
Lake Washington Rowing Club
Novice Sculling
Lesson Plans

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Appendix A: Trouble Shooting Sculling by Frank Cunningham

Sculling Day 1

Equipment: VCR, Safety Video, Erg, Scull, Dowel - optional

Objectives: To learn about rowing safety.
 To learn the basic rowing stroke through the use of the erg.
 To begin understanding the hand hold and how the blade works.
 To learn about the equipment.

Guidelines:

Check class roster. Have all the students signed a waiver and submitted their float test form? Take the class upstairs in the board room and watch the USRA Safety Video. You may elaborate on the immediate concerns they may run into i.e. tipping the wherry, boat traffic. Be careful not to confuse or scare the class before they can actually see what rowing is all about.

1) Bring the class down to the ergs and begin teaching and demonstrating the basic rowing stroke. You may want to point out the particulars to which the students should pay close attention to, like their posture. *Demonstrate with your feet on top of the straps.*

- For simplicity- you may explain that the stroke has 3 parts that ultimately will become one fluid motion: LEGS ó BACKS- ARMS (shoulders).
- Explain the catch and finish, swinging from the hips and squeezing the shoulder blades together. Again, pay special attention to the way in which the lower back is positioned.
 - The best way to show students how this is done is to ask them to stretch their hamstrings while they are sitting on the floor with their legs straight in front of them. They will discover that they are tensing the muscles of the lower back as they ought to an instant before each catch.
- Keep Students relaxed, including relaxed hook - like hands positioned on the handles.
- After rowing upper body (arms and back), add ½ slide on up to full slide.

2) At the finish, they want to look like a begging puppy dog- elbows down with the handle all the way in (about their 3rd rib) and wrists up.

- *Demonstrate the difference between pulling only with the shoulders (high), and pulling with the latissimus muscles (low).*

3) After responding to any questions, show the class where the club sculls are. You may discuss briefly the differences between sweeps and sculls.

4) Using a scull or a dowel, *Demonstrate the hand hold and the action of the hand (fingers) for squaring the blade. Show and explain the difference between using the fingers and using the wrist - The purpose is to learn quickness and to use less muscle in the forearms; thus avoiding tension.*

- At the beginning of the catch the forefinger lies on the very edge of the handle. The thumb covers the end of the oar. Using the middle finger as an anchor, there should be a straight line from the middle knuckle all the way up the arm. Imagine hanging from a pull-up bar.
- To allow the blade to square, the handle is then rolled across the thumb. Keeping the wrist still is a consequence of using the thumb to feel the passage of the handle back and forth. ***Explained in more detail on Day 6.***

5) Finally, pull out a single, or walk them down to the dock and show them a wherry. Point out the different parts, step areas, and the importance of tightening oarlocks.



Sculling Day 2

Equipment: Lifejackets, Dry Bag, bow lines (ropes 3-4), launch key, gas and megaphone.

Objectives: To learn how to handle the wherries on the dock.
To begin to understand how to control the blade and boat through the senses of touch and hearing.

Skills: -Learn how to put the sculls in the boat and how to enter and leave the boat safely, quickly and gracefully.
-Learn the concept of balancing the boat.
-Learn how the blades work above and in the water: pulling and backing.

Guidelines:

1) After a brief review on the ergs, have the students find a set of sculls, wood or carbon fiber. Tell them how to carry the oars- blade tips in front.

➤ Pros for wood oars: heavier so the blades fall into the water (especially when windy). Con: may be over squared too easily.

2) Start with 3 wherries- you may find it is easier to get one down first and do all the demos. Be sure to cover safety protocols: being alert, placing blade tips down and out of danger, carrying wherries to and from the water, etc.1

➤ Tie the wherries to the dock stern first. This way they have a leash to come back on and you do not have to worry about them floating away. Rotate the class through a couple of times and when you feel confident, feel free to take them off leash. Just keep them all around the west side of the water by the tug boats and blue dry dock and/or just in front of the dock. You will want to be in the coaching launch, though.

