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USRPT Training of a Club Squad at a UK Midlands ASA Swimming Club – Update

By an ASA Level 2 Coach¹

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Overview

This first update on the progress of implementing USRPT in a squad at a typical ASA Affiliated Club in the UK describes a number of minor amendments to the implementations of USRPT in order to provide maximum exposure to the swimmers of race-pace training while swimming in the limited facilities available to the Squad.

Recap of the First Three Months Training (January – March 2017)

After the first three months of exposure to USRPT swimmers had settled into an efficient routine. To recap the first three months, the squad undertook a number of time-trials to establish baseline times for swimming 200m FR, 100m BK, and 100m BR. A limited number of swimmers also did a 200m IM time-trial. In addition, “Clock-skills” were practised, whereby swimmers had to learn to start precisely on the “off-time” (not “jumping the gun”) and quickly check the time on the clock to within one second upon finishing.

Swimmers also needed to learn to complete the entire race-[ace set themselves without intervention by the poolside coach. This freed the coach from being a “traffic cop” (with a stopwatch calling out times instantly forgotten by swimmers, or not heard in the first place) to being an active source of help to the swimmers. By re-enforcing skills, encouraging swimmers to strive for “just one more” correctly-paced repetition, and ensuring that they start recovery work as soon as possible after their set ends, the coach was in a far better place to judge the state of the swimmers physically and mentally and to identify common stroke faults/inefficiencies.

One swimmer mentioned in the original report had decided to stop participating in the sport. Descriptions of the swimmers are contained in Appendix A including age and capabilities, but with names removed for Data Protection purposes. Appendix B lists the swimmers' 200-yard freestyle times and improvements during this stage.

Results of the Second Three Months of Training (April – July 2017)

After six months of USRPT training, utilising the *Training Macrocycle* book (Rushall, 2013), and implementing coaching techniques outlined in *Swimming Pedagogy* (Rushall, 2011), the transformation of a disparate set of “written-off no-hopers” into a tight-knit group of confident, well-disciplined, and improving young swimmers has been remarkable. The improvements in technical skills of the Club Squad swimmers has been simply astounding, and is often commented upon by the other coaches. It is this improvement in technique more than anything else that I believe has been the cause of the success of the program to date.

Swimmers previously reluctant to enter Galas due to poor skill levels, have taken part in internal club Galas, and impressed their peers and club coaches with excellent displays of race-skills and in some cases massive reductions in race-times. The same swimmers are now looking to enter one or more Open Meets in the autumn to further test themselves. Other, more experienced swimmers in the group who have in recent years been dropping off in performance, have halted that drop-off and in some cases reversed it and begun improving again.

Not every swimmer has fully embraced the new program. One fails to understand that in order to improve, you have to regularly apply yourself at training; not just do the occasional decent set then skimp on the rest. A similar attitude was demonstrated previously by the swimmer under traditional-training therefore, the swimmer is unlikely to progress with any training regime and not just USRPT, without a change in attitude.

One aspect of USRPT that has only recently been internalised by the swimmers and this coach is the USRPT maxim of “repetition-until-failure”. Looking at completed sets about 4-5 months into the program, there were still many instances of swimmers protecting themselves from failure by completing a number of repetitions, resting, then completing an equivalent number again, then resting, so that nearly all the repetitions were completed. This was not the experience of this coach when swimming USRPT sets himself. If properly executed, training at true race-pace should be stretching a swimmer to the absolute limit for them to complete 20 repetitions. It should be impossible to swim 20 repetitions at a pace faster than a personal-best pace.

After talking through the results of the internal Gala (See Appendix B) and after discussions with the group, that attitude appears to now have been almost universally overcome. Swimmers have finally realised what is being attempted and expected. More importantly, they can see *how* they can achieve *their* goals and that training is not an endless random collection of swims and drills. They now understand that USRPT is well-structured, based on facts and evidence, and delivers results predictably and quickly. Subsequently, training discipline has not waned at all, despite heading into the “holiday season”; in fact it has improved further still, with swimmers keen to ensure they are training at the correct intensity. Swimmers now appear to have taken on board the “repetition-until-failure” principle and the pattern of swims and failures are more in tune with what USRPT requires. Failures are taking longer to happen, but when they do, they come quickly one after another.

Changes or Amendments to the Program

The program operates under severe limitations in terms of pool-time (7 hours per week), pool-space (no 25-m pool and only three lanes of a 25-yd pool available), so compromises and amendments have been necessary to find the correct balance between adhering to the maxims of USRPT to get the greatest training effect and trying to deal with the practicalities of the situation.

