Periodization of Technique Shaping Exercises

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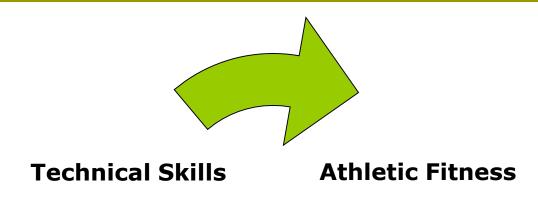


" Just because you can read a cookbook, it doesn't make you Emeril Live!" Coach Giovanni

The Purpose of Coaching is to Improve Athletic Performance

- Total Athletic Capacity requires the coordination of various components
- Coaches should keep their eye on the "Big Picture"
- All sports are dynamic, all require:
 - 1. Technical Skills
 - 2. Athletic Fitness (physiology)
 - Psychological Factors (skills)

Total Athletic Capacity





Periodization- Yearly Training Plan

- 1. Incorporate a Technical Training plan into the components of your Yearly Plan.
- Macrocycles- Phases (I-V)
- Microcycles- Weekly, Bi-Weekly Plan
- 4. Daily Training Plan
- 5. Practice Plans

Daily Training Plan Assumptions

- 90-120 minutes of training time (includes warm-up and on-land teaching)
- Time has been spent teaching on-land prior to going on water with use of:
 - Video
 - Dock rower or tanks
 - Ergometer
 - Boat held dockside
 - Watching experienced rowers

GVSU Rowing Thursday, October 25, 2007

FOCUS: The 2nd Half of the Recovery: (Slowly Forward)

- -Once hands are away, constant speed over the length of the recovery.
- -Knees rise slowly and evenly. The wheels move in time with the blade.
- -Maintain UB posture once body angle is achieved (prior to the start of the slide).

Remember: When the slide starts the run stops.

Emphasis: Posture/Timing of the Catch and the Release/Finish

"Release the bottom edge of the blade to the bow" "Drip Dry, Hold the Blade High""

"The catch is the end of the recovery" (LENGTH!)

"Reach the bottom edge of the blade to the bow ball"

**The concept of the "Rollback" **The concept of the "4/1"

**The concept of "Squaring DOWN"

!!!!!!!!"Edge Control" Square entry and square release!!!!!!!!

"The hallmark of a good oarsman is a smooth and relaxed recovery"! Fairbairn

5:30am EVERYONE Meet at the RTC - Coxies do lights and check boats!

Workout: 4 x 10' by 4's and 6's

Warmup w/ swing pick (Squared/feathered) by 4's, must be kept at 2:1 ratio or greater.

1st 10' = 2 pause rowing then 1 pause rowing (Release/pivot then last 4")

2nd 10' = 4:1 ratio rowing focused on body angles/blade timing/seat speed

3rd 10' = Stationary Drills w/ Feather followed by Recovery Sequence

4th 10' = 1,3,5 x Drives. Placement Drill w/ drive THROUGH the release to FINISH.

Additional Drills: by 4's and 6's. With your feet out of the footstretchers.

A- 2 pause: Focus on pivot (shifting body weight), then glide slowly forward.

B- 1 pause: From Finish/Hands away then poise and gather. Slowly Forward.

C-1, 3 5 strokes at a time.

D- Audible count rowing. Count out loud 4 seconds from release to catch.

E- ST.ST. Rowing with Feet out of stretchers.

Workout: "The October Surprise!"

Thursday Weights on Own: Power Training

Squats –	75% of max	3 sets of 10 reps
Bench Press	65% of max	3 sets of 10 reps
Sit-ups (feet-up, full range)	10-25lbs.	3 sets of 15 reps
Wrist Curls	25 - 50 lbs.	3 sets of 12 reps.

Designing a Practice Session

- Practices should be designed for maximum participation. "The more they do the more they learn".
- Initially demonstrate skills on land, so you are all speaking the same language
- Student/athletes remember:
 - 10% of what they hear,
 - 60% of what they see,
 - 90% of what they do!

