

INSET

Training Course information

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Using movement in the classroom -

Making learning easier and more enjoyable

Preliminary Note

This is a HUGE area, with massive scope positively to help many children and adults. The one day training is pretty much packed with information, tips, techniques and practical suggestions for use of movement in the classroom.

If you are interested in a training on specific issues relevant to your particular school, I shall be very happy to adapt the material as appropriate, given sufficient notice of your needs.

Overview

The overall theme of this material is making learning easier, less stressful and more fun by using movement as part of the learning process.

The information will include some of the theoretical background, and a lot of practical material. A fairly high proportion of the material would involve practical work with it.

This material will cover:

Theory

- Why sensory integration and hemispherical integration is important for easy learning
- What happens when sensory integration and hemispherical integration breaks down, and how it can happen
- How present and past stresses impact on learning

Practical

- Noticing the effect of stress on body systems and functions in various contexts
- Learning a selection of movements and techniques that help sensory-motor and hemispherical co-ordination
- Personally observing the effects of these activities in various contexts.
- Seven stages of learning
- Time-efficient strategies for implementing movement in the classroom
- Improving examination performance

Background

The physical basis of learning

Academic learning and performance is founded upon efficient sensory-motor co-ordination.

For example, the task of reading out loud requires a whole host of co-ordinated activities including:

- Whole body stability as a platform for the eyes to function
- Co-ordination between the balance system and visual system
- Efficient scanning of the eye
- Recognition and decoding of the letters and words
- Assignment of meaning to the letters and words
- Translation into sounds,
- Modulation of pitch and rhythm to attach meaning to the words.

It is easy to take these basic skills for granted, but most of us operate below our capabilities owing to inefficiencies in one or more of these systems. A single break in the long chain of processing can amount to a severe learning block.

All of these processes are founded on movement and the ability to use sensory information. It makes a deal of sense to reason that activities that encourage us to co-ordinate without stress, and experience our senses without stress, are likely to improve our neurological functioning, and thus make learning easier.

And this is exactly what Paul Dennison found when he created the Brain Gym movements.

The movements

The approach that I use is based upon the Brain Gym movements. This is a set of movements that are specifically designed to enhance learning skills and make learning an enjoyable, self-motivating experience. Brain Gym is widely used in schools throughout the world, and for the last thirteen years has been selected annually by the American National Learning Foundation as a leading technology in education.

The movements are simple, very quick, easy for children to remember, and can be easily turned into games or put to music. Many of them can be used as 'self help' by the children when they feel the need, and without teacher direction. Some of the most effective at relieving stress are very inconspicuous and can be used in high stress situations, like examinations.

Benefits observed in other schools who have introduced these activities into the classroom include:

- Increased concentration
- Calmer and more focussed classes
- Greater achievement – in one study of SATS tests the improvement against a control group was 50% greater over a year long trial.
- Lower stress levels (for children *and* teachers!)

- Faster learning
- Better retention
- More enjoyment of learning

The real conviction of the value of these movements comes from experiencing them for oneself, and noticing the differences.

Sensory Integration

Sensory integration – the skill of perceiving what is around us by combining the information from all of our senses – is a learned skill, not one that is automatically there when we are born.

Very early in life we start to work out the relationship between our senses – vision, hearing, touch, smell, taste, balance, proprioception, temperature etc. When born, a baby has no conception of direction, is unable to track an object visually, and has very little conscious control over its body. Through repeated trials and experience, it learns to perceive what way is up and down. It learns to move its eyes, and finds out that with effort it can follow a moving object.

Information from the vestibular system is absolutely essential to efficient sensory integration. One might call this tiny apparatus, which senses gravity and movement, the master sensory organ, as it allows the growing child to create a spatial map, showing where the child is aligned in space. This map is used as a reference for every other sense.

Information from the vestibular system is on the same neurological ‘circuit’ as information from the eyes. These two senses have to work together very closely. If you fixate on an object and move your head around, the object will probably appear to stay relatively still and clear. Even the smallest movement of the head is detected by the vestibular system, and instantly translated into the correct eye movement. Otherwise our vision would be wobbly - rather like looking through a shaky video camera. Many children with reading problems have vestibular/ocular integration problems, and simply can’t fixate on the words clearly.

Many Brain Gym movements focus on developing efficient sensory/motor integration, and tying together vision, hearing, balance and kinesthetic intelligence.

Hemispherical integration

Specialisation

For many years it has been understood that the two hemispheres of the cortex have specialised functions. The Logic side, usually on the left, specialises in sequential processing. The Gestalt side, usually the right, handles the ‘whole picture’.

In reading text, for example, the left side decodes the letters and words, and passes the information to the right side, which attaches meaning to them. I am sure you have experienced reading a page of text, clearly seeing and hearing the words in your head, and not having a clue what you were reading. This is a perfect example of communication breakdown between the left and right hemispheres. The information never reached the right brain, so no meaning was given to it. If you can recall such a

an occurrence, you may also recall the slightly fuzzy ‘switched off’ feeling that accompanies it.

