

## **Another Look at the Developing Athlete – the ‘Amplitude’ wrinkle**

The reasons for my “amplitude” choice for the theme of a running mechanics development session with a 12-year-old are varied. Over the years I have spoken about and written much about the need for appropriate training /learning for the developing athlete and over the last three years, I have had to walk the talk.

I am trying to create a journey that is ‘athlete appropriate’ first and foremost and, at the same time, try to satisfy and stimulate those things that the athlete finds attractive about the two sports she is keen on. Bottom line is that if she loses interest then she will be just another statistic in the ‘ceased participating’ column of athlete development. With running ability being a major component of a vast number of sporting scenarios it is important to ensure that she develops and consolidates a running technique that will be effective and robust enough to progress. For her, running is one of the vehicles of her current journey in track and field athletics. While she has so far enjoyed the journeys of Shot and Discus that she has encountered, her focus is on wanting to run faster so that she can compete well in competition. Here I have to try to create a journey that satisfies her desire to be successful now, and also attempt to keep the journey intact over the next decade if possible. We all choose certain foundations for every sporting action and posture that we coach. Running is no different and I have built all my running coaching around (a) how and where the foot makes contact with the ground and (b) how and in what direction the foot leaves the ground on the way to the next landing.

Most of the time, if these two foundations are done correctly, the rest of the body movement patterns and postures fall into place automatically as the body self-organises to accommodate them. If the self-organising doesn’t encourage appropriate postures and actions from the knees, hips, trunk, shoulders and arms then the learning approach must be changed to accommodate such change. I have found that the older the athlete is, the more difficult learning will be. There have been times when an adult athlete has tried to improve the ‘foot-on’, ‘foot-off’ pattern but the rest of the body has not complied due to previously learned patterns. With the younger athlete, I have found far more compliance as they learn the foot patterns and a high number create the self-organising stimulus that allows the rest of the body to adapt comfortably.

There are hundreds of cues and clues linked to hundreds of actions and postures that are appropriate for this learning to take place. Every athlete will react to unique combinations of all these and none are the same in this translation. I need at my disposal an enormous range of demonstrations, descriptions, analogies and activities within which these foundations can be taught.

So far with the current athlete, I have tried to get her to make the ‘contact’ and ‘recovery’ changes within the full sprinting action at high speed as opposed to spending inordinate amounts of time doing drills. The ‘drill’ route has always seemed to be a clumsy way because no matter how well they get at doing the drill, they still have to transfer what they have learned into high-speed environments. Even though she appears to be learning the actions of the feet (“punch the foot into the floor”; “step over the opposite calf”) and getting the knees, hips, trunk, shoulders and arms to fall into line, the pattern is inconsistent. I am of the opinion that due to a range of reasons (height velocity, weight velocity, hormonal changes, social and emotional changes, etc) I do not expect the movement patterns to consolidate for quite a while yet. The mistake I could easily make is to assume that she is now technically sound and consistent (because she can do the skill well 50% of the time) and so I can progress towards more sexy, adult-type training.

What I need to know is that the technique is robust which means exposing it to wrinkles and interference to test its stability. While I am doing this I am also adding variety to the challenges she faces which, hopefully, keep her interested and wanting to come back.