

# **International Symposium: Re-imagining Special Education Through Arts Education & Arts Therapy**

**‘To show some extra ways that physical activity can  
be included within the curriculum’**

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In addition to my role as the PE teacher and PE Coordinator at Blackfriars School\*; I work for one day per week as an AST (Advanced Skills Teacher) for Staffordshire Education Authority.

During that work, I have been part of a team that has developed a programme to combine the development of gross and fine motor skills through a story; ‘The Jungle Journey’ and a screening tool to assess gross and fine motor capability at the beginning and end of the programme. Accompanying this programme is one day of training for teachers. <sup>1</sup>

This project came about due to a higher than expected number of children being referred to two Staffordshire paediatric physiotherapists, as having coordination and development levels less than those expected for their chronological age. In fact they had suffered from a problem affecting an increasing number of children; that of a lack of physical opportunity and experience. Some time earlier than this Madeline Portwood, a psychologist, tested motor competency in more than two hundred, four year old children in Northumberland. A massive fifty percent did not show the expected physical, motor abilities for their age group, the expected result was ten percent. Following a programme of regular physical activity that especially developed gross motor actions, the children were retested. The percentage of pupils’ still experiencing difficulty had fallen to the expected number. <sup>2</sup>

Cultural changes in lifestyle has meant that children have had less exposure to opportunities to become physically literate due to a world dominated much more by computers and pastimes that are sedentary. The AAP recommends that ‘children under the age of two years watch no TV at all and that screen time should be limited to no more than 1 to 2 hours of *quality programming* a day for children two years and older’. <sup>3</sup> Parents fears for the safety of their children has meant that many of them have had their freedom curtailed and more women than ever before going out to work has contributed to children having less opportunity to be physically active.

\*Blackfriars is a school for pupils who have a range of physical disabilities and associated learning challenges.

It is vastly important for children to be proficient in their movement ability as research has concluded there is a definite link between physical and intellectual ability. Movement competence can determine the extent to which a child is able to perform effectively within the school environment and that it is indeed a pre requisite for maximum access to the school curriculum, 'learning to move is moving to learn'. 4

Although difficult for a school with pupils like ours it is perhaps more important for many of them if they are to fulfil their potential in their learning and understanding.

Ideally children should build up one hour of moderate, physical activity on most days of the week, 'moderate activity' is using about five to seven calories a minute - the equivalent of brisk walking. 5 When a lot of adults think about exercise, they imagine working out in the gym or sweating on a treadmill. But for children and young adults; exercise means playing and being physically active. Children exercise when they have PE or swimming at school, go to a lunchtime club, dance to music, play chasing at break and lunchtimes and they are also exercising when they are walking or wheeling, (as in the case of a manual wheelchair user), or jogging to move from place to place.

Because we can be active in so many ways, there is no single school, agency or organisation that develops, promotes and delivers all areas of physical activity.

During the last five years, in the English school state system, the UK government PESS initiative (Physical Education and School Sport) has been implemented. Via the School Sport Partnerships, a minimum of two hours of quality, timetabled, active PE for all pupils of school age in 85% of schools has been achieved. Schools are currently working towards providing five hours of physical activity including structured activities to take place at times other than timetabled lessons, i.e. before and after school. this target This target to be achieved in all UK schools by 2010.

Considering the PESS initiative, but *more* importantly the need for children to be active for an hour a day and the restricted physical ability of many of our pupils, prompted me to consider ways that as a school we could introduce physical activity in all areas of learning but especially within the planned curriculum. I believe that children and adults of all ages are expected to remain inactive for too long and that frequent 'body and brain breaks' increase any person's capacity for learning. Why? Because movement is the basis for all learning!

To encourage this, I addressed staff in an informal way, during department meetings, to ask that they think about ways that movement could be a part of their lessons, without impeding progress but to enhance them and assist in the creation of more productive and meaningful teaching and learning activities. Also I attempted to embed the concept that physical activity should

happen throughout the school day in its broadest terms and not only at times associated with an active label such as PE, swimming and physiotherapy.

The result was that ideas have started to be developed and have had a considerable impact. Activities have ranged from pupils moving themselves from a vertical to horizontal position to learn which was which, making group body shapes to show triangles, squares and circles, then playing simple question and answer bean bag games in that shape; to mapping out a typical town plan using hoops, ropes and large size labels and photographs. Other ideas have been the daily use of songs that suggest specific movements to encourage language, levels, cross lateral and movement patterns to prepare for switch and communication activities and to encourage head control. Pupils have 'walked the beat' and searched the school garden for 'stolen jewellery' as part of a topic called 'People Who Help Us'. Physical activity ideas are regularly used both as 'brain breaks' and also to make an otherwise ordinary activity more fun to do. One of our teachers of English regularly builds word walls using large size words and statements that the pupils have to handle, move and sort, by given criteria. Our teacher of art has also developed some fantastic, large scales pieces using mops, sweeping brushes, and other long handled items such as plastic hockey sticks involving pupils having to make large movements in order to make marks on the canvas. Short aerobic sessions, bi and cross lateral activities using ribbons, pompoms, crayons or paintbrushes often performed to music have a variety of benefits but importantly they help to engage the brain for learning.

