

## USRPT AND ORCAS SWIMMING

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**27 March 2018**

I'm hoping that as this article unfolds you might experience something similar to what I experienced when I delved into USRPT, and I compare it to the way Alice must have felt when she went down the rabbit hole, a whole new world, a revelation, or at least something worth exploring.

I am Tracey Hemphill and I am the Director of Coaching for Orcas Swimming in Johannesburg, South Africa. We started our USRPT journey in 2014 and can't imagine turning back. Our program serves 115 swimmers ranging from the age of 8 – 21 years of age, of which 50 swimmers are of competitive age and ability. We have implemented USRPT 100% across the board and we follow the guidelines for each age group as advised by Dr. Brent Rushall. I also run the aquatic programs for the primary school and the High School at Maragon Private School in Johannesburg. I have used USRPT to train the school swimming teams, and had great success with both teams.

This platform merely creates an opportunity for us to communicate methods and means which we can use to help others achieve. My purpose here is more to help you avoid some of the mistakes we made implementing this program, or at least jump start you to the stage we are at now so that it doesn't take you a year to iron out the creases. If something you are doing is not yielding results, and you are looking for revamp, you can draw on information shared here to evaluate if this might be the approach for you. It's not about if you should or you shouldn't. USRPT is not a new fad, it's a concept that I believe has been around since the 1950's and is likely to have failed, maybe due to lack of substantiating evidence to support it.

It's not about whether it's right or wrong. There is so much information now and it is so accessible that I think we flounder and are smothered by what's on offer. Inexperienced coaches will find themselves confused, running on a whim with someone else's philosophy, and in that you will not get the results you are looking for, because it is not yours. These programs and your presence on pool deck every day really should be an emotional thing. We attend conferences year in and year out with different international speakers who have evidence in results and silverware and we find ourselves curious as to what are they doing, what is their magic? Generally we're also only referring to top end athletes. So how are we operating with the other 99.7% of athletes? It will never be enough if you are not emotional about it. Emotion is the driving force of us human beings.

So then it's all about your "*why*". Why do we find the appeal? Or are we just searching for something that we identify with. At the end of the day, I believe you will get results you are

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looking for if you and your team believe in the approach and 80% of that belief has to come from the coach who needs to be emotional about it. If the coach's inherent values are not invested in his/her program then one will not get what is wanted out of it. Both coach and athlete have to be equally invested in a program to benefit from it; we all know this. Therefore, it is really my belief that it doesn't really matter which program you are following, but if the swimmer listens and believes in what they are doing you will get results.

This write up is not about why you should do USRPT. I'm not here to try and convince you or get approval. It's about why I tried USRPT. The decision was based on the best interest of my team culture and my foundations in Sport Psychology. It was an emotional decision. So now what I have is a program that I am emotional about and the swimmers see and feel that, and that is enough for them. We are leaders, but to be an effective leader your intentions and approach have to be filled with passion. So I have found a place where Science, theory and passion have come together to give me connection to what I am doing.

Our programs have varied over the years with major influences from various coaching mentors, but nothing grabbed me like the concept of USRPT, and probably not for the reasons one thinks. I spent a lot of time with other coaches, studying their presence, methods and priorities. I quickly saw fruits in working the stroke counts, timing the turns and starts, fine tuning the starts, but found it difficult to cover all of these concepts as much as I would have liked. I had also seen my team culture collapse as a result of a couple of situations that had taken place and needed to find something that was going to turn that around quickly. I saw USRPT as a way to address these two important things in my program, and so with a lot of raising eyebrows and resistance we followed through with the approach. I will tell you that it wasn't a smooth transition. I lost swimmers. I was asking swimmers to trust me on an idea that at that stage I did not completely understand and I told them I wanted to run an experiment. "*Do you want to be a part of it?*" I asked them to have faith in me. I lost some swimmers, which was fine as that was what they needed to do for themselves. I will tell you that in the end, I have gained more than what I lost, as my team culture and the pool atmosphere now is really something we are very proud of.

The information is available for free. Anyone can do it, and it seems appealing because it's supposedly "*less work*", easier, requires less time. These are misconceptions about the program that I am going to quickly address.

