

Tempo Trainer Concepts Made Easy

By Tim Elson

Three Thoughts

1. Very trial and error friendly
2. Constant rate, increase DPS (Distance per Stroke), equals faster time
3. Constant DPS, increase rate, equals faster time

Concept One

Merely by pushing the parameter of fast turnover, and slow catch, a coach or swimmer can find that optimum combination which will lead to the most efficient cadence and faster time. **EXAMPLE** to find the perfect combination for a sprinter do the following drill.

Start with a series of perhaps 6-10 all out 25's with lots of rest. Set Tempo Trainer at 4 tenths of a second (every 4 tenths of a second your hand will hit the water). If a swimmer can go faster; fine. This will be challenging and should set the one end of the spectrum that denotes maximum turnover.

On the very next 25, set the Tempo Trainer at 7 tenths of a second. This will seem amazingly slower than the first, and the swimmer should feel like they are pulling a lot of water; and thus set the other end of the spectrum that denotes (Distance per Stroke) DPS.

Now, the trick is to merge those two ends of the spectrum. On the next 25 set the Tempo Trainer at 4 tenths 3 one hundredths; and the swimmers should feel like they are pulling a little more water. On the next 25, set the Tempo Trainer at 6 tenths 5 one hundredths, and so till at some point you as a coach or the swimmers themselves will say that feels good, Catch and Turnover!! A stopwatch will further corroborate the ideal tempo.

Concept Two

If your rate stays constant, but your DPS increases, your time will be faster. Generally in a race this is very difficult to do, however, it is widely regarded as desirable to strive for continued maintenance of stroke length when a swimmer gets tired. A drill that promotes increased DPS with constant rate is effective for promoting this concept. **EXAMPLE** set Tempo Trainer at one second and swim 50 yards at 80% effort and note time on pace clock; perhaps 40 seconds. On the next 50 a swimmer should strive to go two seconds faster, keeping the Tempo Trainer setting at one second. Next 50 take another two seconds off. Next 50 take another two seconds off. Remember to go faster at the same rate a swimmer must be increasing their DPS.

How does this happen? Well, a swimmer starts kicking a little bit harder, pulls through a little bit harder, rotates hips a little bit more, etc. Great way to elevate the quality of one's swimming!

Concept Three

If you keep your DPS the same, but increase your rate, this will also make your time faster. This is very desirable for racing. Even though increases in rate are bound to shorten your stroke, this kind of practice will minimize how much your stroke shortens.

Here's how you do it. Swim 25 yards at 80% effort and count your strokes, for example maybe 15-18. Now do 6 x 50's with lots of rest with increasing rate. One second is a good starting point for the first one. Then try to increase the rate by 5 one hundredths on each of the next 50's. If you had held your stroke count, your time has to get faster. Interestingly, enough similar things starts happening. You start kicking harder, pull through harder, rotate better, and elevate the quality of your swimming.