

ICT to promote independence, inclusion  
and achievement for your SEN pupils

OR

**“I won’t need you now miss !”**

John Liddle

AbilityNet



When properly chosen, applied and supported, ICT has the potential to make huge differences to students with disabilities in terms of their:

- Independence
- Inclusion
- Achievement
- Motivation
- Self esteem



Unfortunately this potential is not universally recognised:

- Many children are missing out
- Lack of investment in this route for support.
- The priority is usually to achieve sufficient LSA hours



Whilst LSA time can ensure the child's access needs are met, it:

- can give the child a different experience of school life
- may impact on child's motivation and confidence
- may impact on the pupil's readiness for life after school

AbilityNet have experience of young adults struggling to access either employment or further education



## CASE STUDY

Tom from the West Midlands, is a 13 year old boy with a visual impairment. He required a full time learning support assistant, who among other things, helped him with accessing both close up work and that which was on the whiteboard at the front of the class.



## CASE STUDY

He was assessed by AbilityNet under the Communication Aids Project and it became clear that he would benefit from a laptop computer and a Magnilink Student CCTV.

This is a new breed of CCTV which gives the standard close up camera a mode for distance viewing.

Tom turned to his LSA and with a smile he said:

“I won't need you now miss !”



At AbilityNet we want to see a complete culture shift:

- Allow you to achieve your aim of ensuring that pupils have reached their potential in terms of achievement and independence by the time they leave school
- The application of assistive technology and the benefits it can bring need to be brought higher up the agenda
- ICT needs should be fully considered when addressing the complete support mix for a pupil – not just as an afterthought when other things are addressed



We want to take this opportunity to show you:

- The fabulous power of assistive technology
- What you can do for free, back at your schools and authorities
- Core equipment you should all have access to
- Some case studies of how pupils have benefited
- What LSA's can be doing to further support their pupils during any time away from their pupils
- Where you can go for further help



## Magnilink Student CCTV



- Derry from Northampton
- Studying at a mainstream school
- A pupil assessed by AbilityNet and supported by CAP.
- 10 years old at the time of the assessment. He has quadriplegia, with no movement other than with his head.
- Derry's speech is clear but he is on a respirator.



He has been supplied with:

- A laptop computer
- Dragon Naturally Speaking
- A Tracker One Head Mouse
- Screen Doors – on screen keyboard with word prediction

Derry surprised us with what he was able to achieve and now he is able to participate fully in classroom activities and more able to work independently (even though he will always need full time support)



The implementation has not been without its problems though!!



### Speech recognition software



### Head pointing devices



**Assistive technology needn't be expensive. Let's look at some of the built in options for accessibility:**

- Accessibility options
- Mouse tuning
- Fonts and colours
- Autotext and autocorrect
- Word banks in Microsoft Word
- Magnifier and Narrator

Plus many more built in and downloadable utilities

Skillsheets for all of these are available from [www.abilitynet.org.uk](http://www.abilitynet.org.uk)



- Rory is an eleven year old boy with Congenital Nystagmus. Bright and able but struggling to access curriculum, particularly English.
- About to transfer to High school
- School had put in place an AlphaSmart and touch typing lessons.
- AbilityNet arranged joint assessment as development opportunity for AT Team. SENCO from High School invited.
- Recommended laptop with TextHELP Screen reader and keyboard stickers, with built in adjustments used to improve visual accessibility (magnification software wasn't appropriate)



## Rory now:

- The transfer to High school went very smoothly – “He is happy, settled and fulfilling his potential having recently moved into top set”
- Rory is coping for the most part independently
- He is now doing really well with equipment, particularly in English where he previously did not want to know!
- High School have used Rory as focus to examine accessibility.



Ensuring accessibility of ICT is not just about pupils having access to their own special equipment.

When the group is working on ICT all pupils should be able to work together, without the disabled pupil having to work on their own on their own laptop.

All schools should consider having their own core set of accessible ICT equipment to meet the need of a range of pupils.