➤ *Demonstrate how to put the sculls in; reiterate where to step; and then show how to get in (Butting handles together over feet is preferred).*

3) At this point they should be aware that the sleeve has 3 flat sides. Show how the scull is feathered and squared. **Tell them when they are not rowing they are to have blades flat on the water at all times. Never let go of the handles.**

➤ Proceed to the balance drill- *you can demo letting go of the handles and letting the boat balance for itself.* They need to respond to every roll of the boat, with an immediate correction of either an upward or downward movement with the handles.

➤ Point out that the blades do not lie perfectly flat on the water. Explain how the blade skims across the water for regular rowing vs. keeping the leading edge up when backing. *Demonstrate this on the water by dragging the blade on the water to the catch position and dragging it back into your body with the leading edge up.* Have them practice this as well.

4) *Lastly demonstrate rowing with arms and back, recovering with the blades on the water. You can show adding in legs, but do not have them row with legs unless they are stable in the boat. (Tell them that the feet do adjust but unless there are some extreme cases, they do not need to worry about their feet for the first day.)*

➤ Explain catching with left hand in front of right, the importance of pulling all the way in.

- Emphasize the correct hand hold for squaring of the blade when it is ready to enter the water and for releasing the blade at the finish. Hand holds will inevitably be rough the 1st time in the boat due to death grips. Just try to get them to relax as best you can.
- There is no rush to catch. Tell them to reach, keeping the blades flat on the water, and square the blades only when they are ready to catch with arms and back; that is, when the back is ready to swing open.
- Then, progress into backing. You can introduce backing the boat down and turning around either by rowing with one oar or using both hands- alternately or simultaneously. Do not try to teach them to hold water yet; it may just confuse them as well as send them into the water.

5) No matter what they are doing, whether it is rowing or backing, the boat is to be balanced at all times. Point out blade depth and other points you may find simple but new comers may not realize.

6) Do not spend too much time with docking. Tell them it takes practice and you will explain in more detail over the next few classes. Show them how to get out when done.

7) Tell them they need to look behind them on the recovery every 2-3 strokes and to stay aware of their location and other objects. They need to communicate with others by yelling if they see someone heading towards them.

Just be sure not to overload your participants with too much information too quickly.

Drill Suggestions:

Weather permitting; you may want to have them play fishy in the water with their hands. This can help them understand the proper use of the blade.

- ❖ Have the students put their arms up to their elbows under the water parallel to the surface, and row, turning their hands to push the water back (pull through), and to return for the next stroke (recovery).
- ❖ When they can manage this without bringing the hand to the surface, ask them what they observed about the turning of the hand at each end of the stroke. Did it precede or follow the change of direction of the hand and arm? *ANSWER: The hand/blade should turn AFTER the arm/oar moves to propel the water. At the end of the stroke, the hand/blade turns in anticipation of the change in direction.*
- ❖ Next, the students should continue to experiment, bringing the arm to the surface so that the feathered hand skims the surface and the squared hand takes the water half covered. This part should be carried out forcefully, dislodging the water in sheets.
- ❖ The last phase of the experiment reproduces the effective use of a real blade. This is the moment when for the first time a vertical dimension appears in the stroke. The hand is carried just far enough above the water to allow the hand to come nearly square without touching it. It is very quickly immersed and drawn though at an even depth. Just before the completion of the stroke the hand is again turned, this time under water to allow the recovery to begin while it is still covered.

Important Reminders for the students:

- *Never let go of the oars.
- *Never let your handles go past your body.
- *Continue to look around every 2-3 strokes.
- *The goal is to keep the boat-balanced.

For the Coach:

- *Always keep an eye on your students, tipping can occur suddenly.
- *Speak with optimism and encouragement.

Sculling Day 3

Equipment: Lifejackets, Dry Bag, launch key, gas and megaphone.

Objectives: To begin to acquire skill in the management of the boat.
To continue acquiring a working vocabulary appropriate to the sport.
To Stop.
To gain a firmer idea of appropriate holds for pulling, stopping and backing.