One Length Race-pace Set Timing Issues

Since the first report (<http://coachsci.sdsu.edu/swim/bullets/61%20USRPTexample.pdf>), the squad has managed to acquire an occasional session in a full 25-m pool. However, there is only one pace-clock at one end, which makes it difficult to correctly read times on a 25-m swim. Additionally it is very hard to correctly synchronise two race-pace clocks and keep them synchronised over a two-hour period, the inconsistencies in mechanisms causes them to get out of synchronisation. Therefore, a compromise that has been necessary for 20 x 25-yd/25-m race-pace sets is the swimmers have been instructed to allow +/-1 second in addition to their actual nominated times. Subsequently, the accuracy of the 25-m race-pace sets is less than the 50-m race-pace sets. An attempt is being made to rectify this for the next season, by building two identical pace-clocks using mechanisms from the same manufacturer for our 25-yd pool. The commercially bought mobile pace-clock will be moved into the 25-m pool, in the hope that it will stay in synchronisation with the mounted pace-clock at that venue. This is not a very satisfactory situation, but it is hoped it will improve the specificity of training for 100-m races.

“Half-set” Race-pace Sets

Another change to the training regime is due to the improvement in technique of the majority of swimmers. I wanted to introduce more race-pace sets throughout the week. The initial goal was to have two full-sets in a 90-minute session and three full-sets in a 120-minute session. However, this goal was reduced to introducing only one or two more sets, due to the type of swimmers in the squad and also the amount of available pool-time. Consequently, what has been programmed is that the 120-minute sessions contain two full race-pace sets, one of the 90-minute sessions is always one full 20 x 2-lengths race-pace set and a “half-set” of 12 x 2-lengths race-pace, and for the other 90-minute session there is always one full 20 x 2-lengths race-pace set and it always ends with the weekly Water Polo game!

These changes seem to work very well. Swimmers rarely complete the 20 x 2-lengths race-pace set as expected in USRPT, but the swimmers normally always complete all 12 x 2-lengths half-sets. This latter observation at first sight may go against the USRPT maxim of a set should be “too hard to complete” however, when viewed as a “sub-set” of a full 20 x 2-lengths set, 12 lengths is really the minimum that should be completed to get the appropriate training load in and gain some training effect.

I have found that these “half-sets” can be useful in a number of ways:

- They can be easily “sneaked” into a session with only 15 minutes to go, as they rarely last more than 10 minutes, and can immediately follow on from the second skill-set of the session.
- Twelve repetitions is viewed by most swimmers as “do-able” and often these sets are completed fully by even less motivated or tired swimmers.
- If a swimmer has had a poor or disappointing first full race-pace set, the “half-set” is often used as a “redemption set” and if done well, it can re-motivate a swimmer at the end of a session, that is, they can finish on a “high”.

Distance Race-pace Sets

There are several swimmers in the squad who are comfortable over longer distances, and so 20 x 4-lengths race-pace sets have been introduced once a week aimed at the 400-m, 800-m and 1500-m freestyle races. Due to the lack of pool-time, presently it is impossible to do this set more than once a week but they have proved popular with certain swimmers.

Results from Mid-Session Time-trials

Some time-trials were conducted mid-season (after five months) to see assess swimmers' responses to USRPT training. The results from those are included in Appendix C. The backstroke time-trial went very well and the results are as striking as the freestyle times. However, when running the breaststroke time-trial sufficient recovery time after the backstroke-trial did not occur. Therefore, the results for breaststroke are not quite as compelling, and show that for those swimmers with low attendance, recovery and fitness is an issue.

Results from Internal Club Championships

Appendix D shows the comparisons from the Internal Club Championships against swimmers' current race-pace training times.

The Next Six Months

I have recently had a goal-setting session with the group and plan to try to personalise the training even more by getting the swimmers to choose four races for which they wish to train, then try to design the training sessions so that swimmers can use the same cycle times but swim different strokes if need be. I am hoping that the “buy in” by swimmers will be even greater than now, if they feel they have some influence over the program and decision-making. Only time will tell if this will work!

