

How AAC can help an autistic individual



app2vox[™]

As adults we know that speech helps us to communicate with people around us and to interact with the world in general. But for many autistic children and adults, speech is very difficult or not an option at all. These people are often termed as 'non-verbal'.

But there is much more to communication than speech, especially with the technology now available. Think how often you communicate by other methods, such as email, text, instant messenger and even by things like waving across a room or just a look! Non-verbal children and adults can use many other ways to communicate without having to speak words, such as by using Alternative and Augmentative Communication (AAC) devices.

This resource gives an overview of alternative communication methods, including AAC devices and how they can be used to help non-verbal autistic children.



Key communication terms and their meaning

Some of the key terms you may hear about your child and communication:

Communication boards/books – these are two types of symbol systems which use symbols which are displayed in a way in which your child can point to in order to help them communicate with other people.

Expressive communication – this is the way in which someone conveys their thoughts. It could be through crying, gesturing, pointing, signing or speaking.

Pre-symbolic or non-symbolic communication – refers to communication that doesn't use symbols such as words or signs and so doesn't have a shared meaning for others. Receivers of the message have to guess at the meaning of the messages.

Receptive communication – is the way in which the receiver understands or interprets the sender's communication such as listening or reading.

Sign language – refers to signs made with the hands which represent ideas and words and have a specific meaning. Signs can be recognised visually or by the receiver making the signs in the receiver's hands.

Symbolic communication – refers to communication involving a shared message between the sender and receiver such as picture communication systems, sign language, speech, tactile communication systems and writing (braille or print).

Symbol systems – are systems which use objects, pictures or tactile symbols as a way of communicating.

Augmentative and alternative communication (AAC)
– refers to the use of alternative methods (other than speech) to help a child to communicate.



What is Alternative and Augmentative Communication (AAC)?

Augmentative and alternative communication methods are objects, devices and methods that a non-verbal autistic child can use to help them to communicate without using speech, and can take the form of facial expressions, gestures, sign language, speech or vocalisations. In fact, we all use alternative communication methods every day!

Examples of aided forms of communication can include the following:

- Activating a device. Your child may press a button or switch on a recorded speech device initiating a vocal output that says "I'm hungry"
- Pointing to symbols or pictures on a board or in a book
- Using an object to convey their meaning, such as handing you a cup to convey the fact that they are thirsty

It is important to remember that your child will use both aided and unaided methods of communication.

What different types of AAC systems are there?

If your child cannot communicate verbally, then they may choose to use an alternative form of communicating or augment their existing abilities with other strategies. Let's take a closer look at some of the available systems out there:

PECS (Picture Exchange Communication Systems)

PECS can be used in several ways to aid communication but the most common way is through the use of a series of pictures which the child can point at or hand to their caregiver.

The pictures can be hand drawn, clip art or a photo of certain items and/or feelings. When the child wants to communicate something to their caregiver, friend, or parent they can use the picture to symbolise what they want.

The person they have handed the picture to will then reinforce their choice by handing them the item that they want. Over time, the pictures can be replaced with words and then sentences can be built.

Although the use of PECS sounds simple, the actual introduction of it can take many months, and typically moves through six stages:

- Teaching the child to request an activity or object
- Transfer this skill to requesting other objects and activities where people are involved
- Teaching the child to discriminate by asking 'what would you like to do?'
- Encouraging the use of sentences using the symbols for 'I want' and 'car' for example
- Extending the sentences by adding descriptive words such as 'blue' or 'big'
- Encouraging the child to comment on activities such as 'I can smell my dinner cooking'

PECS then works best if you start with a basic request, and then work your way up to a conversation, while expanding the child's verbal skills.



ILB – Interactive Language Boards

ILBs are based on the premise that the child already has some literacy skills but is non-verbal at the moment. ILBs can be made with different purposes in mind, and food is always a good place to start as it is a good reinforcement for learning new skills. The relevant words for the activity are chosen, such as 'eating' and 'drinking' in this case, and then other words are added that allow the child to say 'yes' and 'no' and to make a comment.

