



# The Phoneme Machine

Free software from THRASS aims to help deaf children's understanding of synthetic phonics, as **Chris Griffiths** reveals

It is now possible to use synthetic phonics to teach deaf children through a new Cued Speech version of the groundbreaking THRASS (Teaching Handwriting, Reading And Spelling Skills) *Phoneme Machine* software.

The THRASS *Phoneme Machine*, which uses moving human lips to pronounce the sounds in hundreds of frequently used English words, is a key component of the THRASS programme pioneered by British educational psychologist Alan Davies. It is an excellent resource for parents and teachers for learning about, and also teaching, the fundamental building blocks of English in an entertaining and fun way.

The value of the *Phoneme Machine* was recognised in the September 2007 edition of *Independent Talking Points*, the magazine of the Association of Speech and Language Therapists in Independent Practice, in which Catherine Redmayne, the editor, wrote, 'I would have paid just for some bits of this program. Considering the whole thing was free to download, it was a wonderful offering from THRASS.'

This latest version of the *Phoneme Machine*, version V6-CS, follows a request from the Cued Speech Association UK to include a Cued Speech option. It is being developed by THRASS UK as part of its Corporate Social Responsibility Programme, which aims to improve the quality of life for the local community and society at large.

In Cued Speech, each sound has a visual representation. These sound-based units give deaf children access to spoken and written English. Cued Speech uses lip-reading and eight hand shapes in four different positions near the mouth to represent the 44 sounds of English. The combination of the hand shape, the hand position and the lip shape makes every sound of spoken language clear, so that 96% of spoken language can be lip-read accurately. In version V6-CS, the shapes, positions and movements of the hands will be displayed alongside moving human lips, with the cueing for each of the 500 base words of English demonstrated in a video box.

Cued Speech can clarify spoken language wherever it is used and it is uniquely helpful with literacy. A wide body of international research shows that profoundly deaf children who have had constant access to Cued Speech achieve literacy levels equivalent to hearing

children of the same age. They are able to read by applying their particular knowledge of phonemes, even if they have not heard them, to written language. There is much evidence that this phonological awareness is crucial to reading success, and deaf children who are not aware of the sounds of spoken language cannot learn to read in this way.

The Cued Speech Association UK is confident that this software is going to change the lives of many deaf children, their parents, relatives and friends and their teachers, by helping deaf children to learn English and to understand and use synthetic phonics. The software will help people to learn and practise their Cued Speech skills, resulting in more deaf children achieving literacy levels equivalent to hearing children. It perfectly complements its existing free e-learning provision. Staff from the Cued Speech Association UK and Exeter Royal Academy for Deaf Education have been involved in the development of the software.

Deaf children brought up with Cued Speech use phonics strategies when they learn to read just as hearing children do, so that they can 'sound out' words they do not know, and also work out how to spell new words that they have seen cued. Version V6-CS will now make it possible for deaf children to work independently, both in school and at home, on the sounds and spelling choices in English words.

Version V6-CS is available as a free download from the THRASS website within the territory that THRASS UK is licensed to serve, but the plan is to make the software accessible to as many children as possible. Alan Davies and Anne Worsfold are seeking a meeting with Ed Balls, Secretary of State for Children, Schools and Families, to demonstrate the new software and to request that each local authority appoints at least one 'Cued Speech Champion', who will work with all health centres, nurseries and schools to ensure that deaf children are not forgotten in the Government's Every Child A Talker programme – a programme that stresses the vital importance of good early communication skills in all children.

THRASS UK launched the *Phoneme Machine* version V6-CS on 1 December. For more information visit [www.thrass.co.uk/cuedspeech.htm/](http://www.thrass.co.uk/cuedspeech.htm/)

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