



Vol 07 Issue 6

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The World Swimming Coaches Association

# NEWSLETTER

## SOME SKILLS THAT NEED TO BE TAUGHT

*By Peter Ruddock*

- Streamline – one hand on top of the other, elbows straight, squeezed behind head
  - Leaving 5, 10, 15 seconds apart or waiting till teammate passes flags
  - Clock reading 1:00, :45, :30, :15 intervals
  - Flip turns
  - Fast finish – learning to speed up for the finish
  - Racing start – track or standard
  - Clean streamlined entry on dive – as through a hole in the water. Go for distance on dive
  - Sculling with the hands is a sideways motion
  - Count strokes per lap - Go for fewer strokes per lap.
- As a guide:
- Thorpe does 30 for 50m Free
  - Hackett does 32 for 50m Free
  - Huegill does 18 for 50m Fly race with 3 breaths

### STROKE DRILLS

Simple stroke drills and "catch phrases" especially for novice squad swimmers.

Drills can be used with beginner and advanced squads and also with teaching.

### FREESTYLE

- Kick on pool edge
- Pointed toes, straight legs & knees, relaxed hips, steady kick, boiling water
- Streamline kick on stomach
- Elbows straight, hands together, one hand on top of the other
- Small fast kicks; steady and strong
- Side kick
- On side, face in water and one arm extended, other arm at side
- Turn head, keeping one ear in water
- 12/12 Drill (free), 12 kicks on right side, recover hand, roll across stomach, 12 kicks on left side. Kick steady and even as changing sides
- Free pull – kick and roll, pull with bottom hand, breathe as you begin the pull
- Elbow up on recovery while changing sides.
- Kick on side – change arms under - water-pull and bend
- On entry, slice in so don't trap air
- Shark Fin Drill. Same as 12/12 but swimmers make a shark fin with elbows as arms recover
- Fingertip Drag. Drag fingers across top of water while swimming whole stroke free. High elbow recovery (loose & relaxed). Hand close to surface and close to body
- Slow motion free. Swimmer swims whole stroke very slowly concentrating on one technique point
- Extend forward on entry so as not to rush. Hand enters and stretches forward just as a plane lands down the runway. Begin to pull, keeping the elbow higher than the hand reaching over a barrel - getting an armful of water

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- On entry the hand moves forward on a slight angle [this helps let air out]
- Point the elbow to the side wall on entry
- Keep the elbow up .Use the roll of the hips to transfer force -hips roll to allow the push through
- Alternate-breathing freestyle – every 3
- Fast finish – on side, kicking all the way in
- In f/s, there should be no sideways movement [but roll along long axis]. The timing of the kick must allow hips to roll. The hand finishes simultaneously with downbeat of kick
- Breath control into turns. Face in water the last 2 strokes into a turn
- Back in 1981 when Nort Thornton [USA coach] lectured in Melbourne, he stressed max. distance per stroke and body roll [as in throwing a ball]. He said teaching swimmers shoulder roll helps better purchase of water
- Swim up the pool left arm (count strokes)
- Swim down the pool right arm (count strokes)
- Swim up the pool pull. Swim down the pool (count strokes) – try to do it in 2 less strokes
- Polo - flippers
- Finger tip drag
- “Popov” drill
- 8 kicks 1 arm: 8 kicks other arm
- Recover/scull
- Scull, neutral, forwards, backwards
- Power kick, head up
- Point fingers to bottom of pool when swimming f/s. This enables a high elbow. If fingers point at the side, the elbow will drop

### **BACKSTROKE**

- Kick on pool edge. [same as F/S drill]
- Kick holding board over knees for beginners
- With board over knees, kick with straight legs, keep knees under water, toes pointed
- Kick on back / hands at sides
- Small, fast kicks, knees under water
- Hips near surface, head still
- Streamlined kick. One hand over the other, streamlined with hands overhead, elbows close together
- Loose ankles, “Boil the water, Shake off socks”
- Pull & Roll (with pull buoy between thighs)
- Hands at sides, shoulders roll, look along the gun barrel. Look along arm on recovery, “Rifle barrel recovery”. Reach up to the sky with your hand on the recovery
- Still head
- Swimmers should have their head right back
- 12/12 Drill. Same as F/S, but on back
- Single arm. Stroke one arm only, rolling opposite side out, exaggerate and hold arm up
- [Variations include 3 left / 3 right; or 3 left / 3 right/ 6 whole, etc.]
- Swim with plastic glass with water in it or stone or coin on head. Swim whole stroke with object on head to promote still head position
- Lane pull. Swimmer reaches along lane rope as far as possible and uses his hands to pull, teaching a bent arm pull underwater. Alternate sides
- Steady kick, still head, good body roll
- Reach deep on entry, hand comes over elbow as in an arm wrestle (i.e., bent arm pull), and finishes

