Steven Hughes describes a form of technology that is proving to be one of the main pillars of inclusivity for the multiply disabled.

For the last 18 months the Hollybank Trust in Mirfield, West Yorkshire, has been working in partnership with Boston College, Massachusetts, to develop a breakthrough in assistive technology for the multiply disabled. The children and young people who attend this specialist residential school, and those living in its independence homes, have been benefiting enormously from this work.

In America, the law specifically supports technology assistance for individuals with disabilities and, over the past twenty years, developments have changed the lives of individuals with disabilities in profound ways. The vision impaired, the deaf, those with orthopaedic disabilities and others with multiple disabilities are functioning more independently as a direct result of developments in a range of input and output devices that include:

- switches
- pointing devices
- voice recognition
- video screens
- voice synthesizers
- telecommunications
- language boards

The main credo of the Hollybank Trust is that, through the unique stepping stone ethos, we enable our children and young people to become as independent as possible. We are constantly looking for new and better ways of improving our services, and are regarded as being at the leading edge of this type of technology. Reputations count for little if you rest upon your laurels. We have used the technologies available to search for new ideas; we have scoured the Internet, and talked with many practitioners. However, it does seem quite incongruous that finding out about the EagleEyes system had nothing to do with our diligence, but simply the mutual attraction of a boy and girl on holiday in Florida. In the summer of 1999, a young woman asked her carer and friend to help her go on holiday to Florida. Little did they realise that they would return with news of something that could improve the lives of so many of her friends who have multiple physical disabilities.

Like anyone on holiday in Florida, Sian and Somara decided to visit the Epcot Centre in Disneyworld. Sian noticed a rather handsome young man, who was also in a wheelchair. His name was Michael Nash. He was using and demonstrating the EagleEyes system. The eyes say it all. There was a mutual attraction and Mike's mother, Kathy, invited Sian to come back the next day and have a go with the system. Michael has spastic quadriplegia. He has no voluntary or controlled movement below the neck and cannot speak. Until Mike was 12 years old, he was diagnosed as having the mind of a three-month-old...
Hollybank School staff will train their Irish counterparts in the use of these systems.

The systems are available to all children and young people who, like Sian and Michael, have the right to "unlock the magic that is in their minds".

What this means in practice is that someone who can only move their head or eyes can now interact with a computer and communicate, play games, even surf the net – the possibilities are endless. At Hollybank we have one young man who is currently training for the first international Tic Tac Toe competition (noughts & crosses to people in the UK!) via a virtual classroom set up over the Internet.

This same young man is also exploring the possibility of completing a short, part-time university course on the Internet, with the intention of interacting with able-bodied individuals as an equal. The trust will not be asking for any allowances because he is disabled and his peers won't know, yet without EagleEyes it would be virtually impossible for him to do the course. Needless to say his self-confidence is soaring.

The students using the EagleEyes system both here and in America have disabling conditions that are associated with little or no use of upper extremities, including cerebral palsy, athetosis, spinal muscular atrophy, muscular dystrophy, poliomyelitis, spinal cord injury and head injury.

They have no capacity for normal expressive language and for the most part rely on an eye-gaze strategy to communicate. By raising or lowering their eyes, or moving them left or right, they are able to respond to another person. However, their minds are essentially imprisoned within their own bodies, unable to issue any commands that result in action.

They require constant care and supervision because of personal and medical needs. Some have respiratory conditions and seizure disorders; others require tube feeding, suction, frequent medication and have special dietary needs.

EagleEyes is not a simple cure for all. However, it is a proven tool that can open worlds up to some of the most closed and frustrated people. It is not a switch replacement – it is an effective and brilliant alternative for those who can't use switches or for those who are too restricted by them.

Although Mike Nash was diagnosed as having the intellect of a three-month-old at the age of 12, his mother knew better. Mike is now in a mainstream school using EagleEyes to complete his work. Mike's self-confidence has grown and so has his patience – when his carer doesn't immediately understand Mike he will give her another chance, something he wouldn't have done five years ago!

Please contact Steve Hughes at Hollybank if you would like more information about EagleEyes. holly.bank@ukonline.co.uk