During lunchtimes our primary pupils have a combination of structured and free play activities. The free play activities are organised through an exchange system. Each child has a coloured wristband, like the ones popularly used to promote a charity or special event. The wristband is exchanged for a piece of equipment from a container situated on the playground, the wristband is returned when the equipment is handed back at the container. The system is operated by students on rota from the senior department of our school. The advantage of this system is that children make their own choice for free play, they have the chance to practice skills so that they become automatic and neurological pathways are strengthened, it is very important that they have this opportunity. The equipment is organised and in good condition and a sense of responsibility is fostered because each piece borrowed has to be returned otherwise the wristband is not given back and thus further borrowing prevented. The older pupils, carrying out their role as Sports Leaders, also develop a sense of responsibility and commitment as they have to remember when it is their turn to 'man the container' each week, help the younger pupils to play and practice and see that the system operates smoothly.

Comments that their children are more ready for formal work following a period of physical activity and that some pupils' concentration and readiness to learn is enhanced as well as concepts being more clearly understood have been some of the benefits of this focus. I myself found that teaching the idea of river erosion made much more sense when we made a river on the sports hall floor using long ropes and put on rucksacks filled with different sized

rocks to explain the words erosion and deposition and how a river works in simple terms.

As well as increasing understanding and readiness to work, gross motor activities help to develop shoulder and pelvic stability, abdominal and back extensor muscles and all of these assist the development of trunk control and balance, both of which are pre requisites of fine motor control activities such as writing, using a key board and tying shoe laces. Other specific benefits are proprioceptive feedback, being able to plan a series of movement in the correct order and to be able to correctly sequence from auditory and visual clues.

The message is that all children need to be active most days in a wide variety of physical activities that are appropriate for their age, in chunks of time that accumulate to make a minimum of an hour; that moderate physical activities make you feel good and are good for your health and that moderate means enough to make you slightly breathless or, if appropriate, the equivalent of brisk walking. In addition, as the majority of our pupils have a physical disability it is even more important that they have the opportunities to experience physical activity everyday and not just within designated physical education or physiotherapy lessons.

There are many benefits to this 'daily dose' or 'little and often' approach. Children who are active will improve the strength of their muscles and bones, have a leaner amount of body fat, have less risk of developing type 2 diabetes, have improved cardiovascular fitness, be more flexible and have more stamina, feel happier due to the production of serotonin and endorphins and be able to cope with the challenges that a typical day brings. Perhaps more important in the short term is knowing that there is plenty of research at the moment that links movement development to brain development. So if we want our pupils to progress in their learning, I feel that we need to put emphasise on their moving as well.

Over the last year there has been a positive interest in cross curricular physical activity created in both the staff and the pupils. Different ideas have been tried and some have become regularly embedded in teaching and learning. What I hope to develop over the next year is:

- a greater understanding of how to assess and support children who have specific difficulties e.g. the pupil who can catch with her left and right hand but not with two in the middle of her body and how that visual / proprioceptive / midline difficulty can be corrected
- the introduction of daily aerobic exercise to prepare children and adults for the day. 'Aerobic exercise is important as it increases the blood supply to the brain. It not only forces an increase in the size of the capillaries in the brain but creates new capillaries. Thus, more blood and oxygen can reach the active parts of a child's brain, which greatly increase the potential for learning.' 6
- that pupils will take greater responsibility for accumulating chunks physical activity throughout the day .

## References:

1. DEMS Developing Early Motor Skills through 'The Jungle Journey'  
[www.education.staffordshire.gov.uk/PupilSupport/WholeSchoolSupport/DEMS.htm](http://www.education.staffordshire.gov.uk/PupilSupport/WholeSchoolSupport/DEMS.htm)
2. Madeleine Portwood, Specialist Senior Educational Psychologist  
...Durham County Council
3. American Academy of Paediatrics (AAP)
4. Helen Wright, David A. Sugden 1999 'Physical Education for All: Developing Physical Education for Pupils with Special Education Needs
5. American National Association for Sport and Physical Education publication "Active Start: A statement of physical activity guidelines for children from birth to five years," 2002.
6. Billye Ann Cheatum, Alison A. Hammond. (2000) 'Physical Activities for Improving Children's Learning and Behaviour'.
7. Paul Ginnis (2002) 'The Teacher's Toolkit. Promoting Variety, Engagement, and Motivation in the Classroom Volume 1'

## Appendices:

Some ideas collected from a variety of sources and not aimed at a particular class or age group, but may trigger your own ideas for use in your own particular subject/setting.