- as if throwing a ball at the pool bottom
- Start on alternative arm in backstroke sets, so as to develop turns on both arms
- Vertical kick - 15 seconds = 45 kicks
- Push through fast
- Back pull – 5 dolphin kicks, then BK kick, pull one arm, and then other
- Back breathing. In on one arm and out on other
- Back finish – on side, kicking all the way in
- Rotate on side
- On recovery, shoulder pops up before hand comes out
- Silly backstroke - recover and changeover the top of the water
- Kick on back
- R/L arm flippers
- Right 6 kicks, lift left shoulder out
- Double arm back
- Power spinning

### **Start**

- Bend legs
- Hands together
- Kick legs up so swimmer does a dive through a hole

### **BREASTSTROKE**

- Kick on pool edge
- On back. Start with legs straight, toes point to the sky, bring heels to wall, point toes out to sides and draw circles with your heels.
- In water on back with swimmer holding onto the wall
- Kick on back (with board over knees)
- 2 or 3 Kicks per pull
- 2 or 3 kicks under water in streamline position, then 1 pull and go under again
- Focus lifting heels to backside and finishing kick with big toes together
- Head stays still as if in neck brace so that swimmer breathes as shoulders rise during pull
- Keep hands and elbows in front of chin
- Beginners – can think of Breast pull as Upside down heart shape OR stirring two buckets
- Breast with closed fists
- Encourages the use of the forearm as well as the hand when pulling
- Breast with dolphin kick and flippers
- One dolphin kick per pull. Kick the hands forward into recovery
- Encourages hip lift as the swimmer dives forward “through a straw”
- Breaststroke with 3-2-1 count glide (i.e., long glide)
- Start with 3-count glide and work down to 1 count glide emphasising Pull, Kick, Stretch timing
- Full Stroke Breaststroke
- Hands and elbows in front of chin
- In-sweep and Recovery in 1 motion
- Hands in “praying” position at tail end of the in-sweep and beginning of recovery
- Breathe late on in-sweep
- Single arm: The swimmer holds one arm out in front and still, pulling with the other arm only. This isolates each arm pull to concentration on one arm
- Catch-up: This drill is done in the same way as single arm with catch-up done to the extended arm
- Stretch-out: At the end of each arm recovery, the swimmer stretches and glides - make sure palms

are facing downwards. Progressive shortening of the stretch can be useful. This drill helps the swimmer feel where the pull should start, so it is important that elbows are locked to form a full extension with the shoulders also stretched forward. Tell the swimmer to look along the arms in the stretch and squeeze the biceps against the cheeks

- One pull, three kicks: A full stroke cycle is executed and while the arms are fully extended an extra two kicks are completed. Breathing is done on every kick or stroke cycle
- One pull-two kick: As above but with one extra kick
- All fours: Four kicks (arms to sides), four pulls, and four strokes
- Breast finish – streamlined, never taking the extra stroke
- Shoulder lift: Emphasise shoulder lift in the pull phase. The head should lift with the shoulders starting as the push out of the arms begins. The back should arch rather than the hips drop. This drill is only effective if the push out is with straight arms and the arms and shoulders have been fully extended at the end of the recovery
- Develop distance per stroke
- Work on sculling

These drills can be done with or without flippers. Note there are two styles - Natural and Wave

- Kick on back - hands by sides
- Kick & glide
- Butterfly kick with flippers small fast kick - breaststroke arms, slow arms
- As above, head up
- On stomach, hands behind back - kick up
  - Breaststroke kick - head up, hands out front
  - One arm breaststroke (combination L, R) Breaststroke kick/F/S kick
  - 2 splits under water, 2 normal on top
  - Scull - F/S kick

### **BUTTERFLY**

- Hands at sides, lead with the crown of the head, hips roll up and over the water surface. Back of thighs should be visible during hip roll
- Single Arm – opposite arm in the front, later by side
- Emphasise body motion like dolphin dive, rolling hips over the surface
- Hands in, butt up. Back of thigh should be visible during hip roll
- Breath, when necessary can be taken to the side
- Stretch the entry on each stroke
- Single Arm – opposite arm in front
- Again, concentrate on mastering the movement and body motion first before focusing on the kick
- Variations should eventually lead to whole stroke swimming. Examples might include 3 left / 3 right; or 2 left/2 right/ 2 whole
- Toes pointed, feet together or close, both feet kick down together driving the butt out of the water. Over- emphasise the kick early on asking for quick kicks. Kick down, butt up
- Face in water during kick
- Kick on side or back with arms at sides or streamlined
- Emphasise hip movement
- Practice arm recovery like two large half circles on land
- Full Stroke Fly
- Body position is key, Hands in, backside up