Skills: -Learning to Way Enough and hold water.
-Begin to clarify the sequence and order of the handles as they are brought - through the stroke.
-Begin to sense the depth of the blade and use them at the correct depth.

Guidelines:

1) Begin the day with a verbal review and then a demo of what they have already learned and what you will be introducing to them.

2) Start to explain how to adjust their foot stretchers and where to place them. Be sure to check each student out before shoving away from the dock. (Test position is at the finish with elbows down, wrists up and sculls pushed all the way out in the oar locks.)

3) When showing them how to stop, explain why we do it the way we do. It is more efficient by forcing the boat down into the water, and because frequently when you are holding water you are about to run into something; therefore, this gets you into the backing position quickly.

- Be sure they play with the scull slowly to crab it into the backing position. They need to have a firm hold when stopping (the closer the handles are to your body the more stable you are).
- **Note: Do not have them try this until they have gotten their bearings and seem fairly stable.**

4) *Demonstrate the progression of the legs; some of them may be ready to add in legs, but start with ½ slide then into full slide.* Allow those who do not seem ready to add legs (i.e. unstable people or more uncoordinated people) to remain rowing with arms and back. The great thing about a sculling class is that they all get to learn at their own speed.

- Again, emphasize the squaring of the blade right at the catch. When the legs are added in, a continued reminder of this sequence may be necessary.
- **They will continue to recover on the water, until they have a firm grasp of the connection between the legs and the blades entering the water.**

5) You may introduce docking as well: Come in at about a 45 degree angle or less and then hold water with the water side scull when the bow is just a few inches from the dock.

6) Tell them to sense rather than think. For example, sense with the fingers exactly where the blade is relative to the water and what angle it makes to the water when it is being used to move the boat and when it is idle or feathered.

Drill Ideas:

One Armed Rowing: arms and back only balance the non-rowing arm on the thigh; and while looking at the blade, notice its blade depth. Be sure they use their back swing.

Stopping: For those ready to learn how to stop; have one at a time, take 5 strokes and hold. Give attention to each student at first while they attempt this difficult skill.

Important Reminder:

Note: Be sure to go over the rules of the traffic pattern: looking both ways when crossing over, and paying particular attention while going underneath the bridges. You will again need to keep an eye on all scullers even when you're off helping someone else. The best place to keep them is in the canal in between the SPU dock and the Fremont Bridge.

Sculling Day 4

Equipment: Lifejackets, Dry Bag, launch key, gas and megaphone.

Objective: To continue learning the flow of the rowing stroke.

To maneuver the boat to and from the dock.

To understand how to keep the boat in a straight line

Skills: -Leg drive, progressing up to full slide by the end of class.

-Become more comfortable in the boat as well as at all points in the stroke.

-Become better at stopping the boat.

-Learn about Bow and Stern Points.

Guidelines:

1) *Demonstrate shoving away from the dock by using the water- side scull to angle the boat away while staying level.*

➤ *Then, take little backing strokes with the water- side scull in order to continue swinging the bow away, which allows you to reach up and take regular strokes with the dock side oar. They will have a tendency to let the non-rowing handle fly in the air.*

➤ **Note that you may still need to push them off and be ready if they lose their balance as they come up the slide to take a stroke away.**

2) You may continue with drills from Day 3 and add the legs up to full slide. As students become more comfortable and aware, use your best judgment on individual learning abilities and when to go further into the art of sculling

3) You can tell them that the wherries are hard to keep straight, but sometimes, if a blade goes deep and/or one scull comes out of the water sooner than the other, that this will certainly affect their course.

➤ To avoid having a student stop every other stroke to adjust their course, be sure to tell them that they can just pull harder and quicker with whichever scull to regain their course. And with that, explain what a bow and stern point are. Be sure to tell them that these points will have to be changed due to uneven shore lines made by parked barges, tug boats, sail boats, not to mention house- boats.

Sculling Day 5

Equipment: Lifejackets, Dry Bag, launch key, gas and megaphone.

Review, Re-Demonstrate and Encourage.