Keys to Fairbairnism

- Emphasized coach and athlete focus on the blade rather than on the body.
- Emphasized the learning attributes of the visual rower...Fairbairn said it is OK to look at the blade.
- The oarsman learns to coach himself.
- The best coach is the rower in the boat who is able to coach his own blade to perfection.
- Visually is how the majority of the population learns most skills.

Keys to Fairbairnism

Very Visual Cues

- Lateral pressure button against the oarlock
- Rounded releases bottom edge of blade.
- "Strike TO the Balance" click
- High feather (Carry) level w/ oarlock
- Balance the blade in the air on the sill of the oarlock" (image - high wire act using a pole)
- Gather and Poise on the Footstretcher for the Entry
- "Strike FROM the Balance"- Square Down!
- "Make the Water Boil"

Sequencing of Technical Drills during the Shaping Process – From ACEP

- Shaping
- Targeting
- Modeling and Mimicry
- Manipulation
- Whole/Part/Part/Whole Method of Teaching
 - Repetition is the Key to establishing skill.

Shaping-Reinforcing Progressive Approximations

- Successful coaches of beginners are masters of shaping in their sport.
 - Novice coach most important coach.
 - Neuro-muscular function...increase chance of success
 - 1st 10,000 strokes vs. unlearning.
 - Rested athlete learns more...first 45 minutes of practice.
 - Injury prevention-safety-less "noise"
 - Where **noise** comes from distractions, exhaustion, negative attitude, not understanding what is being taught.
- □ Take the word "Don't" out of your vocabulary... "Protect the ball"... "Tom, keep the blade buried"
- Catch the athlete "doing it right" and end on a positive note.
- Initially reinforce all successes, then gradually decrease reinforcements.

Principles of Shaping

- Reinforce progressive approximations of a skill.
- Have the same coach work with the athlete through the shaping process.
- Set a desired standard (vertical shins, elbows over the knees).
- Establish criteria leading up to each standard.
- Raise the requirements for reinforcement slowly. "Initially praise small improvements".
- Reinforce the athlete as they reach intermediate steps/ goals.
- Shape only one behavior at a time (release, etc.)
- As the athlete moves to the next step, relax the previous step (ex. Going from square to the feather)

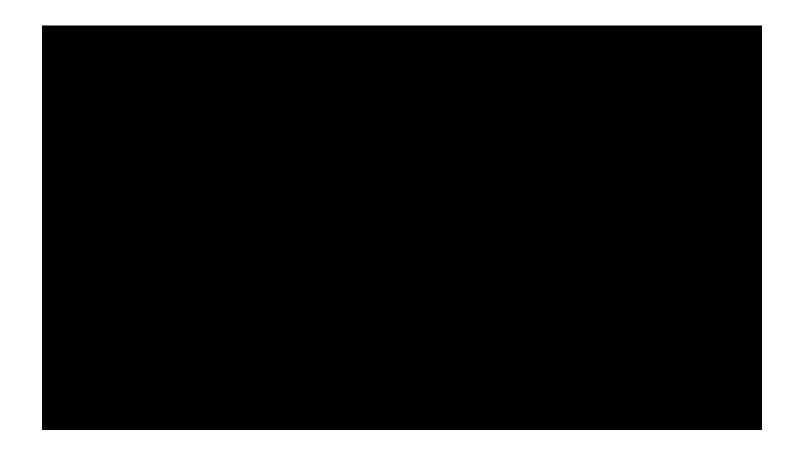
Principles of Shaping (cont.)

- Try a variety of approaches. Seeing, Hearing, and Doing (is best). Use lots of video.
- Expect some resistance and frustration.
- Again, make the shaping session your top priority.
- If performance deteriorates markedly, take a break and start over. Or just let 'em row.

Targeting

- Drawing the athlete's attention to the skill.
 - Example of targeting would be having the athlete focus on the finish and isolating just the hands. The coach then talks about focusing only on the hands, then the hands and elbows, then shoulders, etc. etc.
 - Another example: Focus on feet...using mindfulness exercise, heel to toe.
 - Remember, one skill at a time.