- Timing: Pull, breathe, head under before the hands
- Quick breath
- A good flyer will never see their hands enter the water
- Finish must be explosive
- Fly start– streamline + 5 fast dolphin kicks, pull to come up, 1st 3 strokes without a breath
- Breathing every 2 /3 when doing fly
- Fly finish – streamlined, never taking the extra stroke
- One arm
- One arm variation –2 pulls left arm, 2 pulls right arm, 4 normal then kick the rest of the lap. (breathing to the front as they get better and breathing every 2 strokes)
- Various combinations above, etc., 3 left, 3 right 2 normal.
- Kick on back with flippers
- Kick under water
- Kick on side, right up/ left down pool
- Lots of kick 1 arm
- 3/4 strokes no breathing
- “Bondi” - under water - push back fast
- L.R.N.
- Butterfly on side, right one top/left one arm

### **Butterfly Kicking**

- Normal kick: Make sure the swimmer kicks from the hips and is kicking up and down - it is best done with flippers. The legs should be lifted fairly straight with the feet nearly breaking the surface. This drill can be done with a kickboard, with arms extended in the front.
- Sculling. Kick with flippers with arms extended and sculling with the head up
- Back kick with flippers. Swimmer lies on back. Try to finish the upward movement with straight legs and a boiling action at the surface
- Sidekick: With or without a board - lie on the side, face out of the water. This drill gives the swimmer a good feel for the kick and helps the coach to see how the swimmer is kicking: e.g., if the swimmer is kicking too much from the knees?
- Underwater kick with flippers. Without board. Arms in front or at the side
- When using a kickboard it is held by the near end to keep the body low and flat. The face should be in the water and lifted to breathe with the chin on the water

### **Arms**

- Straight arm recovery
- Palms face up at the back of the stroke
- Rotate arm as it passes shoulder

### **Head**

- Push head down to help bring hips up

### **TRAINING GUIDELINES**

- Arrive on time
- Be on deck ready for stretching prior to the scheduled starting time for each workout
- Bring equipment to training – goggles, caps, log books, flippers. pull buoys, hand paddles and drink bottle
- Swimmers must visit the toilet before they start training
- No swimmer is to leave the water unless they ask the coach
- Elastic bands could be used to keep hair out of eyes
- Eye contact with coach when coach is speaking
- Silent when coach is speaking

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- Support and encourage teammates
- Finish all lengths at the wall with proper finishes
- Stay off lane ropes
- Best efforts on sets and skills
- Get times for swims at a meet
- Proper dress for weather – (Cover wet head with hat in cold weather)
- Nutrition – Drink plenty of water, eat fruits for snacks, and natural foods
- Streamline Turns
- Begin each drill from a dive
- Alternate-breathing on butterfly, i.e., breathe 1/2/3, etc.
- 6 beat freestyle when sprinting.
- Backstroke turn with either arm.
- Locked hand position on backstroke kick
- Be consistent and honest with hypoxic breathing, i.e., breathing 5,7,9
- With breaststroke, always use an underwater pull and kick at the starts and turns

- Begin each repeat precisely on time and finish at the wall (feet off the bottom!)
- Perform all drills exactly as instructed
- Don't change strokes on kick drills
- Time your kick drills
- Practise perfection during all quality sets
- During breaststroke and butterfly drills practice according to the rules
- Start each workout with a correct start/dive
- Each extra practice start helps
- Leave on correct time in all sets
- Streamline correctly at all starts and turns
- After a dive in Freestyle or a turn, take 3 or 4 strokes before taking a breath

To train without adequate recovery time from previous fatigue work does not benefit the swimmer - it only teaches them to cope with fatigue. Do a lot of racing [swim fast] if you want to swim fast at meets •

## Olympic Solidarity Funds Available

*From FINA / July 21st 2007  
To All FINA Member Federations*

Dear Sirs,

Following the publication of the 2006 activity report of the IOC / Olympic Solidarity Programmes, we would like to take the opportunity to remind all our National Federations that there are funds and programmes available by the IOC / Olympic Solidarity within the current quadrennial plan up to 2008. Please find below an outline of programmes available for FINA Member Federations:

Continental and Regional Games - NOC preparation  
The main objective is to offer technical and financial assistance to continental level athletes for their preparation prior to their participation in multisports continental and regional games.

### **2012 - Training Grants for Young Athletes**

- One of the principal objectives of the Olympic Movement is to help the youth of the world and to offer young, promising athletes, symbols of the future, the possibility to progress to elite sporting levels.
- The main objective of this programme is therefore to assist the NOCs to discover young athletes who show a particular sporting talent.