Also of consequence, the makeup of the group will change in August. The “powers that be” have finally accepted that isolating “non-keen” or “less-than-dedicated” swimmers and denying them proper pool time leads to loss of swimmers to the sport and more importantly loss of income to the club! Consequently, the squad has been merged with other swimmers from another squad and rebadged. More importantly the squad will be getting three lanes in a 25-m pool twice per week. The increase in numbers and how it might affect training is a concern, but I am also pleased that for one, my original assertions that these swimmers were *not* “no-hopers” has finally been listened to and accepted, albeit 12 months too late. For

another I know that the fantastic improvements in these swimmers has not gone unnoticed by the Head Coach, and I think he wishes to find out more about exactly what it is the squad is doing!

Summary

Nothing in this second three-month period has given me cause to doubt either the correctness of the science and physiology behind USRPT, or the training patterns designed on the basis of that science and physiology. The Principle of Specificity has been proven beyond doubt with the results from the Club Championships, and those results have awakened the swimmers to what is being done and motivated them towards achieving their next goals in swimming.

I cannot speak highly enough about the value and effects of USRPT for any class of swimmer.

Postscript

At the same time this report was received, an email from the author (July 26, 2017) to this editor contained the following good news:

I've been having meetings with our Head Coach about a squad restructure over the last month, and tonight it was announced to the Club by the Head Coach, that I would be running a new squad consisting of the 14 swimmers I have been working with for the past 6 months, plus seven other swimmers of similar ability. Here's the rub. The programme for this squad would be produced by me and will be a pure USRPT program with half the time in a proper deck-level 25-m pool! So you will be pleased to know after a successful six months, USRPT has hit the mainstream of our Club.

Appendix A: Swimmer Profiles

Swimmer F1: Female, 17 years-old, Regional* Qualifying Swimmer two years ago, but has multiple growth issues around joints causing her to be unable to train for long periods under “traditional training”. Attends three out of four sessions. Excellent work ethic.

Swimmer F2: Female, 16 years-old, County Qualifying swimmer, severe shoulder issues and undergoing physiotherapy and acupuncture. Attends about one out of four sessions. Excellent work ethic.

Swimmer F3: Female, 16 years-old, never achieved a County Qualifying Time. Attends three out of four sessions. Excellent work ethic.

Swimmer F4: Female, 16 years-old, never achieved a County Time, severely intellectually disabled, looking to get categorized. Attends four out of four sessions. Excellent work ethic

Swimmer M1: Male, 16 years-old, never achieved a County Qualifying Time; transplant survivor. Attends one out of four sessions. Excellent work ethic.

Swimmer F5: Female, 15 years-old, County Qualifying swimmer. Swims nearly every session. Variable work ethic. Suspect this swimmer is a “Drop-dead” sprinter as she struggles with two-length sets.

Swimmer F6: Female, 15 years-old, late starter, never achieved a County Qualifying time; often cannot make qualifying times for Open Meets. Attends all four sessions. Excellent work ethic.

Swimmer F7: Female, 14 years-old, never achieved a County Qualifying time; often cannot make qualifying times for Open Meets. Attends one out of four sessions. Good work ethic.

Swimmer M2: Male, 14 years-old, never achieved a County Qualifying time; often cannot make qualifying times for Open Meets, has represented Club in lower-level League competitions. Attends three out of four sessions. Excellent work ethic.

Swimmer M3: Male, 14 years-old, never achieved a County Qualifying time; often cannot make qualifying times for Open Meets, has represented Club in lower-level League competitions. Attends two out of four sessions. Excellent work ethic.

Swimmer M4: Male, 14 years-old, never achieved a County Qualifying time; often cannot make qualifying times for Open Meets. Attends three out of four sessions. Excellent work ethic.

Swimmer F8: Female, 13 years-old, has achieved County Qualifying times and attends Open Meets. Attends two out of four sessions. Excellent work ethic.

Swimmer M5: Male, 12 years-old, has achieved County qualifying times, just missing out on Regional Qualification, and regularly attends Open Meets. Attends four out of four sessions. Excellent work ethic.

Swimmer M6: Male, 12 years-old, never achieved a County Qualifying time often cannot make qualifying times for Open Meets, has represented Club in lower-level League competitions. Attends two out of four sessions. Excellent work ethic.

