

## Types of AAC

**Aided systems:** Use external products and materials to help a user get across a message. These may include AAC systems such as core word boards, communication books or speech generating devices.



**Unaided systems:** Use only the skills that are available to that individual and do not need special material or equipment. These could comprise body language, sign language, spoken language or facial expression.

## Low-Tech & High-Tech characteristics

**Low-Tech:** These systems are methods of communicating that are not battery powered and are usually cheaper to make. Common examples of lo-tech systems include picture exchanging, printed word boards, communication books & sign language. Also, recorded speech devices (digital) can fall into this category if battery-powered with simple short messages.

**High-Tech:** These systems rely on mains power & re-chargeable battery packs as they generally use lighted dynamic displays & synthesised voices. They run sophisticated software vocabularies, multiple voices, are fully accessible, & can be thoroughly customised. Operating systems can be Windows, Android or iOS. Liberator specialises in these high-end devices which can eventually lead to real command of language.

## Benefits & Disadvantages

### Low-Tech

Benefits	Disadvantages
Affordable	No auditory feedback for the user.
Relatively easy to create + use if clinical or technical support not on hand	Generally limited in vocabulary, often with a heavy reliance on fringe (nouns)

No mains power charging required	Positions of words change in picture exchange systems, removing motor pattern learning.
Can use in demanding environments: full sunlight, bath time, beach + if hi-tech device fails	Navigation through levels-based systems or reliance on overlays can be challenging.
	Restrictive, situational pre-determined vocabulary

## Hi-Tech

Benefits	Disadvantages
Availability of more vocabulary	Can be heavier
Auditory feedback for language learning	Must be charged
Can communicate to all groups in the community	More expensive to purchase and maintain
Less reliance on communication partner	
Can talk across distances	
Can develop automaticity and motor patterns	
Fully customisable	
Different options to represent language	
Computer Access: Connectivity	
Environmental Control	
Phone access & SMS	

## Low-Tech to High-Tech: myths & challenges

Everyone has the right to access any language system that will meet their needs. High-tech systems provide features that low-tech systems cannot come close to matching and they are available to all individuals no matter their age, perceived language stage, or surmised intellectual level at the time of intervention. High-tech systems can provide:

- Cause & effect level of use
- Consistent verbal models
- Increased independence
- Consistent location of words
- Access to thousands of words

When introduced sensitively & correctly, electronic dynamic-screen, voice-output devices allow users to practice and make the most of their language learning experiences from a very early age.

Any individual, no matter what their age can use high-tech devices as their first port of call. Such devices are able to be used at a cause & effect level. When coupled with the multitude of ways these systems can be accessed, users become empowered to begin their AAC language journey.

There is no evidence to suggest that low-tech systems have to be trialled & experienced before trying out high-tech options. No hierarchy exists. Dynamic display devices can open up communication opportunities to people adjudged to have very limited language & speech development.

Low-tech systems inevitably tend to require more reliance & interaction with formally trained & known communication partners. High-tech systems aim to build independence & self-reliance through establishing more universal modes of inter-change.

It is always prudent & sensible to maintain a low-tech alternative communication system to the high-tech one more frequently used. Although contemporary electronic devices are now far more reliable & durable than previously, failure or unexpected physical damage can deny the user communication in an abrupt manner. A well-practised, familiar, robust low-tech AAC system can provide immediate relief & reassurance.

Common challenges that arise when an individual starts with low-tech systems include:

- Inconsistent verbal modelling from communication partners
- Inconsistent position of pictures used to exchange or point to in a system
- Great difficulty in communicating across short or long distances
- Significantly increased dependence on communication partner
- Systems developed are generally very noun heavy resulting in poor ability to generalise words across contexts