

# **AAC** Toolkit

**Inclusive communication in action:** 

a training and methodology Toolkit for AAC professionals and occational partners of people with Complex Communication Needs







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# OPEN4ALL Open to diversity in communication

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## 1. INTRODUCTION

#### 1.1 Introduction

According to the definition by the **World Health Organization**, participation coincides with the degree of involvement of a person in their life situations. This involvement can encompass communication, social interactions, education, leisure, and community life ((World Health Organization [WHO], 2001a)

Participation in community life enables individuals to affirm their personal identity, positively influencing their sense of self-esteem and self-efficacy. The sense of belonging to one's community life is strongly correlated with a person's quality of life, as it allows them to self-define, express, and assert themselves (Batorowicz & McDougall, 2006).

**Communicative accessibility** refers to the **right of every individual to access information and express themselves freely**, as all people constantly have the right to communicate as broadly as possible (Light, 1997), by modifying their surrounding environment. For individuals to develop holistically, it is essential that they can communicate effectively, participate adequately, actively claim their role in society, and assert themselves. According to the UN Convention on the Rights of Persons with Disabilities (United Nations, 2006), which reflects the principles of Participation in the ICF Model, it is the duty of every nation to ensure that the right to communicative accessibility is guaranteed for all.





The **importance of functional communication** and participation within society is a cornerstone in the international Classification of Functioning, Disability and Health (WHO, 2001b)., as it is a functional approach that aims to achieve real-world outcomes for people with complex communication needs (CCN) and their partners in everyday life.

While it is widely acknowledged that "every person, regardless of the degree of disability, has the fundamental right to influence the conditions of their existence through communication" (National Joint Committee for the Communication Needs of Persons With Severe Disabilities, 1992), communicative accessibility is not always guaranteed for individuals with complex communication needs. Augmentative and Alternative Communication (AAC), considering communication a primary and inalienable human need, primarily aims to support the communication and participation of individuals with complex communication needs in any life context (ISAAC Italy, 2017) by enhancing real communication opportunities and actual involvement.

**To ensure access to communication is fulfilled**, a person with CCN must be able to:

- understand what others are saying;
- have time and opportunity to communicate what they want to say;
- make their messages understood;
- use their preferred communication method;
- be able to communicate over the phone or with other remote communication devices;
- be able to communicate in meetings and public events;
- use, read, and understand written texts and electronic communication;
- and fill out forms, take notes, and sign documents

AAC interventions should focus on developing adequate functional communication skills essential for expressing needs and desires, building social closeness, exchanging information, and participating in social etiquette routines (Light, 1997).

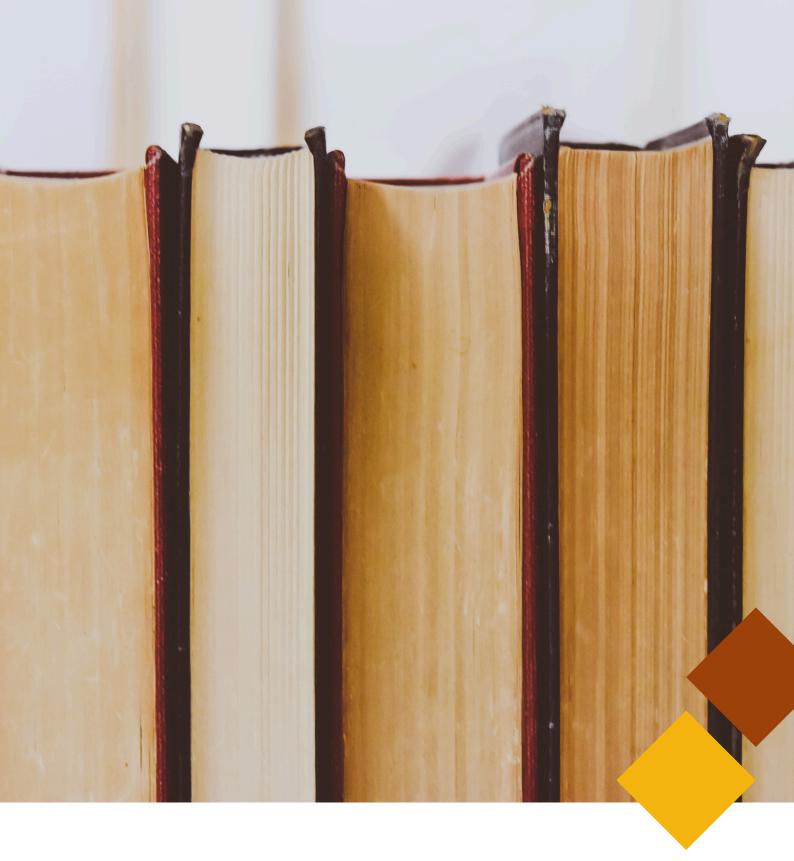


The effective use of AAC helps a person with CCN to take on various meaningful social roles in multiple areas (education, work, leisure, etc.). Access barriers stem from limitations in the current abilities of the person or their communication system, which can be mitigated by using effective AAC intervention. Opportunity barriers, on the other hand, concern the environment and context in which the person is placed and include political, practical, knowledge, skill, and attitudinal barriers.

Having access to information enables each person to make informed decisions about life activities, relationships with others, consumer goods, services, and technology, thereby fully engaging in the community. People with disabilities and CCN are members of the community and, as such, require the same information as everyone else. They need to obtain useful information for everyday life activities (rights, assistive technologies, housing, personal care, transportation, culture, leisure, etc.), as the lack of such information can be disabling.

