

Motor milestones



Universality and variability

Motor development consists of two underlying paradoxical principles; universality and variability. This means that we will all develop universal behaviours but with great variability in when and to what extent. For example, it can be useful to understand the behaviours a particular age group may exhibit in a certain grade at school, but we cannot lose sight of the individual perceptions and experiences and therefore the different ability levels within that group.

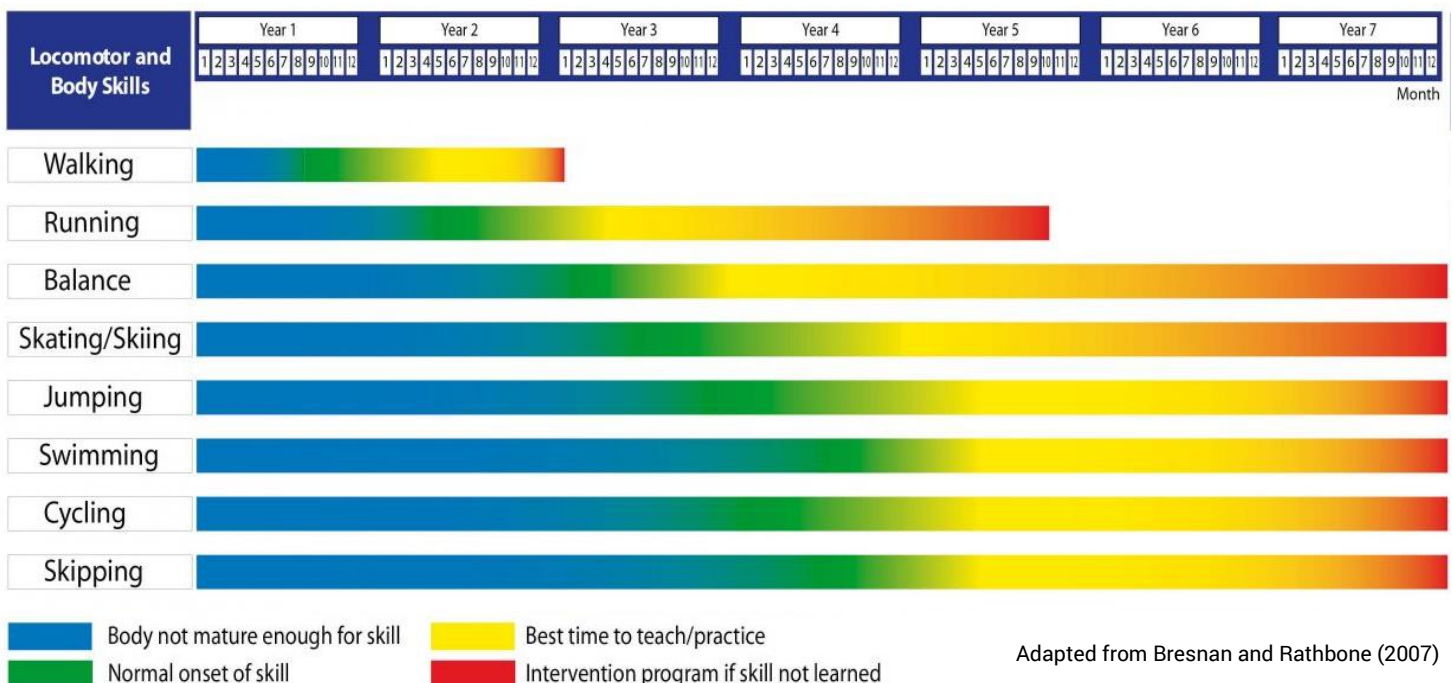
Motor milestones

Many major motor milestones take place in the first few years of life, including goal oriented reaching and grabbing, head control, crawling and walking. Beyond these first milestones, motor development continues in a more subtle and

progressive way. However, it is still important to understand the timing of the onset of these movements to be able to effectively create games and activities where children can perform the activities and have success.

Locomotor movements

Movements that take us from one place to another are called locomotor movements. These consist of walking, running, galloping, skating and many more movements. The ability to perform these movements typically occurs between the ages of 1 and 6 years old. However, there can be great variability as to when the onset of these movements occur. Below is a graph detailing the potential onset of the movements in relation to chronological age.

