
STROKE EFFECTIVENESS FOR CANOE POLO

Esteemed slalom coach Warwick Draper shares some insights on how to develop skills for canoe polo competition or simply tips that can be translated into improved technique to increase enjoyment of everyday paddling.

We spend a great deal of time working on our ball skills, but how much time do spend on improving our ability to move around the pool?

Some questions worth asking:

- How quickly can I get from one end of the pool to the other?
- How long does it take to accelerate to full speed from a standing start?
- How fast can I change direction?
- How far can I turn the boat on a single stroke?
- Can I accelerate out of that turn on the same stroke?
- Can I maintain full speed whilst edging the boat left or right, forwards or backwards?

Other ball sports invest a lot of time on equivalent skills (eg. Football, soccer, tennis, etc...)

So how can we improve these skills? A good place to start would be to look at another discipline that utilises a very similar skill set to Canoe Polo, ie. Canoe Slalom. Stroke effectiveness and the ability to change direction and accelerate as quickly as possible are also critical skills to slalom paddlers. Slalom paddlers use a variety of stroke drills to improve these elements of their paddling, which are often classified as Stroke Kinetics (video developed by 5-time World Champion Richard Fox is available through Australian Canoeing). I believe that Canoe Polo paddlers would also benefit greatly by practicing these types of drills. They can be practiced to improve stroke mechanics and once perfected, can be used to improve strength and power in the boat. Another important factor is the reduced risk of injury through effective stroke mechanics and warm up.

The major elements of effective stroke technique are:

- Good posture – sitting up tall in the boat
- Torso rotation – favouring the use of larger muscle groups
- Grip and transmission of power to the blade
- Fast, effective stroke transitions
- Effective warm up

Good posture requires good flexibility, particularly in the hamstrings. If you struggle in this area, then this is your starting point to improve your stroke effectiveness. Being able to lean slightly forward from the hips with a straight back is the ideal posture for the forward stroke. This roughly equates to being able to touch your toes in long



Piranhas players, L-R, Anna Clark and Paul Main versus Andrew Kegele from Orange Roughies.

sit (sitting with your legs straight out in front of you) as a minimum requirement, and the ideal is to be able to reach 15 to 20cm past your toes! Range of movement in torso rotation is also a critical part of effective stroke technique. Flexibility can be improved by stretching in and out of the boat, and will naturally improve to some degree simply by sitting in a boat and paddling. Good posture allows good torso rotation.

Torso rotation is critical for power in almost every stroke (forward stroke, sweep stroke, reverse-sweep, draw stroke, and pivot). It all starts with the forward stroke and often paddlers who have not had coaching in this area will almost exclusively use only their arms to pull the blade through the water, while keeping their shoulders facing straight ahead. If you watch any top sprint paddler you will see them using almost exclusively the large muscle groups in their back and generating all their forward speed from effective torso rotation. These muscles have the ability to generate far more power to move the boat than using the arms alone. An effective forward stroke in Slalom or Polo is slightly different from this as the boats are far more prone to turning and it is acceleration that is the main focus, and therefore the arms are utilised to a greater degree. However, the major power is still generated from torso rotation.

Torso rotation is also vital for turning strokes. Anytime you want to change direction, the best place to start is to turn your body and face the new direction you want the boat to go. For example, if you are doing sweep stroke on the left you should rotate your shoulders around to the right then plant the left blade at the front of the boat and unload all the power from that wound up torso. Similarly, if you are doing a reverse stroke on the left, you should rotate your torso around

to the left and plant the blade on the back left hand side of the boat and again unwind that powerful trunk to spin the boat around to the new direction. The same applies to the draw stroke.

The amount of grip you can achieve with your blade on the water is another critical link in the chain of power transmission. A good catch at the start of any stroke will ensure that as much of the power your muscles generate will propel the boat in the direction you want. This is achieved by planting the blade fully in the water before pulling on the stroke and also ensuring that you present the most possible surface area to the water in the direction of the intended force.

Fast, effective stroke transitions will help to make the boat respond quickly and also to take advantage of the momentum generated by spinning the boat and also stored energy from pivots. These transitions can be between a stroke on one blade to a stroke on the other blade (such as a reverse-sweep to sweep combination), or between two strokes on the same side that are linked together (such as a draw to a forward stroke). For the former, it is important to keep the boat balanced while moving the paddle quickly through the air between strokes so that the boat continues gliding through the turn during the transition. For the latter it is important to keep in mind the start of the second stroke so that at the end of the draw the arm is outstretched towards the front of the boat for a full forward stroke.

An effective warm-up is also an important factor in stroke effectiveness, as it ensures that the muscles are ready to work through their full range while reducing the risk of injury. It will also help the body's energy systems to operate most effectively during the game, and improve acceleration through increased muscle recruitment. This warm-up should include some sort of aerobic activity to increase the heart rate, taking muscles through range to ensure full mobility, and some maximal sprints to improve neuromuscular patterning and recruitment.

Warwick Draper



David Bevan and Werner Bolz at the city race.



Robyn Ward and Jen Stevens.



Alex James and Louise Reside. Photos Roger Tralaggan.