The project aims to break down barriers to information, culture, knowledge, and art, respecting the principles of access to lifelong education, pleasure, and entertainment, and inclusion in society. By using European "Easy to Read" language guidelines and various adaptation





# 2. ANALYSYS OF REFERENCE LITERATURE

#### 2. Analysis of reference literature



In Italy, numerous projects focusing on Communicative Accessibility have been conducted in the city of Trieste, thanks to the constant work of Isaac-Italy. Through the implementation of these projects, it has been possible to work on the integration of local agencies, aiming for a life path in which AAC becomes the key to accessing information that would otherwise be obscure and inaccessible, respecting the individual's expectations of community life participation (Barca et al., 2015).

To achieve the desired results, continuous collaboration among healthcare, school, and social workers has been essential. In 2014, under the patronage of Isaac-Italy, the book "This School Speaks with Augmentative Alternative Communication" (Luciani & Terrone, 2014) was presented, showcasing how schools can become exemplary environments for facilitating equitable access to information. Another project that had a significant social impact, not only in Trieste, is the "Accessible Museum" project. "Most information is unclear and inaccessible to people with intellectual disabilities. These barriers need to be removed to allow real inclusion and participation in community life, giving everyone the right help and tools to overcome them." (Barca et al., 2015).







#### 2. Analysis of reference literature









By other hand, in Spain, three regulations refer to accessibility: on the one hand, the Convention on the Rights of Persons with Disabilities (United Nations, 2006), which has been ratified in Spain through *Law 8/2021*, *which reforms civil and procedural legislation*, *the European Accessibility Act* (EU) and the *Royal Legislative Decree 1/2013*, *of November 29*, *2013*, which approves the Consolidated Text of the General Law on the Rights of Persons with Disabilities and their Social Inclusion. Thus, accessibility is a guarantee of equality and non-discrimination and implies access to all goods and rights.

Cognitive accessibility is regulated in the General *Law on the Rights of Persons with Disabilities and their Social Inclusion, approved by Royal Legislative Decree 1/2013, of November 29*. The Law establishes that universal accessibility includes cognitive accessibility, which aims to allow easy understanding, communication and interaction to all people. Cognitive accessibility is made effective through easy reading systems, alternative and augmentative communication systems, pictograms and other human and technological means.

On the other hand, the General Law for the Defense of Consumers and Users establishes that cognitive accessibility is based on two main axes:

- 1. That the information is provided in clear and understandable terms.
- 2. The adequacy and adaptation of the formats in which such information is provided.

Although there are numerous regulations that state the need to adapt spaces, texts, information, etc., in daily practice there is still much to be done and fulfilled.





Related to projects, in **Spain** various projects and initiatives have been implemented to improve **accessibility in communication for people with disabilities**. The Spanish Center for Subtitling and Audio Description (CESyA) is dedicated to promoting accessibility in audiovisual media through captioning and audio description services. It collaborates with associations of people with disabilities, the industry and cultural entities to improve accessibility in television, cinema, theater and other events. IncluSite is a web accessibility tool that allows users to navigate web pages using keyboard, voice or sounds, without the need for specific software or hardware. This solution facilitates internet access for people with various disabilities, improving their browsing experience and promoting digital inclusion.

Easy Reading: several organizations promote easy reading, facilitating access to information and culture.



Altavoz Cooperative: is the first cooperative in Spain managed by people with intellectual disabilities and specialized in cognitive accessibility. It offers services such as the evaluation of the cognitive accessibility of spaces and the adaptation of contents to easy reading, contributing to the inclusion and active participation of people with intellectual disabilities in society.

There are several initiatives carried out in Spain aimed at promoting accessibility in communication, seeking to guarantee equal opportunities and full participation of people with disabilities in all areas of society.



# 3. RESEARCH PATHWAY FOR THE AAC TOOLKIT



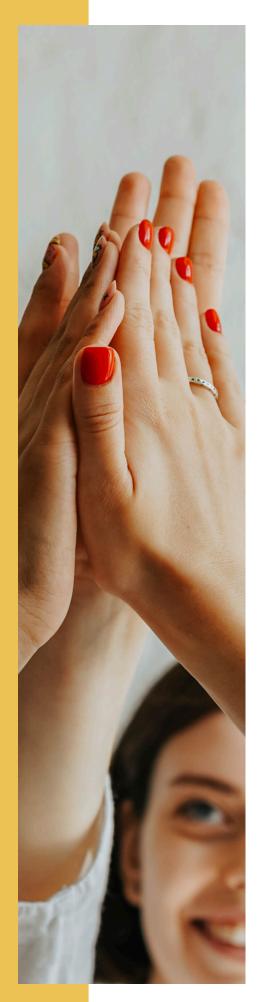
People who use **Augmentative and Alternative Communication** (**AAC**) may face numerous barriers to full community participation, due to limited access to information and communication (Owens, JS 2006).

The aim of the research that inspired this project idea is to gather insights from stakeholders who live and experience the local area every day, in order to design accessibility solutions based on real and felt needs.

Based on these considerations, it was deemed useful to carry out a study that compares and connects two different yet complementary worlds: the point of view of stakeholders who need communicative accessibility to be guaranteed in every area of life; on the other, the perspective of institutions, which are responsible for reflecting on accessibility and turning it into concrete services for all citizens. The study took into account the opinions of people with complex communication needs (CCN) and their families, as well as those of health and social care professionals, workers such as shopkeepers, restaurant owners, librarians, etc., people who, despite being occasional partners of individuals with CCN, encounter a wide variety of different communicative needs on a daily basis, and employees in public institutions were taken into consideration.