* *Hierarchy of competitions in the UK: Open Meets/Local Leagues -< County -< Regional -< National.*

Appendix B

200-yard Freestyle Time-trials (after Three Months)

	10-Jan-17	04-Apr-17	Diff (+/-)	% Diff
Swimmer F1	02:30.31	02:19.36	00:11.0	7.3%
Swimmer F2**	02:21.00	02:21.00	00:00.0	0.0%
Swimmer F3	02:32.98	02:34.35	-00:01.37	0.9%
Swimmer F4	03:32.55	03:16.92	00:15.6	7.4%
Swimmer F5	02:19.91	02:23.42	-00:03.5	2.4%
Swimmer F6	03:12.60	02:52.24	00:20.4	10.6%
Swimmer F7	03:10.27	03:07.71	00:02.6	1.3%
Swimmer F8	02:27.28	02:24.83	00:02.5	1.7%
Swimmer M1	02:37.60	02:28.13	00:09.5	6.0%
Swimmer M2	02:41.44	02:33.02	00:08.4	5.2%
Swimmer M3	03:11.11	02:35.63	00:35.5	18.6%
Swimmer M4	02:52.16	02:37.36	00:14.8	8.6%
Swimmer M5	02:25.25	02:22.41	00:02.8	2.0%
Swimmer M6*	03:10.05	02:51.65	00:18.4	9.7%

* Swimmer M6 did not attend the second 200-yard FR time-trial, so for the purposes of this report I have used a calculated time based upon a 100-yard FR time-trial completed at the start of March 2017.

** Swimmer F2 only attends once per week on a Thursday and so I have no time-trial times for her.

My Thoughts

The results for Swimmers F1, F6, and all male swimmers, bar M1 and M2, are as I would expect. All these swimmers work hard in the race-pace sets. Technically F6, M3, M4, M5, and M7 have improved the most and have responded the best to the Technique Macrocycle (changes are visibly obvious), and have also dropped in times on race-pace sets as well as in the time-trials.

Swimmer F3 has dropped off in times, partly because she was ill and injured in the two weeks prior to the second time-trial. Also, she did not join the squad until the end of January, so her starting time was actually based on a previous personal-best. But most of all, she does not really apply herself to race-pace sets. I am sure it is in her head, because I have seen her on one occasion really apply herself and quite easily make the set, but ever since then has failed to match that performance.

Swimmer F5, has a good work ethic, lacks confidence, and I am convinced has a bit more in her. I am not too concerned about the drop-off, she has had exams and has missed quite a few training sessions in the last month, but she continues to train with vigour and I expect good results on the next time-trial.

Swimmer M5 is a very hard working swimmer and I believe is swimming close to his current limit at present, and the small improvement is in line with his performances at Galas.

Also, I am particularly pleased with Swimmer F1's improvement. She did not start out at anywhere near personal-best level due to long-term injuries and she is still nowhere near her best. However, she has been able to train far more regularly than previously allowed by traditional-training.

Appendix C

100-yard Backstroke Mid-season Time-trial Results (at Month 5)

Swimmer ID	Month 2	Month 5	Diff (+/-)	% Diff	Notes
Swimmer F6	01:38.76	01:29.04	00:09.72	9.84%	Regular Attendee
Swimmer F5	01:19.45	01:23.50	-00:04.05	-5.10%	Doesn't Train Properly
Swimmer M3	01:28.45	01:28.58	-00:00.13	-0.15%	Regular Attendee. Changing Stroke
Swimmer F4	01:49.72	01:44.79	00:04.93	4.49%	Regular Attendee
Swimmer M4	01:33.21	01:22.34	00:10.87	11.66%	Regular Attendee
Swimmer M2	01:16.92	01:14.98	00:01.94	2.52%	Regular Attendee
Swimmer F8	01:16.27	01:15.71	00:00.56	0.74%	Irregular Attendee
Swimmer M1	01:19.86	01:19.86			Injured
Swimmer M7	01:33.59	01:28.54	00:05.05	5.39%	Regular Attendee
Swimmer F3	01:15.09	01:15.09			Exam Revision
Swimmer F1	01:11.61	01:10.47	00:01.14	1.59%	Regular Attendee
Swimmer M6	01:14.11	01:21.62	-00:07.51	-10.13%	Regular Attendee, Carrying Injury
Swimmer F7	01:43.67	01:40.33	00:03.34	3.22%	Irregular Attendee
Swimmer F2	01:14.43	01:13.32	00:01.11	1.49%	Attends Once Per Week

My Thoughts

These results show a significant overall improvement over a three-month period. Excluding Swimmer F5 who does not commit to training and M6 who carried an injury, the group on average showed a 4% improvement in times.

Again Swimmer F5's lack of commitment to training also showed through.

Swimmer M6 had badly strained a muscle in his arm in month-5, hence his poor time. He really should not have swum, but insisted he was fine to so do! His performance in the internal Club Gala confirmed that this was a spurious result caused by injury, and his time in that Gala was identical to his month-2 time.