Depending on class ability- Day 6 drill suggestions may be started today.

Objective: To feel the cadence or rhythm of the stroke.

Guidelines:

1) All of the students should be at full slide by this point. Now they want to begin to feel the rhythm of the stroke.

- *You can use several different sequences to help explain the rhythm.* 1) A waltz or dance feel of a 1 2---3---. Count 1 is the drive through the release and the count of 2---3 are during the approach up the slide. So it is a quick, slow, slow.
- Or 2) If you choose to count the release separately it would be a quick (Drive), quick (Release), slow, slow (2 beats up the slide on the recover).
- Or 3) After they reach ¼ slide have them do a full 3 second count: catching on the AND of the 3. Understanding the rhythm makes rowing easier and improves speed.

Important Reminders for the students:

- *Balance, Balance, Balance.
- *Hand Holds.
- *Practicing stopping and doing 360s.
- Boatmanship and blade work.

For the Coach:

- *Rotating Eyes!!
- * Give mini group lessons as well as individual.

Sculling Day 6

Equipment: Lifejackets, Dry Bag, launch key, gas and megaphone.

Objective: To learn how to catch.

To learn good blade depth, this comes from a good catch.

- Skills:**
- Quick and sure manipulation of the handle, emphasizing the use of the fingers and reducing the play of the wrist to an absolute minimum.
 - Keying the engagement of the blade to the springing off of the stretcher or, if no slide is used, the quick throw of the back. In either case, the arms are to be used only to connect the hands (hooks) to the shoulders.

Guidelines:

1) Before going out- *Demonstrate the catch on the Model A Ergs, while holding the fan- the student should be lifted off the seat as he/she drives with the legs.*

- Watch for people catching with the arms. The catch should be made with the quads. Ask them if they feel it in their quads and then slowly let them down the track using the correct sequence.

- Tell them to relax and pull them up to the catch, by rotating the wheel. Arms and body go forward. Hamstrings should feel a stretch. Then, the seat goes up the slide while the back remains at the correct angle. They need to take this feeling into the boat.
- 2) At the catch, one must be at a position of perfect stillness and repose, correct posture, and wrists flat.
- The handles must be under the middle knuckles of the middle fingers, forefingers at the end of the oar and the thumb's knuckle on the lower curve of the handles. Now they are ready to catch.
 - In order to make the catch, the scull is rolled quickly under the big knuckles by flicking the fingers downward, and allowing the thumb to rub along the end of handle. When the oar is squared, the handle is in the crook of the thumb and the wrists are still flat.
 - The legs are driven simultaneously, moving the body away from the foot stretcher.
- 3) Using Bill Tytus's analogy of the bike wheel- the idea of the catch is to pick the boat up quickly on every stroke. This keeps the boat on its water line.
- It is much more effective to catch while the ergometer wheel is still spinning, than to let it slow down and try to get it back up to speed on each stroke.
- 4) Having the class row between discussions is essential to give them time to work on what you have told them. However, unless the class is incredibly diverse, have them regroup periodically to do group drills. This is also dependent on boat traffic and weather. If it is windy it is hard to keep them together.
- 5) All of this discussion as well as the drills below should improve the effectiveness of their catches. If they learn to drive the legs before they swing the back and bend arms, then their blade depth should be correct, but drills to work explicitly on depth are on Day 7.

Drill Ideas:

Legs Only Drill- Keep their upper body in its forward reach position and have them make a catch on your call using just the legs.

- ❖ Result should be that the legs move down the slide with the body in that forward reach position (a 45 degree angle or so). This also emphasizes the back posture at the catch.
- ❖ Moving the body as a unit is essential- Get them used to the feeling of stretching their arms and shoulders out at the catch.
- ❖ From this you can move to emphasizing holding the legs down at the finish and then swinging the body to the catch angle quickly. Note that there may be some people who continually stay very tense at the catch causing them to catch with their arms. The next drill is great for correcting this:

The 12 Ounce Drill ó row with no pressure whatsoever. They want to put the blade in quickly but as soon as the blade goes in, they let the oar float in as their body follows it.

