

Move on

The elements of a developmentally appropriate movement framework for young children are described by *Mike Jess* and *Jan McIntyre*

With children (and adults) becoming increasingly less active, we in the Developmental Physical Education Group at the University of Edinburgh have been working to construct a vision of pre-school physical education – a task all the more important in the light of current thinking and attitudes towards physical development.

Our experience suggests that although early years educators readily acknowledge the importance of movement in children's development, movement by itself is more often considered as a channel to children's cognitive, social and/or emotional development than an important feature of learning in its own right. In fact, movement often appears to only become an issue when significant developmental delay is identified.

This marginalisation of young children's physical education stems largely from the long-held misconception that children's movement development 'just happens' (Gessell, 1928). No surprise, then, that pre-school curriculum documents in both England and Scotland talk of children's physical development, and not their physical education.

These attitudes are in stark contrast to contemporary thinking in developmental psychology, which suggests that movement development is much more complex than originally envisaged and is influenced, over many years, by the indivisible interaction between:

- the movement tasks a child attempts
- the child's previous experience and changing level of maturation
- the environment in which the child is attempting the task (Thelen & Smith, 1994).

While maturation remains a key factor in the development process, what is becoming clear is that the role of supporting adults in creating appropriate and 'rich' movement

learning tasks and environments is significantly more important than previously thought.

In addition to current thinking and attitudes, we had to ensure that our framework sat with a developmentally appropriate early years movement framework and conceptions of play and active learning that hold much currency in early years thinking (Learning & Teaching Scotland, 2007).

MOVEMENT FRAMEWORK

The Movement Framework we have developed (below) is based on the belief that children need to develop a solid movement foundation that is:

- efficient
- adaptable
- creative.

We have, therefore, built it around:

- generic movements
- basic movements
- movement concepts.

Why did we opt for this structure?

Generic movements

Generic movements are important because these are the non-specific movements that help young children to become confident about their body's movement potential. Generic movements act as the basis for the many

THE EARLY YEARS MOVEMENT FRAMEWORK

Generic and basic movements

Balance and co-ordination
Travelling movements
Object control movements

Made adaptable and creative by:

Movement concepts
Space, Effort, Relationships



Pre-school children need to develop a solid foundation of

basic movements that develop later.

To better understand these movements, we devised a grid (see opposite) based on balance, co-ordination, postures and rotations – the four key elements that underpin all children's (and adults') movement and combine to create an almost infinite number of movement possibilities.

While most children are keen to explore their body's movement potential almost from birth, many, as they get older, are deprived of regular opportunities to further build up this awareness, competence and confidence and so create the balance and co-ordination possibilities that their bodies allow.

Basic movements

Basic movements are important as they emerge from combinations of generic movements and are used by children in their daily play and routines (walking, jumping, etc).

These movements can, in turn, be broken down, with the two main categories being travelling movements (walking, running, jumping, hopping, skipping, climbing, etc) and object control movements (throwing, catching, dribbling a football, striking a moving ball, etc).

Since the 1960s, research has highlighted how many of these basic movements move through a developmental process from an initial emergence, involving few body parts, and through a transitional period to a

Many children are deprived of regular opportunities to build up their body's potential



generic movements like jumping

mature efficient phase, usually from six or seven years of age onwards.

The expectation for most pre-school children, therefore, is not that they reach the mature phase of basic movements, but rather that they develop a solid generic movement foundation and begin the process of developing mature basic movements.

Movement concepts

Adding movement concepts to the framework provides the potential for children to adapt their movements or create original movements. This is important, because children need to perform movements not in one 'gold standard' manner, but rather in numerous different ways, particularly when involved in games, sports and dance.

Movement concepts link to the cognitive, social and emotional factors of movement. They can be divided into three categories:

- space – to help children know where the body moves
- effort – to help children know how the body moves
- relationships – to help children know with whom or what their body moves (see right).

PEDAGOGY, PRINCIPLES AND PRACTICES

Helping children develop a solid movement foundation is a long-term process which begins early in life and extends throughout the school

years. As noted earlier, this does not 'just happen' in the early years, but requires quality support from adults to create regularly appropriate learning opportunities that will help children explore, consolidate and extend their movement creativity, movement adaptability and movement efficiency.

Implications for practice

The following suggestions resonate with recent advice about active learning which suggest that 'children learn by doing, thinking and exploring, and through quality interaction, intervention and relationships' (Learning and Teaching Scotland, 2006):

- Supporting adults need to develop a detailed knowledge and understanding of an early years movement framework to inform their pedagogy and help scaffold children's learning.
- Assessing children's movement on a regular basis through observation and discussion is the key to identifying appropriate developmental needs and goals for each child.
- Children should be offered daily movement opportunities which include a range of non-specific generic movements, more specific basic movements and the use of different movement concepts.
- Children's initial movement engagement should be the starting point, as it provides adults with the opportunity to support children's exploration, help them find their own solutions, set their own tasks, make decisions, practise



REFERENCES

- Learning & Teaching Scotland (2006), 'What do we mean by active learning?' <http://www.ltscotland.org.uk/curriculumforexcellence/publications/BuildingtheCurriculum2/index.asp> (accessed on 26 October 2008)
- Thelen, E & Smith, LB (1994), *A Dynamic Systems Approach to the Development of Cognition and Action*. Cambridge, Massachusetts: MIT Press

BALANCE AND CO-ORDINATION

BALANCE

Two main types:

Static balance/still body
Dynamic balance/moving body

POSTURES

Main positions in which the body is being held

Upright, mid and lying posture

CO-ORDINATION

The relationship between body sector and body parts

All sectors doing same
Sides or top/bottom only
One or more sectors in opposition
One or more sectors crossing the mid-line

ROTATIONS

Around the different axes of the body

Turn, twist, rock, roll, spin

and talk about movement. This interaction between adult and child is very much at the heart of developmentally appropriate physical education.

- Supporting adults should be constantly creating 'rich' and exciting learning experiences by modifying children's movement tasks and the environment in which the tasks are taking place. Different movement pictures, drawings and music can act as an excellent stimulus.
- Children's movement experiences should be set up in different environments, including small sections of the nursery area, large halls and outdoors.
- Children's parents and carers have the potential to play a critical role in children's movement experiences and should be involved in discussions from an early stage. ■

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THE MOVEMENT CONCEPTS

SPACE (WHERE)

Space Self space, general space

Directions Forward, backward, sideways, diagonal

Pathways Zigzag, curved, straight

Levels High/medium/low

EFFORT (HOW)

Speed Fast/slow; gradual/sudden; erratic/sustained

Force Heavy/strong; light/soft

Flow Smooth/jerky; bound/free

RELATIONSHIPS (WHO/WHAT WITH)

Body parts Identify; body shape; wide/narrow; twisted, symmetrical/asymmetrical

Objects Over/under/through; in/out; front/back; on/off

People Co-operative, mirror, shadow, unison, alternating, competitive, chase/flee, attack/defend