



**The one about improving
performance
(with Wayne Goldsmith)**

Podcast 12

The Effortless Swimming Podcast



Welcome to the Effortless Swimming podcast. Today I have Wayne Goldsmith on the line. Wayne is from More Gold Performance Consulting and he is a performance consultant speaker and presenter and has worked with Swimming Australia, British Swimming United States Olympic Committee, South African

Sports Commission a number of AFL teams here in Australia, the Australian Rugby Union and the Australian Rugby League Teams, the AIS and the list just goes on. You can see all the teams, committees and commissions he has worked with on his website at moregold.com.au.



Wayne welcome to the call.

Thanks very much for having me, looking forward to it.

What I want to cover today is talking about pacing your races better for swimming. The role of relaxation in swimming, some exercises to get your mind set and your head right for competition and training and also just touch on why athletes choke; so why some swimmers fail to perform on the big stage.

We first met three years ago when you came to do a session with the squad that I coach, Powerpoints and you took the swimmers through some skills and exercises just to get them to improve their swimming. The main one we did was relaxation; can you talk a little bit about the role of relaxation in swimming.

Well I think relaxation is to me the most under practised and undervalued skill in swimming but in terms of sprinting and the capacity to go fast in the water relaxation is absolutely critical. When you think about when you are a little kid your idea about going fast is usually associated with words like hard or try more or mum and dad will say clench your fists, grit your teeth and push harder. It is always to do with effort, whereas when you watch really great athletes it's all about effortless speed. It's all about being relaxed and moving faster; it's all about doing what you need to do without tension. I often say to swimmers tension is the enemy of



performance. The faster that you want to go the more relaxed you have to be. That's a really simple statement to make but when you think about it it's almost the opposite of how you work with swimmers. We say ok guys come on, we slap our hands together and say common it's time to go fast lets go, we even talk faster when we want athletes to sprint. We don't want them to go harder, what we want them to do is relax more and move their limbs faster. We don't want them to think about effort or trying, we want them to relax and then move their limbs faster. That's a real skill not just for athletes but for coaches is that when you design sprint training programs or designing programs to enhance the speed of athletes is to when you want more speed talk more about relaxation. It's a critical concept and one of the key safe for butterfly; butterfly is always the classic. I talk about butterfly in terms of it being a power circle. One of the reasons why people struggle with butterfly is that when they pull underwater they apply force, their hands go from slow to fast like all swimming propulsive movements they start slow, they accelerate from slow to fast then they exit the water and during their recovering so the time when their hands are moving forward to go back into the water they are still under tension and are still tight and they're throwing their hands to the end of the pool. So they are never really relaxing whereas a good butterfly swimmer will apply force under the water during their pull, exit the water and then turn off and relax. So when we talk about butterfly applying relaxation concept we talk about power on, power off, power on, power off. To get swimmers used to the idea that recovery, when your hands are going forward in butterfly recovery is very much about relaxation. The more effective they are at relaxation during recovery the more they are able to apply force during their pull phase. So this marriage between force production, speed and relaxation is critical. If swimmers get it they improve significantly. If they try and improve purely by trying harder or pushing harder or using more effort it is a dead end they are not going to get the results that they want.

It's a bit like in the Ian Thorpe documentary that was on about two weeks ago he mentioned in one of his races he had the 100m freestyle and said it was the first time he felt that easy speed; which is swimming fast but its relaxed and it doesn't feel difficult. That's what you are talking about isn't it?

Well you can't fight the water, we know the density of water means that the more you fight and thrash against it the more it is going to resist you and the more it will fatigue you. It makes sense then to look at the water as something you are going to move easily through that you will flow through. It goes back to when you are working with little kids; if you



remember learn to swim or have ever seen a learn to swim class I actually call it learn to sing classes because what we do with the little kids when they are in the water for the first time we play humpty dumpty sat on the wall, we play pop goes the weasel, we play ring around the rosy, we play games where they have to sing wiggles songs and all those things not just because we enjoy working with kids. The reason we do it is because we want them to have an association that water means fun. Water means relaxing, water means smile; water means enjoyment so that if we want them to have a lifelong love of water and moving through it we need to teach them right from the start that water is fun place to be. **It's about relaxation and as we teach them water safety. I think one of the issues with master swimmers and tri-athlete particularly is they haven't come from a swimming background; they haven't gone through that fun easy movement relaxation smile in the water phase. Particularly the tri-athletes come into it with a huge aerobic base they have done a lot of running a lot of cycling maybe and they are used to improving by doing hard work and they are used to improving just by pushing harder or bigger gears or running up hills. They try to apply the same philosophy to water and all of a sudden realise that they just can't do it. So they try and do more volume and they don't improve and they do more volume and they don't improve. Critical, critical thing for them is to learn to relax before they really start to do much work.**