Pronouns, nouns, verbs, and adjectives are chosen for the way they will drive the activity as well as words that describe the actual objects needed for the activity, and options for the child to comment, accept and refuse.

If the board is produced to be used with food then it needs to be laminated, so that it is protected from spillages. As a parent you can point to relevant words as you are enjoying the meal together.

Any attempt by the child to use the board to communicate should be encouraged, and you can also guide the child to point to the right word as well.

Gestures

Gestures are a common form of communication that is often overlooked but they are universally understood by anyone. Gestures can include things such as shrugging the shoulders or nodding the head.

Manual Sign Language

This has long been an effective form of communication for many children due to the visual nature of the process which can back up visual communication. Signing allows autistic children to develop their language skills, but some can struggle with the fine motor control or actually understanding what the signs mean.

Recorded Speech Devices

With a recorded speech device someone (yourself, a sibling or a teacher) records messages which your child can use. They can activate the messages when they need to with the touch of a button. There are very complex AAC systems available which enable them to communicate a wide range of information.

Your child can type a message on a keyboard which then reads the message out loud – the keyboard could contain letters, words or pictures.

It is important to remember that every child needs a variety of methods available to them to be able to express themselves (we all use many different methods of communication every day), and augmentative communication apps are one of these methods. Providing them with an array of communication options will help them grow and develop and be able to fully participate in daily life.

How can technology help?

Technology, such as smartphones and tablets, can be used to assist autistic children in many different ways, including:

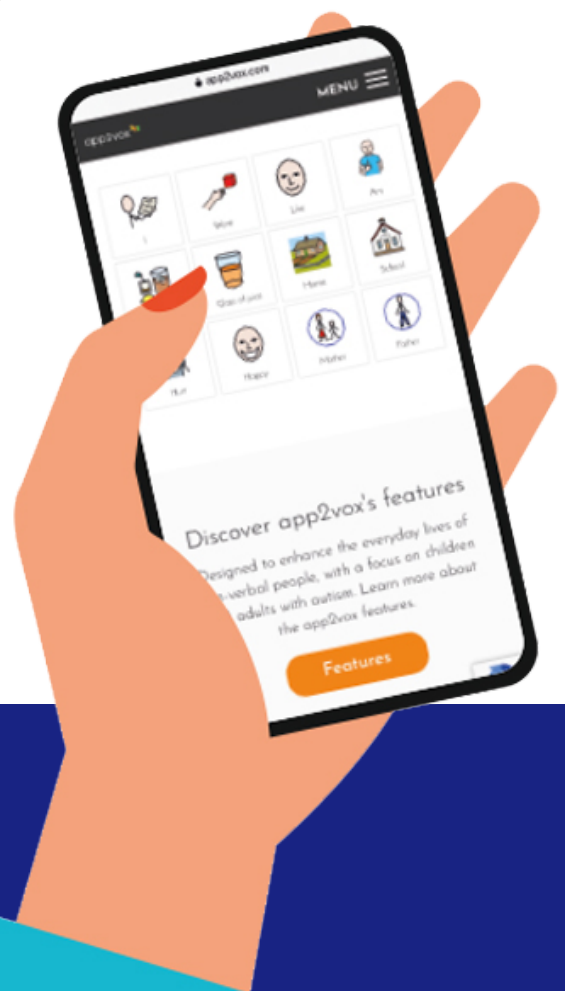
Communication

In the past, your autistic child might have used a picture communication system, social stories or a visual timetable on paper to help them communicate – and now they can have all of these systems of communication on one device.

Apps such as App2Vox can help your child to communicate, and nowadays using software you have downloaded to your device is a much more acceptable way to communicate than having to carry around a lot of picture cards.

There are many tablet apps out there which are aimed at helping autistic children to communicate, but App2Vox is the only one which has been developed in association with autism together and supported by CCL Digital. It is based on a picture system which the child drags to construct the sentence.

