Developing Aerobic Improvements in 9-12 Year Old Swimmers.

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What are the Priorities in Training Swimmers ages 9-12?

• Developing effective stroke mechanics. (always first).

• Developing the capacity to train. (training to train) Included in this are:

• **Aerobic Development**.

• The development of muscular endurance...the ability to repeat optimal stroke mechanics for the distance that is race required.
What is Aerobic Development?

• It’s the ability to go further, faster and with less effort. (Better economy).

• How do we measure it?

  We test for “cruise speed” or sustainable velocity over a “lengthy” swim.

  T-30 for older athletes, but can be a 500/1000/ or 10 x 100 on “X” for 9-12’s.

  “Get an idea what they can HOLD” for a long time. “Cruise Speed” is a useful concept.
How Accurate?

• My belief is that we don’t have to be very scientific or precise at this age. But measurement is always important in order to demonstrate to the athlete that they are making progress.

• Similarly, detailed daily workouts actually will be imprecise, because of attendance fluctuations. Don’t fret about it. Move in the right direction.
So, What’s the “”Right Direction?”

• Development takes place over months, not days or weeks.

• Measure the IMPORTANT STUFF.
  DENSITY of workout. (how many yards in how much time.....mixing all types of training.)
Better to have shorter training sessions with more density, than longer sessions with less density. “when you work, you work. When you play, you play.”
Who Are You Coaching Today?

• Young people have short attention spans.
• Young people are visual learners.
• Young people are easily bored and “tune out”.
• Young people DON’T learn well by listening.
• Coaching is now performance art. You have to educate and entertain. So build your practice accordingly. *(and don’t forget you have to challenge them to get better.)*
Examples:

- Session 1 – 90 minutes
  - 20 x 25 on “whatever” drill.
  - 5 Minute rest/chit-chat
  - 3 x 300 free on 6:00
  - 3 Minute Rest/chit-chat
  - 12 x 50 Kick on 1:15
  - 2 minute Rest/chit-chat
  - 3(25-50-75-100) stroke on 10 SR.
  - 3 minute rest/chit-chat.
  - 20 x 25 fast free on “whatever”
  - 3250 yards in 90 minutes

- Session 2 – 66 minutes
  - 20 x 25 fly drill on 30 (10m)
  - 30 Seconds of rest and explanation.
  - 3 x 300 free on 5:00 (15M)
  - 30 Seconds of rest and explanation.
  - 12 x 50 Kick on 1:00 (12 M)
  - 30 Seconds of rest and explanation.
  - 3(25-50-75-100) stroke on30 second base with 1 MR between sets. (18)
  - 30 SR
  - 20 x 25 Free on 25 (2 steady, 1 fast. (10 M)

- 3250 yards in 66 Minutes.
- What’s the difference? (Dead time)
The first key to aerobic conditioning/development is DENSITY of Practice. Improve that FIRST.

What are good targets for density?
Density Targets

• 8-9-10 year olds – One hour – 3000 yards. (one thousand each 20 minutes)
• 10-11 year olds – One hour – 3,500 yards.
• 12 year olds – One Hour – 4,000 yards.
• You can manipulate this of course by doing all freestyle. By doing long sets. And that’s legitimate. The “first time” your 9 year olds try to achieve 3K an hour, it may NEED to be all freestyle swimming. But as the months go on, you want to incorporate all strokes, kicking, pulling and drilling.
• When you get them to where you can use all modalities and average a thousand each 20 minutes, you’ve done something worth doing.
So First, we develop DENSITY. What’s next?

• Once we have density targets established, we use the principle of progression to increase that density by lowering our repeat intervals. (more swimming in less time...but all steady state, aerobic)

• (the trick of course, is to do this while maintaining good stroke mechanics....and some tradeoffs will naturally occur.)
An example with a simple set:

- Week one – 12 x 100 free on 1:40
- Week two – 12 x 100 free on 1:35
- Week three – 12 x 100 free on 1:30
- Week four – 12 x 100 free on 1:25
- That’s all decreasing rest intervals. What’s the next “progression?”
After that four week cycle, go back and....

Week Five – 16 x 100 free on 1:40 (more volume to the set.)
Week Six – 16 x 100 free on 1:35
Week Seven – 16 x 100 free on 1:30
Week Eight – 16 x 100 free on 1:25.

Then, for weeks 9-12, go back to 12 x 100 and start the progression at 1:30, 1:25, 1:22, 1:20

For weeks 13-16 – make it all 20 x 100 free on 1:30, 1:25, 1:22, 1:20.

“progress....both challenge of the intervals and the total volume swum.”
So, what about the ones who “don’t make it”…..

- Excellent question, thank you.
- Philosophical issue. Who do you design training for? Why?
- “those failing”… some options…
- 1) Put fins on ‘em. (reduce use of fins over time)
- 2) Have them swim “fractions”…75’s instead of 100’s. Maybe 1 x 100, then next two are 75’s, then back to 100’s etc.
- 3) Continuously swim, FINISH and see how far off making the set they are.
- All have pluses, all have minuses. Philosophical question.
Other Strokes.

- **Backstroke** – can be done the same as freestyle.....adjust your intervals accordingly. GOOD to use backstroke to open up the shoulders once again. Very useful aerobic conditioner.....core strength requirements are greater than freestyle, so typically results in improving freestyle if you work a lot of backstroke.
Breast and Fly.....

• It’s very hard with age groupers to do a lot of aerobic breast or fly swimming...because the high levels of force required to swim these strokes optimally do not lend themselves to aerobic swimming. Correct timing in each of these is such an overriding issue that most coaches who agree that jeopardizing that with attempted aerobic work is counterproductive.

• Aerobic Drilling and Kicking can certainly be done effectively in these two strokes.
To summarize:

• In order to optimize aerobic development in the 9-12 age range...
  
  • **First**, concern yourself with workout density.
  • **Second**, concern yourself with lowering repeat intervals. (learning to be comfortable with being uncomfortable)
  
  • **Third**, increase volume.
Other Thoughts:

1. EVERYTHING we do with new age group swimmers is aerobic development. The point is to OPTIMIZE it’s development.

2. It’s better (in my opinion) to have short, dense practices that capture physical and mental attention, than longer, more leisurely practices. When you want to PLAY, PLAY. But Work when you are working.

3. Learning to focus simultaneously on stroke mechanics and dense training is a coaching work of art. Remember the John Wooden method of coaching...short, imperative, evocative verbal reminders, continually offered.

4. By all means TALK with athletes....it’s critical. But do it before or after practice, not in the middle of practice. Keep the Group focused, attentive and “entertained”. Explain what and how you are going to do things to your group, if this is a change for them.

Share the “Why’s”. “No progression of training, then no PROGRESS OF THE ATHLETE!
Hope you’ve enjoyed it....

• Feedback or questions, comments, arguments to....

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• Thanks for being with us! JL