### **Common Misconceptions about USRPT**

1. ***USRPT is easy.*** I challenge you to ask any of my swimmers if they think it is easy. I have senior swimmers who are hard workers who said it was the hardest thing they had ever done. Holding 200p for 20x50's Breaststroke is most certainly not easy.
2. ***USRPT is less work.*** Is it less work? We have 5 coaches on deck to effectively run the program and meet everyone's needs. It's not a necessity, but the way I choose to run it effectively. The lanes are co-ordinated to ensure that the different send offs don't affect each other and so that swimmers don't swim over one another. We record information about starts, turns, pace times, breakout distances and stroke rates throughout the session. I have more information available to me now about each swimmer that I now know

exactly how many strokes each one should be taking on the third length of their 200 back and what stroke rate they need to swim in a 400m in order to make their time. More often than not, if it all fails, I have so much information at hand to tell them why it went wrong if in fact it did go wrong. We are calculating an enormous amount of info all the time, and this gives me info to give to them so that we can make adjustments. We haven't had many unsuccessful swims, but when they aren't successful my response is never to simply brush it off. It's informed. It requires quite a lot of planning from our side for us to do it the way we have chosen to do it. Every single swimmer in the squad is singled out at least once a week and worked on a 1:1 basis with one of the coaches. We introduced 1:1 bookings this season, which allows the swimmers to book a one-hour slot with any of the coaches, at an extra fee obviously. But this slot allows us to look at anything they feel they need addressed.

3. ***It's only a sprint program.*** My squad is incredibly varied. We have CGA swimmers, open water swimmers and lifesavers. It's not in my interest, nor my swimmers interest to run a sprint only program. We had successful results across the board from 50m events through the 5km event at Open water nationals. So this is also invalid. In fact our best results were probably in the distance events, because we were able to clinically breakdown the distance events and teach the kids what stroke rate to swim at. Distance events are often a problem because there are not a lot of opportunities to race the distance events. So I feel USRPT probably has been best for our distance swimmers.
4. ***There are two types of swimming training: USRPT and everything else.*** Unfortunately Brent Rushall doesn't really give a lot of room for variability. But it doesn't mean that you can't be creative here and there. We have done mountains of research on trying to break down the threat of monotony that the program can have, and I think we have come up with some good solutions that still ensure we achieve the specificity and the race-pace but in a more creative way. Yes, USRPT is quite a stringent approach. It's not to suggest that every other program encourages or carries garbage yardage. Garbage yardage is done by swimmers who aren't engaged. I think that it's also important for swimmers to know that there is a million ways to skin a cat.
5. ***You can't build top end speed.*** We break the set up into segments of the event. So if we are doing a set of 100p FR, which would be 20x25's holding 100p – 100m time / 4 = time to hold.

$$100\text{m time } 57.10 / 4 = 14.27$$

We bring in race strategy as well by breaking down the event and dealing with each segment as it needs to be. So the first 10 repeats swim like the first 50m of the 100m, you focus on control, breathing, and technique. Then on the last 10 you dealing with the second 50m and focusing on things like not breathing out of the turns, working the underwater skills, building the stroke rate, etc.

6. ***No land work.*** What it actually says is no non-specific land work. Don't do anything that cannot be directly transferred to your swimming strength. We are doing a lot of yoga and flexibility work to encourage better recovery. We are doing a lot of core strength work. We are also doing body weight exercises stuff, like pull ups and stability work.

What we are not doing is bench press, bicep curls, and leg extensions because I cannot see how they transfer to a stroke. For example, take a strong swimmer and ask them to do something they do every day, like pushups. Then tell them to climb a rope, which will not be very successful. Strength is very specific, and it's more a matter of what is the best way to spend your time.

## What is USRPT? – Ultra-short Race-pace Training

I'm going to try and summarise my take from it, because all the other stuff is available for free online. This is from my personal experience. The VERY basic principles of USRPT include:

1. ***Practice not related to a specific activity is irrelevant.*** The program is largely centred around the Law of Specificity. Swimmers swim repetitions at the same stroke rate and pace as the racing circumstance. Failure to do so is counter-productive. So a swimmer will try and achieve as many successful race-pace repeats as possible. This target is calculated from the individual's personal best times.
2. ***Training intensity, not volume or frequency, is more highly related to swimming performance improvement.*** We need to teach our swimmers how to race!
3. ***The focus is the neurological process more than energy systems.*** There is a lot of focus on technique and our changes are done at pace. The applicable speed requirement is the foundation of every set, so most of the time the swimmer will not go further than they can go holding technique.

## Benefits of USRPT

Again the benefits of the program are directly related to my experience. There are others that can be found online, but these are the benefits that we have seen in our program.

