



Technology to support learning

Viv Ogg, Katherine Clements and Simon Thompson of Mary Hare School show how modern technology can enrich the classroom experience

The aim of this workshop was to share a range of technology used in school to support learning. This was done by looking at a typical school day at Mary Hare. We hoped that ToDs would be able to learn about new resources in order to support the deaf pupils they were working with and have a resource sheet to take away. The workshop would also allow for a discussion about the pros and cons of different technologies, including some practical time to get some hands on experience.

Form Time: The day starts with a check of each pupil's personal amplification using steto-clips, cochlear implant wands and earphones plus listening checks using the Ling sounds.

Lesson 1 and 2: English

The first lesson of the day starts with everyone connecting to the group hearing aid. This is unique to Mary Hare and allows pupils to hear both the teacher and the pupils in the class as each has an individual microphone.

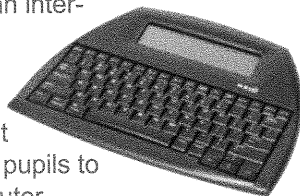
In English the teacher uses visualisation techniques to support the classes' understanding of poetry. This is done by using a prepared folder containing many images suggestive of concepts or objects described in the poem. There are also distractors, either not capturing the tone of the poem, or deliberately misinterpreting it. This is displayed on the Interactive Whiteboard (IWB). Pupils are encouraged to choose images to create a storyboard for the poem. They then debate the merits of one image over another. Pupils are also encouraged to create their own original storyboards using images to support their understanding.

The second half of the lesson is dedicated to reading. We use a database system called Accelerated Reader that tests comprehension of a book, in the form of an online quiz. Depending on their success in the quiz, the programme suggests books that will promote their reading development.

Advantages of this programme are:
Reports are provided to track pupil progress.

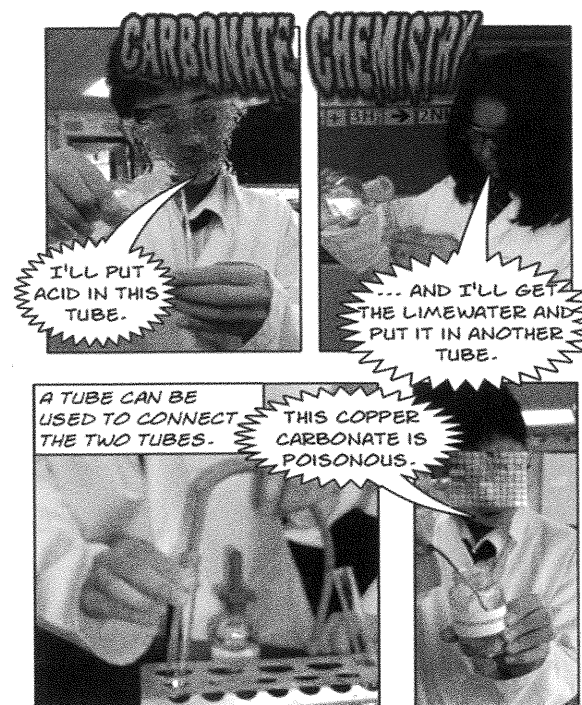
It produces statistics e.g. such as the total number of words read, that are used in an inter-form competition.

Pupils can complete the test using small writing keyboards called Neo 2s. They have built in word processors that allow pupils to send text directly to the computer.



Lesson 3 and 4: Science

In order to support the pupils' learning in Science, teachers use a large number of images and videos from the internet and other sources. The use of step by step instructions, with clear pictures, aids pupil understanding. For example the class produces comic strips to illustrate a particular chemical reaction. They use a program called Comic Life to do this, which is very simple to use and produces fantastic-looking results.

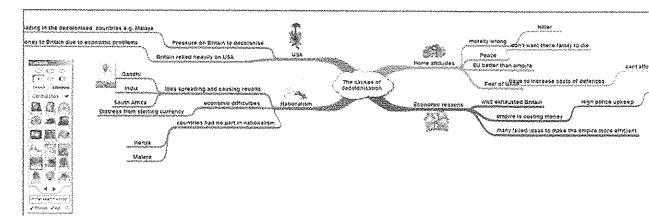


E-books are used in lessons to project the text onto the IWB. The advantage of using an e-book is that all pupils are looking up at the board and can lip read the teacher better without having to look up and down from the page. Pupils can also use the support of Claro read which, when the pupils are plugged into their laptops, can read aloud the text, or even their own work so that they are able to "hear their own errors". This particularly supports the pupils with dyslexia.

