mum" - James speaks for the first time in 16 years with eye tracking assistive communication](#)



[Eye gaze communication](#)

# MODULE 3

## INITIAL ASSESSMENT OF SKILLS FOR ACCESS TO AAC TOOLS



**Augmentative & Alternative Communication: Supporting Children and Adults with Complex Communication Needs" by David R. Beukelman and Pat Mirenda**



**Communication Alternatives in Autism: Perspectives on Typing and Spelling Approaches for the Nonspeaking edited by Edlyn Vallejo Peña**



**AAC Strategies for Individuals with Moderate to Severe Disabilities" by Susan S. Johnston, Joe Reichle, Kathleen M. Feeley, and Emily A. Jones**



**The AAC Coach: Key Strategies for Supporting AAC Learners with Angelman Syndrome**



**Autism and AAC! Gabe uses his AAC device to let us know what he wants! We were shocked!**

# MODULE 4

## HOW TO PROMOTE THE NATURAL HERITAGE: A FEW EXAMPLES ON HOW TO USE AAC TOOLS IN OUTDOOR SETTINGS



[Popsicles and Playgrounds -- AAC in the Summer](#)



[The Benefits of Summer Camp for AAC-Users](#)



[Types of Intellectually Impaired who can benefit from horse riding](#)



[Stepping Stones to AAC: AAC Camp Out](#)

# MODULE 5

## CO-DESIGNING OUTDOOR ACTIVITIES WITH PID



[Guide to Co-Design with people living with disability.](#)



[The Co-create handbook](#)



[Training Toolkit - For organisations co-designing with people with disability.](#)



[Five things to consider in co-design with people with a disability](#)



[Wacoss Co-design Toolkit](#)



[TrainingToolkit For organisations co-designing with people with disability.](#)



[What is Co-Design?](#)



[Key Principles for Successful Co-Creation](#)





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