



## About Educational Kinesiology & Brain Gym® in the UK

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### The Development of Brain Gym

Many people initially come to know about Brain Gym through its use in education – maybe a child who has learning issues and has attended an individual consultation or a school that has integrated the movements into its daily routine. Brain Gym had its seeds in the learning challenges that Paul Dennison, PhD, creator of Educational Kinesiology, experienced as a child. He came to understand how the body was involved in all learning, whatever the subject or area, and a potential source of enhancement for learning skills.

In his Valley Remedial Learning Centres, Dr Dennison saw hundreds of adult and child clients and over 25 years evolved a programme that would address this physical component of learning. The programme was known as Educational Kinesiology. Part of this programme was a group of body-based movement tools that he named “Brain Gym®”. These were the movements that had proved to be the most effective with the greatest number of people through the years in advancing their learning skills.

### Origin of the activities

Dr Dennison experimented with tools and strategies from different disciplines, initially looking for simple techniques that could be done by the person themselves and that proved to be *effective in practice*. Some of the Brain Gym activities were therefore adapted from a variety of sources and others created by him for the purposes his clients needed to help their challenges.

*The Cross Crawl, a cross-lateral movement adapted for Brain Gym, revisits a movement pattern normally acquired in early childhood. This movement skill underpins academic skills that involve crossing the body midline, such as reading and handwriting. Co-ordination and sports skills also depend on this ability.*



In the course of his research, Dr Dennison found that learning was most easily accomplished when it was "embodied" - experienced in the body rather than solely on a mental level - and this is one of the core observations of Educational Kinesiology.

Dr Dennison is a deeply committed, innovative and experienced educator and Educational Kinesiology is the outcome of a lifetime's clinical experience and expertise. More information on the creation of the programme, is available on the website via the "Paul Dennison and Brain Gym®" button.

## **Educational Kinesiology & Brain Gym®**

People often ask what the difference between Educational Kinesiology and Brain Gym® is. Educational Kinesiology - movement in relation to learning - encompasses a broad programme of body-based tools, initially developed to help learning challenges, especially reading. Brain Gym® is the series of 26 movement-based activities that Dr Paul Dennison found helped learners to set up the physical skills for learning.

The full Educational Kinesiology programme, of which Brain Gym is therefore a part, has many tools in addition to the self-help movements of Brain Gym: Vision Gym™, Optimal Brain Organisation, The Seven Dimensions of Intelligence, Creative Vision, Movement Re-education and Total Core Repatterning. They are all based on physical techniques that have the aim of preparing brain and body for learning – and daily life.

## **More about Brain Gym, learning and the body**

What is the role of the body in learning and how does this relate to everyday skills? To take reading as an example, one of the physical skills involved is the movement of the eyes across the page, left to right, right to left, up and down and scanning in all directions. It is commonly found by practitioners, clients and students that, through the use of particular Brain Gym movements, reading and comprehension can improve, accompanied by eye tracking fluency.

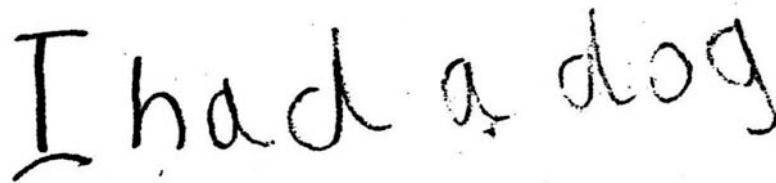
The Brain Gym movements can be used in complementary groups: reading is both an auditory and a visual skill, therefore Brain Gym activities that facilitate both listening and seeing can be used to help reading; writing with ease involves hand-eye co-ordination and crossing the body midline, so the Brain Gym approach is to use activities which help these core body skills.

