Communication Devices

Communication devices are electronic aids (that is, they run on either battery or mains power) that can ‘talk’. The type of voice output may be in the form of:

- **Digitised speech** – where a real person’s actual words and sentences are recorded and stored in the form of digitised sounds that may be played back.
- **Synthesised speech** - where a computer program produces sounds similar to human speech. The technology keeps improving to make this type of speech sound more natural. Some synthesised voices are also available with an Australian accent.

*Communication devices include the following:*

**Simple message devices** allow one (or a few) short messages to be recorded. These communication devices are really useful for quick and simple communication to increase social interaction and participation. Children at all communication levels can utilise the devices and some have large buttons that can be accessed by those with significant physical disabilities.

**Static display devices** have a limited set of messages. They mainly use digitised speech – that is, someone records their voice for the messages. Usually, picture symbols represent messages/words on the buttons of the display. A variety of displays/overlays can often be made up to use on these devices and are changed manually. For example, the child might have specific overlays that they use during meal times, booksharing and art and craft containing messages/words that they commonly use during these activities. These devices also often have varying size buttons.

**Dynamic display devices** are devices that allow for large storage of words and messages. Because of this sizeable vocabulary they tend to use synthesised speech for voice output. However, some dynamic display devices use digitised speech only, and some will also convert text to speech.

These devices usually have many pages of vocabulary that are organised in a logical way. For example, there is usually a main/home page and when the person presses a button the device automatically speaks a message or navigates to a linked page (similar to the internet). In this way the person is able to access the specific message that they want to communicate. For example, the person might press a food/drink button which takes them to the food/drink page containing messages such as “I want a drink” and “That’s yummy!” Dynamic display devices can be dedicated – that is they are manufactured solely as a communication aid.
They may also be computer-based devices that utilise mainstream laptops, tablet computers, iPods, mobile phones and so forth with specialist communication software.

Text-to-speech devices allow people to type on a keyboard display and then the words are converted to speech output (synthesised speech).

**ADDITIONAL FEATURES - Terms Defined**

*Non-Dedicated Feature* – some communication devices allow access to computer applications such as Windows and the Internet within the device itself.

*Environmental Control* – some communication devices have inbuilt environmental control capabilities which allow people with physical disabilities to control their immediate environment (such as changing channels on the TV, turning lights on and off) using an infra-red remote in their device.

*Access* – refers to the way the person will make the communication device work. This can be directly (the person actually touches the device with their finger, or a pointer of some kind) or indirectly (the person operates the device without actually touching it - by using a switch, for example). Communication devices may offer only one type or a whole range of different access methods. See sheet 3.4 for more information.

**FIND OUT MORE**

Check out some of the different communication devices available for purchase in Australia by browsing the following websites or calling for a catalogue…

- [http://www.liberator.net.au/](http://www.liberator.net.au/) Ph: (08) 8362 5655
- [http://www.spectronicsinoz.com/](http://www.spectronicsinoz.com/) Ph: (07) 3808 6833

This handout is part of an information package, funded by a NGCS grant, to assist local teams in supporting children who require augmentative and alternative communication – particularly communication devices. Augmentative and alternative communication, or AAC, refers to other methods of communication people may use when they have difficulty speaking. These methods may supplement what speech they do use or may become the primary form of communication in the absence of speech.

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