

USRPT

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Background

- Family of coaches: Mom, Dad, cousins, aunts, uncles
- Student of the game
- Best coaching advice received / learned:
 - Beg, Borrow, Steal
 - You don't make mistakes. You use what works, change what doesn't.
- Studied Maglischo's Swimming Fast (high school),
 - Swimming Faster (college)
 - Swimming Fastest (coaching)
- First started coaching, I designed my program using experiences and the zones Maglischo describes
- My biggest concern as a coach has been Distance

Coaching Concerns/Considerations


- Dichotomy of coaching in our sport for the past 50 years: High yardage (distance) vs Intensity (sprint)
 - Gave us false choice
 - Focuses on the wrong thing
- Everyone works hard, so why do some improve and some don't?
- What is success? What is failure?
- What's the goal: to train better or to go faster in meets?

HS Journey to RPT

- Took over BVN, ran it like my college program: 9 practices / wk, weights 2-3 times in the mornings, split into groups (distance, sprint, IMers)
- Overall was spending 25-30% of practice time on dryland activities
- Noticed lack of hustle / motivation, larger numbers not doing the full dryland workout
- 5 years ago, I took out weights and gradually cut back on dryland

- Began increasing power work in the water
- Popov and Hawk
 - Started pushing intensity, swimming faster in practice
 - Limited my yardage totals
 - Further reduced drylands (space and time issues)

- Results and Observations:
 - Not detrimental
 - Improvement in # of state qualifiers and consideration times (averaged 12-13 for the first 3 years, averaging 16 in the past 4 years)

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- Kept increasing intensity
 - Found high intense workouts from places like Auburn, USC, Cal Berkeley
 - Meant I had to give more recovery in the form of rest or EZ swimming
 - Introduced USRPT
 - Consistent with observations
 - Solved my Distance problem without sacrificing my sprinters

Race Pace Training

- Ultra Short Race Pace Training (USRPT)
 - Program developed by Dr. Brent Rushall
- Research and evidence based
 - Some new, some older
- New data shows that what we thought we were doing, we kind of are, and kind of aren't...
- Uses short distance, high intensity, high volume to achieve training effects that improve performance
- Misconception: Race Pace = Sprint
 - We race at all kinds of distances
 - from 50- 1650, all have a different pace / stroke-rate / DPS

USRPT:

- Emphasis on Technique
 - More / constant feedback
- Shifts coaches role from practice administrator to teacher
 - Responsibility to pay attention to times on athlete
 - Technique on coach
- Mental Toughness
- Goal Setting
 - Responsibility of the athlete is to pay attention to their time

Closer Look:

Typical Traditional Workout: USRPT Workout:

- 1500-2000 warm ups
- 10 x 200 @ 2:20- (En-2)
- 15 x 75 @ 1:20-1:40 5ok/25sw
- 10-15 x 25 @ 30 underwater k
- 3 x 300 SW or P @ 20 sec rest

- 400-600 Warm-up
- 20 x 25 @ 30 50 pace (RP)
- 200-500 Recovery
- 30 x 50 @ 45-1 200 pace (RP)
- 200-500 Recovery
- 15 x 50 kick @ 50-1 25F/25ez
- 100 EZ
- 10-12 x 25 @ 30 #1 stroke
100pace (RP)
- 200 Warm down

Comparison

Year-Round, 16 yo male

Traditional set:

- 10 x 200 @ 2:20
 - Best split: 1:55
 - Slowest 2:07
 - Average split: 2:02
 - PR 200: 1:45.81
 - Total yards swam at RP: 0

USRPT

- 15 x 50 @ 15 sec rest -200 pace
 - Goal time:26.5
 - # to fail: 8-9
 - Failure times: 27-28
 - Total yards swam at RP: 400+

Comparison

17 yo Female, non-year round

Traditional

- 500 Free 2013
- PR 5:41.65
- Splits:
 - 30.1 / 32.15 / 34.1 / 35.0
 - 34.8 / 35.8 / 36.2 / 36.5
 - 34.0 / 33.0

USRPT

- 500 Free 2014
- PR 5:39.74
- Splits:
 - 30.26 / 33.16 / 34.06 / 34.17
 - 34.22 / 34.49 / 34.86 / 34.84
 - 35.3 / 34.2

Goal time 3 weeks prior: 34.55

High Volume vs High Yardage or Quality vs Quantity

- Traditional:
 - 7000 workout, 400-1500 yds of quality (5-20%)
- USRPT:
 - 4500 workout, 800-1500 yds of quality (16-30%)

My Observations and Conclusions:

Pros:

- Race Pace Fast rather than Survival Slow.
- Consistent feedback
- High quality in spite of space / time issues

Cons:

- Buy In
- Not as easy to 'set and forget'
- Won't work if the athletes don't

Bibliography

- Swim Science Journal
 - <http://coachsci.sdsu.edu/swim/bullets/table.htm>
- Rushall, Brent S. PHD. A Swimming Technique Macrocycle. 2013
- USRPT.com