

# PRIMARY SUCCESS



Looks can be deceiving – **Robin Williams** explains why your technique may look neat but is it also efficient?

PHOTOS: **PETER SPURRIER**

**W**hen we watch the Olympics I am sure we will all have opinions about how good this or that crew is. But sometimes the result goes against what you would imagine – the smooth, neat crew is beaten by the rough, physical one. So what's going on? I want to look beneath the surface of technique this month and try to outline the really important 'must-have' elements. Hopefully we can then all spot a winning crew without relying on first appearances!

Rowing is essentially a simple thing, but

a crew going by with uniform blades and body movements and assume that uniformity means speed. Neatness is fine, of course, and does matter in the grand scheme – but just tidying up the rowing doesn't guarantee the crew will be fast. Smooth technique will help because it saves energy, but it needs to be effective as well as efficient.

Look at the three scullers pictured – Mahe Drysdale, Ondrej Synek, and Alan Campbell took the medals at the World Rowing Championships in 2011 and most of us would say they have differing

## “ Good technique has a clear sequence of movement ”

there are many components to good technique: movement sequences, power production, stroke length, boat run, blade control, body control, posture, breathing, synchronicity, relaxation, balance and more.

When you are watching a crew go by, your eye quickly picks up on visible traits like the neatness of the blades, the togetherness of the squaring and feathering, the heights off the water, the depths in the water, and the phasing through the stroke. We can easily spot someone opening a body angle too early, or sliding out of time with others. Conversely we instantly admire

techniques. Single scullers often do because they can personalise what they do to suit themselves, but if you look at the early stages of the drive there is a key similarity. They all initiate the stroke with a clear leg movement. *Movement* is the key word here and as my bio-mechanist colleague, Paul Francis, has pointed out “whichever bit of you *moves*, that's the part of your body you are trying to use to *move* the hull at that particular point of the stroke”. So, ideally you would use the leg movement off the beginning to create your connection and to get the hull itself moving. In mid-stroke you would add your trunk movement

(open) to increase the hull movement, and finally your arms move (pull) to create even more movement in the hull and complete the stroke.

Commonly though, people get it wrong – and if, for instance, you try to move everything at once at the catch (i.e. push the legs, open the trunk and pull the arms all at the same time) they compete with each other, the consequence being that *none* of them can really move so they lock up. They've got plenty of load or force but all feel heavy and they only free up when the hull gives way a bit. Good technique has a clear sequence of movement through the stroke with the legs being the crucial bit: the 'primary technique'. If this is effective then you are likely to have a fast crew.

Looking at the Olympic crews or indeed those at any regatta this summer, see if you can spot this in their rowing and scrutinise their primary technique. That's a starting point for deciding if you think they are a fast outfit who might win. See if they are trying to move the legs as a way of moving the boat in the early drive.

Of course the leg movement needs to be connected to something – movement per se means nothing. Take an air stroke for example; with no blade in the water you get plenty of leg movement but none from the boat. So the primary technique comprises the leg movement and the back connecting the legs to the handle. I am going



Ondrej Synek of Czech Republic winning gold at the World Cup in Belgrade last month



Alan Campbell and Mahe Drysdale showing good primary drive

PHOTO: PETER SPURRIER

“Technique needs to be effective as well as efficient”



PHOTO: SEDAN STENOVIC / GETTY IMAGES

in to all of this in more detail next time but it is useful to describe technique in these broad terms to start with. Paul Francis defines it like this:

- Primary technique: leg drive & body connection / swing (force production).
- Secondary technique: shoulder draw and arm pull (force transmission and acceleration).
- Tertiary technique: hand movements (exit, blade skills, entry).

The tertiary technique is often the part we notice. Because it is mostly out of the water and therefore visible, we often judge a crew based on this. Furthermore we spend a lot of time training and practising, and I would bet most of us devote the majority of our technique time to the tertiary areas. Again, nothing wrong with that because it needs to be right and is important, but I have come across athletes who just never move boats fast because

they cannot grasp the primary technique. Despite the simplicity of the three components they complicate the process. If you use your legs to supply the movement into and out of the front end, your back to keep still and brace the legs, then the only choice you have to make is when your hands drop the blade in the water.

On camps in Italy I regularly see hordes of ten-year-olds sculling with horrendous bum-shoves, but they **all** move their legs. They might not know how to connect them well but it is clear that the coaching message has been delivered: “your legs need to move first”. If you see a crew with slow legs, look at their bodies and the chances are they are opening too early. If you see no trunk acceleration they are likely pulling the arms too soon.

So, good primary technique means letting the legs pick up speed followed by the trunk, not both together and good secondary technique means

using the hips and shoulders before the biceps. The phases overlap of course, and the three-picture sequence shows this. Why not put your technical eye to the test this summer and see if you can spot the winners before they win?

## Robin Williams

Robin coaches the GB women's pair who won silver at the 2010 and 2011 World Rowing Championships. He coached the lightweight men's four to gold at the 2007 Worlds and to fifth at the 2008 Olympic Games. From 1995 to 2005, Robin was Chief Coach at CUBC, achieving seven wins out of 10 in the Boat Race against Oxford. After learning to row at Monmouth School and then representing the University of London Boat Club, he gained his first GB vest in 1981 when he was selected for the Worlds.



Olympic champion Mark Hunter demonstrates how the different phases overlap in the stroke sequence

SEQUENCE: DON SOMNER