The research was conducted by administering a <u>questionnaire</u> eleven closed-ended answers, designed to gather opinions on accessibility in the city's places and services; and three open-ended questions designed investigate which places and services of public interest should be made more for people accessible communication difficulties, how they could be made more accessible, and what role public institutions could play in guaranteeing everyone's right to effective communication. In order to thoroughly investigate the perceptions of accessibility in the area, it was also considered important to interview five adults with intellectual disabilities (ID). The survey shows that there is no significant gap between the perceptions of communicative accessibility held by stakeholders (families, workers, professionals) and of public institutions. particular, barriers to accessing information are seen by all respondent groups as almost insurmountable.



The **results highlight** that nearly all participants share a common understanding of what it means to experience lack of access а communication. Local institutions are aware of the shortcomings present in the areas they manage and have solid ideas for interventions that could help overcome access barriers. However, disconnect there seems to be а should ideally be between what invested in and what is actually being funded. The hiring of qualified personnel in public places who know how to respond to the needs of people with disabilities is considered a priority by many respondents.



Overall, institutions and occasional partners working with people with complex communication needs (CCN) tend to place little importance on training and awareness-raising, which should involve all citizens, regardless of their role. They rely on the expertise of specialists who support people with disabilities, without recognising that everyone's role within the community is essential.

These observations clearly show that:

a large part of the population, people with disabilities are still perceived as "in need" of assistance and specialist support. Little attention is given to the potential of work carried out within a community, which enables each individual to have an impact on their surroundings, fostering social participation and wellbeing.



Training aimed at everyone considered especially important by families and professionals, as they face on a daily basis the inability of people complex with communication needs (CCN) access services, engage in conversations, participate in meaningful activities and social moments, make choices, and influence the world around them. Among the various spaces and services, public transportation is

services, public transportation is seen as the area with the most obstacles to participation, as communicative and cognitive access barriers make it impossible for many people with CCN to use it independently. Recreational and leisure spaces, as well as essential services (such as banks and supermarkets), are also perceived as largely inaccessible for people with CCN.

Across all groups, there is a shared desire **to create new opportunities for dialogue** and co-design between stakeholders and institutions.

A good percentage of respondents identified that:

- the ability to symbolize language
- simplify it
- make it more accessible

by using AAC (Augmentative and Alternative Communication) in various public contexts—is one of the **key strategies to break down both information and opportunity barriers.** 

After gathering the stakeholders' opinions, we visited, together with <u>five adults with intellectual disabilities</u>, some of the places considered the most inaccessible: the metro (public transportation), the supermarket (an essential service), and a café (a recreational and social space).



To make the aim of the research and the importance of their perspective clear to the participants, we prepared a short introduction on Communicative Accessibility.

#### The introduction was:

- 1. written in easy-to-read language
- 2. adapted with WLS symbols, so that even those who do not use the written alphabet could still access the content.

During the activity, **numerous** obstacles were encountered (the self-service ticket machine in the metro was not working, signage in the city was either absent or incorrect), so the young people had the opportunity to experience first-hand and reflect on the barriers that can be encountered during everyday activities.

This enabled them to find numerous solutions that could be adopted to overcome these barriers.

#### **01** M.'s point of view:

"When we went down to take the metro, the ticket machine wasn't working, and there was no sign saying so. In the metro, some things can be difficult for people who can't read. If someone can't read the names of the stops, there could be another way: for example, at the 'Italia' stop, you could use the symbol of Italy – that might make it easier. In Piazza Galatea, we could draw the sea because the sea is nearby, and so on."

"There is a way to help young people who can't communicate independently. You can use drawings, for example, for someone who has difficulty reading. On the menu, next to the Margherita pizza, you could draw a Margherita pizza, and do the same for all the others. When we went to the supermarket, it was hard for G. to find the bread section. If there had been a drawing of bread, and maybe an *arancino* in the deli section, it would have been easier."

#### 02

#### G.'s point of view:

"I would love to go bowling with my friends, I'd like to play a match, change our shoes, eat fries, pizza, and drink Coke. I'd love to go to the amusement park and pay with coins. Unfortunately, I can't go on my own — I only go with my mom and grandma."

#### 03

#### S.'s point of view:

"When I visit Catania, there are some things that I find difficult, like road signs or crosswalks, street names, or information on visiting the city or going to church. I move around on my own using the metro. Some metro stops are a bit hard to understand."

"You can use a GPS, but it's not easy for everyone. Not everyone finds it easy to ask for help. Drawings could help—people who can't ask for information could follow the drawings to understand whether to exit to the right or left in the metro."

"At the café, ordering is easy, but paying is hard."

## 05

#### S.M.'s point of view:

"In the metro, the ticket is hard — I need to have one euro.
Paying for the ticket and choosing it at the machine is difficult. Looking at the map can help."

"When I go to the bar, paying is difficult — my mom, dad, or support worker helps me."

#### 04

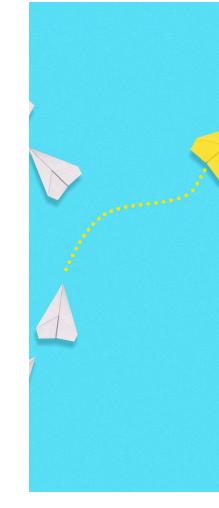
#### L.'s point of view:

"When I go to the cafe, it's easy to pay for coffee because it costs one euro. I say 'one coffee' to the cashier and give them one euro. At the pizzeria, it's a bit more difficult."