Here is an example of Brain Gym being used to improve handwriting. (For a fuller account of the session, see “Case Studies” via the “Results” button on the website.) The client was a 6 year old boy (H). When asked to write a sentence, he initially wrote:



The image shows a child's initial handwritten attempt at the sentence "I had a dog." The letters are very tall and narrow, with significant slanting and overlapping, particularly in the word "dog" where the letters are almost vertical and touch each other.

H then did a sequence of four Brain Gym activities known as PACE, designed to create an alert yet relaxed state and to prepare the body for learning. This was followed by an activity which involves crossing the body midline with eyes and hands in a co-ordinated way, Lazy 8s. The ability to do this is involved in core skills such as reading (eyes) and writing (eyes and hands) and, when all goes well in development, naturally evolves. For some learners, this is not automatic and Brain Gym activities are used with the aim of facilitating this. H then rewrote the sentence:



The image shows the same child's rewritten sentence "I had a dog." The handwriting is significantly improved, with letters that are more upright, better spaced, and clearly legible. The word "dog" is now written with distinct, rounded letters.

The process took less than two minutes.

People who attend Brain Gym trainings and individual sessions soon discover that there is a strong developmental aspect to the Brain Gym movements. Some of the movements revisit, in adapted form, natural movement patterns (childhood reflexes) normally activated by the child in early development (eg The Owl – Asymmetric Tonic Neck Reflex). Movement patterns become more complex as the brain develops, building on earlier physical skills, such as the progression from gross to fine motor skills. Where the core movements are not fully in place – balance, hand-eye co-ordination, cross-lateral movement, are examples - the physical skills that are relied upon for complex, centrally focussed movement, such as handwriting, can be challenging.

Some practitioners, such as Svetlana Masgutova PhD, from Poland, have pioneered specialised and in-depth programmes involving the development and integration of the reflexes, incorporating the Brain Gym model (Dynamic and Postural Reflexes programme). The Total Core Repatterning process, used in advanced Educational Kinesiology, also address this in an in-depth way. Cecilia Freeman, from the US, has adapted Educational Kinesiology to work with children who have exceptional physical, emotional or cognitive challenges.

## Individualised Brain Gym

Many people experience Educational Kinesiology through individual consultations, which can be booked with an Educational Kinesiology Consultant or Brain Gym Instructor through the Professional Directory. In addition to children, who may come for learning, attention, co-ordination or social issues, adults also take advantage of the opportunity offered by individual consultations to target particular skills or challenges. Public speaking, singing, sport, marketing, confidence and leadership are common goals. Or they may come for adult literacy or numeracy issues. Brain Gym can be easily integrated into other programmes: recovery from brain injury, physical or emotional trauma and learning improvement strategies. In addition to the Brain Gym activities, a 5-step goal achievement process is used in individual work (and can equally be incorporated into a lesson plan), to allow a choice of activities that relate to a specific goal or target.

Practitioners draw on different aspects of the programme in their consultancy work, such as the Vision Gym™ activities, for visual and perceptual skills with a developmental bias, and sensory dominance profiles. One of the strengths of Brain Gym is that it can be incorporated into just about any other learning or self-development strategy.

## Getting the best out of Brain Gym

Brain Gym is a highly adaptable tool with relevance for people of all ages – from toddlers to seniors – and all levels of cognitive, emotional and physical ability. It is our consistent experience over many years that the best results are obtained by learning the activities and the procedures from a trained Brain Gym professional in the first instance, rather than from a book. We therefore fully recommend that you contact one of the Instructors and Consultants listed in the Professional Directory on our website who cover most areas of the UK and Southern Ireland if you wish to experience Brain Gym.

The activities need to be demonstrated and discussed for best outcomes. Common questions that a trained Instructor can provide guidance on are: What is the best speed at which to do different activities? How often should they be done and how long for? How can they be adapted to suit the skills level of an individual learner or group? What is the best developmental sequence for younger children? How should they be adapted for those with learning challenges? Which activities best support certain skills?