Cross lateral patterning

For *any* academic task, efficient communication between the two hemispheres is essential. Unfortunately, the communication pathway between them, the corpus callosum, is prone to shutting down in stressful situations.

Normal development of a child encourages the use of both hemispheres at the same time. This starts at the crawling stage, where the child’s interest in its surroundings provides an incentive to move. Crawling is impossible without co-ordination between left and right sides of the body, and at this stage of development, regular attempts to crawl stimulate a considerable neurological flow across the corpus callosum, encouraging many new connections, and myelination of the neural pathways (myelination increases the speed of the nerve impulse).

When the child stands, the learned preference for hemispherical co-operation is reflected in her gait pattern – walking by moving opposite arm and leg forward at the same time. This is the normal gait one expects to see in a person with cross lateral patterning. Repetition of the gait pattern whilst walking continues to reinforce the co-operative use of the two hemispheres.

Some children develop in a way that prefers to use one side of the brain at a time. This may be caused by any factors, particularly the retention of primary neck reflexes. Such children have rarely crawled cross-laterally, and may have ‘bottom shuffled’ or simply stood up. Strongly one-sided patterns can be observed in cumbersome gaits, and also in children whose arms seem immobile when walking. These children are very likely to have serious learning blocks, and usually need their basic patterning to be addressed before they can start to process efficiently.

Where a child has a bad or difficult experience with a subject or task which stresses her, she may develop a block. Subconsciously, when a similar task comes up again, the memory of stress in a similar situation can be sufficient to shut down the corpus callosum again. The child experiences repeated failure in tackling the task and further entrenches the stress – and so on, down a dreadful spiral of lowering self esteem.

Brain Gym has an important role to play in helping improve hemispherical integration and breaking these vicious circles. Many of the techniques relate to this crucial area, and directly stimulate the corpus callosum by the use of co-ordinated movement.

Relevance to children of all levels

For most people, there is a marked contrast between a task before and after doing a selection of Brain Gym activities. It can feel like the difference between driving with the handbrake on, and then releasing the handbrake. Brain Gym works like a ‘tune up’, preparing the brain and body to work efficiently, using more direct neurological pathways. Children of all levels experience increased ease of learning, and with that ease comes greater enjoyment and motivation.

Just as we teach children to clean their teeth and eat a decent diet, we can teach them to notice when their neurological integration has broken down, and to keep their physical and sensory skills tuned using these quick, simple techniques.

Why do movement in the classroom?

Not unnaturally, there is a tradition that ‘exercise’ is done in PE lessons, not maths.

However there are excellent reasons for including movement in *every* subject, whether arts or science, physical or academic.

Our learning processes tend to be *task specific*. Although we are capable of transferring learning skills across different subjects/situations, this is not the norm. For example a child may find reading a story book at home very easy, but find it very hard at school, simply because the environment has changed and a different set of stresses is present. Similarly, a child who is well integrated for maths may be blocked in art, or English. At a more precise level, a child who is well integrated for, say, basic number work may be totally stressed by fractions.

It is a bit like watering a vegetable patch. You can fling the water randomly, and perhaps you might get lucky and water something that needs watering. On the other hand, you can target the specific parts that need the water, and be much more successful. Brain Gym without a context is like throwing the water randomly.

If we are to use movement to help learning, it is therefore very useful to build it into the learning of specific tasks – water more precisely! Brain Gym movements done in the context of a task affect the processing of that specific task. They can therefore be used strategically during a lesson in a variety of ways. The course will aim to provide some really useful structures and suggestions to do this effectively.

What is almost always noticeable when using Brain Gym in the context of a task, is an increase in ease of performance of that task, frequently a dramatic increase.

Remarks I have heard children make include:

“It feels so much easier”

“I don’t feel at all worried now”

“Oh, I see!”

“Now I understand!”

“My head feels clearer”

“I can see better”

One teenage girl’s feedback:

“I feel like I’ve got a new head and a new back. I can’t believe how different I feel”.

Smart educators will also focus not only upon specific tasks, but upon general ones – such as being ready to learn. Brain Gym can thus be used as a ‘brain break’, and a way of energising a class in the morning or after lunch, when the movements will tend to work with issues about being prepared to learn.

Using both general and specific contexts for Brain Gym can considerably increase its potential.

In small groups you can use Brain Gym very precisely, and with very distinct elements of a larger task. For example, with a child learning a piece of music, there are many levels upon which you can focus. Bar by bar, you can use Brain Gym to help co-ordination and memory, allowing rapid assimilation and fluid expression of the music, and considerably more effective practice time. Stresses relating to playing positions, and performance, can rapidly be dispelled leaving the child to play at his or her best.

Further information

For further information on arranging an INSET training, please feel free to ring me or e-mail me:

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