**Review Article** 

# The trend of Augmentative and Alternative Communication within schools in Rome and surrounding areas

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### **Abstract:**

Augmentative and Alternative Communication (AAC) is a set of techniques, strategies, and technologies designed to improve the communication skills of people with verbal language difficulties. This practice facilitates social and school integration, especially for individuals with developmental disabilities such as autism and cerebral palsy by not replacing verbal language, but enhancing it, using symbols and images to support oral communication. In recent times, AAC has been implemented in schools to facilitate the learning and inclusion of pupils with neuro-diversity, creating school environments adapted to individual needs. AAC, through tools such as visual planners and communication charts, not only improves communication skills, but also supports children's emotional, cognitive, and social skills. The initiative was appreciated by both pupils with communication difficulties and their classmates, fostering an inclusive and interactive learning environment. Despite the benefits, challenges remain related to bias towards the use of these tools and the need for more training of school staff. Raising awareness and inclusion of all school actors are essential to overcome these critical issues and promote full inclusion through the enhancement of differences.

Key words: autism; neurodiversity; school; communication; education; teachers; learning; educational programs

# Introduction

Augmentative and Alternative Communication (AAC) is a tool that, through the use of techniques, strategies and technologies, creates real communication opportunities for all those people who have difficulty using the verbal communication channel. AAC refers to an area of research and clinical and educational practice that studies and attempts to compensate for temporary or permanent communication disabilities, limitations in activities, and restrictions on the participation of people with severe disorders in the production of language and/or speech, and/or comprehension, in oral and written modes of communication (ASHA, 2005). It is defined as "augmentative" precisely because, in opposition to some beliefs unfortunately still widespread, it does not replace, but rather increases the natural communicative possibilities of the person, including verbal language where the conditions exist. The symbols or images used by AAC qualify as alternative tools that accompany and stimulate oral production. Augmentative and Alternative Communication techniques are used almost routinely with people who have developmental disabilities, such as cerebral palsy, intellectual disabilities, autism spectrum disorders, deaf-blindness, and speech apraxia (Beukelman et al.; 2014).

With this tool, it is intended to mediate the communication of rules and programs in order to facilitate conversation and learning, making people aware of neurodiversity. Precisely for this last reason, the role of AAC is necessary within schools, as, in addition to being a method for creating visual concept maps and/or visual syntheses to facilitate learning in the classroom, it is fundamental for the integration and inclusion of pupils with neurodiversity at three hundred and sixty degrees within the class and its social dynamics. To encourage this, the goal is to build school contexts capable of welcoming and enhancing the uniqueness of each student, facilitating meeting, participation and focusing on individual abilities but, above all, focusing on improving life contexts in order to improve their quality. To ensure that this happens, art. 13 paragraph 3 of Law no. 104/1992, which provides for the presence of an ad personam specialist assistant, provided by local authorities. The figures designed to fill this role are pedagogists, social workers of various titles, psychologists, professionals who, through specific activities, integrate functions and tasks that the school itself pursues, facilitating the inclusion and social integration of disabled pupils, of various degrees, levels and pathologies. If this figure was born as "assistance for the autonomy and

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personal communication of pupils with physical or sensory disabilities", in recent years this definition has been gradually enriched, going over time well beyond the tasks of physical care and accompaniment: more and more functions of support for personal and social autonomy have been included, mediation in the relationship with teachers and peers, support for socialization and communication, in the expression of experiences and needs by giving emotional support and enhancing resources and potential. This figure, which is extremely important within schools, differs from that of the support teacher, a difference found within art. 13 of Law 104/94.

The support teacher is a professional figure who has been included in schools following Law 517/77 which provides for the presence of a teacher specialized in special education for the integration of pupils with disabilities certified according to the previous Law 104/92. This role assumes the co-ownership of the chair of the class in which he works and therefore signs the evaluation documents of all the students. The support teacher is therefore assigned to the class and not to the student with disabilities, with the priority task of implementing integration interventions through specific teaching strategies, together with the curriculum teachers.

The specialist assistant, on the other hand, as an assistant to autonomy and communication, is assigned o single person: he or she has the precise task of enhancing the communication of the pupil with special needs, stimulating the development of skills in the different dimensions of his or her autonomy, mediating with the class group to strengthen their relationships, supporting him/her in participating in activities, participating in the educational action in synergy with the teaching staff. Precisely for this reason, for some years the Lazio Region has started experimenting within public schools with a specific assistance service for pupils who show difficulties in understanding and producing language, therefore need AAC interventions for school integration.