Yeah that's exactly right and when I am working with tri-athletes who are new to the sport they have only got six months a year of swimming under their belts you see that they are sort of trying to pull themselves through the water and just forcing their way through. So I take them through some kicking drills and drills just to get them to stretch out and relax and just work with the water instead rather than fighting against it. You are spot on there with people who haven't got that swimming as a younger kid background.

Well a lot of people talk about feel one of the common things that tri-athletes will say they struggle with; is feel, so feeling the water to learn where to apply pressure. That again comes down to relaxation. I often say to tri-athletes or swimmers that are struggling with those two very simple words that mean a hell of a lot, soft hands. The things about your hands are very soft and loose and relaxed so they can actually feel the water. It comes back again to this relaxation thing that a lot of swimmers again the tri-athletes are the biggest culprits I think who have come from non-swimming back grounds is that when you ask them to move faster you can see the tension start to form in their finger tips, their hands, they



cup their hands really tightly. They get tension in their forearms right up even past their elbows sometimes as they go well I have to go faster **let's** really grind out and apply more force to it and they **can't** figure out why they are not going faster. Whereas if we talk to them about moving their arms faster and increasing speed, keeping their hands soft so they are thinking about relaxation with speed or relaxation with power they get those two things together they get great benefit from it. Very tough thing to teach because again they are used to getting performance improvement through tensions or applying tension. We want them to do exactly the opposite of what they have done, maybe since they were little kids playing football and trying to improve their performance in other areas. **It can be learnt it is a very simple skill and doesn't take very long** but just those little queue words like soft hands; the faster you want to go the more relaxed you want to be. All the power on power off all those little queues to keep reminding them about the marriage between relaxation and speed.

Working with a lot of swimmers and tri-athletes you can notice the kind of light bulb moment where they realise, they get it they start to switch off the tension and they just relax and stretch out and just work with the water. Once you get it you start to really improve from then on.

I think one of the drills that I have been doing a lot lately with swimmers and tri-athletes has been to get them to swim very slow freestyle with their fins on and their paddles on at the same time and really relax and feel with soft hands on the paddles, feel the pressure of the water on their paddles and just feel that sensation of having pressure on the paddles; so having the fins on just gives them a bit of momentum. Most drills are performed at kicking speed so quite often you put fins on just so they have the momentum to perform the drills the way that you need them to be performed. I have found that doing some repeats early season nice and long, very slow with paddles on and fins on at the same time thinking about and feeling about pressure on their paddles. I call the session **'pressure in power, power in pressure'** so what we are trying to do is teach people how to first feel the water and that teaches them the concept of pressure. Once they understand the concept of pressure then they can apply force and power to the water in the right place. If they are **not relaxed they can't feel if they can't feel they don't really know where** to apply force effectively. So the session or the routine that I do is called power and pressure, pressure and power. Another extension on that is we do that drill where we ask them to close their eyes for 5-6 strokes while they do it to try and get them again to not worry about what they are



seeing or looking at the line at the bottom or what is happening on the side of the pool but to really relax, close their eyes for 4-5 strokes and really feel that pressure on their fingertips, the pressure on the paddle which then helps them to learn where they can apply effective force during their stroke.

Yeah that's one of the things that you did with my Powerpoint squad is we did 4 x 100m's building 1-4 so the last 100m was the fastest one but the whole time just thinking about staying relaxed as you get faster. The feedback that I got after that was that it was just so useful and to think about going faster without working harder. That was a light bulb moment for a lot of the guys that I coach.