# Participation as a Tool for Change

This research is a **first starting point** that allows us to focus on the importance of <u>listening to everyone's point of view</u>. In order to bridge the often existing gap between interventions that respond to real needs and those that address "constructed" needs (imposed from above and disconnected from the perspective of actual stakeholders) it is **essential to design opportunities for dialogue**, **exchange**, **and collaboration among all relevant actors**, **without forgetting to involve the main protagonists**. We cannot think of improving quality of life and participation without also considering how to involve the protagonists in all phases, regardless of their level of disability or complex communication needs (Medeghini et al., 2013).

Only by effectively interpreting the need to foster dialogue among the various actors engaged around a community-relevant issue - such as Communicative Accessibility in all its facets — and by building a network capable of designing concrete and effective social interventions, will it be possible to move the inclusion beyond idea of as an unattainable and often expendable utopia. Any intervention aimed at real change in the territory must include participatory co-design actions from the bottom up, which serve as a tool for planning, action and learning for all those called upon to participate and become "multipliers" of the effectiveness of interventions proposed in terms of community empowerment (Gattino et al., 2020).





# 4. FOCUS GROUP AND QUESTIONNAIRE REPORT

#### 4.1 IN SPAIN

During the project, partners conducted focus groups and questionnaires to understand the problems, barriers and opportunities related to communicative accessibility.

Thus, Fundación Miradas made a Focus Group with People with Intellectual Disabilities and Autism to understand their point of view regarding problems, barriers and opportunities related to communicative accessibility. This Focus Group was integrated by 15 people (6 women and 9 men) between 18 and 29 years old who belong to the course for young people with disabilities and autism at the University of Burgos. The questions were divided in 5 sections: bureaucracy; spaces-orientation; public and private spaces; people; and closing.

These were the questions and the responses:

#### **BUREAUCRACY**

- 1.1 In which documents have you encountered difficulties? Difficulties in understanding the information, understanding the content, procedure... Give examples to prompt the response.
- 1.2 How did you solve it?
- 1.3 Who helped you?

#### **SPACES - ORIENTATION**

- 2.1 What are the spaces in which you had problems in getting your bearings, understanding where you had to go...?
- 2.2 What were the problems you had?
- 2.3 How did you solve them?
- 2.4 Who helped you?

#### PUBLIC AND PRIVATE SERVICES

- 3.1 Which public and private services do you remember having problems with in the last few months? Prompt answer: health centre, civic centre, university, school, shops, restaurants, public transport, etc.
- 3.2 Why do you think you had problems? For example, poor signage.
- 3.3 How did you solve it?
- 3.4 Who helped you?

#### **PEOPLE**

- 4.1 Do you think all people understand that sometimes we need help?
- 4.2 How do you think it can be solved?

#### **CLOSING**

- 5.1 How have you felt when you have encountered these problems?
- 5.2 Is there anything that we haven't discussed in the session that you would like to share?



#### 1. Bureaucracy

The participants expressed the issues they had with bank documents, tax-related matters, and everything related to taxes.

For example, they use Apps for scheduling doctor's appointments. They don't request appointments over the phone because the automated response machine doesn't understand them, and they have difficulties.

For all matters related to bureaucracy, young people with intellectual disabilities rely on other individuals, mainly their family members, as they are sometimes unaware of all bureaucratic procedures.

#### 2. Spaces – orientation

Participants stated that related to the orientation, they have difficulties understanding the messages displayed on airport screens. And for example, in the University of Burgos "No one can figure out where to go".

Sometimes, the signs (arrows) are unhelpful because they are confusing. Similarly, guidance through letters doesn't help either.

For the public transport (bus), they use an App (Moovit) to know where they need to go, which bus to take, etc. However, sometimes there is advertising that makes it difficult for them to understand. They use google maps.

Participants expressed that they have problems in the bus station, and they ask people when they need something. Their main problem is getting a ticket. Also, they have difficulties in the cinema, theatre... in general, difficulties in getting to places

#### 3. Public and private spaces

One of the participants expressed having issues with using the Burger King QR and that it's necessary to raise awareness among the population to offer assistance. Also, they expressed the difficulties they have with the money exchanges.

Often, the size of the letters (menus, signs, prices, etc.) makes reading difficult because they are small or have strange, hard-to-read fonts.

#### 4. People

In general, all participants said the belief that there needs to be greater awareness among the general population. They emphasized the importance of people having more patience and understanding that some individuals may struggle more with understanding, communicating, etc. They noted that often people can be very rude and respond in negative ways, especially when someone struggles with reading or takes longer to do something.

It is necessary to raise awareness and consciousness among the general population that there are people who have difficulties in communicating and understanding, and to understand that not all individuals are the same

#### **Conclusions**

It is necessary to carry out awareness-raising and sensitisation actions for the general population to understand the problems and barriers so they can understand the problems and barriers faced by people with complex communication needs.

People with complex communication needs demand their rights and the correct application of existing accessibility legislation.

Also, changes in public and private spaces, as well as in the legal-administrative area and in the orientation and movement in public and private spaces are necessary.

Through tools and awareness-raising campaigns, we can help a lot of people with complex communication needs.





#### 4.2 IN ITALY

By other hand, **Controvento ONLUS**, made questionnaires with <u>occasional partners and educators of people with Complex Communication Needs</u>. Although the aimed to reach 15 responses and contacted a large number of people, we received 11 responses. Despite the lower number, we consider these 11 responses to be of extremely high quality due to their distribution:

- 1. 4 answers from family members/caregivers of people with Complex Communication Needs (CCN).
- 2. 5 responses from educators of people with CCN.
- 3. 2 responses from family members of people with CCN.