1. ***Race-pace is necessary because stroke techniques change with speed and velocity.*** I think that this is always one of my biggest issues with the training methodology. You cannot hope to make changes to a person's stroke that will be specifically beneficial to them if you are not repeating it in the way they will be required to all the time. If we think about the "10000 law" – the law that prescribes that we need to carry out behaviours, actions and habits 10000 times to be a master. One cannot say that we would be doing this successfully in swimming if we are allowing our swimmers to spend 60% of their session doing non-specific work. How do we make our swimmers fall in love with practice? Swimmers enjoy racing and going fast.
2. ***Failures in performance are reduced.*** We had many seasons where our athletes had very slow swims at certain times of the season due to the traditional program demands at that time. We could plot them out and mature swimmers kind of knew what to expect at a given time in the season. This for us has been reduced. Our swimmers are not having any slow meets. They have either been on target or faster.

3. ***Failures in performance can be properly measured against measurements taken daily at training.*** We are able to have more information available for the swimmers to evaluate their performance more objectively.
4. ***High-intensity workouts involve both aerobic and anaerobic systems.***
5. ***Better and more efficient use of energy sources.*** We are able to do the quality workout every day. In traditional workouts we would have to have intermittent recovery sets, which meant that if a swimmer could only attend a few sessions a week for whatever reason they ran the risk of not attending the quality sets, and therefore not achieving the workload required of them to expect improvement.
6. ***Provisions are made for appropriate mental-skills and race-strategy development in conjunction with relevant racing biomechanics.*** We are able to take time out of an allocated 1.5 hour to do visualization exercises and teach swimmers how to use this tool effectively. We are also able to carry this exercise over into the pool during repeats if the swimmer is failing physically. Race strategies can be developed during sessions because we are able to see improvement or development more frequently.
7. ***Technique can be observed and manipulated in the race-specific conditions.*** This relates to how perceptual feedback can change for a swimmer as they grow or go through puberty, and the neuroscience involved with how the brain is making alterations or correctly carrying out a movement.
8. ***Quality sessions can happen more frequently as the impact of irrelevant fatigue is greatly reduced.*** Recovery is a huge variable between swimmers. Some swimmers need five minutes and some need eight. This is something else that can be measured.
9. ***Coaches are more engaged with the swimmers as are swimmers engaged with other swimmers.*** Now again I want to stress that I am not suggesting that other coaches are not engaged with their swimmers. But I think what we are finding is that even we are more interested in the set and the developments the swimmers are making so we are participating as well. The only time we are sitting down during a set is while the swimmers are recovering and we are frantically writing down all the measurements we took during the set. We do sets where the groups are split into two and we do the set in waves, so that kids can time each other. They get actively involved in helping their partner have a successful set.
10. ***Character building is fostered.*** Dealing with failure is hard and it takes a good character to be able to roll with the punches that this sport can deal. I suppose for me this is the most important benefit that the program has delivered, because these swimmers are forced to deal with possible failures in a set every day. One of the swimmers I lost as a result of implementing this program was a kid who just could not get her head around the fact that you had to fail. That failure was a good thing and that in failing you learnt all the ways how NOT to do it. She just did not have the character to handle it, and therefore did not fit in with the culture of my team. So what you create is a team full of individuals

who have good character! More than anything else it is about the team culture that has developed with our team. Everyone is on board with what each swimmer needs to achieve and the swimmers congratulate each other when they get it right. There is an excitement when their team mates have a successful set and there is an amazing amount of encouragement from one swimmer to the other as the program plays out. Each and every swimmer has bought into the program whole heartedly and they use the information around them to make responsible decisions and take responsibility for their own swimming. They feel empowered! Nothing is aimless. Every set gives them an opportunity to have a sense of accomplishment and motivation. When they fail a set the team rallies around them to motivate them for the next set. Now it is not to say that other coaches haven't achieved this in their programs, but this is just what has worked for us and now I have five coaches, all from different backgrounds and different clubs and coaches, who have also now bought into this concept 100%.

Lastly, the neurological thing grabs me. The fact that we are not only training the body, but training the brain as well, this is something that speaks to my core. We are always talking about how much we need to engage the brain during racing, and how much the psychological approaches are neglected, but we are not making the time to work this element. Mental skills training should be incorporated into the program just as much as anything else. USRPT gives me the time and the vessel to constantly address this.