Movement education: Syllabus on health and physical education and global recommendations on physical activity for health

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Abstract
Movement is the basis of human life. In the primary school level, movement education is organized around themes and concepts as it is not command-oriented multi-activity approach. Here the aim is to provide the required theoretical and practical inputs in order to provide an integrated and holistic understanding and developing positive attitudes, values, skills and behaviour related to health and physical education at the primary level. As comprehensive school health programme included six major components viz. medical care, hygienic school environment, and school lunch, health, yoga and physical education, the syllabus review committee might concentrate on all other aspects along with the recommendations of World Health Organisation for the prevention of non-communicable diseases.

Keywords: Movement education, School health programme, WHO

Introduction
Movement is the keystone of Physical Education. It may be affected by physiological factors (physical fitness and body build), biomechanical factors (teaching movement skill effectively), sociological factors (competitor, team mates) and psychological factors (fear, anxiety, self – concept). So teachers should understand some of its dimensions.

Movement education is originated in the 1970’s. Rudolf Laban, a dancer, was the founder of this type of education. He established that the body is the mechanism through which people move. It was the first distinct new style to develop in Physical Education after the traditional ‘command-oriented multi-activity approach’. Unlike middle and high school which is generally organized into activity related units (badminton, personal defense, etc), movement education is organized around themes and concepts. These themes and concepts form the basis for teaching typically using the guided discovery model.

Basic movements are comprised of movement concepts and fundamental motor skills.

A) Movement Concept
Movement Concept is the knowledge and understanding of movements. It includes:

- Body awareness (What can the body do?). Its objectives are:
  - Identification and location of body parts
  - Body shapes and positions
  - Awareness of body movements
  - Body as a communicator to express feelings
  - Awareness of muscle tension and relaxation

- Spatial awareness (Where does the body move?). Its objectives are:
  - To recognize self-space and respect that of others
  - To move within general space safely
  - Recognize different directions and how to change directions
  - To understand different levels of movement
  - To travel through different pathways and the pathways that different objects move in.
  - Adjusting range of movements according to the task and situation

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Qualities of movement (How does the body move?). Its objectives are:
- Time: Differentiate among speeds and to increase or decrease the speed of movement.
- Force: To be able to create and modify one’s force to meet the demands of the task
- Flow: To combine movements smoothly and to perform movements within a restricted time or space.

- Relationships (With whom and what does the body move?)
  - To understand the association of body parts to one another and the body.
  - To move effectively relative to other individuals and/or within a group.
  - To be aware of the relationship between the body and its parts to objects.

B) Fundamental motor skills
Fundamental motor skills are of three categories: Locomotor, Nonlocomotor and Manipulative. Locomotor skill includes walking, running, jumping, hopping, leaping, skipping, sliding and galloping. Nonlocomotor skill combines bending and stretching, twisting and turning, pushing and pulling, and swinging and sway. Manipulative skill includes throwing, catching, kicking and striking.

Movement Education is progressive and problem-solving by students. Here emphasis is on cognitive and creative involvement of students. Here three steps are followed - explore, analyze, and apply knowledge to arrive at solutions. Individual differences are appreciated very much.

Framework of Syllabus on Health and Physical Education for class III and IV

If we consider the framework of syllabus, it is found that the syllabus committee identified several broad themes and these included for effective implementation of the subject of Health and Physical Education. These are:
1. We and our environment
2. Human Body; physical fitness and health
3. Food and Nutrition
4. Social Health and relationships with others
5. Safety and Security
6. Consumer Health; vocational and leadership aspects.

In this study, special concentration was given on movement education of only class III and class IV under ‘physical fitness and health’.