Swimmer M3's growth-spurt has left him ungainly and he is in the process of changing his backstroke, so the result is actually pleasing as far as I am concerned.

Swimmer F8 is a talented swimmer but who at this point attended infrequently only one or two times per week. The result is highlighted to show that even at this low attendance rate, marginal gains in times are possible using USRPT.

100-yard Breaststroke Mid-season Time-trial Results (at Month 5)

Swimmer ID	Month 2	Month 5	Diff (+/-)	% Diff	Notes
Swimmer F6	01:45.83	01:40.59	00:05.24	6.19%	Regular Attendee
Swimmer F5	01:25.04	01:28.92	-00:03.88	-5.70%	Doesn't Train Properly
Swimmer M3	01:28.93	01:28.04	00:00.89	1.25%	Regular Attendee
Swimmer F4	02:07.46	02:06.23	00:01.23	1.21%	Regular Attendee, poor technique
Swimmer M4	01:34.41	01:27.24	00:07.17	9.49%	Regular Attendee
Swimmer M2	01:38.96	01:38.35	00:00.61	0.77%	Regular Attendee
Swimmer F8	01:36.10	01:37.01	-00:00.91	-0.95%	Irregular Attendee
Swimmer M1	01:31.76				Injured
Swimmer M7	01:53.13	01:53.69	-00:00.56	-0.62%	Regular Attendee, poor technique
Swimmer F3	01:33.72				Exam Revision
Swimmer F1	01:23.53	01:20.10	00:03.43	5.13%	Regular Attendee
Swimmer M6	01:29.25	01:31.59	-00:02.34	-3.28%	Regular Attendee, Carrying Injury
Swimmer F7	01:46.62	01:55.76	-00:09.14	-10.72%	Irregular Attendee
Swimmer F2	01:26.87	01:38.84	-00:11.97	-17.23%	Attends Once Per Week

My Thoughts

The timing of this time-trial was on reflection too soon after the 100m backstroke. Only about 15-20 minutes was allowed which included some general recovery swimming.

Swimmer M6 was suffering from a muscle strain in his arm.

Swimmer F6 does not commit to training.

Swimmer F2 only attends once per week and the exertions of the backstroke left her with shoulder-pains.

Swimmer F7 only attends 1-2 times per week and has very weak breaststroke.

Whilst the results of this time-trial are not as impressive as those of freestyle and backstroke, the lesser improvements are all generally explainable. Ignoring swimmers M6, F5, F2, and F7, the remainder of the group exhibited again an average 4% increase in speed. If Swimmer F7 is included then this is reduced to 1.3% improvement. Take your pick on how you wish to interpret the results. What cannot be denied is that despite having swum a backstroke time-trial 20 minutes earlier in which all but three posted personal-best times, half of the swimmers managed to also swim a personal-best in breaststroke, with a further quarter managing on or near a personal-best time. That was on generally less than five hours of training a week. This is further evidence that not only is the technique methodology of Rushall sound, but USRPT does maintain great aerobic and anaerobic conditioning.

Appendix D

Club Championship Results

Below is a comparison of Club Championship's times swum compared to race-pace set training times.