Lesson 5 and 6: History

At secondary level pupils are expected to write long essays. This can be a challenge for most hearing-impaired students.

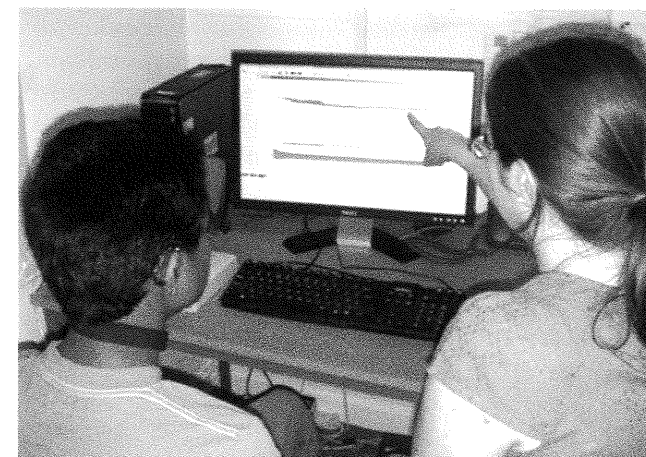
The **Inspiration** program helps a student plan his or her writing and can also be used for presentations and revision.



Lunchtime

Touch typing classes: Many children benefit from lunch time touch typing classes, especially those with dyslexia. By using an online version called Kaz, pupils can practise at home with their parents. The ability to type effectively and quickly is a skill every pupil should have.

Speech Therapy: As pupils are not withdrawn from lessons, SLT sessions take place after school and at lunchtimes. The laryngograph provides a visual display of the vibrations of the vocal folds. This is recorded by two electrodes placed on the neck near the larynx. The vocal vibrations are recorded as visual patterns and pupils are able to see pitch, intonation, loudness, roughness and irregularity in their voice.



Listening skills & auditory rehabilitation: There are many resources now available through the cochlear implant companies to use with newly implanted students as well as those students wishing to develop their listening skills. In terms of CI rehabilitation pupils enjoy using:

Musical atmospheres produced by AB: this provides listening activities linked to music, identifying instruments, listening to the emotion of the music, the tempo, male vs female singers. It is very interactive and provides good opportunities for discussion.

The seeing and hearing speech-lessons in lip-reading and listening by Sensimetrics remains one of the students' favourite (even though the speakers have American accents). You can set each task as lip reading only, listening only or both. Pupils can work their way through target words in closed sets to everyday sentences listening to different speakers and lip patterns.

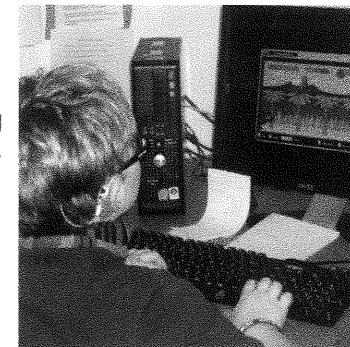
iPad and Apps:

iPads are a brilliant resource that can be used to motivate a reluctant pupil, or they can be used as a reward, or to consolidate skills learnt. Pupils really enjoy using the iPads and they can often download apps to their own phones to practise at home and at the weekends.

We currently find the following helpful with listening:

My Play home (listening to environmental sounds round the house)

Use my ears – Ling 6
Sound touch – animals' names and sounds
Splingo – receptive language app.



Lesson 7 and 8: Geography

In this lesson, the teacher has used a word processor to produce word mats – technology being used to produce attractive analogue objects that can provide scaffolding and subject specific vocabulary. One side of the laminated word mat contains key vocabulary for today's lesson, and the back refers to the current skill being taught in English (writing to show cause, effect and response).

After school, pupils have access to the computers for their homework, as well as using them for specialist literacy applications such as Nessy. Pupils with spelling difficulties or dyslexic traits can use the Nessy learning programme which is specifically designed for children with dyslexia.

Pupils with good listening skills can play the online games independently while others may need support from an adult.

Finally, it's back to the houses, where pupils can Skype their families.

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If you would like a copy of all the resources, websites and links please email us: audiology@maryhare.org.uk

A crucial piece of technology – a metal detector. Especially useful for finding hearing aids and processors after it's been snowing.

