# **MUSEC Briefings**

### The Cellfield Reading Intervention

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#### Statement of the Problem

Despite the best efforts of teachers and others there are still children who fail to develop effective reading skills. There are a wide variety of programs on the market claiming to assist children and adults with reading difficulty or dyslexia. Although several types of dyslexia have been identified, most children with reading difficulties have a phonological disability that makes learning to read a problem.

**Proposed Solution/ Intervention** 

This computer-based program, called Cellfield, is claimed to concurrently remediate multiple deficits which have been shown to be associated with dyslexia, i.e. phonological, auditory and visual deficits. The intervention is claimed to be the first which simultaneously activates "key causal areas and their interconnections" by targeting the left rear language area of the brain. The intervention is said to be unsuitable for children younger than 8 years. It is also claimed to be suitable for adults. Those who undertake the Cellfield intervention should already have some letter/sound knowledge in place. The intervention is presented over 10 one-hour intensive sessions. Each session has ten subsections which target various deficits which have been shown to be associated with dyslexia. There are two more levels, which can be undertaken at a later time if required.

### The theoretical rationale – how does it work?

It is now possible to see how the brain works while reading, using brain imagery technology. Cellfield's program is based on

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the belief that good readers use the left half of their brain, quickly and efficiently to integrate both visual and auditory skills as they read whereas poor readers use both sides of their brain inefficiently and do not form connections between what they see and hear. Cellfield claims use of its computer program can quickly and efficiently help build up connections between visual, auditory and motor functions through synchronisation of this information and then deliver this information where it is needed in the brain. Thus Cellfield claims that it is different to other programs which only target a specific area of the brain.

## What does the research say? What is the evidence for its efficacy?

The evidence base for the efficacy of this program is based on one published study of 262 participants in a refereed journal. It should be noted that this study did not include comparison groups who had received other forms of intervention. Other unpublished studies and anecdotal reports are provided on the Cellfield website. The one published study concluded that further research should be carried out independently of Cellfield clinics to evaluate Cellfield's efficacy amongst a broader more representative sample of children struggling with reading difficulties.

#### Conclusions

There is insufficient evidence to support the claims made for the Cellfield Intervention.

The MUSEC verdict
Not recommended

Key references may be found at: http://www.musec.mq.edu.au/community\_ou treach/musec\_briefings.jsp



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