

How technique influences every aspect of your paddling performance

Endurance

So is endurance important? Do you need to do the big aerobic training? Of course it is important and of course, you need a fair portion of it in your program. Even our 200 meter guys need some LIT (low intensity training). But why you do it and how you do it is crucial.

You can use it as recovery sessions, to develop aerobic capacity, the anaerobic threshold or the VO_2 max. And this is all great, as long as you can really use these capacities in the race. And as long as it doesn't make you too tired and you neglect the most important goals of your training.

Endurance sessions aren't there to only make you fitter. Endurance sessions are there to prepare you for the demands of the race. One of the demands is holding your technique in place while very tired and your body is screaming at you to stop. When designing an endurance session think of these facts:

- Your technique should remain at least similar to the racing one (you try to stabilize the movement you will need in racing; you don't want to develop a stroke efficient for marathon if you want to win a 500 meter race). The way you paddle in those endurance sessions should in some way support the perfect technical execution of your race. And never make you adopt and internalize movement patterns that harm your race performance (very common).
- You could calibrate your distance per stroke used in the endurance sessions to mimic the distance per stroke used in your racing distance (it has been shown by our biomechanics specialist Andrea Pace, that most Olympic distance races are won by using a constant distance per stroke for the most part of the race – so why don't train it?).
- The training load will allow you to be focused on what you are trying to achieve in the session and also won't disturb the following sessions too much.

Strength

So is strength important? Of course it is. After all, you can't escape the laws of physics. You need force to keep the boat moving and even more, force to accelerate it. But there are important bottlenecks in the attempt of using your dryland strength in the boat. Getting strong on land rarely transfers well into being strong in the boat (it usually does for the most talented paddlers and for beginners, but fails short with most others). Also strengthening the wrong parts of your body might make you adopt a wrong approach to technique.

Strength is the glue that holds movement together. Start your strength training by teaching and training core strength, the posture, by giving the athletes the strength to keep their shoulders and torso compact and organized and by giving them the power they can express without sacrificing all the aforementioned.

You can also substitute strength with the term work capacity. [Gray Cook](#) defines work capacity as 'the integrity of postures and patterns against fatigue and across time'. This is dryland training you can use in the boat.

When working on strength you need to think of:

- How will the particular exercises support your technique?
- Will you be able to transfer it to the boat (when you add balance in the equation)?
- What type of strength you really need?
- How much strength is enough?
- Should I measure it? If so, how do I measure it?
- Will strength make me more robust and give me the ability to go faster regardless my technique (this might be the wrong mountain to climb)? Or will strength enable me to use a better technique (this is probably the highest possible mountain one can climb)?
- How much athleticism and general preparation I still need? How much prevention and postural work I need to stay healthy?
- What is specific and what is semi-specific strength (and do I do it right)?

Race tactics

Andrea Pace showed in his 2017 book (Complements to the base technique in Canoe Kayak, downloadable here) that basically there are no tactics in kayaking. What we see as a tactical solution for a race, is usually an athlete's best compromise between his technical ability and the demands of the race. How a paddler behaves during the race (the start, the middle part, the finish, the point where they break or the point where they break the opposition, the stroke rate and the distance per stroke he opts for etc.) is his best attempt to be metabolically efficient in the attempt to reach the finish line as quick as possible. Optimizing technique, therefore, means optimizing the paddler's performance.

Psychology

Psychology hugely affects technical execution. How do you train and change psychology? Through insisting on optimal technical execution, through striving for excellence, through training a technique that will endure also the nerves and not only the physical load of the competition. Through many aspects of learning, training and exercising optimal technique we can work on the practical side of psychology.

The athlete will be alone on the start line, the athlete will have to adjust his paddling to unexpected conditions and most of all to the uncontrollable circumstance of competition – you can't prepare for this from an armchair.

Technique execution is the clearest mirror of what's going on in an athlete's mind. And the connection works both ways. So you have to always make your best to understand how good paddling works. This way you will be able to always know where is your training going, how to make decisions regarding training and how to plan it.

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