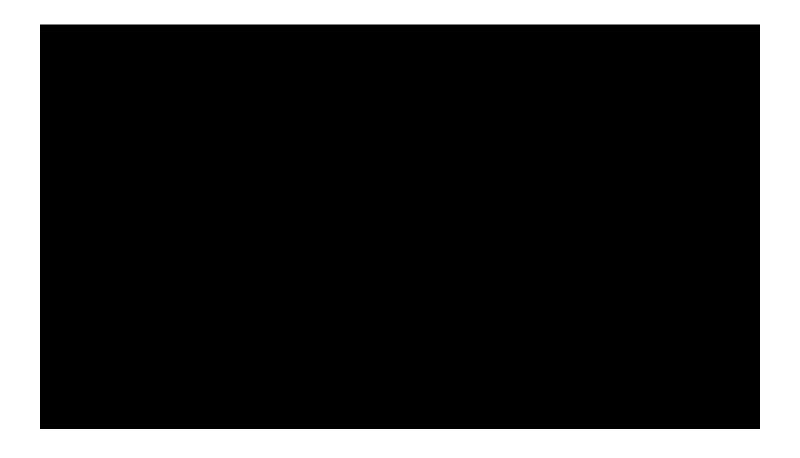
Targeting



Modeling and Mimicry

- Techniques in which you first demonstrate what you want the athlete to do.
 - You can demonstrate on an erg, in a tank or using video before you go out on the water.
 - Have an experienced crew/athlete demonstrate to another on the land/water.
 - Following an experienced athlete on the ergo.
 - Two crews rowing side by side by 4's/6's, having the group not rowing watch the other boat while the coach points out correct motion.
 - Watch a video of correct execution of the stroke.

Modeling & Mimicry



Manipulation

- The final aid in the shaping process. In this technique you physically move the athlete through the skill or action you are shaping.
 - Done on an ergo, in a rowing tank, in the boat alongside the dock, or by using an athlete sitting behind another in the boat.

Manipulation



Shaping Behaviors

- Step 1: Coach provides targets
- Step 2: Coach uses others to model
- Step 3: Coach manipulates athlete, demonstrates or uses others to manipulate

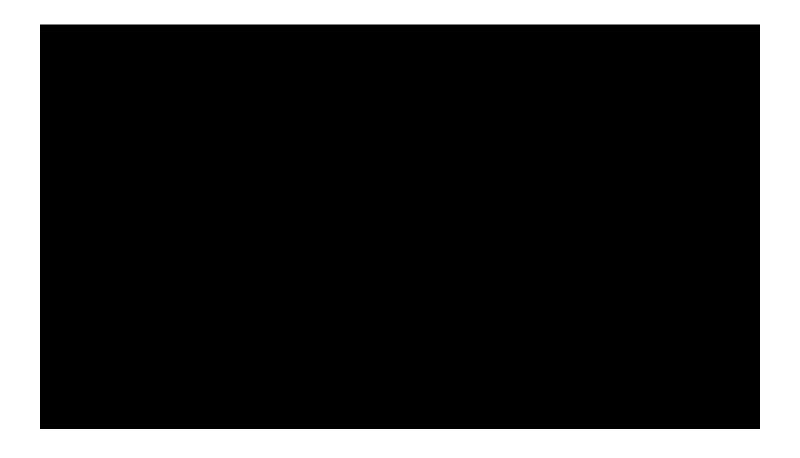
Step	Targeting	Modeling	Manipulating
1			
2			
3			

Shaping Behaviors

Example of doing clean and press

Step	Targeting	Modeling	Manipulating
1. Initial drive	-Grip hands -Stance, feet -Push legs	-Demonstrate standing -Squatting and pushing up legs	-Legs only -Hold back with straight arms
2. Body swing	-Head leads w/ eyes up -Swing shoulder/hips -Front -Flip and catch	-Demonstrate swing -Catch weights -Push legs	-Swing only with weight flip
3. Overhead push	-Stabilize stance -Push evenly -Hold	-Demonstrate pushing bar overhead	-Stabilize body -Allow athlete to push weight up -Assist if needed

Shaping - Cleans



Shaping – Drive Sequence



Shaping Behaviors (worksheet)

Directions: Think about a behavior (skill) that you would like to shape. Complete the following shaping guide. Although only three shaping steps are required, please feel free to add as many as you need to shape the desired behavior (skill). For example: the catch, the finish, the recovery, bladework.

