AECYC Seminar 4 March 2017
2-4-year group

Movement makes my Body Smart -
Movement, Play and the Different learning apparatus for each stage

Introduction:

• Motor development - progressive change in motor behavior throughout life, which includes an interaction between the task, the biology of the individual and the influence of the environment (Gallahue & Ozmun, 2006)

• Motor development – categorized as fine- and gross-motor development (Malina et al., 2004)
  • Gross motor development includes:
    • locomotor skills
    • stability skills,
    • basic sport skills / object control skills (throwing, catching, dribbling, rolling, kicking and striking a ball (Goodway & Robinson, 2006)
  • These skills – also called fundamental motor skills (Goodway & Robinson, 2006)
  • Fundamental motor skills = ABC of movement: all components are integrated to perform complex movement skills (Malina et al., 2004)

Phases of Motor Development

Motor development is simply learning to move with control and efficiency and is characterized by four predictable phases

Figure 1: Gallahue & Ozmun’s stages of motor development
Gallahue's movement phases

Reflexive Movement Phase (0-4 months) first sign of controlled motor development, sub-cortex controls all reflexive movements

Rudimentary Movement Phase (0-2 years) Locomotive Skills: Creeping, Crawling, Walking Manipulative Skills: Reaching for, grabbing, releasing Stability Skills: Gaining control of head, neck and trunk Learning how to sit and stand unassisted

Fundamental Movement Phase (2-7 years) Evolution of skills Running and Kicking - Throwing and Catching - Heading/Trapping

Sports Related Movement Phase (7-adulthood) General Specific Specialized Underhand throw Underhand serve Accuracy and control Phases of Motor Development

Effects of motor skill instruction on the performance of sport skills later in life

Adapted from: Fundamental Motor Skills – A manual for teachers
**Critical Fundamental Motor Skills**

The following fundamental motor skills have been selected from a wide range of possible motor skills as being those most essential for primary school children to learn:

- Catch
- Kick
- Run
- Vertical Jump
- Overhand Throw
- Ball Bounce
- Leap
- Dodge
- Running sideways
- Two-hand Side-arm Strike.

*Relationship between Fundamental Motor Skills and Specific Sports Skill (Overarm Throw)*
### The Long Term Athlete Development Model – Late Specialization Sports

<table>
<thead>
<tr>
<th>WHERE</th>
<th>LEADERS</th>
<th>TRAINING</th>
<th>COMPETITION</th>
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<tbody>
<tr>
<td><strong>Active Start</strong>  &lt;br&gt;Males and Females 0-6</td>
<td>Home;  &lt;br&gt;Day care;  &lt;br&gt;Sport programs;  &lt;br&gt;Pre-schools;  &lt;br&gt;Community recreation;</td>
<td>Parents;  &lt;br&gt;Pre-school &amp; Kindergarten teachers;  &lt;br&gt;Day care providers;</td>
<td>None; focus on learning proper basic movement skills such as running, jumping, wheeling, twisting, kicking, throwing, and catching;</td>
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<td><strong>FUNdamentals</strong>  &lt;br&gt;Males 6-9 females 6-8</td>
<td>Schools;  &lt;br&gt;Community recreation;  &lt;br&gt;Sport programs;  &lt;br&gt;Sport clubs;  &lt;br&gt;Home;</td>
<td>Parents;  &lt;br&gt;Teachers;  &lt;br&gt;Recreation leaders;  &lt;br&gt;Volunteer coaches (mainly);</td>
<td>Unstructured &amp; structured play; short seasons; multiple activities; overall movement skills &amp; development of athleticism;</td>
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<td><strong>Learning to Train</strong>  &lt;br&gt;Males 9-12 females 8-11</td>
<td>Schools;  &lt;br&gt;Community recreation;  &lt;br&gt;Sport programs;  &lt;br&gt;Sport clubs;  &lt;br&gt;Home;</td>
<td>Parents;  &lt;br&gt;Teachers;  &lt;br&gt;Recreation leaders;  &lt;br&gt;Volunteer coaches (mainly);</td>
<td>Regular practice; seasonal activities; multiple sports; overall sport skills development;</td>
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<td><strong>Training to Train</strong>  &lt;br&gt;Males 12-16 females 11-15</td>
<td>Schools;  &lt;br&gt;Community recreation;  &lt;br&gt;Sport programs;  &lt;br&gt;Sport clubs;</td>
<td>Teachers;  &lt;br&gt;Recreation leaders;  &lt;br&gt;Volunteer &amp; professional coaches;</td>
<td>Regular structured practice; seasonal activities; more than one sport; sport-specific skill development;</td>
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<td><strong>Training to Compete</strong>  &lt;br&gt;Males 16-23 +/- females 15-21 +/-</td>
<td>Schools;  &lt;br&gt;Post-secondary institutions;  &lt;br&gt;Sport programs;  &lt;br&gt;Sport clubs;</td>
<td>Teachers;  &lt;br&gt;Volunteer &amp; professional coaches;  &lt;br&gt;sport science, medicine, &amp; nutrition consultants;</td>
<td>Regular structured practice; planned &amp; periodized schedule; focused on one sport; technical &amp; tactical training;</td>
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<td><strong>Training to Win</strong>  &lt;br&gt;Males 19 +/- females 18 +/-</td>
<td>Post-secondary institutions;  &lt;br&gt;Sport clubs;  &lt;br&gt;Training centres;  &lt;br&gt;Professional sport;</td>
<td>Professional coaches;  &lt;br&gt;Integrated support teams;</td>
<td>Regular structured practice; planned and periodized schedule; focused on one sport;</td>
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<tr>
<td><strong>Active for Life</strong> ENTER AT ANY AGE</td>
<td>Community recreation;  &lt;br&gt;Sport programs;  &lt;br&gt;Sport clubs;</td>
<td>N/A</td>
<td>N/A</td>
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Each sport must develop its own unique training/competition structure. Each individual will have their own unique progression (needs) within the broad structure above.

Early specialization sports include artistic and acrobatic sports such as gymnastics, diving, and figure skating. These differ from late specialization sports in that very complex skills are learned before physical maturation since they cannot be fully mastered if taught after maturation. Most other sports are late specialization sports.

### Bibliography


http://canadiansportforlife.ca/learn-about-canadian-sport-life/ltad-stages