



Preschool Physical Education

The "I Am Learning" Curriculum

Developing a Movement Awareness in Young Children

by *Linda M. Carson*

During early childhood, discovering and exploring movement provides a child with profound learning experiences. Young children are delighted with their emerging capabilities and seek out opportunities to play and practice. They run, jump, throw, climb, balance, explore, and pretend, among others. It is during early childhood that the foundation is being laid for body management abilities needed in childhood games, recreational activities, and youth sport. In addition to contributing to the development of skillful movement, it has been suggested that early and appropriate movement experiences help to create neural networks in the developing brain (Hannaford, 1995; Gabbard, 1998). To enhance these and other areas of child development like cognitive, social, and emotional attributes, the teacher must carefully select activities and plan lessons that represent best practice for early childhood education (COPEC, 2000; Bredekamp, 1997). It is unfortunate, however, that the motor development of young children is sometimes left to chance.

Many preschool children in homes, agencies, centers, and schools participate in physical activities that are "unplanned" and self-selected. While self-selected play is important for young children, so is movement instruction that has been planned, sequenced, and delivered by an informed teacher. In some settings, a "gross motor area," "play toys and props," and "fine motor activities" are phrases that well-intentioned teachers use to assure parents that the staff is meeting the physical needs of their children. What they really are describing is each child's opportunities for unstructured, self-selected play. Without planned instruction and teacher-directed practice opportunities, the under-informed staff

is really leaving movement learning and the acquisition and improvement of motor skills to chance.

Teachers and parents would never leave the cognitive development of their children to chance. They would not advocate learning to read or communicate by having their children enter a "gross cognitive area" where children could engage in self-selected "reading play" with a variety of books. They realize that early educators should guide and facilitate early learning of reading and language development. This expectation should also apply to the development of physical skills. Physical educators must help parents and early childhood educators embrace the notion that motor development is an integral part of over-all child development and that it is no longer appropriate to assume that children will become skillful just because they play.

To become skillful movers, young children need a foundation of carefully selected movement experiences. The movement foundation includes appropriate instruction and ample opportunities for planned practice. Therefore, teachers need a curricular framework to guide their planning. This article describes four categories of awareness that young movers can develop as a result of movement instruction and practice. The four categories of awareness when interfaced with appropriate instruction and practice develop a child's movement awareness.

A comprehensive movement awareness refers to a knowledge base within children that allows them to select movements that meet the demands of a task or situation (Carson & Griffin, 2000). This might mean selecting just the right amount of force when throwing a ball so that it is not always going over the head and past the person who the child intended to receive it. Selecting the appropriate movement to meet task demands could also mean adjusting

movements in order to catch a ball that is rolling on the ground toward the child, but several steps to one side. It could also mean pairing a movement with a specific rhythm, avoiding collisions, or controlled stopping and starting on a signal.

What are the Components of Movement Awareness?

Becoming skillful is a gradual process. Preschool children need teachers who will foster gradual improvement in their body management capabilities by providing ample opportunities to practice the basic components of movement awareness, which are fundamental movement actions and concepts (Figure 1). We should not think of preschool actions as sports skills. Rather, fundamental movement actions are the foundation upon which game and sport skills are based. Basic movement actions can be thought of as those foundational movements that must be mastered before learning more complex, specialized skills like those needed in games, sports, and recreational activities. The categories of actions that children can do with their bodies are traveling, manipulating, and stabilizing. Together they develop an action awareness. Action instruction in early childhood should focus on exploring and discovering preferences for movement patterns, with minimal emphasis on performance scores like accuracy, or how far, or how fast. Gradually and later, instruction in movement should begin to include expectations for combining and refining actions, more specialized versions of actions (skills), and expectations for performance outcomes as well as technique.

If basic movement actions are what children can do with their bodies, then movement concepts are how they change or vary the actions. Movement

concepts can be thought of as the simple, fundamental “movement vocabulary” that must be mastered before adding complexity, like movement sentences or “movement text.” Including concepts in movement practice ensures that children are being provided the practice of actions in a variety of ways. Movement concepts develop three categories of awareness: effort awareness, space awareness, and relational awareness (Figure 1).