### **Team Support Grants**

- This programme offers comprehensive financial and technical assistance for Water Polo Teams training and attempting to qualify for Beijing 2008.

### **Development of National Sports Structure**

- The main objective of this programme is to allow NOCs to develop their national sports and coaching

structure by implementing a mid to long-term action plan for a specific sport.

### **Olympic Scholarships for Coaches**

- The main objective of this programme is to offer coaches access to high-level further training, experience and knowledge, which they will then use to benefit their respective national sports structures.

### **Technical Courses for Coaches**

- The main objective of the technical courses programme is to provide basic training to coaches through courses led by an expert from another country.
- The basic idea is to allow for a "standardization" of the training given to coaches around the world, providing a quality and performance benchmark for NOCs and their national sports structures (national federations, coaches, athletes, etc.).

Please note that only NOCs are permitted to make applications to the Olympic Solidarity. Consequently, you need to address all requests for Olympic Solidarity assistance directly to your respective NOC for approval; on the understanding that the NOC will be the final arbiter as to which request they decide to present to Olympic Solidarity.

We remain at your disposal for any assistance you may need.

Yours Sincerely,  
*Cornel Marculescu*  
*Executive Director*

# GOAL SETTING

Permissions from ASCTA

By Leigh Nugent - National Youth Coach, Swimming Australia

Goal setting is synonymous with success. It would be safe to say that no successful athlete achieved what he or she achieved without setting goals throughout their career.

The setting of many goals is an essential and important process in athletic performance. The inability of some athletes to effectively set goals will have without question retrogressively affected their progress or level of achievement in their chosen sport.

Establishing appropriate, realistic, chronological, challenging and measurable goals is imperative if athletes are going to have a chance of achieving their athletic potential.

## What is a Goal?

A goal can be described in a number of ways:

- A desired outcome or the end result of the implementation of a particular process.
- A prediction of a future desired outcome.
- A goal is essentially fiction until it is achieved then it becomes reality.

For most of us in swimming our goals are based on a combination of outcomes that we dream to achieve, as well as outcomes which we feel we are actually capable of achieving. In this there are elements of attainability, unlikely attainability and non-attainability.

The secret to effective goal-setting is identifying the attainable at its most challenging limit, which will have the effect of bringing within reach of what we may have thought to be the unattainable.

## Why Do We Set Goals?

We set goals to provide a clear and structured order to the process of achieving increasingly difficult results, which lead to success of the desired outcome at the conclusion of the process.

To realize the goals that we have set for ourselves we need to focus on the process. The process is the activity of the things that we do to carry is from one stepping stone goal to the next. It is the conduit to achieve our goals; in fact, goals have no purpose without the process which links them.

## What are the Various Types of Goals?

There are basically four types of Goals:

- Dream Goals
- Milestone Goals
- Stepping Stone Goals
- Process Goals

**Dream Goals** – are our absolute or ultimate achievement. For example winning an Olympic gold medal in world record time. Goals such as this are achieved by few but are dreamt of by many. They are dreams that fuel the involvement and provide the initial motivation for young children participating in a sport.

The dream goal is not easily forgotten and for this reason it is not necessary to write it down and stick it on the bedroom wall as a daily reminder. For some, our dream goal becomes a reality, however for most it remains a dream, but it is a vital and an important dream as it is the end point from which we work backward in planning the rest of our goals.

**Milestone Goals** – are the goals marking the achievements which we would like to make at various significant points in our career. They form the dots on the map of our career macro-plan.

For example:

- Make the 12/u District Team
- Make a State Championship final
- Make my first national qualifying time
- Compete at my first Australian Age Championships
- Make my first National Age final
- Win my first National Age medal
- Gain selection to the Australian Age Flippers Squad
- Make my first Australian Open Qualifying time
- Make my first Australian Open final
- Gain selection to the Telstra Dolphins Squad
- Win a National Open medal
- Gain selection to my first Australian Open Team
- Make an international open final
- Win an international medal
- Gain selection in the Australian Olympic Team
- Etc.

These goals create a staged progression through our career by providing a longer term focus to the strategic points in our development. A number of these goals may be targeted within a year and others will be challenged over a number of years.

**Stepping-Stone Goals** – can crossover with milestone goals which have much smaller jumps from one to the other when compared to milestone goals. Because of this the time period for achieving stepping-stone goals is generally confined to the time frames of a seasonal preparation or a 12, month span.

Stepping-stone goals involve a series of marginal improvements, which provide a challenging yet achievable progression from one goal to the next, along the stages of the pathway that leads to the next milestone.