Successes of the experimentation in the schools of the Lazio Region Starting in 2020, the Mirjac and Tutti giù per Terra cooperatives, under the direction of Dr. Fabiana Sonnino, an individual and group psychotherapist specializing in clinical psychology, have promoted AAC within various institutes in the region, going from 12 in the 2020/2021 school year, 33 in 2021/2022, 34 in 2022/2023 and reaching 44 during 2023/2024, with a total of 264 hours of work per year by several experienced operators. These data represent a huge success for cooperatives and AAC, demonstrating how demand from schools has increased due to the great improvements found both in stakeholders and in the inclusion practices used. The two cooperatives, with their twenty years of experience in this field, are able to select and train specialized assistants motivated to take care of people diagnosed with the autism spectrum or with similar problems, inserting an expert coordinator who can provide teacher training alongside this professionalism. This role is played by psychologists, educators and pedagogues who, together with the school and clinical team of the pupils in question, identify through functional assessment the appropriate strategies to enhance their strengths and to reduce problematic behaviours where present, calibrating the implementation or otherwise of some intervention strategies to facilitate the maintenance of executive functions, of attention and the pro-social capacity of users with difficulties. In this way, those with "special" needs acquire adequate tools so as to be able to cope with the school assignments proposed by the teaching staff but personalized: the user is thus gradually inserted and accompanied in all his learning, with adequate and personalized support methods and tools. Among the various aids provided by the specialized teacher, Dr. Francesca Lattanzi, an expert in occupational therapy and currently coordinator of the AAC within the schools reached through the cooperatives indicated above, provides a tangible example of the success brought by the AAC in the school Auctores Publishing LLC - Volume 18(5)-512 www.auctoresonline.org ISSN: 2690-4861

environment – but also outside it – namely the visual agenda, a clear list composed of images representing the activities to be carried out during the day. This tool allows you to lower, and in some even completely eliminate, the anxiety of not knowing how your day will be marked, but above all, the possibility of being more autonomous, a very important fact to alleviate the frustration often perceived by neuroatypical subjects. This autonomy can concern activities such as going to the bathroom or taking one's school supplies, processes that for neurotypicals seem trivial, but if carried out independently by those who are generally unable, they can represent a huge step towards integration, socialization and school inclusion, especially in middle schools or high schools, where the autonomy of students without specific fragility is almost total.

The figure of the specialist assistant is in fact a "bridge" between the needs of the person's global growth and the school performance that is present in his or her training path. In fact, an autistic child not only needs support teachers and teaching materials, but also an active classroom that makes him feel included. Each person with special needs must be involved in the checkout on an equal footing with everyone else: inclusion, relationships with others and games played together help children with neurodiversity to feel part of a group. The AAC assistant, therefore, integrates his or her intervention with that of the other professional figures present at school (teachers, support teachers, autonomy assistants, etc.), with the specific aim of facilitating communication, autonomy, socialization and access to educational content using specific tools of Augmentative and Alternative Communication. This service is inserted and integrated within a series of services already active in favor of students with difficulties with the aim of improving the quality of life of the student and promoting his inclusion within the school context. The AAC assistance service is aimed at children with difficulties in the sphere of expressive and/or receptive language, who may be highly uneven with regard to age and the clinical conditions that determine this communication difficulty. Hence the need for the intervention of the communication assistant to be highly individualized and personalized according to the age, the resources of the student and the class group, his needs, interests and aspirations in accordance with and integration with the school and therapeutic path already undertaken. From the moment the child is treated, the psychologist, clinical supervisor and responsible augmentative communication assistant organise an initial cognitive encounter. Because of the importance of school, in the lives of children, teachers, the family of the child or young person and the therapists who follow him are involved to present the project and share expectations, goals, methods and tools of work.

This first meeting is essential to be able to collect valuable information about the student, the context of the class and his communication needs in order to set up a good shared network. Furthermore, AAC intervention is not only aimed at communication, it also allows to expand the child's global skills, positively influencing the emotional, linguistic, cognitive, attentional and relational areas. AAC aims not only to prevent further communicative impoverishment in children with complex communication needs, but also the appearance of possible behavioral disorders related to the child's inability to express his or her needs in another way. In addition to this, the AAC tools are also extremely useful for foreigners who are learning the Italian language, for pupils with learning difficulties and attention problems and more generally for all preschool children as a first approach to the world of reading and autonomy. For this plurality of benefits brought to you byAAC, this tool qualifies as a powerful means of inclusion useful for all children and a real opportunity to learn that there are multiple ways to communicate beyond the verbal channel. Within this perspective, AAC is not addressed exclusively to those who have atypia, but also to those who are considered

"neuro-typical": according to Dr. Sonnino, the use of images, diagrams and symbols is essential to keep the threshold of attention high by the whole class group towards the school program, to help them better understand the topics covered, especially due to the lowering of attention that has reached an all-time low due to the advent of social media. These visual tools are truly effective only if shared with classmates, teachers and all the figures that revolve around the child who must be sensitized and trained in their use. Following the inclusion of specialized assistants within schools through cooperatives, it is possible to say that the use of tools such as visual concept maps or stories translated into AAC with all pupils is not only an important inclusive experience, but a useful learning strategy for everyone.