Skill to be shaped:

Step	Targeting	Modeling	Manipulating
1			
2			
3			

Sample Workouts in Shaping

FOCUS: Slowly Forward

- Once hands are away, constant speed over the length of the recovery.
- -Knees rise slowly and evenly.
 The wheels move in time with the blade.
- -Maintain UB posture once body angle is achieved (prior to the start of the slide).
- Remember: When the slide starts the run stops.
- Recovery Sequence: 8's by 6's. With your feet out of the stretchers.
 - A- 2 pause: Focus on pivot (shifting body weight), then glide slowly forward.
 - **B-** 1 pause: From Finish/Hands away then poise and gather. Slowly Forward.
 - **C-** 1, 3 5 strokes at a time.
 - **D-** Audible count rowing. Count out loud 4 seconds from release to catch.
 - E- ST.ST. Rowing with Feet out of stretchers.

FOCUS: <u>Catch "Entry"</u>

- Quick and soft (grip the water).
- Push the handle away to ensure full extension and a small backsplash.
- As soon as the bottom edge of the blade touches the water, "stand-on" the footstretchers to beign the "pry".
- Plant the blade to optimum depth "watermark" immediately on entry: maintain an even depth throughout the drive. "Cut the water evenly".
- Remember: The blade is a scalpel and you are the surgeon.

Stationary Drills: 8's by 6's. With your feet in/out of the stretchers.

- Equilibrium Drill: eyes open and closed. Patting the water lightly.
- Posture: "Bobs" at the Release and Catch. 5 each. (Try with outside hand only.)
- 2 pauses: Release to Hands and pivot. (Try with inside hand only.)
- Catch Placement Drill: Release to Catch (Try alternating hands)
- 5 "bobs", then release to catch.
- = 3 5 x 1, 3, 5 strokes at a time.

Getting Athletes Involved in Behavior Modification

- Team rewards are the best...gives athletes a sense of ownership/control
 - Reinforces and keeps them involved
 - Builds support...social systems of team support
- Peer rewards are greatest...more valuable than coach rewards

Using Behavior Modification Techniques During the Shaping Process

- Define desired skill you are teaching.
- Assess the current skill.
- Structure the session for teaching and controlling the desired skill.
- 4. Determine methods of reinforcement. (Pos/Neg)
- 5. Initiate the program using immediate and contingent reinforcement; gradually moving to delayed or variable reinforcement.
- 6. Evaluate the program and progress.
- 7. Modify the program as necessary.
- 8. Or "just trick 'em into it" Kucick

Guidelines for Using Drills in the Shaping Process

- Whole/Part/Part/Whole Theory of Teaching.
- Quiet and Relaxed Drills Stationary Drills.
- Progressive Pause Drills- drills broken down into phases teach best (especially for complex skills)
- Begin with large movements.
- Break the movements down into component parts.
- Instruct the movement in sequence and repeat until movement is observed correctly then move on to the next step.
- Raise the requirements for reinforcement slowly.

Guidelines for Using Drills in the Shaping Process (cont.)

- Remember: Work on one thing at a time.
- As the athlete moves to the next step allow for mistakes.
- Variety of approaches (see, feel, hear).
- Make the shaping session a top priority, early in the practice (first 45 min.).
- Can incorporate new drills, coach should stay focused on the goal of the session. Easy to get sidetracked.
- If performance deteriorates (due to fatigue/stress), repeat steps.
- End each session on a positive note and catch them doing it right.

Periodization of Technique using Fairbairn's principles.

- According to Fairbairn, "All sports are dynamic, they all require..."
 - Posture Sit Tall. "Posture provides power."
 - <u>Timing</u>- Timing can only be obtained by relaxing and taking your time, rushing is fatal.
 - Control Keeping the body braced firmly, TAUT, against the footstretcher and the oar handle.
 - Balance Keeping the boat level...keep an even, controlled weight on the oar handle.
 - Touch "Delicacy and cleverness in every act"...clean, sharp bladework.