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| 1. | <ul style="list-style-type: none"><li>• Where are we?</li><li>• Where could hide?</li><li>• Where could we balance?</li><li>• Where could we run?</li><li>• Where could we play with a ball?</li><li>• Where could we go under?</li></ul> <p>Take photographs of teddy or the class soft toy in a variety of places in the class room, make a display with positional words / phrases.</p> <p>A circuit of activities over/under/through/into/under – positional vocabulary.</p> |
| 2. | Cut holes in large cardboard boxes, aim into, which hole is the hardest? Use drainpipes or guttering to roll balls into. Discuss which hole is the hardest to hit, devise own scoring system, give rewards, e.g 3 points, 3 raisins.   |
| 3. | Simon Says: give instructions for movements with a ball/beanbag/ribbon/Koosh ball, only when Simon Says.   |
| 4. | <ul style="list-style-type: none"><li>• Create a mime or dance to accompany poems.</li><li>• Some children perform while others say rhyme and change over. Talented pupils say the poem in another language.</li><li>• e.g. fruit dance where it came from growing on a tree, being picked, travelling in a boat or lorry, being eaten. Add music, take a photograph, could develop a set for different fruits add colours.</li></ul>  |

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|    | <ul style="list-style-type: none"> <li>• Act out scenes from a book to encourage creative writing such as a chase or scary moment</li> <li>• Journeys /routes – photograph the route, ‘on my way I saw ....’ Walk, draw or photograph route, describe route... e.g. from classroom to swimming pool, or to shop over road.</li> <li>• Play action games to help explain ideas: Statues, move about, call ‘stop in the name of the law’ see who moves</li> <li>• Lay a trail for children to follow e.g. ‘who stole the cakes’ follow pre laid footprints, a coat, pieces of cake...</li> </ul>  |
| 5. | <ul style="list-style-type: none"> <li>• ‘Wake up &amp; Shake up activities’ at the beginning of lessons as preparation, focus time or <i>signal</i> that it’s that lesson. E.g. maths time or literacy.</li> <li>• Body drumming to stimulate oxygen flow</li> </ul>   |
| 6. | <p>Maths</p> <ul style="list-style-type: none"> <li>• body shapes, use children to make shapes either individually or in groups.</li> <li>• Bowling games, counting, how many left, dropping into boxes/hoops, adding, taking out, how many left, sets of bean bags tossed into hoops, onto spots, times tables?</li> <li>• Use blow up number cubes for sums to move about, also available as letter cubes too.</li> <li>• Pass a ball or bean bag in a number pattern.</li> <li>• Walk to shops , find and buy items from a list, spend actual money, carry own shopping back if able to.</li> </ul>  |
| 7. | <p>Music CD’s to encourage movement e.g. Sticky Kids <a href="http://www.stickykids.co.uk">www.stickykids.co.uk</a></p>   |
| 8. | <ul style="list-style-type: none"> <li>• Use bingo games or word finding activities to introduce new topics or as a revision activity.</li> <li>• Words placed around the classroom to find and sort into correct groups.</li> <li>• Parts of information to spread around like a jigsaw that piece together to make a piece of information, an instruction, a fact, a clue.</li> <li>• looking at alternatives to a word e.g. ‘Nice’ –rank the following according to how powerful the group thinks that they are. ‘agreeable, amiable, charming, kind, good, polite, well-mannered, attractive, refined ‘. Ranking activities mean the pupils have to work as a team, move around the class (usually in a given period of time) and can focus the pupil on the task.</li> </ul> |

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| 9.  | <ul style="list-style-type: none"> <li>• Accumulate 'points' for being active. Add up active minutes in a day playing, going on an errand or a route, shake pom poms, throw bean bags to a target, reduce time or get more in a given time, balance on a Sissle cushion, move a short ribbon on a stick when work is finished, have dance to music/practice an action rhyme</li> <li>• Create an incentive for the most minutes accumulated in a week individually or as a class.</li> <li>• Give active time as reward for good work e.g. golf putter, small rebounder that can be used in safely in the corner of a classroom</li> </ul> |
| 10. | <p>Use pedometers to accumulate steps, collect data, predict tasks, use in maths lessons</p> <p>Add steps to make a measurement of distance e.g. a kilometre, 5K or even a marathon accumulate over time and reward with praise certificates</p>   |
| 11. | <p>Give activity homework tasks e.g. play throw, bounce and catch, practice hopping or jumping. Get parents to join in.</p>  |

Most important ask the pupils they want too, get them involved

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