Well I think if you have the capacity to do this one on one with swimmers you could make significant improvements very quickly where you would walk with a swimmer, I have done this with a few senior guys where you start off swimming very slowly walking along side them as a coach and looking at them getting some kind of feedback from them about how it feels or watching their distance per stroke looking at how long they are having pressure on the paddle throughout this stroke. Once you see that they are losing it you back off the speed a little bit. So you might start off with this progressive power and pressure drill, you might start off at 1500m pace or even slower say 6 out of 10 speed; very easy and then progressively give them some hand signals, build the speed up a little bit lap by lap until you see they are losing that sensation for feel. Until you see them start to lose that pressure moment on the water. One of the things that I have learnt over the last few years watching some very good athletes is that I think we teach distance per stroke the wrong way. I think we have athletes with the belief I think that if you ask the average tri-athlete what distance per stroke is they say it is from where the hand enters the water to where it comes out and everyone is big on these long reach drills or flick yourself on the thigh drills or bounce the basketball **drills past your knee type of things and I don't think that's right. I think we have to start thinking differently about distance per stroke; whereas distance per stroke is not where your hand goes in and where it comes out. Distance per stroke is how long during that path are you keeping effective pressure on the water. So if you are not catching the water or feeling it effectively then you are only applying force to the water say from just above your head to just around about your belly button. Well that's about how long your stroke is going to be allowing a little bit extra for momentum because of the speed you are travelling at. To me you the go from doing drills to improve distance per stroke as I said those old**



ones of reaching out for a stick or kickboard or pushing the water past your knees that sort of thing that we have said, I think you go back to feel drills and teaching athletes how to apply pressure more effectively throughout that distance. Throughout the entry to exit points, I think you get a far better result doing it that way.

In terms of pacing what are your recommendations for say swimmers who are doing 100m, 200m, 400m races what are your suggestions with pacing?

Well pacing is a matter of what you are doing in training and staying relaxed and maintaining a pace that you have been trained and prepared to do and understanding it. The great Russian freestyler Alex Popov had a great phrase and I have never forgotten I think it is a fantastic way of looking at swimming. He said there are two sorts of athletes that you come up against in competition; one group is what he calls the pacers, the ones who are trained to do a very specific job. So though the athletes are training to break a minute for 100m freestyle for example they may be trained to split 28/32, 29/31, 30/30 unlikely but **let's** use it hypothetically and they can execute that pacing strategy effectively because of the repetition that they have executed in training. Whereas the other type of athlete is a racer; racers and pacers. Alex said that they have not only got a good understanding of pace but they are able to change it and vary it and use it as a tactical and strategic weapon depending on what needs to happen in the race so that whatever the race throws at them they have this strategic and tactical tools to deal with it. I think of pacing in two ways; learning to pace is critical because if you **can't** pace there are a whole range of things you **can't** do. For example a lot of test sets that we do with athletes depend on your capacity to **maintain a very exact pace. Swimming Australia's endurance test set, the 7 x 200m test set where you descend from around 60 beats off your maximum heart rate down to an out effort on the last of the 7 x 200m's depends on your capacity to pace very accurately.** There is another great **test set I like which is 7 x 50m's where you start off around 12 seconds off your best time, the second 50m is 10 off your best time and then 8 off your best time, 6 off, 4 off, 2 seconds off and the last one is a maximum speed effort.** Again **can't** do the set, and the set is a great one when you can track stroke count, stroke rate and stroke efficiency it gives you a lot **of good information, but if you can't pace accurately you can't do the test set.** So pacing is really critical for that reason. Pacing is really important obviously to be able to hit a specific target, certainly using stroke count, stroke rate and rhythm for tri-athlete it helps them to stay on track for what they are trying to do. Then to me it is also a very important



strategic weapon to know how to take it up and drop it back when you need to and change pace. One of the issues I find with tri-athletes it drives me mad is they do their fast work to slow and their slow work to fast. They are always sitting around about threshold and they lack the capacity to change up or change down when they need to. They are very good at maintaining a speed around about threshold but that's the way they train all the time. They are very good at pacing race distance pace but have not really got a top end or a bottom end and they can't change up or down when they really need to. I really encourage tri-athletes to do some of their work around 60-65%, do some of their work up around threshold and then include some sprint work; sprint work being 100% maximum speed.

Yeah. Doing those sets you need to... if you are not doing them at this end also known as build sets where you try and hit whether it is PB +4, +2 or threshold work plus x amount of seconds then it is very hard to know how hard you can go before blowing up and being able to judge that pace while you are racing and while you are training it definitely is a skill and especially if you are doing longer races too. It is a very good strategy to know how hard you can go before you are going to blow up.