Grand Valley Rowing Varsity Men's Practice - Thursday, September 13, 2007

ALL SPORTS ARE DYNAMIC - ALL SUCCESSFUL ATHLETES REQUIRE:

POSTURE TIMING CONTROL BALANCE TOUCH

TIMING/RECOVERY:

"Timing can only be got by taking your time/relaxing."

Poised and patient on the recovery. Focus on Body angles and posture.

- **-POISE** = pivot w/ "rollback", 15 degree forward body angle set by 1/4 slide.
- -GATHER w/ upper body set allow the boat to glide beneath you.
- -STRIKE! the catch is part of the recovery. Reverse direction=seat/blade/feet-'knees don't stop"

Every Crew that goes fast has certain basics:

- 1. **GOOD POSTURE** -1st thing s coach teaches is good POSTURE.
 - hands/foot stretchers/feet/seat/height
 - -LESS injury > better connection> Free Power!

"Good Posture Provides Power"/"The taller you are the stronger you are"

2. CORRECT USE of the HANDS

- -From the 1st time they pick up the oar
- Takes a long time to change the grip once it is learned
- "Wheelbarrow Grip"

3. BLADEWORK

- Most critical part of the stroke
- The Blade is the only thing that propels (MOVES) the boat.
- Trace handle ("race track oval"/"conveyor belt")

4. RELAXATION

- Recovery- "Take a Ride" Relax
 - "A smooth and relaxed recovery is the hallmark of a good oarsman"
 - Let the boat come up underneath of you.

Thursday, September 13, 2007

Practice is as scheduled: 5:30am sharp

Water Workout:

1 x 10' ergo warm-up at RTC then stretch and run to the BH.

 $4 \times 5 \text{ mins. RACING SR} = 24 (26 \text{ in Fours})$ R = 7-8' active drills.

This Week's Technical Focus is: "STRIKE TO THE BALANCE"

- Rowing by fours and eights, working on the release.
- Focus on pivot and glide. "Redirecting the drive phase into the recovery"
- Listen to the boat at the release.
- 1. **Firm** release from the water.
- bottom edge of the blade releases to the bow. Inside hand feathers to the stern.
- Rounded releases: Keep the hands moving in a circular motion in front of body.
- "Conveyor belt" image
- 2. **Poise!** Follow thru on the release from the water out to the knees. Pivot!
- "Hands pass the knees before you start the slide."
- Old Rowing adage, "when the slide starts, the run stops" Get that PIVOT!
- Re-direct the energy of the drive into the recovery. Keep the handle moving.
- The finish then is past the knees.
- 3. Maintain lateral pressure on the button against the oarlock.
- 4. **Pivot** the Upper Body from the back of the seat to the front of the seat.
- Look and feel for the "rollback" when the wheels move slightly to the bow as you shift your body weight from the back to the front of the seat and onto the balls of your feet. When you learn to shift onto the feet it will lead to defeat (of your opponent).

SEND!!!!!!!!!!!!

Drills:

1. - Warm-up on water:

A. "Swing Pick":

- a. back and arms no slide.
- b. The shoulders swing until the blade leaves the water.
- c. Relax the arms and the grip. Allow the body weight to do the work
- d. "A smooth relaxed recovery is the hallmark of a good oarsman"

B. "One Drives":

- a. Placement Drill w/ pause a initial pause at the catch, followed by drive to the blade through the release to the Finish (pivot).
- b. Strike to the balance

REMEMBER: The catch is part of the recovery.

The release to the finish is part of the drive.

Shaping Rowing Technique Utilizing Fairbairn's Principles

Focus:

- Major muscle groups: legs, back, arms
- Contact points: feet/legs, hips/seat, shoulders/hands, the blade.
- DRIVE: Push, Pull, Draw; All muscle groups overlap. Shoulders and blade finish together.
- RECOVERY: fluid, relaxed, appearance is that the hands pull shoulders forward followed by the slide...Poise and Gather
- "The catch is a part of the recovery"
- The warm-up is as technical as much as it is physical.