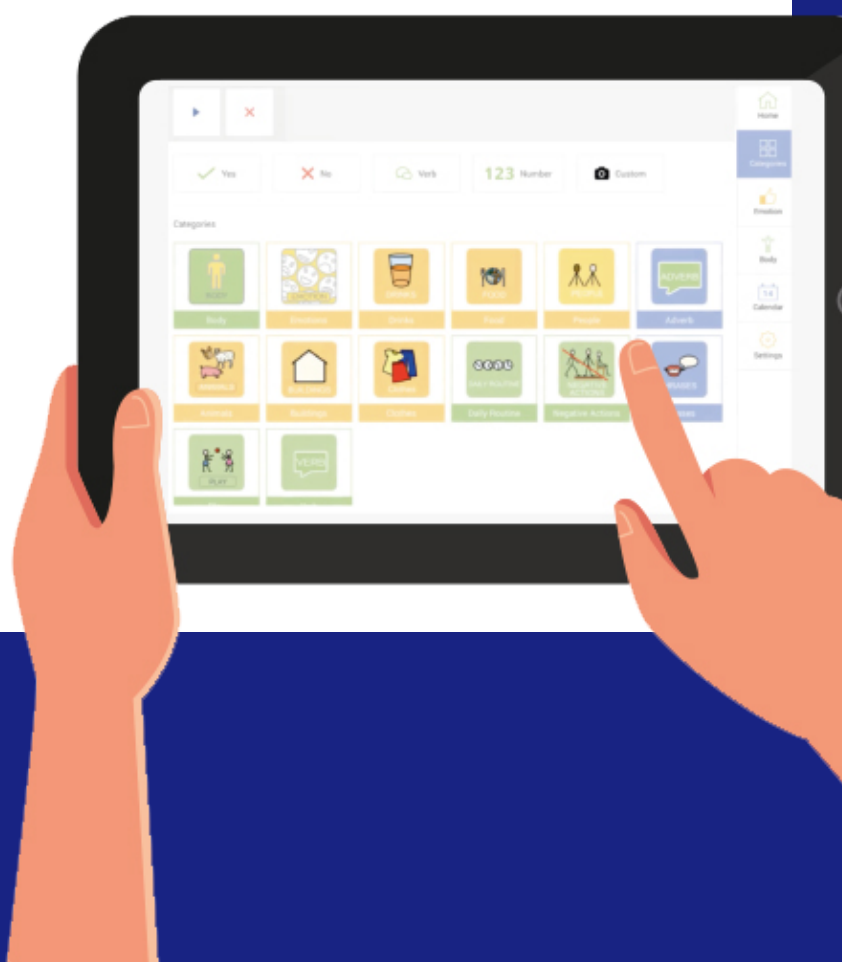
Many parents worry that using an app to help their child to speak will affect their child's ability to speak. There have been lots of studies done over the years relating to AAC and autism, with one common theme coming through from all of them – the use of AAC devices with children who have autism will not prevent them from speaking, as some people believe, and they actually may increase the speech potential of these children instead.



This is not to say that AAC devices will help every autistic child to speak. Every autistic child is different and so there is no single thing that will help all of them. However, many of the children who were part of these studies showed no ill effects from using such devices, and in fact were found to have gained many benefits from using them.

With no risk to using such a device, and potential improvements in terms of speech though, surely, they are worth a try with your child?

On top of these studies, AAC devices have been found to offer children the ability to communicate with other people even if they are not able to speak. If you are living with a non-verbal autistic child who has autism, imagine how different your life could be if your child was able to press a button to tell you what they wanted, instead of them getting frustrated and potentially throwing a tantrum.



Social

Another worry that some parents have is that using technology is an anti-social activity which may mean their child withdraws from social situations. However, this is not always the case. If there is a popular game that other children are playing, and your child is allowed to play it too then it will give them something to talk about in the playground. There are also a large number of games available which are community based, and then there are social networks such as Facebook and so on.

You can use such games and networks as this to help your child to overcome their feelings of social isolation by working with them to help them to learn how to use such things safely. Helping your teenager to build their confidence in things like this, can help them towards living a more independent life and just becoming more independent in general.