For example:

- 1<sup>st</sup> club meet swim 1.16.00 for 100brst
- 2<sup>nd</sup> club meet (2 weeks later) swim 1.14.50
- 1<sup>st</sup> state qualifying meet (4 weeks later in hard work) swim 1.15.00. Split more even than 2<sup>nd</sup> club meet. No more than 1.5 sec drop off.
- 2<sup>nd</sup> state qualifying meet (3 weeks later workout intensity reduced, more speed training) swim 1.13.50. Go out faster than previous meet and hold 2<sup>nd</sup> 50 at the same time.
- Taper phase Target broken 100s 1<sup>st</sup> 50 – 35.00 2<sup>nd</sup> 50 37.20

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- State Championships (milestone goal to win gold medal in 100 breaststroke). Final stepping stone goal to swim 1.12.00 – 1.12.50 for 100 breaststroke.

**Process Goals** – are essential components of the process plan. The “process” is all important as described above as it is about what we do in our attempt to achieve our various goals. Process can be applied to many areas but for the purpose of this discussion let’s look at the process of preparation.

The process of preparation is the performance of the detail of the preparation plan and as such process goals need to be established to build in implementation, challenges, accountability and progress of the process on a day-to-day basis. Process goals help keep us on track, provide progressive satisfaction through achievement and are the essential micro-dots that go together to constitute the bigger picture.

For example:

- Milestone goal – is to win the Australian Age Championship for the 200fs
- Stepping stone goal – is to swim 2.00.00 at the Australian Age Championship
- Overview of the process plan is – to establish in the swimmer an aerobic and an anaerobic capacity to train at speeds that will produce a likelihood of swimming 2.00.00 at the Australian Age Championships 16 weeks from now.
- Part of the process is – to achieve certain volumes during the first 6 weeks, The process goals for volume may be:
  - Week 1 – 35km,
  - Week 2 – 40km,
  - Week 3 – 45km,
  - Week 4 – 50km,
  - Week 5 – 60km,
  - Week 6 – 65km.

In line with these, process goals on volume may be process goals in regard to being able to manage progressively more difficult training cycles:

- Week 1 may be based on 1.30 cycle/100,
- week 3 on 1.20 cycle,
- working down to 1.10 cycle by week 6.

Process goals can be applied to any part of the process as desired.

### **How do we Go About Setting Our Goals?**

Goals are about the future; some are set in the immediate future, some are in the distant future and some are in-between. Because of this goals to be developed based on a timeline; that is to say, we need to attach a goal to a certain stage or time in our development.

Goals need to be established which are commensurate with our ability and set in accordance with our projected rate of improvement.

It is essential to consult with your coach and any other experts who your coach may feel would be of assistance. Principally it is a process performed in partnership between the swimmer and coach.

- Step 1 – The Dream Goal
- Step 2 – Design the career plan.
- Step 3 – Determine the Milestone Goals according to a rough timeline.
- Step 4 – Establish Stepping-Stone Goals for the immediate 2 years.
- Step 5 – Develop a process which supports the season plan.
- Step 6 – Identify Process-Goals which reflect the desired progression through the process.
- Step 7 – Evaluate
- Step 8 – Confirm, modify, eliminate or re-establish goals

This is the process of goal setting but its success is determined by how effectively a balance is achieved between:

- realistic optimism.
- challenges which encourage us to strive to achieve.
- exploring our limits
- our ability to objectively measure
- alignment to an appropriate time-line
- its effect on building our character

### **Achieving a Goal – Emotional Response**

When a goal is achieved the level of the emotional response is determined by the significance of the goal to the achiever. Positive reinforcement (positive feedback) from the swimmer’s coach in response to the achieving of the goal will increase the swimmer’s self-esteem and increase the swimmer’s self-belief. This will result in the swimmer’s belief in them achieving the next goal. Resulting in an increase in motivation to accept the challenges which lay ahead.

The level of satisfaction and sense of achievement felt by the swimmer is directly related to the perceived degree of difficulty of the goal which was achieved.

### **Not Achieving a Goal – Emotional Response**

Not achieving a goal may elicit a response of disappointment. The level of disappointment will be determined by how difficult the goal was perceived to be. If the goal was considered to be of extreme difficulty than rationalization may dissipate the disappointment.

Whenever there is failure to achieve a goal then a process of objective evaluation has to take place. Through this process it can be determined whether the set goal was too difficult when it was established or whether there were other reasons or factors inhibiting the performance. The recent experience and the benefit of hind-sight will be helpful in making the decision to reinforce or modify the goal.

### **Effects of the Degree of Difficulty of the Goal**

The degree of difficulty is a critical factor in:

- The achievability of the goal.
- The level of satisfaction if achieved. The more difficult the goal is to achieve the greater the level of satisfaction.
- Difficult goals pitched at the appropriate level have the effect of motivating us to strive or try harder.
- There is a fine line between making the goal hard to achieve but achievable and too hard where it is unachievable.

