

# Educational software for children with Down syndrome - an update

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In an effort to take a broad overview of the software that is available and which would be of particular benefit to children with Down syndrome it has proved difficult to move on considerably from those programmes that have been identified in earlier articles and in the *Down Syndrome Issues and Information* book "Utilising Information Communication Technology to Assist the Education of Individuals with Down Syndrome" published in 2003.

I am confident in continuing to support the use of all the software that was identified then and, while some programmes such as *Clicker* and *Speaking For Myself* are in new versions (Clicker 5 and *Speaking for Myself Plus*), the only changes that are particularly relevant to this group of children are the improved sound, graphics and animation qualities of the programmes. The relevance of the content remains much the same, while some activities have been further developed to address the specific learning profile of children with Down syndrome.

In the intervening period, however, there has been a bit of a quiet revolution going on in schools with the proliferation of

interactive white boards and a much greater use of resources on the internet, brought about by the increased speed and reliability of broadband connections in the UK. Schools are increasingly accessing traditional core curriculum material from sources such as *BBC interactive* and an increasing number of sites offering printable resources for use in the classroom. Homework and revision for school work has been pretty much revolutionised by content from *BBC bite sized* and some schools have even developed their own web sites to include a range of curriculum software and resources for students.

It is hoped that many students with Down syndrome will benefit from the opportunities that interactive white boards give to offer visual clues and key content reminders, as well as accessing the curriculum through the web alongside their class mates. It will certainly remain true that the majority of students in this group will continue to need individualised and differentiated material in many areas of the curriculum as they grow and progress through their primary and secondary school careers. The ability of ICT to offer specific software in these areas is still

outstanding. In this article I hope to identify the main newcomers and re releases that will offer opportunities for parents and educators to target specific areas of development where children may encounter difficulties.

## Early vocalisation

One quite specific area where the technology has allowed improvement is that of speech activation. Not to be confused with speech recognition, where little has changed in term of its relevance to children with Down syndrome, speech activation is simply the ability to operate some software activities by the means of vocalisation. For young children and for a few older children the opportunity to reward vocalisation or the simple production of voice sounds can be very encouraging, and there have been a few nice simple programmes that have developed this capability well, using exciting activities operated by voice stimulus. A simple microphone is all that is needed – voice input training or complicated configurations are not required.

*Sound Beginnings* offers two programmes (and one for Macintosh computer users). The programmes have been spe-

cifically designed to encourage vocalisation.

**Sound beginnings:** This programme enables you to select appropriate sounds, words and phonemes, and has the facility to let you import your own pictures, relevant and personal to your child. Its features include:

- gradually revealing pictures through sound stimulus
- rewarding pupils to say specific words
- encouraging extensive language work development
- promoting fun experimentation with sounds.

**Sound beginnings 2:** All the activities can be configured to suit individual users. You can also track progress of an individual through printable user records. There is even a gallery that can be viewed showing saved screenshots from certain activities that a user has accessed, e.g. Counting, Flying, Painting, Racing, Placing (see screenshots on this page).

*Speech Viewer Three* advances these ideas to improve the accuracy of speech sounds by representing speech sounds graphically. It is a more formal programme and requires some familiarity with using its features.

## Early language and reading development

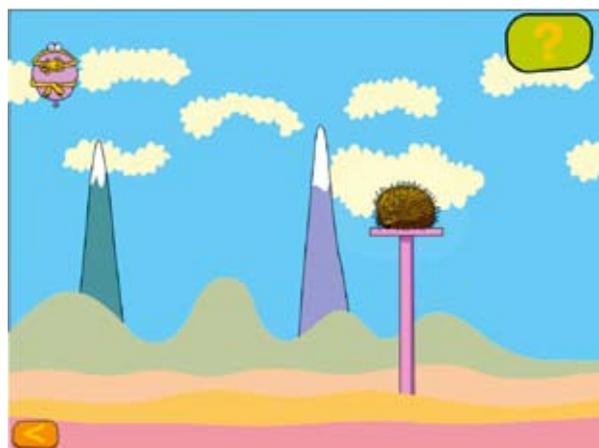
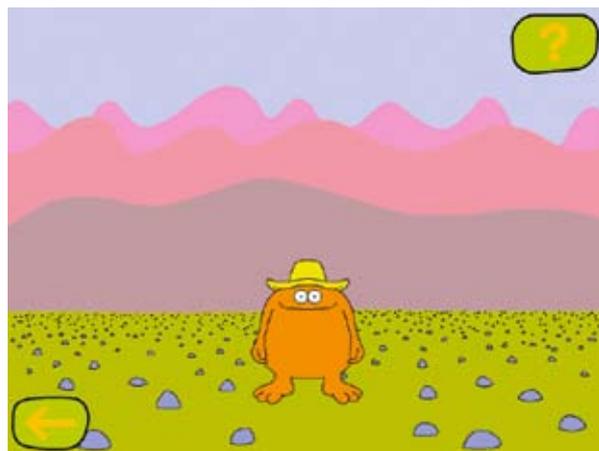
Significant improvements have been made to a number of programmes that support the development of whole word sight vocabulary, reading and spelling. The newer graphics in *Speaking for Myself Plus*, along with the improved signing support for a larger number of stories and nursery rhymes, has improved the range of activities and appeal of this old favourite, bringing it into line with the best of the most modern software titles.

