Teknologi

INFORMATION COMMUNICATION TECHNOLOGY (ICT) AND AUTISM

What is Autism?

Autism disrupts the development of social and communication skills, isolating those it affects from the rest of us. This complex condition, believed to be caused by organic brain damage, affects four times as many boys as girls and is found amongst all races, nationalities and social background.

Children and adults with autism are unable to relate to others in a meaningful way. Their ability to develop friendships is impaired, as is their capacity to understand other people's feelings. In an effort to create order from situations they can't understand, many develop strange obsessions; bizarre patterns of behaviour and seemingly irrational fears. They need specialist help to cope with the demands of everyday life. Without this, their world is like a jigsaw when the pieces don't fit.

Some ways in which autism is displayed:
- Displays indifference
- joins in only if adult insists and assists
- does not play with other children
- talks incessantly about only one topic
- one-sided interaction
- indicates need by using an adults hand
- echolalic - copies words like parrot
- bizarre behaviour
- handles or spins objects
- no eye contact
- variety is not the spice of life
- lack of creative, pretend play
- but some can do some things very well,
- very quickly but not tasks
- Involving social understanding

What causes Autism?

Many experts believe that the pattern of behaviour from which autism is diagnosed may not result from a single cause. There is strong evidence that autism can be caused by a variety of physical factors, all of which affect brain development - it is not due to emotional deprivation.

Is there a cure?

At present there is no cure. Children with autism grow into adults with autism - many of whom will need constant care and supervision throughout their lives. But there is hope.

People with autism can be helped to develop their social and communication skills, become more independent and lead fuller, more productive lives.

Autism can give rise to problems of social interaction, communication and behaviour. Communication and language problems are a major feature of autism; over 50% of autistic people do not develop meaningful communicative language and most autistic people have problems with other forms of communication.

Autistic people are often easily distracted and have poor organisational skills. They can also find it hard to deal with abstractions and are easily obsessed with details. Although many of the features associated with autism are similar to those found in people with learning difficulties, autistic people tend to be uneven in their abilities, with noticeable strengths and weaknesses.

Abnormal motor patterns are often observed and some people can have extreme reactions to sensory input, reacting strongly to some stimuli, such as sound or light.

ICT can provide help in many different ways, among the obvious being with communication and motor difficulties. However it should always be born in mind that the computer may reinforce or provide a vehicle for some of the less desirable tendencies of autism. In fact one description of autism describes autistic people as having, among other problems, impaired reciprocal social interactions and restricted behaviours, a description that could be used for some computer enthusiasts!

Given the range and degree of problems that can occur with autism it is difficult to describe some computer software and resources as being "for autism". It is better to know and understand a pupil's needs, consider the range of ICT resources that are available and match them, if possible. It can be helpful to consider the different ways that computers can be used and how they can be adapted to support special educational needs.

Recording and writing

Word processors are commonly used to record written work. Some pupils will find it is easier to record using a computer than by hand writing and will benefit from using a standard word processor. Others may need or gain additional benefit from extra support with recording. Programs such as Inclusive Writer can provide additional support for writing with on-screen word/picture banks.

Motivation

A neat printed copy can be more satisfying than poor handwriting. Mistakes can be more easily corrected. Speech feedback can help with motivation and checking work.

Cognitive access

Children can write using the keyboard to spell each word. An IntelliKeys keyboard, on-screen word bank and prediction software can allow children to record by selecting whole words or phrases. Sentences can also be created using symbols and pictures.

Motor access

Keyboards and other input methods can be used by children who find handwriting difficult.

Cause and effect and early interaction

Software can be used to help children develop a concept of cause and effect. Simple input devices such as switches and touch screens along with suitable software can encourage interaction. Children may then be able to progress to more complex tasks using a computer. Care needs to be taken as some of this software could encourage repetitive actions and interaction with a computer could be isolating. Activities and games can be found which can be used by two people, using the computer to encourage communication and interaction. Electronic books and CD-ROM software can be fun and can encourage children to concentrate for long periods. This software also can be used as a reward.

Communication

Computers and other ICT devices such as electronic communication aids can be used to support children who have communication difficulties. The computer is an ideal way to work with symbols and pictures. Sound, both "real" and synthetic can be easily used along with symbols and pictures to create communication tools. The computer can make it easy for staff to create symbol based learning and communication activities using the readily available computer versions of standard symbol systems.

This article was adopted from Internet.