- It requires expertise and experience to set goals at the appropriate degree of difficulty.
- Goals which are constantly set too difficult to achieve run the risk of creating a sense of failure, dishearten the athlete and eventually reduce the desire to keep striving.

### **Do We Need Help to Set Our Goals?**

Yes we do need help to set our goals especially when we are younger and lack knowledge and experience in the sport and life. It is difficult to be totally objective with ourselves.

The swimmer's coach is the number one reference when establishing our goals. The coach has sport specific knowledge, experience, an understanding of rates of progression and most importantly is empathetic with our potential athletic capabilities.

Other experts can also be helpful but are secondary to the swimmer/coach combination. These experts might be – strength trainers, physiotherapists, dieticians, sports psychologists, etc.

Parents can be of help but usually lack the specific expertise and sometimes have difficulty maintaining objectivity.

### **Goals are a Renewable Resource**

Goals are not set in stone. They need to be referred to regularly and frequently because they are subject to change, which requires our goals to be flexible and renewable.

Process goals need to be referred to more frequently (often on a daily basis) than milestone or stepping stone goals, as these are the goals linked to the process of what we do from day-to-day and session-to-session. These goals are an integral part of change driven by the process.

Some goals which seemed necessary or appropriate in the past may not be so now, hence need to be eliminated or modified.

Goals are a resource to help us improve, just like the people who support you, the facility you train in and the equipment you use.

### **Evaluation of Performance in Relation to Goals**

Evaluation is an important part of the goal setting process as it is the activity which determines the future of any particular goal. Failure to carry out regular evaluation of our goals undermines the entire goal setting process, inevitably rendering it ineffective.

Accurate evaluation can only be carried out effectively provided accurate records have been kept on the swimmers' competitive and training performances. Information in regard to best times for various activities is essential but just as critical are the process measurements; for example – stroke counts and stroke rates related to a particular time, best average time for a particular set, etc.

Was the goal achieved or not achieved? Both objective and subjective analysis has to be carried out to perform a thorough evaluation.

If it was achieved was it achieved because it was too easy or was the process that was put in place responsible for the improvement that resulted in the achievement. If this was the case then the goal setting was accurate/appropriate and the developed process was correct.

An outcome as described above is an effective connection between goal setting and the implementation of process outcome.

### **How Important is the Time Line?**

The time line is critical to the rate of development and has the effect of applying pressure to improve at a predetermined rate. In saying this we have to consider the fact that experience tells us that swimmers vary in their rate of improvement. This is an element that we need to be mindful of when we are setting the time line.

A reasonable period of time needs to be allocated to allow the effects of the process to stimulate change, adaptation and improvement in an effort to achieve the target or goal. Only an experienced person such as the coach can determine what is an appropriate period.

Time lines need to be revised and evaluated in response to the predicted rate of progression, then adjusted according to the history of the progress. As a swimmer develops through their career the common trend is to observe rapid rates of progress early in their life, say 7 – 15 years followed by a decline in the rate from 15 years onwards. This will vary from person to person.

### **Review and Re-Setting Goals**

Following the evaluation of the performances against the previously established goals comes the exercise of re-establishing or resetting the goals.

The key is to reset the goals in line with the current rate of improvement (provided that rate is acceptable to the coach). However if it is considered that the new goals need to be set in consideration of the current rate of improvement and the possible rate of improvement.

Many factors can affect the rate of improvement; for example:

- The likelihood of a growth spurt.
- Imminent improvements of technique and/or skills.
- Training load increases.
- Improvements of strength and power.
- Reductions of external stresses (schooling).
- Improvement of health state.

### **Goals Help Us to Be Accountable**

Goals keep us accountable by maintaining an element of pressure on us to perform, as they are usually set in relation to a minimum rate of improvement.

Through this accountability they effectively provide us with direction and encourage us to stick to a plan through adherence to the process approach.

People who side-step goal setting avoid accountability and generally achieve little.

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### **Obsession with an Outcome Goal is Dangerous**

Outcomes which are important to us are often associated with a milestone goal, occasionally associated with a stepping stone and rarely associated with a process goal.

Milestone goals are a fictitious, desired outcome, related to a proposed performance in the future. We and others around us can become obsessed with achieving such a goal; this is a trap and a dangerous way to think, as it frequently ends in failure to achieve, resulting in the experience of devastating disappointment.

Once the milestone goal is determined a process to facilitate the possibility of achieving the goal is established in conjunction with a time line and an evaluation plan which is put in place.

The milestone or outcome goal is no longer the focus of the preparation as the impetus is now on the process that has been put in place to help achieve the outcome. From this point on, the time for dealing with or thinking about the outcome goal is when the evaluation of the process and the process goals are being carried out. Depending on the information considered during the evaluations the outcome goal will be changed or remain unchanged.