Absolutely, there are a lot of different ways of teaching with some technology available on the market that can help teach you is there is some technology that will beep in your ear and tell you where you are relative to the wall, you can beat out a tempo. I found a really simple one for tri-athletes that doesn't cost a lot of money; a lot of them have that ironman Timex watches... I am not plugging Timex I haven't got a watch on myself so no I am not plugging it. But there are some brands of watches, waterproof watches, that tri-athletes will use for the rest of their training just to do split times and measure how long they are riding and running and so on that have got a countdown timer on it. The way you can use that in swimming is just to fold it up and stick in the side of your swim cap above your ear so you can hear it really clearly. So let's say I am trying to learn how to swim 45 seconds per lap is my pace. So 130 hundreds, I set the countdown timer to 45 seconds and it is going to go off every 45seconds in my cap. Obviously I am not on the wall I am a little slow, if my feet are on the wall I can back off I am a little too quick. You can do that at the beginning of training and you very quickly learn how to hold pace. So if you have already got one of those watches just learn how to use the countdown timer stick it in your cap you can learn pacing very quickly.



I heard you on one of the radio stations here in Australia the other day talking about choking. So when athletes fail to perform on the big stage. The example was with Magnussen in the 4 x 100m he went a bit slower than he was expecting and some people refer to it as choking. You had a really good analogy for that called the plank theory; can you explain a bit more about that?

Well choking is an interesting concept because some athletes that go to the Olympic games the ones that are really well prepared physically, mentally, technically, tactically; the ones that have got a great preparation and all the bases covered they go to the Olympics looking forward to it. They think it is a really exciting opportunity to challenge themselves against the rest of the world and they really thrive in it. A lot of athletes even if **it's** not the Olympics it can be the national championships can be for your first triathlon can be your first junior age **group doesn't matter what it is. If the athletes don't fully understand the nature of the environment and its lots more than physical anyone can be trained to swim a fast time it is doing it when it's hard and there are a lot of**



people watching and you are on the other side of the world and so on; **that's the real issue. So some athletes go under** prepared in terms of understanding the mental stress and the emotional requirements of the race even though they are well prepared physically. Having said that some athletes will go this is great I have trained for this, I have lived for this moment I **can't** wait to get started and they really thrive it in. Others build it up to be more than it is. Others go look this is not another swimming race this is the Olympic Games I am going to win this I am a national celebrity I make money I am famous and they start to over think it a little bit too much. So it is one of the great things in swimming compared to triathlon and football and other sports is that wherever you go in the world Fina have regulated that the pools are a standard width, standard depth, the temperature of the water is controlled so that is standardised around the world. The lane ropes, the starting blocks, the timing mechanisms everything about the environment is standardised. So extensively being in Sydney, Melbourne and Brisbane and doing 100m freestyle in front of four or five of your friends is no different to doing it in front of the Olympic Games but the perception is.



So the example and this plank theory is quite a good one is that if you imagine that I had a plank of wood around 15-20cm wide and 2-3m long and I had it on the ground on a grass track, dead flat on the ground and I said I want you to walk up and down the plank you could do it quite easily and most people could do it blind folded. **I've got a two year old he could more than likely do it without a lot of support. That's not a challenge and people can do it quite comfortably.** Now imagine and visualise that we now shift that plank 300-400m into the air and again ask you to go backwards and forwards across the plank. Now the plank **hasn't changed its not any shorter it's not any narrower, it's not any slipperier it's just an environment where your mind says this is hard, this is tough this task I have been asked to do is really challenging and demanding.** The ones who see it for what it is; hey look I am in London but it is still the same lane it **doesn't matter where this is I am trained to do this job they do very well.** The ones who go there and see the plank as the one suspended 300-400m in the air they are the ones who struggle they are the ones who really battle for seeing it being more than what it really is.

I think we saw that with Leisel Jones'100m breaststroke. It was her third Olympics I think or possibly fourth but after her race, she raced really well her final was a good time and she just came out of it happy with the swim, just had fun and just really enjoyed it. She has the experience there but she didn't elevate the Olympics as the be all and end all its something that is just out there sort of thing. It is almost just another meet for her, she was relaxed and wasn't nervous about it.