Syllabus on Health and Physical Education: Class III

<table>
<thead>
<tr>
<th>Class</th>
<th>Theme / Sub-Theme</th>
<th>Key Concepts</th>
<th>Activities/ Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>Neumuscular Coordination</td>
<td>Neuromuscular Coordination Coupling of Movements; e.g. Can we combine: walk and run sit and stand; stop and walk hop and walk; bend and roll walk and run/leap; walk and jog Walk, jog and run forward and backward running</td>
<td>Performance of neuromuscular co-ordination, activities like jogging, running, hopping, leaping, rolling etc.</td>
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<tr>
<td></td>
<td>Strength and Judgment</td>
<td>Developing strength Judgment and decision-making Throwing/Catching the ball Developing strength, judgment and decision-making</td>
<td>Throwing and catching in pairs and in groups (simple and manipulative) Throwing to various distances and catching from various distances Throwing the ball farthest and Highest</td>
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<td></td>
<td>Coordinative Abilities</td>
<td>Eye-hand, eye-leg and neuromuscular coordination and Motor fitness How can I toss?</td>
<td>Running in pair while holding hands Playing chain Three-legged race Tossing the coin/ ball/ shuttle cock/tennikoit ring/frisbee Taking decision about choosing head or tail and deciding about the turn on any game Fundamentals of tossing of various sports object</td>
</tr>
<tr>
<td></td>
<td>Combative Skills</td>
<td>Combative Actions</td>
<td>Hand pull/push Line pull/push Back to back pull/push Wall-push</td>
</tr>
</tbody>
</table>

Syllabus on Health and Physical Education: Class IV

<table>
<thead>
<tr>
<th>Class</th>
<th>Theme / Sub-Theme</th>
<th>Key Concepts</th>
<th>Activities/ Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>Physical Exercises</td>
<td>Objectives of exercises: Good for health and fitness Base for sports performances Importance of warm up, rest and sleep</td>
<td>Exercise on two, four and eight counts Calisthenics Jogging, Running Simple stretching General warm-up exercises - Toe-to-head - Head-to-toe</td>
</tr>
<tr>
<td></td>
<td>Speed and Power</td>
<td>Speed Power</td>
<td>Sprinting, Running in Variation Vertical jump Standing broad jump Running long jump</td>
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<tr>
<td></td>
<td>Coupling Motor Ability</td>
<td>Developing flexibility and balance</td>
<td>Forward roll, Backward roll, Forward roll and Leg split, Backward roll and leg split, Cartwheel</td>
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<td></td>
<td>Coordination</td>
<td>Coordinating motor ability with partners and objects</td>
<td>Rolling with partners (double/triple) Free play (informal games &amp; sports)</td>
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<td></td>
<td>Rhythm and Reflexes</td>
<td>Reaction time Responding to Command Responding to rhythm</td>
<td>Positions of 'On your marks' and 'Go' Positions of Attention, Stand at-ease, Right-turn, Left-turn, About-turn Marching on-the-spot (Kadamtal)</td>
</tr>
</tbody>
</table>

Global Recommendations on Physical Activity for Health by WHO

According to the World Health Organisation, for the children and young people aged between 5 to 17 years, physical activity includes play, games, sports, transportation (walking or cycling), chores (work), recreation, physical education, or planned exercise, in the context of family, school, and community activities.
In order to improve their cardio-respiratory and muscular fitness, bone health, and cardiovascular and metabolic health biomarkers and reduced symptoms of anxiety and depression followings are recommended:

- Children and youth aged 5–17 should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.
- Amounts of physical activity greater than 60 minutes provide additional health benefits.
- Most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week.

Discussion
Movement Education is mentioned in the syllabus only in two classes - class III and class IV in primary level. So these two classes were considered here. The syllabus review committee proposed a frame so that a child can combine various physical movements, how to throw and catch an object, how to run in pairs with friends or parents while holding hands, how to move (pull or push) an object around us or to answer why we do exercise, how fast we can run, how high we can jump or how far we can throw an object and how I can perform on command/rhythm.

As we all know that students of class III and IV are of age between 8 and 9 years, so they have to perform at least 60 minutes of moderate- to vigorous-intensity physical activity daily. But there is hardly any such scope in syllabus or feasibility in practical situation.

Conclusion
An analysis of the mortality and nutritional indicators from the pre-school, primary, secondary and senior secondary levels show that under-nutrition and communicable diseases are the major health problems faced by majority of the children in this country. So the idea of a comprehensive school health programme was conceived of in the 1940's that included six major components viz. medical care, hygienic school environment, and school lunch, health, yoga and physical education. But the recommendation of the World Health Organisation is with guidance on the dose-response relationship between the frequency, duration, intensity, type and total amount of physical activity needed for the prevention of NCDs. So the committee might concentrate on all other aspects along with the recommendations of World Health Organisation.

References
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