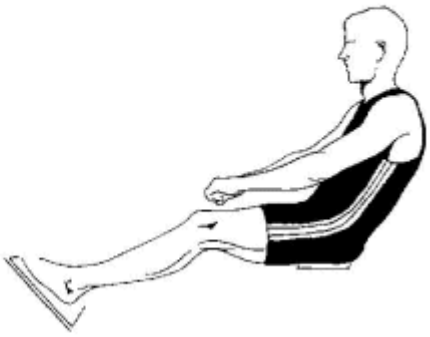
Technique

With thanks to Warwick University

Notes on Technique:

The essence of the Cambridge technique is that rowing is all about pushing, rather than pulling. The legs are the strongest muscles, they should do most of the work and the leg movement in the boat is a push. The objective is for the legs to push the boat past the point at which the blade has been locked on. There is no question of pulling on the handle or of the blade being moved through the water - the blade stays still, with all the energy being focused on moving the boat past the spoon of the blade.

Oarsmen who row with a lot of upper body tend to visualise the most powerful part of their stroke with themselves with fully flexed triceps and lats somewhere towards the end of a stroke. Oarsmen who use the Cambridge technique visualise the most powerful part of their stroke as the leg drive, with the back and shoulders locked so that they are 'hanging off' the handle.



The components of the stroke

Inevitably, a coach has to break down the stroke into various phases. However, bear in mind that these phases must flow from each other and into each other, producing a continuous and fluid movement.

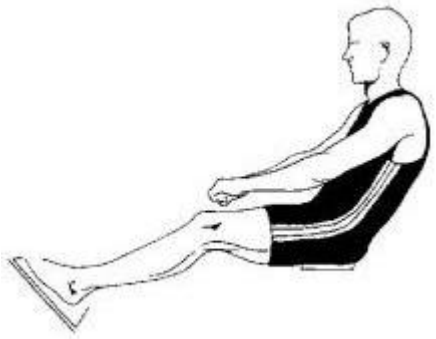
Coaching the catch as the starting point is flawed - an oarsmen will never perfect the catch unless he has learnt how to put his body in the correct position prior to connecting with the water. For that reason, we'll start with the recovery (i.e. the instant that the blade has been extracted from the water).

The Recovery

Aims:

- To let the boat do the work whilst the oarsman rests and breathes
- To rock over onto the toes as a crew

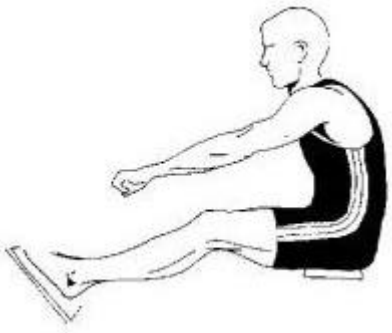
Steps:



1. The hands should move away from the body at least as fast as they were drawn into it. This should not be forced, but should flow.

2. If the finish has been properly executed, the boat should be running at its maximum speed and the boat should be level - this the oarsman's only opportunity to rest. To achieve this, the shoulders and arms should be relaxed - stiff shoulders and locked elbows are to be avoided.

3. Physiologically, the most efficient breathing pattern for an oarsman is to exhale on the finish and then inhale immediately so DON'T FORGET TO BREATHE.



4. Once the hands are 'away' the body must be rocked over into the catch position. It is vital that this movement comes from the hips and not just by leaning forward from the shoulders. The whole upper body must be rocked without rounding the back - this cannot be achieved unless the knees are held down until the rock has been completed. Achieving this in unison is the easiest way to create rhythm in an eight or four.

5. The rock over should also achieve a transfer of the oarsman's weight from the seat to the footplate. The key to achieving the 'push' off the catch is to have the weight on the toes as early as possible and then to build that pressure as the oarsman comes forward on the slide.

The Slide

Aims:

- To hold the body position achieved in the recovery.
- To build the pressure on the toes.
- To stay relaxed enough to allow the accurate placement of the catch.

Steps:

1. The body position should remain relaxed and should not alter from that achieved from the rock over.

2. The slide should be at an even pace, with no rush to frontstops.

3. The slide should happen under its own momentum as a result of the 'hands away' and 'rock' movements. This should lead to the oarsman 'floating' up the slide. It should not be necessary to use the ankles or feet to pull the seat up the slide.

4. As the boat moves beneath the oarsman and the seat moves towards the frontstops, there will be a gradual transfer of the weight of the oarsman from the seat to the footplate, building the pressure on the toes.

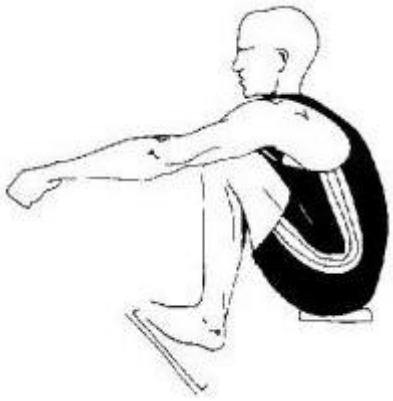
5. The oarsman should use his inside arm to square his blade as it comes over the toes and should let his hands rise gently into the catch.