Warm-up Sequence (by 2's, 4's and 6's) Posture/Timing/Control/Balance/Touch

- 1. **Swing pick** on square with back and arms... "The shoulders swing until the blade leaves the water."
 - Focus on **Posture**, 30 degrees arc, shoulder swing, hands making circles at the release
 - Sit tall... "The taller you are the stronger you are"... "Posture provides power"
 - Note: If done too fast the drill becomes counterproductive...keep it at 4:1 to 3:1 ratio.

Warm-up Sequence

- 2. 1/4 slide on square, keep swing and add slide... "Slide starts when the elbows pass over the knees"
 - Focus on Body Angles (Pivot) and early Body Preparation...**TIMING**
 - "The hallmark of a good oarsman is a smooth relaxed recovery", Coach Fairbairn in 1892

Warm-up Sequence

- 3. Full slide on square, keeping body swing, length, catch, and release angles
 - CONTROL, full body angle by 1/4 slide, sitting tall into the catch, shins almost vertical, butt up to top of slide, chest against the thighs, chin over the inside knee with a long outside arm. Appearance of being pulled forward.
 - CONTROL means keeping the body TAUT (like a rope) throughout the drive and the recovery.

Warm-up Sequence

- 4. Full slide with the feather, keeping all the previous steps and adding the action of the BLADEWORK
 - "The hallmark of a good crew is uniform bladework", Fairbairn
 - Vertical release, feathering towards the bow, high carry over the water (blade width), early squaring, vertical entry by unweighting the hands INTO the catch.
 - Balance: Balancing the blade in the air on the sill of the oarlock.
 - Clean catch with little splash, V splash, "Greg Louganis catch"...no backsplash, no front splash!...the catch splash should look like a V or ?

Warm-up Sequence

- 5. Full slide all eight or four with feather, putting all components of the stroke together
 - Rhythm and ratio- Rowing around 4:1 and 3:1, relaxed, patient and fluid with no rush to the next stroke.
 - TOUCH- sharpness and cleverness in every act, breathing and relaxing with the rhythm of the boat. Know what "It Feels Like".
 - "It Feels Like This" McLaren

Drill Sequences: POSTURE/TIMING

Timing/Body Angles Sequence

- Done w/ stable boat squared or feathered.
- 2 Pause- pause at release, coxie says, "hands", pause at body angle, coxie says, "slide", come up slide to take stroke and pause at finish hands away. Can vary.
- 2. 1 Pause- pause at finish hands away, coxie says, "shoulders", take stroke and pause.
- 1 Pause- ¼ slide, coxie says, "slide"
- 4. 1 Pause- ½ slide, then 3, 5 at a time.
- Focus: Posture/Sequencing of body angles

Drill Sequences: TIMING/CONTROL

Progressive Pause Drill

- Couple of each, done by 2's, 4's, or 6's...can be done all 8.
- 1. Sit at release- Focus on posture (hands and elbows) vertical release and drop. 5 bobs.
- 2. Same add feather.
- 3. Feathering the inside hand away, swinging the shoulders out of the bow, pausing with the handle over the knees...blade is a blade width over the water.
- 4. Add body angle.
- 5. Add ¼ slide, begin squaring with the rolling of the wheels.
- 6. Add ½ slide, blades squared to 45 degrees.
- Add ¾ slide, blade fully squared.
- 8. Full slide placement drill...the placement drill is done with a stable boat by 2's, 4's or 6's
- This drill is one of my favorites! Teaches a direct catch, length and a fluid recovery!