It is currently being translated into Danish, with plans for more languages to be made available in the New Year.

*See It Say It* from Resource Education is among the best of the single activity programmes covering this area.

The latest version (5) of the widely used *Clicker* programme makes it more understandable. The new speech engine generates new voices such as 'Acapela Graham' and 'élan Lucy' who, while computer generated, have at last started to sound less like demented robots and more like real people. There are some fun alternatives such as 'Female whisper' and 'Robosoft' which offer some light relief. A big bonus for Clicker 5 is that they now have access to the 'Oxford Reading Tree' resources, previously the sole domain of the Sherston *Talking Stories* series. The new series available for Clicker 5 has a range of useful activities such as **word practice** – developing whole word recognition – and **sentence activities**, including building and understanding sentence construction using whole words and missing word activities. All these are narrated by Tony Wilson using the familiar characters from the well-known book series. For comprehension there are picture-based and word-based activities appropriate to the level of the story, to aid and enable children to demonstrate understanding of the text.

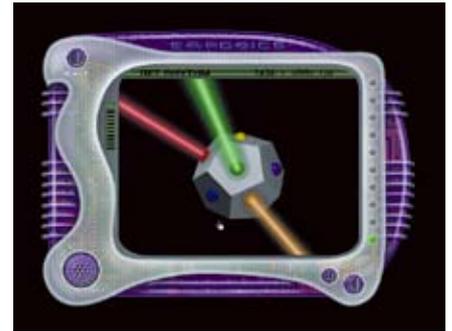
An innovative approach to developing vocabulary and language knowledge is taken by Don Johnston Software in *Earobics* and resource education have further developed *Wordwork 1* and *2* taking their usual simple and clear approach to topics.



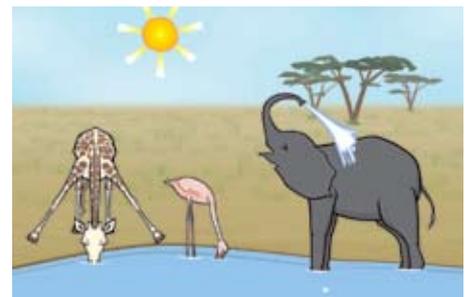
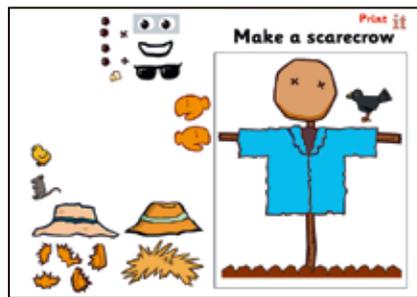
**Sound beginnings: Conversation, Flying and Placing screens**

## Supporting inclusion and free resources for parents

A range of titles hugely expanding the catalogue of software that 'Supports Inclusion' has been released by Sherston Software. Titles include *Easy Keysi*, *Mini Matchers* and a special



**Earobics: Rapper, Earobics 2 and Get Rhythm 2**



**Switch It: Bob the Builder, Farm extra and Wildlife**

edition of *Tizzy's Toybox*, another updated classic specifically addressing its usability with interactive whiteboards.

Their *Skill Builders* series cover most common activities from Listening skills to Observation skills, Matching and Sorting. An innovation from this company allows those with reliable and fast internet access to subscribe to the whole series and access them online without ever having to install or store CDs again. They also have a nice free area where you can try out some basic activities free of charge (see resources).

More free activities can be found at Inclusive Technology's 'help kidz learn' area with more being added before we go to print.

Another hugely expanded series is the simple *Switch It* series from Inclusive Technology with new titles covering a vast range of good quality, basic skills activities including 'Bob The Builder', for those who don't have time to create their own activities in *Switch It Maker 2*.

*Switch It Maker 2* allows parents and teachers to create their own activities using the pictures and sounds supplied or by using their own digital photographs and recording their own or their child's voice.



**Free online activities from Inclusive Technology and Sherston software**

## Resources

Sherston free online activities:

<http://www2.sherston.com/freebees/ict.htm>

Free online activities from Inclusive Technology:

<http://www.helpkidzlearn.com/>

BBC free resources for home and school:

<http://www.bbc.co.uk/schools/index.shtml>

*Clicker 5* (Cricksoft [www.cricksoft.com](http://www.cricksoft.com))

*Speaking for Myself Plus* (Topologica [www.topologica.com/](http://www.topologica.com/))

*Sound Beginnings* (Semerc, Granada learning [www.semec.com/](http://www.semec.com/))

*See it and Say it* (Resource Education [www.resourcekt.co.uk/](http://www.resourcekt.co.uk/))

*Wordwork 1 and 2* (Resource Education [www.resourcekt.co.uk/](http://www.resourcekt.co.uk/))

*Earobics* (Don Johnston Software [www.don-johnston.com/](http://www.don-johnston.com/))

Oxford Reading Tree *Talking books*, *Skill builders*, *Tizzy* and *Easy Keysi* (Sherston Software [www.sherstonhome.co.uk/](http://www.sherstonhome.co.uk/))

*Switch It Activities*, *Bob the Builder* and *Switch It Maker 2* (Inclusive technology [www.sherstonhome.co.uk/](http://www.sherstonhome.co.uk/))

*Utilising ICT to Assist the Education of Individuals with Down Syndrome*. Bob Black and Mandy Wood (2003). Portsmouth, UK: The Down Syndrome Educational Trust.