#### The questions made in the questionnaire were:



# 1. In which places or areas are the most barriers present?

- 1. Legal and administrative area (contracts, documentation, applications, etc.)
- Orientation and navigation in public and private spaces (signs or directions to reach a specific place)
- 3. Public spaces (hospital, city hall, schools, etc.)
- 4. Private spaces (shops, bars, restaurants, supermarkets, gyms, etc.)
- 5. Other:

#### 2. What are the main barriers?

- 1. Lack of awareness and understanding by the person or professional providing support
- 2. Lack of training of the person or professional providing support
- 3. Lack of resources to implement improvements
- 4. Other:



# 3. Strategies or ideas that could be useful in helping people with complex communication needs to communicate in different spaces

- 1. Training and awareness for the general population
- 2. Training and awareness for people who work with the public
- 3. Tools to make spaces and services more cognitively accessible
- 4. Other:

# 4. Where would you like the OPEN4ALL project in Catania to focus its efforts?

(e.g. commercial establishments, schools, public transportation, etc.)

### The questionnaire results

### 2) Solutions implemented:

Accessible signage and information: use of symbols, pictograms, clear texts, and AAC to facilitate orientation and understanding.

Creation of calm and better structured environment s: reducing noise and confusion to promote communicat ion and interaction.

Elimination of architectural barriers: ensuring autonomous accessibility with elevators, ramps, and suitable restrooms.

Personnel training: raising awareness and training staff in the use of AAC for effective and inclusive communication.

· Assistive technologies: implementing tools such as tablets with AAC software to facilitate expression and communication.

## The questionnaire results

### 3) Public and Private Spaces

Facilities with issues encountered:

Hospitals:
medical visits
and laboratory
tests with poor
signage and
understanding
of processes.

Public services (post office, bank, public transport): difficulty in understanding information and interacting with staff.

Cultural
venues
(museums,
libraries):
often
inaccessible
content
making
people with
CCN passive
participants.

### The questionnaire results

### 4) Solutions implemented:

Adoption of visual and practical support: use of images, videos, and social stories to better explain situations and locations.

Role-playing and training: practical preparation to face new situations through simulations.

Personnel training: improving training for public service staff to effectively respond to the needs of people with CCN.

Assistive technologies: use of devices such as communicators and communication boards to facilitate interaction in public places.

### The questionnaire results

# 5) Feedback and Suggestions for the AAC Toolkit Main Suggestions:

Provide
concrete
examples:
include
practical
examples of
how to use AAC
in various daily
situations such
as school,
home, work,
and leisure.

Continuous feedback: implement a feedback system to gather user suggestions and continuously improve the toolkit.

Training:
provide
training
sessions for
educators,
parents, and
caregivers
on how to
effectively
use the AAC
Toolkit.

Multilingual support: offer the toolkit in multiple languages to overcome language barriers.

Mobile technologies: develop mobile applications and software usable on various devices and manageable by multiple users.

### The questionnaire results

#### Conclusion

The OPEN4ALL project has identified and addressed numerous issues that people with Complex Communication Needs encounter daily. Through targeted solutions such as accessible signage, staff training, and the use of assistive technologies, the project aims to create more inclusive and accessible environments. Continuous feedback and the implementation of practical suggestions will be essential for the success and evolution of the AAC Toolkit, further improving the quality of life for people with CCN, their families and caregivers



# 5. TOOLS AND BEST PRACTICES FOR COMMUNICATIVE ACCESSIBILITY

Communicative Accessibility is inalienable right of every individual, as it coincides with the ability to access information and express oneself freely (Light, 1997). Acquiring information and making choices can be difficult for many people due to the way information is presented. Although it is widely recognized that "every person, regardless of the degree of disability, has the fundamental right to influence, through communication, the conditions of their own existence" (Communication Bill of Rights, 1992), communicative accessibility is not always guaranteed for people with complex communication needs (CCN). People with CCN are members of the community and, as such, require the same information as everyone else.

It is important to consider that a person's quality of life is strongly correlated with how much they feel they are part of the community.

A sense of belonging allows individuals to define themselves, express themselves, assert themselves, and enhance their selfesteem and self-efficacy (Batorowicz et al., 2006).

Numerous studies have shown that people who use AAC (Augmentative and Alternative Communication) often measure their success based on how competent they feel in communicating with others, and how comfortable others feel when communicating with them (O'Keefe et al., 2007).

For these reasons, AAC (Augmentative and Alternative Communication), which considers communication a primary human need, supports the communication and participation of individuals with complex communication needs (CCN) in all life contexts (ISAAC Italy, 2017).

AAC intervenes in the environment by making it more suitable to meet the person's needs, promotes interventions to be implemented across different settings, and helps the person with CCN to become the protagonist of a variety of meaningful social roles in multiple areas of life (McNaughton et al., 2007).

Augmentative and Alternative Communication" (AAC) is a field of research, clinical practice, and educational intervention. AAC studies and, when necessary, seeks to compensate for, temporary or permanent communication disabilities, activity limitations, and participation restrictions experienced by individuals with severe impairments in speech and/or language production and comprehension, whether in spoken or written forms of communication (ASHA, 2004; Beukelman & Mirenda, 2014).

Augmentative and Alternative Communication (AAC) recognizes communication as a primary human need (Light, 1997; Williams, 1997). According to Beukelman and Mirenda (2014), AAC is not intended exclusively for specific groups of people, but can be used by individuals from a wide variety of socioeconomic, cultural, and ethnic backgrounds.

The only common factor among these individuals is the need for specific support in communication, due to the temporary or permanent inadequacy of their verbal, written, or gestural communication to meet the demands of everyday interaction.