"The outcome will be the outcome"; this is dependent largely on how well we commit to the process. Focusing on the outcome usually has the effect of us not adhering to the required process, resulting in us achieving little.

### **How do Goals Impact on Our Performance At Training**

Goal setting for train performance involves two elements. The planned goals which are methodically established and directly linked to the process plan and the unplanned goals which are created on the spot during the training performance.

The unplanned are the mini goals that are set by the swimmer and/or the coach during the session, which have the effect of stimulating the swimmer to strive for improvement. Such goals are responsible for a great deal of the training stimulus and progression. They have an effect on the evaluation of the established process goals on a day-to-day basis.

### **Competition**

The effects of setting competition goals has been discussed already in sufficient detail, however it must be reinforced that these goals are largely a reflection of how well the process has been adhered to during the various stages of the preparation.

Objective and accurate evaluation of these goals is imperative, because the interpretation as to how valid they were at the time of performance will have a bearing on the assessment of where the swimmer is in their preparation, and subsequently how they internalize the significance of their performance.

Competition goals serve the purpose of providing stepping stones to the final competition performance of the preparation, but they must be viewed by considering the current state of readiness of the swimmer to perform.

### **Career Duration**

Setting of milestone goals provides us with a mechanism of bringing some clarity and perspective to the likely course our career might take, the time frames that may be involved and the sequence of events which may adversely affect or bolster performance.

### **How to Goals Affect Our Sense of Achievement?**

Achieving goals is important to our self-esteem and our belief in our self, which in turn feeds our optimism and our willingness to continue striving to achieve.

The process goals are the building blocks of continued achievement. These goals provide the points for progressive achievement along the route to the major ultimate goal. It is essential to have these mini-goals help us cope with the enormity of trying to achieve the final outcome.

Conquering each little step provides a sense of achievement and movement toward achieving the end result. Our sense of achievement is fuelled by reaching each spot in a continuous line of end points, which are realistically achievable along the way to achieving what might conceivably seem to be unachievable ("the ultimate goal."), if it was viewed in isolation.

### **Important Information when Setting Goals**

The knowledge of our own performances or our own history of performances and our rate of progress is a primary factor in setting our goals, that is why it is so important to record all of the information possible. In swimming we only have control over what we do, we don't have control over others.

Goals are set based on our own historical record (past performances), the rate at which we achieve, the difficulty of what we would like to achieve and the time frame in which the achievements are to be made.

The bench marks that other people set are secondary but they may be useful in helping set standards for our self by providing insights to other's performances and their rates of progress. Don't be deterred or limited by what others have achieved; remember when they started their goals were also their fiction.

### **Setting Appropriate Goals**

When we are young "the sky is the limit." Unfortunately age, experience and education can have the effect of shrinking our optimism, which can also be described as realism or being realistic. This can turn us into people who have a "can't do" rather than a "can do" mentality.

As we become older and become a more experienced competitor in our sport, we come to position our selves (in regard to ability to perform) in relation to our competitors. This positioning can cause us to function in a negative way particularly in relation to goal setting where we in fact set goals lower than we are capable of . These goals become the ceiling of achievement and are called "self limiting" goals. They have the effect of us performing to a limited amount of our capabilities when in reality we were able to achieve well beyond these levels.



We need to avoid this type of thinking and goal setting at all costs if we are to fully explore our real capabilities.

### **Satisfaction Through Process Dissatisfaction with the Final Result**

Dissatisfaction with the final result will only be short lived if we committed to the process because: lasting satisfaction comes from fulfilling the requirements of the process and striving to conquer the many goals along the way to achieving the final result.

### **Concluding Statements**

Goal setting is a very personal and private process and the choice of what we reveal or share with others is totally our own.

Revelation of what we desire to achieve can create undue pressure on our self which may inhibit our ability to perform. Added to this it can fuel the desire of our opposition to our perform us.

- Goals are goals, nothing more nothing less.
- They are tools to stimulate us to strive to achieve.
- They can be created, reinforced, changed or deleted.
- They are your private fiction waiting for you to convert them into your reality.
- In the end your reality is what you do, not what you think you might do.
- Goals are in part an educated guess of what you think you might be able to achieve, and in part a fantasy of what is your dream to achieve.
- Goal setting is inescapably connected to achievement. •

# Scientific Study of Swimming

A very interesting site for those interested in current research in swimming can be found at SWIMMING RESEARCH CENTER AMSTERDAM.

<http://web.mac.com/htoussaint/iWeb/SwimSite/Welcome.html>

Lots of current science studies, some with immediately useful information, some with food for thought.