I think you can only do that and she is very experienced and near retirement and a great athlete. I think you can only relax and enjoy it if you are well prepared. I often, talking to an AFL friend of mine the other day and we were talking about the impact that AFL coaches have on match play while the match is actually going on. So the decisions that the AFL coaches make from the coaching box; how much influence that actually has on the game on match day. My friend and colleague and I **were talking and he said 'look the match is won from Monday to Friday.** A great example I could give is that if you were planning for a competition in 8-10 weeks for example. What a lot of athletes will do tri-athletes, swimmers and even coaches; what a lot of them will do is they will take it easy for the first **2-3 weeks and go well it is a long way off I don't have to worry about it** and they will get to the fourth, fifth week and will say well I will start training hard now the meets getting a bit closer. They start to build up and then all of a sudden it is three weeks to go and they go oh **my god I haven't one starts I haven't done turns I haven't done race**



practice, I haven't done tempo training I haven't done this I haven't done that I am overweight, I am not doing gym work and they throw everything at it in the last minute and they stress themselves out. There is a great phrase I love that says that 99% of stress comes from not doing things when you should have done them. It is a great phrase because the athletes who do it the other way, the athletes who go alright 10, 12, 14 weeks before competition and start to prepare with that type of attitude them; when they get to the actual meet that are going to be relaxed and comfortable and confident because they know with certainty that they are prepared to do the job.

One of the things that I get asked a lot about in my business is can I help an athlete with their confidence problems? Confidence comes from knowing; knowing that my preparation has been uncompromised in every detail. They have out prepared my competition in every detail, I know for certain that I have made my training more challenging and more demanding than anybody else was prepared to. If you go to a meet with that sort of confidence and that certainty and knowing those things you can relax and enjoy it. The ones that have got doubts and uncertainty over their preparation they're the ones that struggle with confidence.

It was either Alicia Coutts or Bronte Barratt that after one of their swims she said; it must have been Alicia Coutts she got second and she said 'for the last three months I have trained so hard I have put in as much work as I possibly could do so if anyone wants to beat me then I know that I couldn't have done a single thing more in order to beat them, so well done to them'. You can see it from the way she was talking that the confidence that she had; she just knew going into that race that she had done all the hard work so whatever happened now was going to happen anyway and that is a good example of it.

There is a great phrase that I like Brenton that goes 'you may get beaten on talent but you can't get beaten on intent' what that means very simply is that if you come up against Ryan Lochte and you get beaten well that is the role of the dice the guy genetically, training, background all those things is a superior athlete at this moment in time but intent means I can try to eat better than he does, try to sleep more than he does I can make my gym work more intense than his, I can be more consistent at training than he is, I can work on my starts more than he does, I can do everything possible with real intent and purpose to out-prepare him in every detail if he still beats me well he is a superior athlete good on him he deserves it. However I can never be beaten on the fact that my intent



was less than his. It is a great lesson for swimmers, particularly young swimmers who go to their first age group meet and see someone who is a lot taller or maybe a lot more experienced than them and they freak out **and worry about it. Don't worry about you have got no control over them** or what they have done but if you can go there knowing that your intent, your preparation was better in every detail than theirs you can be confident that you are going to do a great job and that is a critical lesson for young swimmers to learn.

That's all about just doing the best that you can with the things that you have control over. So you can't control how much Lochte's trained you can't control his height, weight or anything but you can control what you eat and how much you train for you. So it is all about taking responsibility for what you have control over.

Absolutely, no one controls if you are anywhere from your mid teens onwards no one really tells you when to go to bed, you make the decision. How much sleep and what sort of quality of sleep you are going to make. You make the decision about every mouthful of food that goes in your mouth. You make the decision about when you re-hydrate, you make the decision about how fast you go during your kick sets or how much effort you put into your work in the pool. You have got no matter what age you are as a swimmer you have a lot of control over some of **the key issues. I often say to swimmers, I use the example again let's say Lochte at the moment. So if we were watching Lochte get out of bed in the morning what do you think he would do? Oh he would get up and put a tracksuit on, shoes and socks and probably have a light breakfast before training. Oh that's good. Look if we watching Ryan Lochte arrive at the pool what do you think we would see? The swimmer will respond well look he will probably stretch without being told he will do some warm up exercises, might do some skipping. So what you are saying is that you know what it takes to be the best but you have made a choice not to do it? Oh yeah that's right. By the time you have a swimmer in their mid teens they know what they should be doing but for whatever reason their motivation, their personal drive their ambition they have made a choice not to do it. So much of building their confidence and giving them the tools to compete effectively is to say 'guys success is a choice you choose to do the right things well and consistently, do them well consistently every day, success is the choice then that you have made. If you choose not to do those things then you have no control whatsoever not only about what your opposition does you have no control of influence over your own outcome and that is not a position that you want to be in.**



