

Saturday, July 18, 2015

Adult Swim Clinic

Curriculum and Drills

Clinic goals

Efficient vs correct

What we can learn from world class swimmers

All elite swimmers incorporate drills in every practice

Introduce drills that emphasize specific aspects of efficient stroke

Reducing resistance better than increasing power: Friction/Form/Wave

Body posture: Center Buoyancy/Center of Gravity

Efficient Freestyle/front crawl [Subscribe to GoSwim on youtube]

Simple measures of efficiency are time and stroke count.

- Core alignment
 - Head in line with spine – eyes down or slightly forward
 - Smallest possible hole in water/hips near surface (exer: *stand in streamline*)
 - Approximately 30 degree body rotation around long-axis
- Legs
 - Quick and tight kick
 - Hip driven
 - Slight knee bend in power phase/essentially straight leg recovery
 - Floppy ankles/slightly pigeon toed
 - Churn water
- Arms
 - Front quadrant swimming
 - Enter in front of shoulder 12-18" forward of head – thumb and index finger first
 - Full extension after streamline entry
 - Early vertical forearm (exer: *rotate elbow up – straight forearm & hand*)
 - Positive palm pressure throughout stroke
 - Straight vs curvilinear path
 - Full stroke/elbow leaves water first/relaxed recovery
- Breath
 - Slow consistent exhale
 - Inhale timed with body roll
 - Breathe in the pocket

- Early and quick – return head to center
 - Head stays “on spine”
 - Bi-lateral breathing
- Connection
 - 2/4/6 beat kick
 - Body rotation (exer: *walk with arms down and arms up*)

Freestyle drills

1. Freestyle warmup – are you swimming a consistent 2/4/6 beat kick?
 2. Breathe standing in shallow water (the goal here is to always keep one goggle in the water)
 3. Breathe with arm movement (same goal as above but with one arm stroking now)
 4. Shallow water sculling (figure 8 in front – fingers pointed down. Develop a ‘feel for the water’)
 5. Sculling on back/breast (a productive and fun exercise best done with a snorkel on breast)
 6. Stroke distance (with the help of a friend or camera mark hand entry and exit – a great indicator of stroke efficiency)
 7. Kick 25 on breast w/board (looking for a tight/quick kick that churns water. Try putting your face in the water and see how much easier it is to keep the hips up!)
 8. Kick 25 on back w/board (looking for a tighter/quicker with toes just breaking surface. Most swimmers drop their hips more on their back...if you have a good kick here it will translate to freestyle!)
 9. Roller drill (emphasizes EVF: fingers toward the bottom of the pool and a high elbow for the catch)
 10. Freestyle paddles (will indicate a poor entry or negative palm pressure)
 11. Forearm fulcrum (emphasizes a proper catch and EVF – will become loose or fall off if you drop your elbow!)
 12. Kick on side – left down/right back, eyes on wall roll up to breathe (emphasizes body rotation and incorporating breath into body roll)
 13. 6 kicks and switch (same drill as above but switch sides every 6 kicks – make sure hand enters water as opposite legs kicks down)
 14. Catch-up drill w/stick (ensures front quadrant swimming and body balance)
 15. Flick the suit (emphasizes a full arm stroke, although many swimmers ‘give it up in the back’)
 16. Finger drag (emphasizes a relaxed recovery that is kept low and close to the body)
- Stationary body balance exercise/core driven roll** (Head down/arms up/press the T. This is a great eye opener at how body balance affects horizontal swimming. Adding the roll makes you develop core strength and control)
17. Freestyle swim – obtain time and swimmer provide stroke count for 25 (time and stroke count are the 2 easiest measures of swimming efficiency. Monitor them regularly!)
 18. Streamline push off (proper body position starts when you leave the wall. Focus on reducing body and wave resistance and moving seamlessly into the first stroke.)
 19. 2 beat kick (a good distance alternative but mostly makes it easier to see proper connection between arms and legs)

20. Tennis ball drill (takes away your 'paddle' and makes you use your whole forearm for power. If you drop your elbow it will seem like you are hardly moving.)
21. Freestyle paddles held in fingers (emphasizes the forearm as one paddle)
22. 6 beat Zipper drill (emphasizes a full extension, good rotation and keeping the recovery low and close)
23. 3 beat zipper drill (moves the above drill closer to a normal swimming rhythm)
24. Instinct/agility paddles (emphasizes positive palm pressure, thumb first entry and good sculling motion)
25. Pull buoy with choice of paddles (isolates the arm stroke and demonstrates the role of the legs in balance – the more you balance without the legs the more your core is engaged.)
26. Three strokes and glide (demonstrates core balance)
27. Tarzan or water polo drill (demonstrates the importance of a quick catch)
28. Sculling drill with instinct or infinity paddles (promotes a feel of the water)
29. Sail boat drill (shifts balance to front quadrant and sets up smooth entry about 12" front of head)
30. Falling piling (core strength, efficient kick and body balance)

On July 9, 1922, Weissmuller broke [Duke Kahanamoku](#)'s world record in the 100-meter freestyle, swimming it in 58.6 seconds.^[12] He won the title for that distance at the [1924 Summer Olympics](#), beating Kahanamoku for the gold.^[13] He also won the 400-meter freestyle and was a member of the winning U.S. team in the 4×200-meter relay. As a member of the U.S. [water polo](#) team, he also won a bronze medal. Four years later, at the [1928 Summer Olympics](#) in [Amsterdam](#), he won another two gold medals.^{[14][15]} It was during this period that Weissmuller became an enthusiast for [John Harvey Kellogg](#)'s [holistic](#) lifestyle views on nutrition, [enemas](#) and exercise. He came to Kellogg's [Battle Creek, Michigan sanatorium](#) to dedicate its new 120-foot swimming pool, and would go on to break one of his own previous swimming records after adopting the [vegetarian](#) diet prescribed by Kellogg.^[16]

In 1927, Weissmuller set a new world record of 51.0 seconds in the 100-yard freestyle, which stood for 17 years. He improved it to 48.5 s at Billy Rose World's Fair Aquacade in 1940, aged 36, but this result was discounted as he was competing as a professional.^{[3][15]}

In all, Weissmuller won five Olympic gold medals and one bronze medal, fifty-two United States national championships,^[3] and set sixty-seven [world records](#). He was the first man to swim the 100-meter freestyle under one minute and the 440-yard freestyle under five minutes. He never lost a race and retired with an unbeaten amateur record.^{[3][15][17]} In 1950, he was selected by the Associated Press as the greatest swimmer of the first half of the 20th Century