Suggested items include:



## Hardware

- Small mouse
- Joystick
- Trackball
- Keyboard and guard
- Compact keyboard
- Keyboard stickers
- Larger keyboard
- Overlay keyboard
- Switch interface and switches
- Touch screens



## Software

- Speech feedback
- Word Prediction
- Dyslexia aids
- Talking word/symbol processors
- On screen keyboard
- Voice input
- Magnification / speech



- Very bright year 9 pupil in mainstream school
- She has Spinal Muscular Atrophy and is a powered wheelchair user.
- Handwriting difficulties mean she was not able to record her work at a level that reflected her ability
- Becoming an increasing problem as she moved up the school - the demands of the curriculum were for more and more recording and so her difficulties increased.
- A need for her to record more efficiently
- Lack of independence was the real issue, as she needed to use a scribe for most of her work



### Chloe now:

“Is an independent recorder of her own work and is able to progress at her own rate through the curriculum”

“Is able to do most of the typing herself”

“It's her own work rather than having to relay to somebody”

**Chloe now has a much greater degree of independence**

**And will be better prepared for further education and employment**



(Alt + Enter)



Even outside of these case studies we have a great deal of evidence of the independence giving potential of AT

This independence covers a the whole spectrum of greater autonomy

- from 10 minutes away from an adult in each lesson
- through to taking away the need for individual adult support completely



Any improvements in a pupil's independence should not be at the expense of their achievement

There are a plethora of things which LSA's across the country would like to do to for their pupils improve their curriculum access, which at the moment they struggle to find the time to do.

With appropriate use of AT, many LSA's could develop a number of hours a week away from the pupil where they could develop resources to further support the pupil.



**What might an LSA be able to spend any free time gained doing to enhance the curriculum access of the pupil they are working with ?**



An LSA's shopping list might include:

- Scanning existing materials so that the electronic documents can be accessed by those with visual or literacy difficulties.
- Producing word banks for software such as WordBar or Textease
- Creating supportive grids for programmes such as Clicker
- Producing dyslexia friendly resources – taking existing electronic documents and editing them to support children as appropriate – e.g. changing font size or style, re-designing the task or restructuring it into more appropriately sized chunks



- Managing vocabularies in word prediction programmes or creating subject specific topic banks for these programmes
- Downloading and adapting new resources
- Preparing for future lessons – perhaps discussing with teaching staff the content of lessons to come so that accessible resources can be prepared in advance
- Preparing resources in accessible formats – tactile diagrams, Braille, Moon and even Daisy books for the very adventurous



- Could be cost savings – the one of cost of the equipment could be offset against the savings from reduction in LSA time required.
- More children could be dealt with at School Action / Plus level as the need for statementing as a means to secure the additional funding for LSA hours could drop
- Children more likely to integrate with their peers – kids allowed to be kids
- Pupil leaving with greater chances of employment – as whilst DDA and Access to Work exist, many employers still see problems when considering employing someone who needs a helper



Free web based training resources at [www.inclusive.net](http://www.inclusive.net) – provided originally under NOF

INContext SEN – CD ROM training materials for LSAs and SENCos from Pearson publishing Group  
[www.pearsonpublishing.co.uk](http://www.pearsonpublishing.co.uk)

The Inclusion website – a catalogue of resources to support individual learning needs for teaching professionals, parents, carers and learners. Resources include publications, software, equipment and online information.  
<http://inclusion.ngfl.gov.uk/>

Also the Ace centres [www.ace-centre.org.uk](http://www.ace-centre.org.uk)



## AbilityNet resources:

- Freephone information line – 0800 269545
- Website – [www.abilitynet.org.uk](http://www.abilitynet.org.uk)
- My Computer, My Way – [www.abilitynet.org.uk/myway](http://www.abilitynet.org.uk/myway)
- Courses
- Services for local authority and health teams
- Accessible IT Kits and Mini Kits
- Web accessibility services



- An introduction to assistive technology to support written communication
  - Pupils with physical difficulties
  - Pupils with visual difficulties
  - Pupils with reading and writing difficulties
- A CAP resource, but not exclusive to CAP, providing a starting point for information and training needs for anyone wanting to find out more about Assistive Technology



## Designed to be as accessible as possible

- CD help- how to get around, changing the user preferences
- Computers and accessibility- practical guidance on changing the settings of your computer
- Information about CAP
- Information about the DDA and guidance for schools
- Video case studies
- Hardware and software video clips and information
- Factsheets and Skillsheets
- Further contacts and training opportunities