There is just one more thing I want to cover before; I know you have to go. That is just in terms of a pre-race routine; what are your suggestions for swimmers or tri-athletes to get a good pre-race routine that allows them to be confident and relax before a race?

Yeah really important, a couple of points I would throw in there is understand what ready feels like for you. So understand what you feel like and how you feel in your body and your mind when you are ready. **It is very important for swimmers to write down... I think getting swimmers** to keep a training diary I never been able to do it in 25 years in this business I think I am going to try to keep what little hair I have on my head left and stop doing it. But I do encourage them to keep a race diary. The race diary says look this how I felt today, this is what I did in my warm up this is what I ate, this is what I had for breakfast, this is how much sleep I had last night, this is what I did and here is my result. **Nine swims, eight PB's. Probably tells me I am on the right track for** understanding what ready feels like for me. To write down before my 50m breaststroke where I did a PB time today I felt really alert I talked to my friends I felt really bubbly and bouncy and that gave me this great time. So take note of those things and understand from that what does ready feel like.

A great story and I have this over the years and I love to tell it; was before the 2000 Olympic trials there were three swimmers trying to get into the Australian Olympic team for 1500m freestyle. One of them very sensible, very direct very relaxed wanted to do a great job Kieren Perkins. Sat in the marshalling area with a towel over his head and went through the race, wanted to be alone wanted the pressure on third Olympic gold medal potentially and wanted to be relaxed. Second swimmer there likes to be around people and I remember as I walked past he flicked me on the backside with a towel and had a joke with me about the state of origin rugby league. Another one of the guys who was going to be one of **Kieren's serious competitors liked music he had head phones on he was** dancing around singing and that was his way of bopping. One of the others was talking to his coach. So here we have super talented athletes all males, all Australians all at the one place at the one time in the same event completely different ways of getting ready and that is a critical message for swimmers, tri-athletes for anyone. Understand what ready feels like and what you need to do physically, mentally, nutritionally to **get yourself in that ready state. So keep a racing diary don't worry about** the training diary so much. There are a whole bunch of other ways you can do that. Keep a racing diary; secondly practice it, just practice it. So



every meet that you go, if you are going to go say to state championships all the meets that you go to leading into state championships practice your pre-race routine, eating, sleeping, resting, stretching, warm up, swim down listening to music reading a book, iPad, iPhone whatever you do to get yourself in that ready state practice that for 2-3 meets before you get to your main target meet.

So it is a very individual thing and about refining the little things within that pre-race routine.

Absolutely and we know for example I was at an international meet with a senior swimmer once who had a 2.5km warm up routine, she got out of the water and said she felt terrible I just don't feel right. She went into the change rooms, had something to eat, drink change her swimming costumes put on a different cap, came out again and did her entire warm up again. That is a bit extreme but the whole point was that she knew what ready felt like and she knew what she needed to feel like to perform at her best; it didn't work so she took herself out of the environment, started again, near gear, started dry the whole bit, went through it and had a great result. It all came from understanding and knowing what it meant to be ready for her.

That's awesome. So how can people get in touch with you if they want to work with you, for the services that you offer? How can people get in touch with you?

Well the best way is through my website which is www.sportscoachingbrain.com which is one word sportscoachingbrain or www.swimcoachignbrain.com and can follow the contacts in from there. Look it has been really enjoyable I have had a great time.

Yeah thanks Wayne I will put links in the show notes for this so people can just go straight through to those websites but thanks so much for you website. I have learnt a lot once again; three years later after meeting you back at MSAC that day, but thanks again so much for your insight and I am sure we will get a lot of really good feedback from you interview so thanks again Wayne.

Yeah no worries mate anytime.