### AAC tools and application examples

Through the intervention implemented by the Mirjac and Tutti giù per Terra cooperatives, it's possible to find out how classmates, often intrigued by the tools used by students with atypia, have the opportunity to have a competent and trained person in the classroom to answer their questions. In a particular case reported by Dr. Silvia Nazzicone psychologist and contact person for various projects of the Tutti giù per Terra cooperative -, an assistant at the AAC proposed to bring a printer and a laminator to the classroom, involving all boys and girls in the construction of personalized necklaces with the main images useful for communicating with the classmate with neurodiversity. This experience was fundamental, not only for the student with communication difficulties, but also and above all for all the children who tried their hand at the initiative, going out of the ordinary, to learn a new language and a different way of entering into relationships. In addition, in another specific case reported by Dr. Nazzicone, the pupils of an elementary class participated with emotion in the first science lesson translated into AAC, and projected on the interactive multimedia whiteboard (IMW), through which everyone was able to benefit. Thanks to the spread of these tools, in recent years the production of textbooks translated into Augmentative and Alternative Communication that follow the school curricula of all schools of all levels has been increasing.

AAC tools can offer valuable help to teachers to work with the whole class in an unusual and fun way even on topics that may appear more boring in the eyes of the students. This is another case that happened in an elementary class, where the assistant organized a group game involving all the children in taking turns fishing the image of a behavior from a bag and posting it on a green or red billboard depending on whether it constituted an appropriate behavior or not. The children learned while having fun and feeling like active builders of what they were learning.

Another case cited by Dr. Silvia Nazzicone concerns "The Betrothed", a cornerstone of Italian literature: thanks to the experience of AAC in schools, an autistic adolescent attending the eighth grade, considered "low-functioning", was able to appreciate to his satisfaction, teachers and parents, to understand the work together with his classmates, who were in turn helped by the characteristics of synthesis and clarity offered by the visual support.

It is a matter of providing, to all pupils of any age and functioning, the same real opportunity to learn, express themselves and participate in school life: the case just mentioned is a testimony to the extreme relevance that alternative tools bring to the educational and personal experience of those who use them. This autistic boy, thanks to AAC, then visually structured his eighth-grade essay in a highly personalized way based on the educational and therapeutic objectives that the school and therapeutic staff had shared.

It is well known how important concrete experiences are for these young people who often have difficulties in abstracting and symbolizing reality.

Based on the needs and objectives identified for each child, the communication assistant is responsible for structuring and labeling school spaces by creating communicative environments through the construction of daily visual agendas, communication tables and visual task analysis as reminders for autonomy – such as the routine of washing hands or flushing the toilet – affixed to the bathrooms and therefore accessible to all children, in order to increase the ability of individuals with communication problems to orient and understand the context, promoting their inclusion in school. Teachers have often testified, within the experimentation of AAC in schools, how some tools are also extremely useful for other children, beyond the specific difficulties of some: an example of this is the learning of the rules of behavior at school.

An effective tool that has been used by specialized assistants within kindergartens and primary schools, during the path promoted by the cooperatives in schools, is an inclusive fairy tale entitled "Cippilù the squirrel of the blue planet", published by Tiziana Capocaccia: a short story for children who, through the events of a squirrel, illustrated by Diego Archilei, it talks about communication and how important it is, for the purposes of inclusion, to use alternative and augmentative tools, just like symbols and drawings.

In the first phase of the integration of the AAC assistant in schools, the two cooperatives proposed this tool to raise awareness among pupils of diversity and the existence of alternative ways and modes of communication, with respect to that of verbal language. Along with reading, the specialized assistants set up several workshops in order to promote the children's ability to express their emotions, to put themselves in the shoes of others in order to be able to face reality from another perspective, learning to appreciate the value of diversity as a source of mutual enrichment and not as an element to be distanced and discriminated against, preventing bullying in the classroom.

## Critical issues and the need for awareness

There are still many steps to be taken to encourage and encourage the use of AAC in schools, as prejudices against images still persist, since visual elements are often considered too immediate that prevent the use of verbal language, as if using a shortcut; moreover, schools are not yet equipped with specific technological and non- technological tools, such as textbooks translated into AAC which are not widely used. The results obtained in the various schools through the experimentation of this service are a sign of openness towards this different form of communication, but the various critical issues highlighted show how it is necessary to raise awareness of AAC aimed at the entire school body, since, as an unprecedented support system, it is not very well known and above all is often a source of skepticism on the part of teachers, who should, on the contrary, be strong promoters. According to Dr. Fabiana Sonnino, in fact, despite the fact that in recent years there has been a strong enthusiasm by families in the promotion of AAC, many schools are reluctant to accept the method because school staff are not adequately trained and informed about it, so much so that some teachers still do not believe in the capabilities of AAC. On the contrary, everyone should be included in this awareness-raising practice, starting, for example, from school staff, to bar staff - if present -, canteen workers, secretarial staff, as well as, of course, teachers. The inclusion of AAC within educational institutions and beyond, as demonstrated by the successes achieved by the Mirjac and Tutti giù per Terra cooperatives, has borne excellent fruit, but it is important to continue on this path, to promote a practice that is still to be explored and has so much to offer, so that everyone has the same possibilities and tools and so that no one ever feels excluded, since the

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full inclusion of everyone in social, emotional, working and educational life can only take place thanks to the enhancement of differences.

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