Leisure

Autistic children can often struggle with tasks such as sitting still to listen to a story, and so they may find it easier to interact with a story on a tablet.

You can find lots of ways to share your love of computers or engage with them through their tablet – sharing your experiences like this can really strengthen your relationship.

How AAC can help your non-verbal autistic child to communicate

Augmentative and assistive apps can help autistic children to learn the basics of communication before they even begin to speak. It can also help parents as well as they can bond better with their child by communicating with them through assistive technology. There should be no worry in the parent's minds that they are giving up on their child's verbal skills by using an alternative communication system. Augmentative communication apps can actually help to form the foundation of your child's communication skills that will allow them to verbally communicate at a later point.



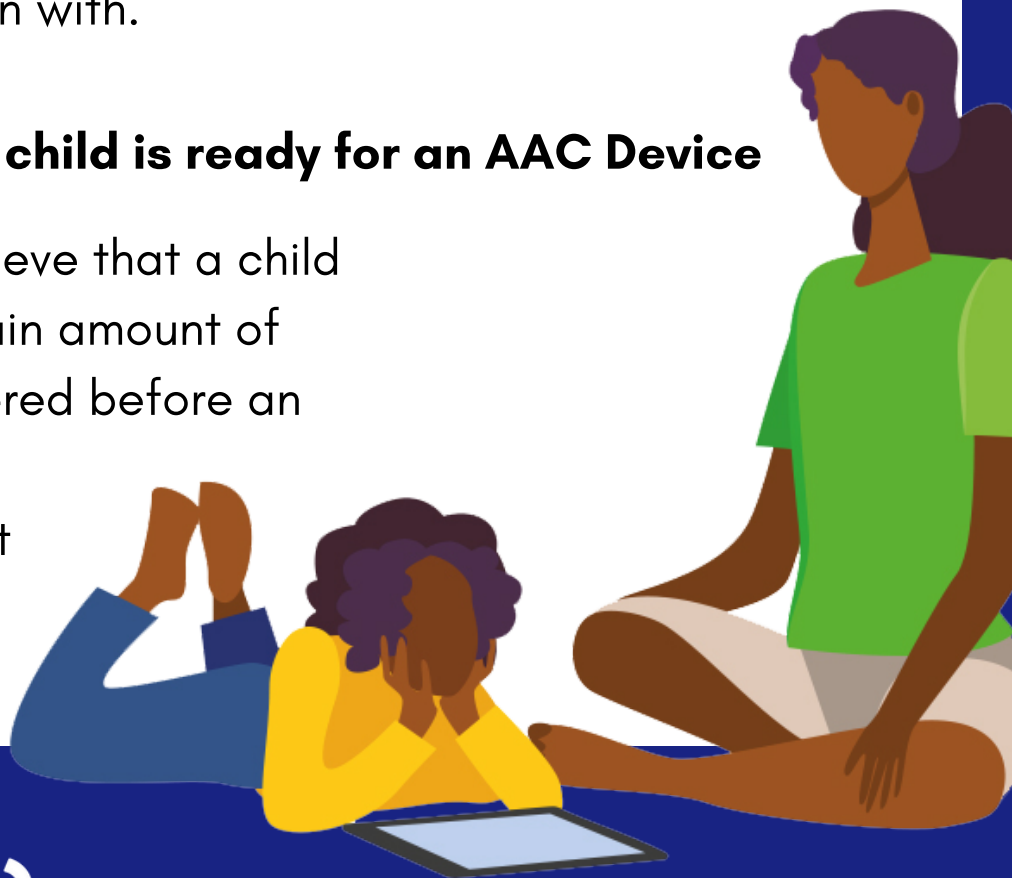
When you look at the typical development of a child, you usually see that communication happens in a certain order:

- Listening
- Speaking
- Reading
- Writing

Children who have been diagnosed as autistic can have problems with developing in a certain sequence – but they will also have different strengths and weaknesses. They usually demonstrate stronger visual processing skills than other children, so focussing on reading, writing and using a keyboard may be more productive than focussing on verbal skills to begin with.