Varying and modifying basic actions with movement concepts offers the teacher endless options for designing movement challenges for children. For example, the simple traveling action of walking continues to challenge children as the teacher asks them to walk (travel) backward (directions) on tip toes (levels), or march (travel) forward (directions) in slow motion (speeds), or walk (travel) into open spaces (shared space) with quick steps (speeds) and change direction (shared space) each time the teacher claps her hands (control dimensions of effort). Not only is it a challenge to produce and vary the movement that the teacher requests, but each child is also challenged to avoid collisions by moving into open spaces and anticipating where others will move.

Teaching movement concepts and actions to preschool children should be structured to allow gradual improvement, which in turn builds confidence and increases the likelihood that a child will choose to repeat activities or try new ones. Many children feel good about what they can do and are proud of new accomplishments. This is the idea behind the “I Am Learning” Curriculum (Carson & Griffin, 2000; Figure 2). Used as a framework for movement instruction, the “I Am Learning” Curriculum summarizes the general content for developing movement competence in children. It conceptualizes for the teacher or parent the comprehensive nature of the actions and concepts approach to teaching body management. As the teacher leads and guides the children to a functional awareness of actions, effort, space, and body relationships, each child is really practicing the following movement sentence: “I am learning what my body does, how and where my body moves, and how my body relates to myself, other movers, and objects.”

Comprehensive Movement Awareness Categories

Action awareness: I am learning what my body can do! Action awareness refers to what a child’s body does or can do. Children know from watching older siblings and friends, local sports heroes, and athletes on television that the body can do some amazing things. Most children and parents value and admire skilled performers. How do fundamental, basic skills develop into efficient and effective game or sport skills? Most skills develop in a predictable developmental sequence. Teachers can enhance the process of sequential skill development with adequate instruction. Physical competence and skillful movement are dependent on ample and appropriate early practice of basic actions and concepts (Gallahue & Ozmund, 1998).

There are an infinite number of possibilities of how movement concepts can modify or vary actions. As a result, an action awareness develops from varied practice opportunities, allowing children to master basic movement actions and gradually refine those actions into the performance of specialized skills. Figure 2 illustrates the three categories of actions (traveling, stabilizing, and manipulating) and contains examples of selected actions within each category.

Traveling Actions

Traveling actions are used to propel, project, or move the body from one location to another. These actions, in some form, can be found in most games, sports, and recreational activities. They require practice individually, i.e., one action at a time, and with many modifiers (concepts) before practice should begin to include actions in combinations or sequences and long before the actions take the form of specialized sport skills. Examples of traveling actions are walking, galloping, sliding, skipping, and hopping, among others.

Stabilizing Actions

Stabilizing actions encompass those movements that require balance, maintain equilibrium, and gain and maintain postural control. While it is true that all movements require

Movement Actions

WHAT my body can do

Traveling Actions

Manipulating Actions

Stabilizing Actions

Action Awareness

Movement Concepts

HOW my body moves

Time

Force

Control

Effort Awareness

WHERE my body moves

Self

Shared

Directions

Levels

Pathways

Space Awareness

RELATIONSHIPS my body creates

Self

Other movers & objects

Relational Awareness

Figure 1—Categories of movement awareness

stability and postural control, this category of actions depends on body management, and keeping the body stable over the center of gravity for their performance. Examples of stabilizing actions include turning, dodging, balancing, landing, bending, and stretching, among others.

Manipulating actions

Manipulating refers to object control and precision handling actions mostly with the hands or feet. Children need to practice propelling objects (throwing, kicking, batting, tossing), receiving objects (catching, trapping,

I am learning WHAT my body does, HOW and WHERE my body moves, and how MY BODY RELATES to myself, other movers and objects.