*John Leonard*



# Functional Path Dryland Training

By Vern Gambetta  
Gambetta Sports Training Systems

Goal - Design and implement an effective, practical training program that produces measurable and visible results in the required time frame.

Let's use today as a jumping-off point. This is where we are:

- The bottom-line tends to be the bottom-line
- The focus is on "super" exercises and "magic muscles"
- The means and the end are not connected

"Not only is the old becoming today's new... most coaches do not know what the old was." Kevin McGill

- Yesterday is gone - the future is now
- Learn from the past - Successes as well as failures

## THE STORY

Following the Functional Path to Building and Rebuilding the Complete Swimming Athlete

## PROBLEMS

- Early specialization
- Lack of fundamental movement skills and a general fitness base
- Extended competitive seasons
- Decline in quality of coaching
- Dominance of equipment
- Marketing
- Explosion of injuries

## WHAT IS THE FUNCTIONAL PATH?

- Indirect
- Relationships and Connections
- Telescope

## WHAT IS FUNCTION?

Full Spectrum Work, Multiple Planes, Multiple Joints, Full Range of Motion that is Proprioceptively Demanding

## WHAT IS FUNCTIONAL TRAINING?

- Training that incorporates a full spectrum of training methods, designed to elicit optimum adaptive response appropriate for the sport or activity being trained for.
- No one system is emphasized to the exclusion of another
  - No one method or physical quality becomes an end unto itself
  - Each athlete is a case study of one.

## ATHLETICISM

The ability to perform athletic movements (run, jump & throw) at optimum speed, with precision, style and grace within the context of your sport

### # 1 Have a road map - Start with a plan, execute it, and evaluate it

- Systematic approach to athletic development for swimming
- The Puzzle - Putting the pieces together - Timing and Time

Use project management methods to improve coaching effectiveness

- Analytics
- Must be measurable in order to be repeatable

Do's >>>> Don'ts  
How >>>> Why  
What >>>> When

- Monitoring Training
- Coaching Management Functions
  - Session Management
  - Injury Management
  - Competition Management

### #2 Think big picture - Build and rebuild the complete swimming athlete

- The big picture is the context; and context is everything
- The muscles are slaves of the brain
- Tap into, and use the wisdom of the body
- No one workout or method will make the athlete; training is synergistic, just as movement is synergistic

### #3 Fundamental movement skills must be mastered before advanced training

- FUNdamental Movement Skills
- Locomotor
- Stability
- Manipulative
- Movement Awareness
- Long-Term Athletic Development is based on play
- Cultivate-the "Skill Hungary Years" ages 7 to 9
  - Not sport skill, movement skill
  - Crawl, reach, pull, push, climb, run, jump & throw

### #4 Train the core as the center of the action

- Movement revolves around and through the core
- It is the transmission and relay center of the body
- Recognize its role in function and train it accordingly
- Rotate >>>> Rotate >>>> Rotate

### #5 Train swim appropriate - You are what you train to be

- SAID - Specific adaptations to imposed demands
- Reversibility - Use it or lose it

### #6 Use Dryland to build a work capacity base appropriate for swimming

- Training is work with a purpose
- The foundational work is based on the demands of swimming
- Volume is NOT a biomotor quality



## #7 Train Linkage - Train toenails to fingernails - Train

the symphony of movement - "Toenails to fingernails"

- Respect the structure and function relationship
- "...the function of a muscle depends critically on the context in which it is activated." Roger Enoka

## #8 Connect the Hip to the Shoulder

- Structure & Function
- Means

Indian Clubs	Stretch Cord	Medicine Ball
Ball Drops/Catch	Dumbbell Combo Series	
Push-ups	Rings/Jungle Gym	

## #9 Think Long-Term - Training is cumulative

- Athletically, you must earn the right to progress to the next step
  - Systematic
  - Sequential
  - Progressive
- Often, what you do not do is as important as what you actually do

## #10 The individual athlete is the focus - Recognize, train and rehab the individual

- Know the athlete
- "Build athletic bodies that are adaptable rather than adapted" Steve Myrland
- Male versus Female
- Must meet individual needs; no two individuals are alike
- Many roads to Rome
  - Fast Adaptors
  - Slow Adaptors

### RECOMMENDATIONS FOR AN EFFECTIVE DRYLAND PROGRAM

- Do not trivialize - Do not try to pick the fly poop out of the pepper
- Seek knowledge rather than information
- Specialize in being a generalist
- Understand the spectrum of the physical demands in swimming
- Training is more than exercises and training methodology- it is application of the principles of sport science and sound pedagogy
- Beware of the "Sheep Walking" phenomenon
- Think, Think, Think
- Ultimately it is about the athlete - We must not forget that

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