Some individuals who use AAC are able to produce words or phrases, but not sufficiently to support functional communication. There are many conditions that can impair communication skills, and they may be either congenital or acquired.

It is important to emphasise that the ultimate goal of AAC-based intervention is not merely the introduction of tools, but rather the creation of concrete opportunities that enable individuals to communicate effectively, participate actively in social life, and freely choose their own activities and relationships. Communication is not only a functional tool — it is a fundamental right that enables the development of identity and full inclusion within the community.

Guaranteeing the right to communication means recognizing that every person has the need and the desire to participate actively in social, educational, and relational life.

For individuals with Complex Communication Needs (CCN), this right is not expressed solely through spoken language, but requires access to personalized, flexible, and diverse expressive modalities.





In today's world, the concept of **accessibility** can no longer be limited to physical aspects alone. Accessible spaces must also ensure that everyone can understand, express themselves, and participate, even if they experience communication difficulties.



For many people, spoken communication is not accessible. This includes individuals with intellectual disabilities, speech and language disorders, autism, neurodegenerative diseases, or even people who simply do not speak Italian.

For them, even seemingly simple actions — like asking for information, ordering at a café, or buying a ticket — can become insurmountable barriers.

It is essential to focus on communicative accessibility, which is the right of all citizens — regardless of disability — to access, understand, and use information in everyday life, from public messages to interactions in workplaces or public services.



However, many everyday situations present invisible Overly complex messages, non-intuitive barriers. environments, and the lack of supportive tools are all obstacles that can exclude those who do not communicate through spoken language. This is where AAC (Augmentative and Alternative Communication) comes into play. AAC is founded on a key principle: placing the person at the center, respecting their uniqueness, and providing tools that allow them to communicate as independently as possible. It's not just about compensating for a limitation — it's about enhancing existing communication abilities building an effective communication system around them.

To achieve this, it is essential to adopt a multimodal approach that includes both verbal and non-verbal modes of communication, using strategies, technologies, and visual or symbolic supports. In this way, individuals with Complex Communication Needs (CCN) can not only express their needs and desires, but also understand their environment and others, build meaningful relationships, and fully participate in everyday life contexts.



However, many everyday situations present invisible barriers.

AAC, in fact, views communication as a primary human need, and from this principle arises the commitment to create accessible and inclusive tools that protect everyone's right to communicate.

For an environment to be truly accessible and inclusive, removing architectural barriers is not enough, it is also necessary to create the conditions to communicate, to understand, and to be understood.

This means integrating AAC tools such as communication boards, pictograms, visual supports, technological devices, or easy-to-understand signage, adapting them to both the context and the individual. It is a process that requires awareness and a profound cultural shift: it is not the person who must adapt to the context, but the context that must become able to welcome and respond to a plurality of communication styles.



### AAC distinguishes between two types of communication systems:

1) Unaided systems, which do not require external objects and rely solely on the body (such as gestures, vocalizations, or the use of sign language);

2) **Aided systems**, which involve the use of external tools — either low-tech or high-tech — and may include images, photographs, graphic symbols, communication boards, or electronic devices with voice output.



The use of these tools, which can be combined and personalized based on the individual's needs and the context, is essential to promote participation, autonomy, and understanding.

This is why AAC is not just a means of communication, but a vehicle for participation.

Every communication board, every symbol placed in a public space, every professional trained in the use of these tools helps to transform spaces into welcoming environments that respect diverse ways of communicating.



- Many environments today are still designed with only spoken communication in mind. This approach excludes those who use alternative communication channels. For this reason, integrating AAC requires a profound cultural shift, involving families, schools, professionals, and institutions. What is needed is a new social awareness that recognises the right to communication as a fundamental right, equal to the right to mobility or education. AAC can make use of both alphabetic and symbolic tools.
- The symbols used in AAC are more than simple drawings: they represent a true visual language, built according to logical and grammatical criteria. There are both symbol sets (collections of images without internal grammatical rules) and symbol systems (which follow complex linguistic rules and can also express abstract concepts and syntactic relationships).

#### Among the main tools used in Italy are:



• PCS® (Picture Communication Symbols): a widely used set of very intuitive and visually clear symbols, licensed by Tobii Dynavox and used around the world.



• Widgit Literacy Symbols (WLS): a symbol system with internal grammatical rules, useful for representing both concrete and abstract concepts, distributed in Italy by Auxilia.



• Blissymbols: one of the most structured symbol systems, based on ideographic symbols that follow a rigorous grammar. They are less immediately transparent at first glance, and are managed by Blissymbolics Communication International.



• ARASAAC: a free symbol set, developed by the government of Aragon (Spain) and distributed under a Creative Commons license. It is an accessible tool, easily used by public institutions and associations.



It is important to highlight that most of these symbols are protected by copyright. To use them legally, it is necessary to respect the licensing terms and include any required attributions. Some licenses, such as Creative Commons, allow non-commercial use without prior permission; for other uses, especially public or commercial, specific authorization may be required.

These systems can be used in communicative accessibility projects within public spaces, educational settings, healthcare environments, and cultural institutions. They are not merely tools for specialists: they become living resources that allow people with Complex Communication Needs (CCN) to navigate, make choices, interact, and feel part of the community.

Using symbols allows us to represent words, concepts, and phrases through coded and recognizable images. But it's important to be clear: these are not just drawings.



AAC symbols are structured linguistic systems, following coherent logic, semantic categorization, and pragmatic criteria.