WHAT my body does

Traveling Actions

Walking
Running
Sliding
Galloping
Skipping
Jumping
Hopping
Leaping
Climbing
Crawling

Stabilizing Actions

Twisting
Turning
Bending
Stretching
Curling
Stopping
Balancing
Landing
Swinging
Swaying
Pushing
Pulling
Dodging

Manipulating Actions

Throwing
Catching
Kicking
Striking
Object Handling
Rolling
Trapping
Bouncing
Tossing

Action Awareness

HOW my body moves

TIME

Speeds
Slow
Medium
Fast
Accelerating
Decelerating
Rhythm
Beats
Cadence
Patterns

FORCE

Degrees of Force
Strong
Medium
Light
Creating Force
Starting
Sustained
Explosive
Gradual
Absorbing Force
Stopping
Receiving
Stabilizing

CONTROL

Weight Transfer
Rocking
Stepping
Rolling
Flight
Dimensions
Single Movements
Combinations of Movements
Transitions

Effort Awareness

WHERE my body moves

Categories

Self space
Shared Space

Directions

Up
Down
Forward
Backward
Counter-clockwise
Right
Left
Clockwise
Sideways

Levels

High
Medium
Low

Pathways

Straight
Curved
Zigzag

Space Awareness

RELATIONSHIPS my body creates WITH MYSELF, OTHER MOVERS and OBJECTS

Body Parts

Head
Neck
Ears
Eyes
Nose
Shoulder
Knee
Back
Arms
Waist
Chest
Stomach
Hips
Leg
Bottom
Foot
Ankles
Toes
Elbow
Wrist
Hand
Fingers
Like
Unlike

Body Shapes

Big
Small
Curved
Straight
Wide
Twisted

Roles

Leading
Following
Mirroring
Unison
Alternately
Solo
Partner
Group

Locations

Near to—far from
Over—under
In front—behind
On—off
Together—apart
Facing—side by side
Around—through

Relational Awareness

The movement framework for all Motor Development Center Classes

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Figure 2—I am learning curriculum.

bouncing), and handling objects (balls, ropes, bats, rackets). This category of actions is somewhat more difficult than the traveling or stabilizing actions. The difficulty stems from the added complexity of eye-hand and eye-foot coordination and may require precision timing of the movement of the body parts with the arrival of the object and the possible addition of implements.

Concepts Are Modifiers

The types of awareness (effort, space, relational) resulting from a functional understanding of movement concepts provide a child with a more broad-based range of abilities when trying to practice new actions. Even young children can develop a conscious awareness of the movement requirements as well as an awareness of the capabilities and limitations of their bodies. Movement concepts are

the modifiers of the actions, and therefore, they make up much of the “movement vocabulary” needed by a child to “speak fluently” with his body. Teachers can provide ample opportunities to practice a wide range of movement concepts as part of Physical Education lessons.

Effort Awareness: I am Learning How my Body Can Move! Effort awareness refers to an understanding of how the body moves, including the muscular effort needed to produce, sustain, stop, and regulate a movement (see Figure 2). All human movements are temporal and produced within a time frame. The time component of effort awareness refers to the speed and rhythm of the movement. Children need to learn not only to move at different speeds, but to control the speed of the movement, including accelerating and decelerating the speeds of movement. The notion of

time is also very important because all movements have specific rhythm. Whether children are moving to the rhythm established in a song or chant, or moving with the beat of the teacher’s hand clap, or if they are controlling the pace of their self-selected movements, they are exploring and practicing the time component of effort awareness.

Force refers to the amount of muscular effort required to perform a movement. The movement might be ballistic, like kicking a ball, static, like holding a balanced pose, or sustained, like marching with high steps. Young children can relate to this concept when they think of it as telling their muscles what to do. Teachers can capitalize on this level of understanding by prefacing force-related movement challenges with the phrase “tell your muscles to.” For example, tell your muscles to roll the ball with enough force that it hits the cone. Or tell your

muscles to roll the ball with just a little bit of force so it stops near the cone. The degrees of force are strong, medium, and light. The categories of creating force and absorbing force allow children to experience and recognize how much muscular tension is required to start, sustain, or stop different movements. Absorbing force is also an important concept for understanding how the muscles respond to receiving force, like catching or trapping a ball or for jumping and landing safely. The weight transfer concept allows children to think about and experience creating and absorbing force in specific ways, like rocking, stepping, and rolling. Many young children intuitively want to kick the ball as hard as they can or toss the beanbag as high as they can before attempting to catch. Practicing each of the components of force helps children to realize that there are options other than "as hard as you can."

Control refers to the coordination or management of the movement. Is the movement smooth or jerky? Are the transitions between movements smooth or awkward? Children need to practice the transitions between two or more movements. Many children can perform isolated movements, but when movements are combined or placed in a sequence, the continuity and quality of the whole movement sequence is likely to be compromised. The control component of effort awareness is essential for learning how to regulate movement. Exploring all of the components of effort awareness (time, force, and control) in a rich context of varied practice will assist the young mover in understanding how to initiate and regulate movements.