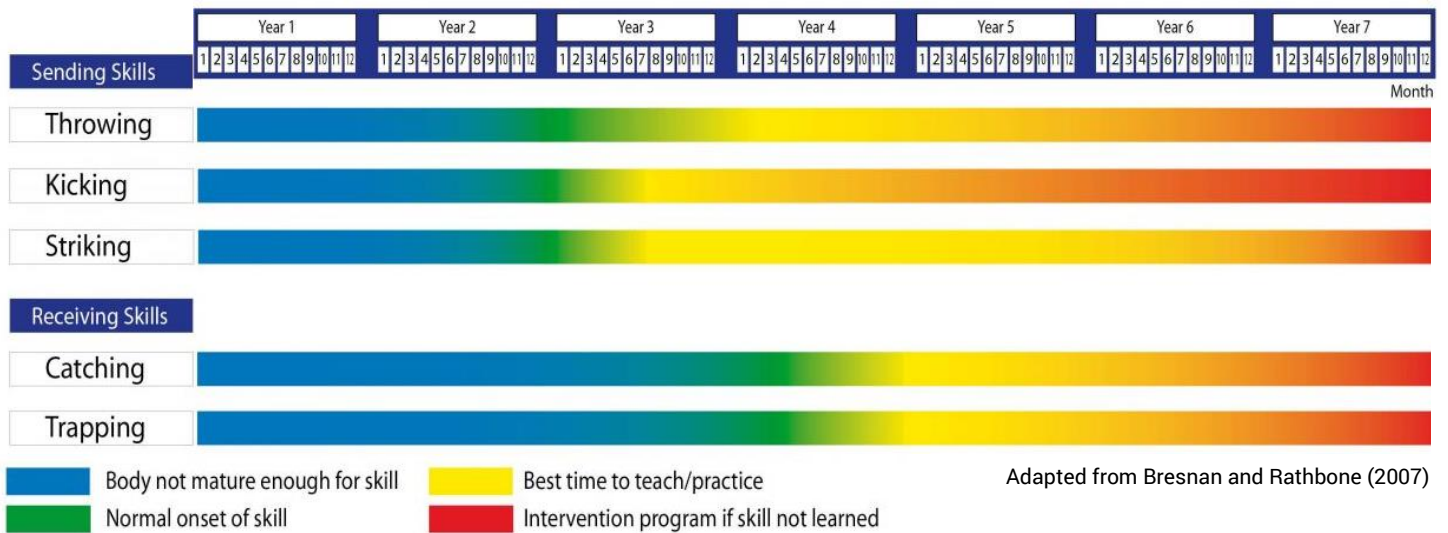


As you can see, the onset of the skill may occur with great variability, and this guide only gives general expectations as to when movement may develop. Interestingly, a complex movement like skipping may not develop in a learner until around the beginning of their fifth year. For facilitators to understand this is important as asking a 3 year old to skip not result in the desired movement, so keeping the movements more simple is encouraged. Additionally, a kindergarten teacher may want to focus on movements such as running, jumping and balance in the first semester of the school year before building in skill practice

for more complex movements later in the year.

Object manipulation

Object manipulation skills involve moving or propelling an object with our body, typically using our hands and feet but can also involve an implement such as a tennis racquet or hockey stick. The onset of these movements can occur between the ages of 2 and 5, but will occur in a basic form. Development of a more mature movement form will take many years to achieve.



Specifically for throwing it is important to know that gender differences can occur in relation to mature movement proficiency. A mature form can be seen in around 60% of males at approximately age 5. Comparing this to females, achieving a 60% mature form rate does not appear until 8.5 years of age. Understanding this can impact the expectations within throwing activities during programs and lessons as females may have a less proficient throwing performance than boys of a similar age. However, much of this difference in performance has been shown to be attributed to cultural influence such as boys being encouraged to take part in activities that involve throwing and

throwing movements earlier in life, or having a male role model (father, older brother) in the house being correlated to higher attainment.

Summary

Being aware of the milestones and onset of movement is important, but understanding that each individual is bringing their own level of maturation, experiences and perceptions to the task is crucial for modifying and adapting activities for success.