One of the great strengths of AAC is that, although it was developed to meet specific needs, it is actually a useful tool for everyone. Think of preschool children who are beginning to read, foreigners who do not yet speak the local language fluently, or people in hospitals who have undergone procedures that temporarily prevent them from speaking. Symbols can break down communication barriers in contexts of vulnerability, but they can also support learning, participation, and a sense of belonging for a much wider range of people.

Now, *let's imagine* what it would mean to introduce these symbols into public spaces.

In complex environments, such as a train station, a library, or a medical clinic, it can be difficult to understand where to go, what to do, or how to interact. The use of visual signage, labels, and symbol-based boards placed at key points (entrances, counters, service areas, waiting rooms) can provide a visual guide that helps anyone find their way.



For example:

In shops or cafés, the use of symbols can support direct communication between customers and staff. A board with images of the menu or common actions ("I want to drink", "I want to pay", "I don't like this") can help reduce anxiety, increase autonomy, and prevent uncomfortable situations.

Likewise, staff working in these environments — if properly trained — can learn to use symbols as an integral part of daily communication, combining them with spoken language to reinforce meaning. When people can express themselves, understand others, and be understood, they feel less isolated, less frustrated, and more confident. This has a positive impact on both emotional and relational well-being. In many cases, the inability to communicate can lead to anxiety, confusion, and even challenging behaviours. **Providing tools that support communication also means preventing distress and promoting calmer, more effective interactions.** 



But for symbols to truly work, they cannot be placed randomly or without purpose. They must be carefully designed, integrated into the context, and co-created with people with disabilities and their families.

It is also essential that staff receive training, not only on the technical use of symbols, but also on inclusive communication in general: how to build relationships, how to adapt language, and how to interpret non-verbal cues.

Moreover, accessibility requires an active social network: families, schools, professionals, associations, and institutions. Only when all these actors collaborate does the environment become truly accessible.



The ultimate goal is not to "simplify" reality, but to make it accessible without losing its richness.

Symbols can represent simple and complex concepts, emotions, desires, and reflections. They can support friendly conversations, formal dialogues, practical requests, or deep thoughts. But most importantly, they can give a voice back to those who are too often excluded from social dialogue.

A truly inclusive society is one that accepts the diversity of communication styles and is committed to making them visible, usable, and respected. Using symbols in public spaces is not just a technical choice, but it is a cultural and political act. It is a sign that we are building spaces where all people can be heard, understood, and included.



**Easy to Read (ETR)** is a way of communicating that makes written information easier for everyone to understand. It supports equity, participation, and autonomy by ensuring that content is presented in a clear, respectful, and accessible format. The principles behind ETR reflect a broader commitment to human rights and inclusion, recognizing that all people deserve equal access to information—regardless of background, ability, language, or educational experience.

Creating Easy to Read content means more than just simplifying language. It intentional involves decisions about words, structure, layout, and tone to ensure that communication is welcoming and useful to a wide audience. The goal is not to reduce the value or meaning of content, but to express it in a way that is clear, direct, and respectful of all readers. This approach can be applied across sectors—from public institutions to healthcare, education, workplaces, and community organizations.



Several key practices guide the development of Easy to Read materials.

#### Writers are encouraged to:

- 1) use simple
- 2) familiar language
- 3) avoiding technical terms or abstract expressions unless they are clearly explained.

#### Sentences should be:

- 1) short
- 2) active
- 3) focused on one idea at a time, which supports easier understanding and flow.

#### Structure is also essential

- 1) using heading
- 2) bullet points
- 3) generous spacing helps organize content and prevents cognitive overload.

Visual layout matters as well—large, legible fonts and high-contrast text improve readability, while meaningful images can reinforce key messages when used thoughtfully.

An inclusive approach to communication means designing with diversity in mind from the start.



Easy to Read supports this by ensuring that materials are not just technically readable but actually usable and meaningful for a wide range of people. One powerful strategy is user review: testing materials with a variety of readers to ensure clarity and usefulness. Feedback can reveal hidden barriers and improve the effectiveness of the final version, while also fostering a culture of participation and co-creation.

In addition to structural clarity, the language itself inclusive. This should be means stereotypes, using gender-neutral and person-first expressions, and being mindful of how power and identity are represented. Inclusive communication respects differences actively and assumptions. It emphasizes that all individuals regardless of how they communicate or understand -should be able to access information that affects their lives. This kind of inclusive practice does not isolate or single out any group. Instead, it aims to create content that speaks to everyone with fairness and respect.



Easy to Read is more than a writing technique—it is a reflection of the values of accessibility, equity, and respect.

When communication is truly accessible, people are better able to understand their choices, contribute to their communities, and exercise their rights. In this way, Easy To Read contributes to more open, inclusive societies where no one is excluded from understanding simply because of how something is written.

Choosing to write in an Easy to Read format is not just a practical tool—it is a powerful expression of inclusion.



### 6. PRACTICAL APPLICATION OF THE AAC

The UN Convention on the Rights of Persons with Disabilities (UN, 2006) recognizes the right of every individual to receive and share information in an accessible way, committing states to adopt effective measures to remove barriers.

Public spaces are defined as open and accessible areas for everyone, including public offices, healthcare facilities, schools, transportation systems, squares, libraries, and cultural centers (Smith & Brown, 2017). Ensuring accessible communication in these settings is essential so that every citizen can fully benefit from the services offered.

For individuals with Complex Communication Needs (CCN), such as cognitive impairments or language disorders, it may be essential to use AAC tools in public contexts (symbol or alphabetic boards, speech-generating devices, assistive technologies, etc.).

