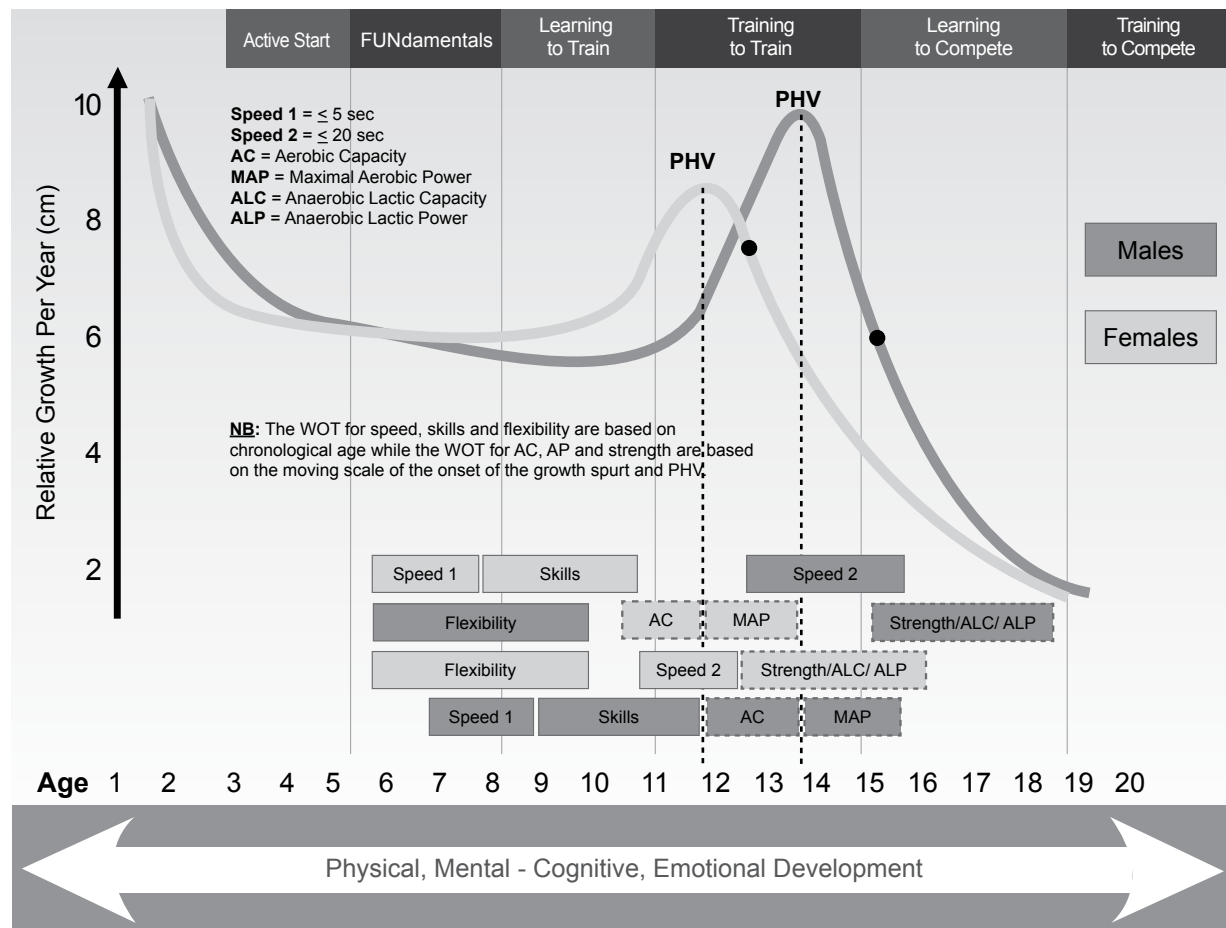




2.5 Trainability

Trainability has been defined as the responsiveness of developing individuals at different stages of growth and maturation to the training stimulus. Although all systems are always trainable, some periods of growth and development provide windows of enhanced trainability.

Figure 2.5: Pacific Sport Windows of Optimal Trainability (adapted from Balyi and Way, 2005)



The five Basic S's of training are: stamina (endurance), strength, speed, skill and suppleness (flexibility). Of those five, three have windows of optimal trainability that are relevant to children in the FUNdamentals stage of development:

- ❑ **Skill.** Provide the base requirements for future advances in movement capacity. The window for optimal skill training begins late in the FUNdamentals stage of development (nine years of age for boys and 8 years of age for girls). This window ends at the onset of the growth spurt.
- ❑ **Speed.** Window of optimal trainability (Speed 1) for girls, and also for boys at the end of this stage. Develop linear, lateral and multi-directional speed with repetitions of duration of less than five seconds. For more information refer to section 4.3 of the CCI Learning to Train (Dryland) Reference Material.





- ❑ **Suppleness (Flexibility).** Basic static and dynamic flexibility/stretching exercises should be introduced in an appropriate setting, with an emphasis on proper technique. Development can occur through participation in a variety of off-snow activities. The window of optimal trainability for suppleness in both boys and girls occurs between six and 10 years of age. For more information refer to section 4.2 of the CCI Learning to Train (Dryland) Reference Material.

There is evidence that supports the fact that there is a high degree of variation in the trainability of children, both from the standpoint of magnitude of change and the time course of response to a given stimulus. This diversity must be taken into consideration when teaching skills to children.