Space Awareness: I Am Learning Where my Body Can Move! Space awareness refers to knowing where the body can and should move. Any basketball coach would like to have players who could avoid collisions and move into open spaces on the floor. All skiers would like to be proficient at



Running with an object like a soft ball practices action awareness.

avoiding obstacles and other skiers while making quick decisions about when to turn the skis. Frustrated Christmas shoppers would like to be able to walk through the stores or onto the elevator without being bumped. Knowing where the body can move and should move is an essential concept that requires ample practice in a variety of circumstances (see figure 2).

All "play" space can be divided into two categories: self space and shared space. Self space is the space

immediately surrounding an individual, as if encased inside a bubble. It can be thought of as personal space, allotted to one individual and rarely shared. The concept of self-space can be utilized by the teacher to arrange children so that no one is too close; it can be used to practice isolated skills and concepts; and it can be mixed with movement activities that require children to move individually, yet within a group. In other words, children are always in their self space; it moves with them as they practice and play. Young children's recognition and pride of their own self space helps them to recognize that the self space of others is off limits. Shared space is all of the designated play space that can be used by everyone. One of the unique features of shared space is that it has boundaries determined by the teacher. The shape or size of shared space can vary from lesson to lesson or inside to outside, but the children are given limits to their play and practice area. As children move in shared space, they are reminded not to touch anyone else's self space and to move only into open spaces.

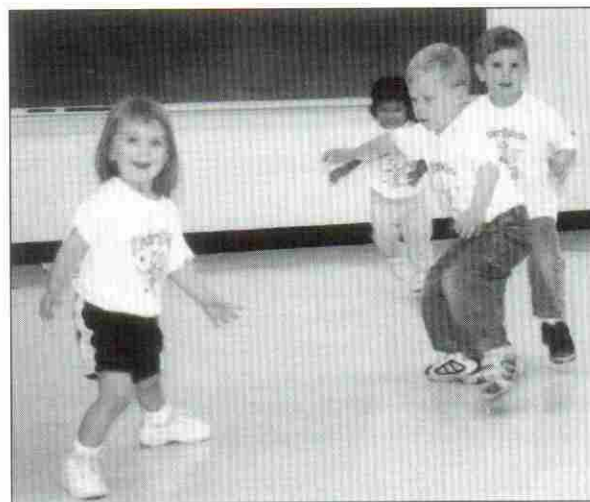
The dimensions of space are directions, levels, and pathways. Directions refers to the intended directional route of a movement, such as

forward or backward, right or left, or up or down. The next time you watch someone play soccer, or tennis, or participate in a dance production, pay attention to how many times entire bodies, or segments of the body, are expected to change direction.

Levels describe the height, in relation to the floor, of movements, body segments, and equipment or props. Actions can be performed at a high, medium, or low level. For example, children should be given ample practice in catching objects, especially balls in various levels, because in games, recreational activities, and sports, the performer must adjust movements to catch balls at an assortment of heights.

Pathways refers to the floor pattern or path that the movement requires. Since pathways can be curved, zigzag, or straight, young children can have their understanding of pathways enhanced by asking them to visualize pretend sidewalks or trails for them to move on as they practice their traveling skills. Picture a child skipping along a curved sidewalk or galloping on a zigzag sidewalk or running on a trail that changes from curved to straight to zigzag. This kind of movement practice is based on the knowledge that in games, sports, and even daily living skills like Christmas shopping, the path of movements may change and vary often.

Relational Awareness: I am Learning About the Relationships my Body Creates! Relational awareness refers to an understanding of the relationships created by the body to its segments or the body to other movers or objects (see



Stopping and starting practices effort awareness.



Moving in different pathways practices space awareness.

Figure 2). Relational and positional concepts can be very easily learned and practiced in a movement context. The relational concept of the child's body to it's own segments has two categories: body part identification and body shapes. Body part identification is essential for young children to know in order for all other aspects of movement activities to be meaningful. Whether it is pointing to body parts, or shaking them, or making circles with them, or relational movements like one hand up high and the other one low, practicing movements that focus on body segments helps children to internalize a "body knowledge." Equally as important is the concept of body shapes because this allows young children to experience the shapes that the body can make. This helps develop an overall awareness of the structural capabilities as well as the limitations of the body.