Recovery Sequence – Progressive Pause



Drill Sequences: TIMING/CONTROL

Recovery Sequence- extension of the Progressive Pause Drill

- Done by 2's, 4's, or 6's...can be done all 8 by a very good crew...can be done with and w/o the feather.
- Progressive Pause Drill- keep it short, I each, just a review of the previous drill.
- 2. Placement Drill- Release to Catch done stationary.
- 3. 1 stroke at a time, finish to finish, hands away...Very Easy, NO Pressure!
- 1 stroke at a time, finish to finish, hands away...1/2 pressure, Emphasize the placement of the blade.
- 5. Continuous Rowing on the Square- Focus on the catch, one speed on the recovery..."The catch is the end of the recovery"
- Check: Posture at the catch and the release
 - Timing and Body Angles
 - Catch angles at the pause when the blade is buried
 - Release angles when the blade is buried and the body weight is behind the oar handle
 - Hand and elbow levels, flat outside wrist
 - Tall outside shoulder, leaning slightly into the rigger

Drill Sequences: TIMING/CONTROL



Drill Sequences: CONTROL

Drive Sequence

- Best if done with part of the crew stabilizing the boat.
 - 1. Sit-up at catch with shins vertical, chin over inside knee, long outside arm, blade buried...**Drop Blade** in water, repeat at coaches or coxies cadence. (bob drill).
 - 2. **Top 6" of the slide (Russian Drill)**, No Back, straight-arms, "Push blade with knees", "Knees don't stop when they reach the top!" Imagine pushing the blade with the feet. Watch the blade enter.
 - **Full legs**, "Ca-Press", catch/press the knees. Watch and listen.
 - 4. **Full legs, add back swing**, "Impulse", "Shoulders swing until the blade leaves the water", shoulders swing against the leg drive, "Suspend the body off the oar handle".
 - Full legs, back and add arms, break elbows at mid- drive, accelerating and drawing within 1 inch of the body.
 - All muscle groups overlap. Shoulders and blade finish together.
 - "Once the arms break the load is in the arms"- "Shoulders swing until the blade leaves the water"

Control/Drive Sequence



Drill Sequences: POSTURE

Lean Sequence

- Done by 2's, 4's or 6's...Purpose is to focus on posture and keep the outside shoulder slightly higher than the inside shoulder with a slight rotation around the pin (oarlock).
- Squared blade rowing.
- 2. Wide grip, inside hand lays on top of the plastic on the shaft.
- 3. Outside hand only, inside hand pointed toward opposite shore. Then reach back to the bow.
- 4. Wide grip. (Can also take the inside hand and reach behind the opposite shoulder to feel the lats engage, hang and squeeze).
- Square Blade Rowing emphasizing the outside shoulder/elbow.
- 6. Inside hand only on the feather, emphasizing a strong finish (like starting a lawn mower) making circles.
- Both hands on the feather reinforcing posture.

Posture/Lean Sequence



Drill Sequences: TOUCH

Bladework Sequence

- Done by 2's, 4's or 6's...Focus is entirely on the blade.
- Can incorporate various drills as well as the Progressive Pause Sequence to teach the release and squaring of the blade
- 1. Start by rowing on the square.
- Watching the bottom edge of the blade release to the bow and maintain uniform height through the recovery.
- Maintain the height by feel with the coxie, rowers in the boat, and coach assisting.
- 4. Add feather and early squaring, maintaining height of the top edge...Squaring down!
- 5. Bottom edge of the blade falling on its hinge.

Drill Sequences: TOUCH/CONTROL

- Eyes closed
- Post Card drill
- Middle finger
- Feet out in boat and on ergo
- Paper Drill on the ergo
- Remember: Following all drills, focus on good clean rowing, reinforcing the main points of the drill.

Resources

- □ Fairbairn, Steve (1892). Steve Fairbairn On Rowing.
- Joy, J. (). Rowing Canada, Level II, Technique Improvement.
- Korzeniowski/Jordan (1996). US Rowing Coaching Video #1 (w/ Harry Parker clip)
- Martens, R. (1987). Coaches guide to sport psychology. Champaign, IL: Human Kinetics.
- Orlick, T. (1980). In pursuit of excellence. Champaign, IL:
 Human Kinetics.
- Thompson, M. (Jan., 2004). Teaching Technique to the Developing Athlete. Presented at Canadian Coaches Conference in Kingston, ON.
- □ The many coaches I have learned from over the past 38 years. Mainly my first coach and life mentor, Bob Garbutt.
- Edited by Coach Michael Thompson and Coach Mark McIlduff.
- Video editing by Mark Azkoul.