HOW TO STUDY YOUR SWIMMER IN A RACE

Presented by Coach Ira Klein
Head Coach Sarasota Tsunami Swim Team
Director, Sarasota Swim Academy
No information = no change

- You have to decide whether or not you want your swimmers to learn from each race.
- Realize that you can provide too much information as well as too little.
- Never give away an opportunity for your swimmers to learn.
Break down the race into different parts;

• At the very least I want the athletes to understand the way they split their race.
• Sprinters who train more anaerobic will split the race differently from an athlete training aerobic or is more of a distance swimmer.
Breakdown of a 50 swim;

• We will always be talking more about a ‘trained’ athlete rather than a newer less trained swimmer.
• One second between first and second 25.
• Backstroke will usually have a slightly less difference
• Breaststroke will usually have a slightly greater difference.
Splitting a 100 race;

• Goal is 1 sec. difference in backstroke, less than 2 sec. difference in freestyle and 2.5 sec. difference in breaststroke and butterfly.

• If there is more than a 3 sec. difference in the two 50 splits then it was not well split and probably not their best potential race. They slowed due to too much lactic acid built to early in the race.

• This is a generality and you need to learn each individual swimmer.
Splitting a race at 200 yd.

• Less than 2 seconds between first and second 50.
• Less than .5 seconds between second and third 50.
• At least 1 second drop on final 50.
• In IM the free split should be within 1 sec. of the fly split.
Splitting the 400 IM

• The fly should be within 2 sec. of the two 50’s.

• Negative split each of the three other strokes. Easier in back and free [turn vs. hand touch] than in the breaststroke.

• Free and fly splits within a second of each other.
Splitting 400m up to 1650y free;

- Goal is to even split to negative split races.
- Controlled speed on first quarter, pick up speed on 2nd quarter, descend to finish.
- Look at how they split each 100, as well as each quarter of the race and each half of each race.
- Train the way you want them to race.
Other areas to focus on;

- **Stroke count**
  - Strokes per lap

- **Stroke rate [tempo]**
  - Number of strokes per minute
  - Time per stroke cycle

- **Distance and timing of starts**

- **Time it takes for turns**
Stroke Count

- Count each stroke for each lap
- Goal is to have as little ‘degradation’ as possible
- Mary T would swim 200 m. fly going 18 – 20 – 20 – 20. Other swimmers would go 18 – 21 – 23 – 24. Who is remaining the most efficient?
- Swimming golf – add time per 50 with stroke count. Time 35 sec. + 20 strokes equals score of 55. Goal is to drop time or strokes to get lower score.
- Knowing the stroke count can help with training goals.
- Goal is to improve the DPS or DPC by decreasing the stroke count.
Stroke Tempo – speed of the stroke

- Strokes per minute – extra function on most stop watches. If two or more swimmers per race difficult to do.
- Time per cycle – use normal watch timing one cycle [two cycles more accurate]. Easier to work multiple swimmers in race or during short course swimming.
Stroke tempo, cont.

- How do you take the cycle timing?
- What do you look for in the tempo?
- How can we teach better or more consistent tempo?
Starts and turns

- On starts at least understand how long they spend underwater.
- Try to get an idea of how far they go before surfacing. Practice starts to that distance and work to decrease time to get there.
- Two ways to time turns;
  - time and distance from feet leaving the wall to breakout from underwater.
  - timing from end passing flags to the wall and back to flags.
Race analysis program

- For information on this program, contact one of the Sport Performance Consultants from Club Development Dept. of USA Swimming.

- Film races and watch with this program, can get per 50, breakout time, breakout distance, split time, drop off from previous 50, three tempos in both cycles/min and time/cycle, distance per cycle, velocity in the water, turn time.
Can’t do it all;

• You can offer, especially with younger or less experienced swimmers, too much information.
• Pick what you feel comfortable with and make certain they understand and work to improve.
• I find race splits, stroke tempo and stroke count to be the best information to work with.
• Swimmers who have slower turns I will work to time and try to improve.
• Don’t accept just this information, go out and find more from other sources. Invent your own.
THANKS!

• I appreciate the opportunity to spend this time with you all and to learn from providing the talk.

• Check out the ASCA website with their 99 cents download for talks from all of the previous World Clinics.