- ❖ This helps them realize the blades do know exactly what they want to do, and gives them a relaxed feeling through the stroke.

Modified Catch Drill - Certain members of the class may need simple reminders to square at the catch. Have them sit at about ½ slide and just square and feather continually and then have them row ½ slide one stroke at a time, on your call.

Sculling Day 7

Equipment: Lifejackets, Dry Bag, launch key, gas and megaphone.

Objective: To continue advancing in skill.
 To achieve a better understanding the Finish or Release of the stroke.
 To understand why what they are doing makes the boat move faster.
 To refine blade work, as necessary.

Guidelines:

1) It is always important to give a brief review and demonstrations addressing what problems your class may be having. You may find that the drills for Day 6 are more appropriate for Day 7, or else, if they showed a lot of progress with the catch on Day 6, move on to the Finish or Release. Become a stickler about the hand hold.

2) Discuss the release: keeping the toes down on the foot boards; applying the pressure all the way through to the body by squeezing the shoulder blades while at the same time moving your head out of bow.

➤ Be careful not to confuse those who are not ready for it, but feel free to start that discussion with those who seem to be toiling along with no serious problems.

3) Day 7 may also be a good day to allow them to do a lot of experimenting. Practicing docking over and over would be good.

4) If you have not already done so, start emphasizing the importance of establishing their reach early.

➤ Gaining position quickly after the release before moving up the slide allows one to be able to press the stomach into the legs to slow the slide, a natural braking system. This might help: ðFlare (like a duck) or Glissando (slow sliding)ö up to the Catch. Feel free to use Frank's analogy of a duck landing: ducks flare their wings back right before they land. This will help the rhythm of the stroke as well.

Drill Ideas:

Finish Drill ó For those who seem ready, you can try the finish drill: Sitting with legs down, in the layback position, arms out about a foot with a slight bend of the elbows. On your call they pull hard with the shoulders; squeezing the shoulder blades together; drawing the hands all the way in then shoving them away and ending at ½ slide.

❖ The result is to become aware of what happens to the toes and how to prevent the toes from coming off the foot board as well as being able to squeeze the finish and letting the release just happen, quickly and quietly.

The 12 Ounce Drill combined with the Finish Drill. The result would be an emphasis on seeing what the blade does at the time of release and all that is needed is to push away and get the forward reach established.

Leaving and Approaching the Dock ó You can just have them do circles into and out of the dock, practicing the landing as explained in Day 3.

❖ It is important to give them time to practice this, especially for those who will want to join the club. They need to be self sufficient.

1/2 Blade ó Rowing ½ blade gives them an idea of where their body and arms need to be in relation to the blade. Having them pull in with ½ the blade covered will help them establish the proper handle height and a quick catch.

- ❖ Generally when rowers do the ½ blade drill, they actually are in the correct depth. So it's a self correcting drill more than anything.
- ❖ If they are at the correct depth, the release will be easier, since they will not be trying to get the blade out of the water by pulling down.

Sculling Day 8

Equipment: Lifejackets, Dry Bag, launch key, gas and megaphone.

Objective: To continue learning and advancing the skills introduced over the last 7 classes.
To give a Final Skills Check.

Guidelines:

1) Day 8 should be used to do a **Final Skills Check** consisting of but not limited to: Shoving off from the dock, Stopping the boat, Turning around using both sculls, Backing, Docking, and going in a relatively straight line using bow and stern points.

2) You can start to introduce **recovering off the water** for students who seem ready. This would be for those that have a good connection at the catch. Some may be ready to do this in Day 6 or 7. Use your best judgment.

- At the release, the handles will need to be pushed away in a slight downward angle in order to lift the oars off the water. When they go to catch, it is a **slight lift of the hands** to drop the oars into the water. Again though, keeping the connection with the legs quick and sharp. The oars should just plop into the correct depth.

Please have your class complete the Evaluation Forms located in the LTR Box.

Please give class information sheet about future classes and membership.