Training public service professionals, in schools, hospitals, transportation, administrative offices, and cultural centres, is one of the most strategic elements for ensuring inclusive and accessible communication for all people, including those with communication, sensory, cognitive, or linguistic disabilities.

Operators are often the first point of contact between the citizen and the public service. In the absence of adequate training, they risk becoming an additional obstacle, especially for people who have difficulty understanding or expressing themselves through conventional communication methods.

Conversely, trained operators are able to:

- recognize the specific communication needs of users with disabilities;
- adopt flexible strategies to facilitate understanding and expression, using augmentative and alternative communication (AAC) tools;
- use clear, simple, and nondiscriminatory language, even in complex bureaucratic contexts;
- promote relationships based on active listening, empathy, and respect for communicative differences;
- interact effectively with assistive technologies, such as speechgenerating devices, visual symbols, accessible software, or personalized digital supports.

effective Finally, training also has an impact on a cultural level: it helps to reduce prejudice, to raise awareness of the invisible barriers related to communication, and to promote a culture of inclusion in which communicative diversity is not seen as an obstacle, but as a natural dimension of society.



In many public spaces (such as train stations, hospitals, libraries, museums, or parks), AAC can be used to create accessible orientation systems through various types of interventions:

- Use of symbols to label environments ("toilet", "exit", "information", "elevator"), providing a direct visual representation that can be easily understood by individuals with Complex Communication Needs (CCN).
- Inserting **visual maps** using symbols or sequenced real images allows users with cognitive disabilities or orientation difficulties to navigate independently.

In cultural venues, AAC can help make historical, artistic, and scientific content understandable even for those who have difficulties with reading or language processing.

- Explanatory panels written in simplified language and accompanied by symbols allow access to information without having to decode complex texts.
- O2 Some Italian museums, such as Explora Museum in Rome, offer symbol boards, brochures, and narrative pathways in AAC, where each step is explained through symbols, photographs, and simple sentences.
- Audio guides can be enhanced with synthetic voice outputs from digital communication boards or with mobile apps that present the content using symbols or assisted voice reading.

In contexts such as hospitals, schools, municipal offices, or public transportation, the presence of AAC supports allows for more inclusive communication between citizens and service providers.

Printed communication boards with key symbols (greetings, basic needs, requests for help, expressions of discomfort) can be placed in emergency rooms, clinics, reception centers, or social service desks, facilitating interaction even with users who do not speak or understand Italian.

In public places, dynamic communicators on tablets could be made accessible to the public.

Even in informal settings such as cafés, restaurants, or vending machines, AAC can make a real difference:

- Symbol-based menus (e.g., "sandwich", "pizza", "water", "coffee") promote autonomy in making choices and enable verbal or non-verbal interaction.
- Sequential **visual panels** describing the steps of interaction ("enter greet order pay receive leave") are also useful for individuals who need a predictable structure.
- At ticket machines, the addition of interfaces with AAC symbols and voice output allows use by those with linguistic or motor difficulties.

The use of AAC is also crucial in emergency situations. People who are unable to verbally express their health condition or discomfort must be able to communicate effectively and immediately:

- **Emergency communication boards containing symbols** to express pain, nausea, need for help, fear, thirst, etc.
- Emergency personnel must be trained in the use of portable communication boards to manage interactions during emergencies.



Therefore, ensuring communicative accessibility in public spaces means building a fairer and more inclusive society. This requires the removal of physical, sensory, and cognitive barriers through technological solutions, visual/tactile supports, AAC tools, and adequate staff training. While international regulations provide an important framework, it is the concrete, day-to-day application in schools, hospitals, parks, and public transportation that determines real accessibility.

Only through a systemic and inclusive approach, one that is attentive also to emergency contexts, will it be possible to guarantee the full exercise of the right to participation for all people.

### REFERENCE LIST

- Barca, A., Clementi, P., Luciani, N., Samec, R., & Sforzina, C. (2015). This School Speaks with Augmentative Alternative Communication. Isaacltaly.
- Batorowicz, B., & McDougall, S. (2006). Participation:
   A change of culture. Communication Matters,
   20(3), 11–15.
- European Union. (2019). European Accessibility Act. Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019.
- ISAAC Italy. (2017). AAC is Communication. ISAAC Italy.
- Light, J. (1997). "Communication is the essence of human life": Reflections on communicative competence. Augmentative and Alternative Communication, 13(2), 61–70. <a href="https://doi.org/10.1080/07434619712331277848">https://doi.org/10.1080/07434619712331277848</a>
- Luciani, N., & Terrone, L. (2014). This School Speaks with Augmentative Alternative Communication. Isaac-Italy.

#### REFERENCE LIST

- National Joint Committee for the Communication Needs of Persons With Severe Disabilities. (1992).
   Guidelines for meeting the communication needs of persons with severe disabilities. ASHA, 34(Suppl. 7), 1–8.
- Royal Legislative Decree 1/2013, of 29 November.
   General Law on the Rights of Persons with Disabilities and their Social Inclusion. Boletín Oficial del Estado.
- Spanish Law 8/2021. Reforming civil and procedural legislation to support persons with disabilities in the exercise of their legal capacity. Boletín Oficial del Estado.
- United Nations. (2006). Convention on the Rights of Persons with Disabilities (CRPD). <a href="https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html">https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html</a>

#### REFERENCE LIST

- World Health Organization. (2001a). International classification of functioning, disability and health (ICF). World Health Organization. <a href="https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health">https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health</a>
- World Health Organization. (2001b). The world health report 2001 – Mental health: New understanding, new hope. World Health Organization.

https://www.who.int/publications/i/item/924156201