Can do, Can do, Can't do, Can do

This may annoy the skill acquisition purists but, along with other coaches who have tried these different teaching techniques, I have had success when using this learning process. I have no idea where it fits in all the latest terminology and recommended skill acquisition ideas or research, but it seems to work.

Let me choose an example to illustrate this process. In running mechanics development, I usually choose actions that are happening as close as possible to where the 'rubber meets the road' – the contact of the foot with the ground and the direction of the same foot when it leaves the ground (see these as the goals or outcomes or main pillars of the technical component being worked on). In most cases when these elements are done correctly the lower limb acts correctly; the knee follows and acts correctly; the hips follow and act correctly and the trunk follows and acts correctly – all done by the body self-organising.

I start by demonstrating this 'toes-up', 'heel-to-hamstring' action. Showing a slow-motion video also helps to illustrate this explicit description. The athletes are then asked to try these actions in a sub-maximal speed drill. This is usually followed by a range of results by the athlete – ranging from complete failure to some form of success. While they are negotiating this drill other 'cues' can be helpful e.g. 'try to step over the opposite ankle' or 'try to step over the opposite shin' or 'punch the foot into the ground' or 'pretend you are driving nails into the ground'.

As part of this early learning, I then expose the athletes to activities that actually force the 'toes-up' 'heel-to-hamstring' to take place. In my world this is seen as changing the task or adding a constraint while maintaining the focus on the chosen goal / outcome / pillar of 'toes-up, 'heel-to-hamstring'. These activities are (a) running over mini-hurdles (b) running while skipping with a rope. Both activities usually elicit the required actions of the feet, but I have learned to also teach within these two activities.

While I expect the athlete to find a movement pattern solution to the mini-hurdles and the skipping activity I also need to get them to intentionally do the required patterns of 'toes-up', 'heel-to-hamstring'. To this end I 'cue' both actions while they are crossing the mini-hurdles or running with the skipping rope. I feel that they need to be aware of what they are doing as part of the learning process. Using my phone, I can give them immediate feedback with video.

As time unfolds and the goals / outcomes / pillars appear more consistently in the session (I always assume that they haven't learned them even though they can do them sometimes) so I start to deliver the 'Can do - Can do - Can't do - Can do' activities.

Once they can deliver the goal / outcome movements more times than not, I add a complexity to the puzzle. For example, I might tell them to raise both arms straight overhead, often holding a light broomstick aloft, while they do the chosen activity. Now they must peer through a fog of complexity or disturbance (arms above head) to seek out the 'toes-up, 'heel-to-hamstring' action. This disturbance acts as the 'Can't do' element. After a period of time striving to complete the goal / outcome / pillar and often being less successful at it, I then revert them back a stage to the activity that they 'Can do' and success often prevails more consistently than before.

They still have not permanently acquired the required movement pattern ('toes-up', 'heel-to-hamstring') so the program will need to expose the fragile pattern to things like speed, fatigue and other pressures. I find that the greater number of 'puzzles' they have to solve as part of learning the technical model, the better.

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