Relational awareness also deals with the relationships created between the mover and other movers and the mover to objects. Roles refer to relational concepts between movers, i.e. leading, following, mirroring, partner, or group. Locations refers to object or mover relationships based on position, i.e., near to-far from, over-under, in front of-behind, on-off, among others.

Implementing the "I Am Learning" Movement Framework

A comprehensive movement awareness is knowledge that is grounded in a movement vocabulary. In order to be able to "speak fluently" with their bodies, children must first learn single words (solo actions and concepts) and then phrases (movement combinations and sequences)

before they can speak in conversational or technical language (games and sports). The movement framework discussed in the preceding pages encourages a "know it and show it" approach to movement education, and relies heavily on the internalization of movement vocabulary. Not only does "know it and show it" encourage a child to pair a vocabulary

word with a movement selection, this approach also gives each child more information to store for future reference, plus it gives each child even more to feel positive about as he or she builds self concept. Physical competence, self-concept, and activity preferences are determined, for the most part, by the types of early movement experiences in a child's life. It is widely recognized that self concept development during early childhood is largely based on what a child feels he can or cannot do with his body (Harter & Pike, 1984; Gruber, 1985; Gallahue and Ozmun, 1998). Therefore, we should try to provide each child with as many positive movement experiences as possible.

The "I Am Learning" movement framework and others like it (Bushner, 1994; Gallahue & Ozmun, 1998; Graham, Holt / Hale, & Parker, 1993; Stinson, 1990) represent an appropriate way to lay the foundation for developing skillful movement. The four categories of awareness (action, effort, space, and relational) represent the functional knowledge required to select and produce efficient and effective movement solutions.

The movement vocabulary in each category of awareness is the underpinning of skillful body management and movement competence. Young children are responsive and receptive to movement instruction when it is delivered using this type of framework utilized by teachers who carefully plan and sequence

their instruction and practice. Finally, advocating for daily planned movement instruction by qualified movement specialists will ensure parents that the motor development of their children is not being left to chance.

References

- Bredenkamp, S. (Ed.). 1997. *Developmentally appropriate practice in early childhood programs serving children from birth to age 8*. Washington, DC: National Association for the Education of Young Children.
- Carson, L. & Griffin, L. (2000). Fundamental movement skills and concepts. In L. Housner (Ed.), *Integrated physical education: A guide for the elementary classroom teacher* (pp. 55-73). Morgantown, WV: Fitness Information Technology.
- Council on Physical Education for Children. (2000). *Developmentally appropriate physical education practices for children*. Reston, VA: AAHPERD Publications.
- Bushner, C. (1994). *Teaching children movement concepts and skills*. Champaign, IL: Human Kinetics.
- Gabbard, C. (1998) Windows of opportunity for early brain development. *Journal of Physical Education, Recreation, and Dance*, 69, 54-61.
- Gallahue, D.L. & Ozmun, J.C. (1998). *Understanding motor development: Infants, children, adolescents, adults* (4th ed.). Boston: WCB McGraw Hill.
- Graham, G. Holt / Hale, S., & Parker, M. (1993). *Children moving: A reflective approach to teaching physical education* (3rd ed.). Mountain View, CA: Mayfield.
- Gruber, J.J. (1985) Physical activity and self esteem development in children: A meta analysis. In G.A. Stull and H.M. Eckert (Eds.), *The academy papers: Effects of physical activity on children* (No 19, pp. 30-48). Champaign, IL: Human Kinetics.
- Hannaford, C. (1995). *Smart moves: Why learning is not all in your head*. Arlington, VA: Great Ocean Publishers.
- Harter, S. & Pike, R. (1984). The pictorial scale of perceived competence and social acceptance for young children. *Child Development*, 55, 1969-1982.
- Stinson, W.J. (Ed.). (1990). *Moving and learning for the young child*. Proceedings from the 1988 International Early Childhood Conference. Reston, VA: AAHPERD. **tepe**



Balancing scarves on body parts practices relational awareness.