How to tell if your child is ready for an AAC Device

A lot of people believe that a child has to have a certain amount of skills already mastered before an AAC device will be useful to them – but this is just not the case.



We have found that children can easily learn how to push a button, which is the only skill really need for AAC devices, while they are actually using the device. If the child is able to see the benefit of learning the skill – by pressing the button they are able to communicate – then they are more motivated to be able to master this skill.

Starting out with Technology

If you are thinking of introducing your child to technology, one easy way to do this is to borrow a tablet or smartphone from your child's school or a willing friend, to see how your child responds to it before you actually splash out on one of your own.

As with most things, there are lots of different choices you can make when it comes to hardware and the right thing for you will depend on how much you want to spend, what you want the technology to do, and how adept your child is at using technology.



Here are some things you may want to think about when considering which piece of hardware to buy:

What do you need it for?

If you are just going to use it at home, then you may want to think about a laptop or desktop which can have other uses in the family. If you are primarily going to use it as a communication device for your child though, you may want to get something smaller and lighter that they can carry around – such as a smartphone or small tablet.

What features do you need?

Look at whether the device you are considering has parental controls as these may come in useful. You may also want a device that allows multiple user accounts to sign in so that other members of the family can use it as well.

What software are you going to be using?

Some apps are only available on Apple, which means purchasing Apple products which tend to be more expensive than Android.

Are there compatible accessories?

If you are going to be purchasing a tablet which your child will carry round to help them communicate with, then you may want to think about purchasing a hard case as well in order to protect it.

What interface does the device have?

Touchscreens can be very useful for young children or those with a learning challenge as it will be the easiest interface for them to use.

You can always consider buying a device second hand as this may enable you to stretch your budget further. Just make sure that you buy from a reputable dealer and that you get a guarantee as well.

How to introduce AAC to your autistic child's routine

Once you have decided to try using an AAC device with your child, and you have chosen the one you want to try, the next stage is to introduce the AAC device to your child. Here are some easy steps to help you to do that:

Show the child how to use it.

The best way for you to do this is to use it yourself when you are communicating with your child. So, if you have decided to use sign language, then you need to start using sign language when you are communicating with them. Or if you choose to use pictures, such as with App2Vox, then you need to show the child the picture of what you are talking about. For example, if you are offering your child a choice of snack, load up two pictures of the snacks you are offering and ask them to choose between them.

Offer the device to the child.

Once you have shown the child how the AAC device works by using it in your communication with them, the next step is to give the child themselves access to your chosen device. You can do this by leaving it lying around where the child can see it so that they have chance to explore it on their own and choose to use it or not. Or you could be more obvious about it and hand it to them and ask them to explore it.

Help them to use it.

Make sure that you spend some time with your child on a daily basis, showing them how to use the AAC device before you actually let them handle it on their own. This may take a few weeks, so don't worry. When the AAC device has been introduced and your child is comfortable with picking it up, you could place it in their hands for them when you sense that they are trying to ask for something. You can then help them to move their hands to press the button to show you what it is that they want.

Once they have completed this action you should reward them as though they had actually said the word themselves, by handing them whatever it is they had asked for and repeating the word back to them.

For example, if they have pressed a button asking for an orange, you should hand them an orange and say 'orange.' Keep an eye on how frustrated the device makes the child to begin with, as if they are finding it hard to grasp then you may want to only do this once in a while, rather than all the time – break them into it gently as it were.

Gradually reduce the amount of prompting.

After you have helped your child to use the AAC device for a while and you think they are getting the hang of it, then try reducing the amount of times you do this. Perhaps pause before helping to see if they can get the hang of it on their own. If they still need help, then try prompting them before you jump in rather than doing it for them. Start to dial back the amount of prompting that you give them to allow them to become more and more independent.

Further Help and Support

Inevitably a resource of this type can only give an overview of AAC. Every person is different and will have different needs and different learning preferences. It is essential that every person is valued for who they are and allowed to be themselves through identifying the best tools and aids for their situation.