Swimmer ID	Event	Time	Race Pace Rep Time	Calculated Swim Time	Diff	Notes
Swimmer F6	100m Backstroke	1:38.29	00:25.0	01:40.0	-1.71%	
Swimmer F5	100m Backstroke	1:28.10	00:22.0	01:28.0	0.11%	
Swimmer F4	100m Backstroke	1:32.82	00:28.0	01:52.0	-17.13%	Exceptional result
Swimmer M2	100m Backstroke	1:23.44	00:21.0	01:24.0	-0.67%	
Swimmer F8	100m Backstroke	1:21.16	00:20.0	01:20.0	1.45%	
Swimmer F1	100m Backstroke	1:15.65	00:20.0	01:20.0	-5.44%	
Swimmer M5	100m Backstroke	1:21.84	00:21.0	01:24.0	-2.57%	
Swimmer F5	100m Breaststroke	1:37.13	00:49.0	01:38.0	-0.89%	
Swimmer F4	100m Breaststroke	2:10.72	01:01.5	02:03.0	6.25%	Forgot Technique in Race!
Swimmer M4	100m Breaststroke	1:34.52	00:49.0	01:38.0	-3.55%	
Swimmer F8	100m Breaststroke	1:37.01	00:49.0	01:38.0	-1.01%	
Swimmer F1	100m Breaststroke	1:27.18	00:45.0	01:30.0	-3.13%	
Swimmer M5	100m Breaststroke	1:34.79	00:48.0	01:36.0	-1.26%	
Swimmer F6	100m Freestyle	1:27.16	00:22.0	01:28.0	-0.95%	
Swimmer F5	100m Freestyle	1:09.17	00:19.0	01:16.0	-8.99%	Proof that swimmer can train harder!
Swimmer F4	100m Freestyle	1:41.94	00:26.0	01:44.0	-1.98%	
Swimmer M4	100m Freestyle	1:12.11	00:18.0	01:12.0	0.15%	
Swimmer M2	100m Freestyle	1:14.54	00:19.0	01:16.0	-1.92%	
Swimmer F8	100m Freestyle	1:12.00	00:18.0	01:12.0	0.00%	
Swimmer F3	100m Freestyle	1:18.06	00:20.0	01:20.0	-2.43%	
Swimmer F1	100m Freestyle	1:07.95	00:17.0	01:08.0	-0.07%	
Swimmer M5	100m Freestyle	1:13.41	00:18.0	01:12.0	1.96%	
Swimmer F6	200m Freestyle	3:09.90	00:47.0	03:08.0	1.01%	
Swimmer F5	200m Freestyle	2:39.94	00:39.0	02:36.0	2.53%	
Swimmer F4	200m Freestyle	3:38.71	00:27.0	03:36.0	1.25%	
Swimmer M2	200m Freestyle	2:49.17	00:41.0	02:44.0	3.15%	Swam PB in 50m Butterfly 15 minutes earlier!
Swimmer F8	200m Freestyle	2:40.87	00:40.0	02:40.0	0.54%	
Swimmer F1	200m Freestyle	2:29.56	00:37.0	02:28.0	1.05%	
Swimmer M5	200m Freestyle	2:36.91	00:39.0	02:36.0	0.58%	
Swimmer F3	200m Freestyle*	02:45.49	00:41.0	02:44.0	0.91%	

* Calculated 200-m race time to illustrate the fact that Swimmer F3 swam her 100-m freestyle at 200-m freestyle race-pace.

My Thoughts

Of special note was that swimmer F1 won her age group, which whilst only consisting of 4 swimmers, did include one swimmer from the “top” group in the club, and she did so by swimming more races in one day than she has managed in the past 24 months, with no side-effects from her condition. She almost managed a personal-best in one race, something she thought she would never approach again.

Also of special note was swimmer M2. He was one of the “written-off” swimmers as being “too poor in skills” and “too old” to ever improve to a level of interest to the then Head Coach. This swimmer managed a seven- second personal-best in his 100-m freestyle, his last time being only nine months prior. He also beat one of the “top” group swimmers in the 50-m butterfly. That was

a particularly sweet result, it has to be said, for the swimmer and the squad. Whilst 50-m butterfly is not a race that the squad has specifically trained for, it is testimony to the correctness and effectiveness of the “Technique Macrocycle” and “Swimming Pedagogy” which are the foundations of the program we are running.

Comparisons of Club Championship Results to Training Paces

In nearly all cases the time swum by swimmers correlates highly with swimmers' current race-pace repetition times. Even swimmer F3 who swam a 100-m freestyle was so programmed at 200-m pace, she swam an excellent 100-m at 200m race-pace! Knowing this might cause some people to question the validity of USRPT, and argue that if a swimmer cannot get out of a specific pace, then what is the point? My counter argument to that is that there is not the slightest proof that swimmers are unable to adjust their pacing to suit the race. Male swimmer M3 did just that. He did not swim a 200-m freestyle, only the 100-m and his repetition times were significantly faster than his 200-m times. Swimmer F3 just needs to learn to adapt on a per race basis. Also, and I love this analogy from my wife when somebody argued this exact point, “*If a drummer can change tempo on a per-song basis, there is no reason to think that swimmers cannot also make the differentiation on a per-race basis*”. I totally agree. In the next six months, we will be training for both 200-m and 100-m free style, if nothing else, just to prove the point!

References

- Rushall, B. S. (2011). *Swimming pedagogy and a curriculum for stroke development* - Second Edition. Spring Valley, CA: Sports Science Associates [Electronic book - <http://brentrushall.com/pedagog/index.htm>].
- Rushall, B. S. (2013). *A swimming technique macrocycle*. Spring Valley, CA: Sports Science Associates [Electronic book - <http://brentrushall.com/macro/index.htm>].