People can be surprised to discover, when they attend a training, that there is much more to Brain Gym than the activities, as they are introduced to the unique procedure of Dennison Laterality Repatterning and the 5-step goal achievement process, known in Brain Gym terminology as a “balance”.

These additional tools are taught on the Brain Gym® 101 course, the foundation course in Brain Gym, and add to the scope of the programme.

## The reported effects of Brain Gym

Although Dr Dennison initially used Brain Gym to help learning, he soon discovered that skills other than academic learning could benefit. These are some of the positive effects commonly fed back by those who use Brain Gym and those who observe the results, both in the classroom and for personal learning skills (for further information, see “Results” on the website):

- **Education:** improved focus, concentration, calm, memory, listening, speech and language, motivation, self-confidence in approaching new tasks and general learning skills across the subject range.
- **Social and personal wellbeing:** enhanced stress management, communication skills (such as public speaking), relationships, ability to plan and take action.
- **In work and business:** focus on task, team co-operation, leadership, confidence, organisation, competence and performing arts skills (such as singing and dance).
- **Physical skills:** improved co-ordination (gross and fine motor), balance, hand-eye co-ordination, sport and general movement skills.

As we observe changes in function - such as ease of eye tracking, ability to cross the midline of the body, better eye-hand co-ordination, ability to remember instructions and listening skills, longer capacity for attention and focus, and so on - we hypothesise that, as we know that the brain controls all our physical functions, changes in brain function accompany these changes in physical skills and are stimulated by the Brain Gym processes and activities. We cannot yet explain what actually happens in any detail.

## Brain Gym as a “cure” or “fix” for learning challenges

The programme aims to improve the physical skills that lie behind learning, and cannot be described as a “cure” or “fix” for learning challenges. In practice, Brain Gym practitioners often work with people who have been identified as “having” dyslexia or dyspraxia, and find that the symptoms they describe initially - such as being slow readers, finding difficulty putting words on the page, co-ordinating hand and eye for writing or focussing – are often reported as alleviated after using the tools. Clients and learners also comment on a reduction of stress levels, either generally or in relation to a fear of certain subjects, eg maths. These cognitive and behavioural improvements encourage learners, and ourselves as practitioners, to continue using the tools we have, based on the outcomes our clients’ experience.

## Explaining how Brain Gym works

Naturally we are often asked how the activities and procedures work. The answer to this is that we have considerably greater experience of the effects of the programme than we have certainty as to how it works. Since the programme was developed working one-to-one with adults and children with learning issues, Dr Dennison had the opportunity to observe the effects of what he was using in great detail (see “Paul Dennison and Brain Gym” on the website for an account of this). It was through this experimental process that he developed the Educational Kinesiology programme and the Brain Gym activities.

Everyone involved in using Brain Gym professionally in the UK enthusiastically supports progress in understanding how the activities work. The first independent research study in the UK, recently undertaken, has focussed on the effects of using the movements in relation to Reading Age (to be published – see the “Research Snapshot” and “Results” buttons on the website). A second, much larger, study involving 800 primary school children is currently under way.

The investigation of the neuroscience that underpins Brain Gym is an eagerly awaited project for the future. We can only at the present time hypothesise about why without actually knowing. Children and adults who use Brain Gym report that when they can more automatically undertake the physical functions on which a learning skill relies (for example, in the case of the visual skills involved in reading, ease and control of eye movements), that skill becomes more effective and fluent. It may also, predictably, become more enjoyable as effort and stress are reduced.

## Accessing Brain Gym

There are three main ways to access Brain Gym:

- through individual consultations with a Consultant;
- by attending a module of the Professional Training Track, which may be used for professional or self-development;
- via custom-designed workplace trainings, such as school Insets, twilights, workshops and talks.

All Brain Gym Instructors qualify first as Educational Kinesiology Consultants, so both offer individual work. Brain Gym Instructors are further qualified to teach Brain Gym to the wider public.

**To find out more about how Brain Gym in the UK, go to the “Brain Gym® in the UK” button on the website.**