The Catch

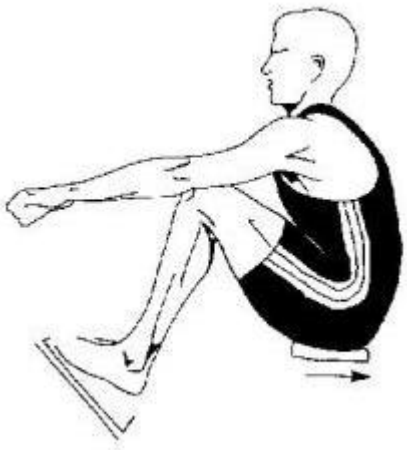
Aims:

- To PLACE the blade in the water from the position of maximum length.
- To apply the 'push' to the blade immediately.

Steps:



1. At the instant that frontstops is reached, the blade should be placed in the water using the outside arm. If this is not achieved instantaneously, one or two things can happen - (1) the leg drive is applied without the blade being locked into the water (rowing in the catch), in which case all of the leg drive is forcing the boat backwards; or (2) there is a pause at frontstops which causes instability, timing problems and a loss of the run on the boat.



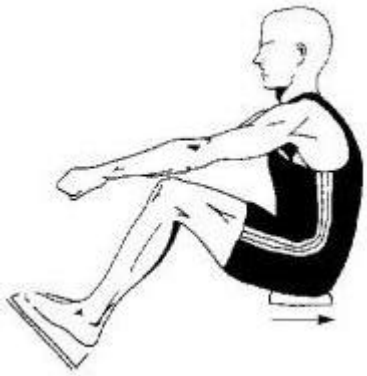
2. Avoid trying to 'slam' the catch - it wastes energy, causes instability in the boat and leads to the development of a two-stage stroke (catch, followed by finish with nothing in between) rather than a smooth application of power.

3. Applying the leg drive as soon as the blade has been placed into the water in order to lock the spoon into place. The push should be applied only from the toes, keeping the back and shoulders locked, and the arms straight. Avoid using the shoulders or arms as anything other than a way of connecting your legs to the handle.

The Drive

Aims:

- To apply the full power of the leg drive smoothly whilst 'hanging off' the blade.
- To accelerate the boat to its maximum speed.
- To coordinate the application of the back, shoulders and arms.

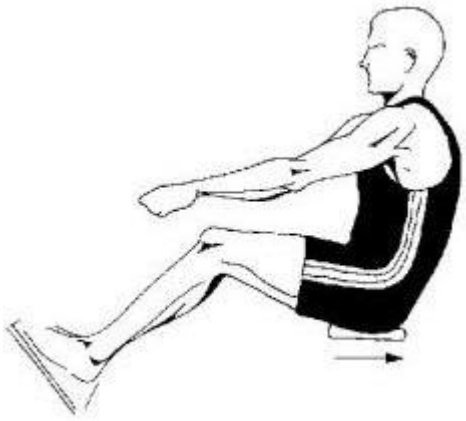


Steps:

1. There should be very little of the oarsman's weight on the seat during the drive. The knees should come down smoothly, but as quickly as possible. The arms should still be straight with back locked and the oarsman 'hanging off' the handle of the blade.

2. The oarsman should not have used any power from his shoulders or arms until the legs have been straightened. The back will naturally 'open' towards the end of the leg drive.

3. The oarsman should then initiate the first part of the upper body effort by pushing his shoulders back.



The Finish

Aims:

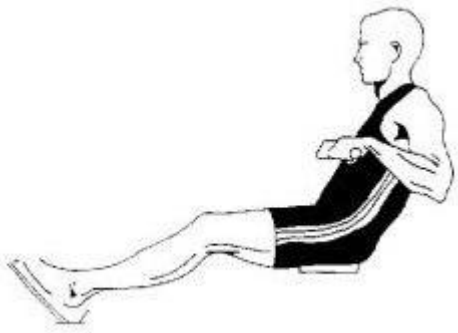
- To maintain the speed of the boat with a quick movement of the arms.
- To draw the blade up so as to allow a clean 'send'.
- To extract the blade cleanly and together.

Steps:

1. Assuming that the drive has been properly executed, it will be almost impossible to increase the speed of the boat with the arms as they cannot match the power generated by the legs and lower back. The best that can be hoped for is to maintain the speed of the boat and to set up the 'run' between strokes by sending the boat cleanly away.

2. The smoothness of the rest of the stroke can also be lost if the oarsman 'yanks' the blade through the water. A properly executed finish involves a 'draw and squeeze' rather than a 'pull'. However, this should not be taken to mean that there should be any lack of effort - the arms still need to produce considerable power, but in a controlled way. The consequence of a lazy finish can be that the effort at the catch and drive is lost and no run is achieved

3. The elbows need to be drawn quickly and smoothly past the body, with the effort being concentrated on the outside arm and shoulder. The inside arm should steady the blade and produce power towards the very end of the stroke, but will inevitably not exert the same effort as the outside arm.



4. Both arms should be used to guide the blade up into the chest at the finish. Without drawing up, the finish cannot be 'sent' as there is no capacity to tap the blade down and away.

5. As the handle reaches the chest, the outside arm should be used to tap the blade down. The blade must remain square until it is fully extracted from the water - only then should the inside arm be used to feather it.

Please pay careful attention of these notes, especially when you do your winter practices.