

# REVIEWS

**For parents, teachers and all concerned with dyslexia**

## **Dynamo Maths**

**By Pearl Barnes, Specialist Teacher**

No-one would doubt the benefits of mathematical skills for lifelong prosperity and independence, but mathematical difficulties are often over-looked and stimulating, engaging resources are seldom easy to find. Dynamo Maths is an interactive evidence-based on-line resource designed to captivate primary-aged children and walk them through the stages of mathematical skills and knowledge, from early foundation concepts to more complex strategies.

### **What is dynamo maths?**

Dynamo Maths can be accessed easily online through a simple log-in. The site is well structured and comprises of four stages, each consisting of multiple steps which progress through the mathematical concepts. Each cumulative step builds upon prior learning and follows a neurodevelopmental approach, by progressing in line with the principals of counting and ordering number.

### **Who is it suitable for?**

The programme can be used by primary-aged children in a variety of ways; independently, in pairs, or supported by an adult to engage in dialogue and extend the learning. Where an adult is employed, useful prompt questions are provided, which help provoke the learner to construct meaning and reflect upon their learning.

The flexibility of the programme allows the opportunity for it to be used for varied lengths of time depending upon the needs of the learner. A pupil with a short attention span could spend just a few minutes each day, whereas a pupil who is engaged more readily, may choose to spend longer. The activities are short enough to be give variety and hence personalise the learning. It has demonstrably improved the learning of pupils when used on a regular basis.

Dynamo maths is expressly designed for primary-aged children with specific mathematical difficulties. There is a useful section providing information of mathematical difficulties and dyscalculia, which also directs you to particular activities to support mathematical skills.

Mathematical difficulties, such as dyscalculia, (often linked with specific learning difficulties such as dyslexia), are associated with the under- development of basic number sense; that is an inherent difficulty in seeing patterns, rules and sequences and having an intrinsic feel for magnitude, value and number relationships. Children with difficulties in understanding mathematical concepts often struggle to associate meaning to the number system; this programme certainly provides opportunity for developing these skills, as the activities and games allow the child to practice basic skills in a number of fun and engaging ways.

### **What does it offer?**

The programme offers a wide variety of intervention approaches including interactive games and activities, in addition to worksheets for follow-on work and reinforcing learning. Activities are supported with templates for resources and on-line games are usefully timed. Teachers are able to enter the names of pupils to obtain progress reports. These reports not only provide data and information for tracking and monitoring progress, but also intervention reports, for future areas of development.

A multisensory approach is adopted, and the visual models and images suitably illustrate the mathematical skills being developed. Whilst the images are varied to motivate and engage the learner, there is a consistent approach, in order for the learner to know what to expect and thereby encourage independence. The focus of attention is therefore on developing mathematical skills as opposed to taking time to find your way around the programme. Having said that, the programme is flexible and can be used as support material for children who may need additional support in specific areas. It is merely a case of selecting the appropriate box which matches the concept to be developed.

### **Summary**

To summarise, I found Dynamo maths incredibly easy to use - an enormously useful quality for any busy teacher – well structured, systematic and thorough. It encompassed all the areas of mathematical development including basic counting, ordering and sequencing, the four operations, in addition to more complex concepts such as bridging, mathematical symbols and tables. Shape, data handling and word problems form part of the programme, to ensure ample coverage of the national curriculum, and although it covers the many aspects of the national curriculum, it is independent of it and will therefore not need any drastic alterations when the curriculum changes.