Where are we now ?

Scientific research has identified that it takes at least 10 years or 10,000 hours , for talented athletes to achieve sporting excellence . There are no short cuts !

Former National Performance Director Bill Sweetenham (2002)

Right now we have too many clubs in Great Britain offering too little training times and in most cases too much competition. This leaves many athletes in a twilight zone of training less than 14 hours a week hoping for international results and expecting swim camps and national level success. For an athlete training 8 hours a week the benefits are social, fun, participation, team building and heath benefits. For those athletes wishing for an optimum performance at national level then swimming in a programme with a high performance objective of 18-25 hours is approximately what it will take to achieve these objectives. However in most countries and in most clubs, the vast majority of athletes train between 8 and 14 hours per week. This is the twilight zone , too much volume to be fun and achieve the social and happy benefits of the participation level (8 hours and under) and not enough to achieve the competitive results or optimum performance that an athlete expects. In other words it is too much for participation and too little to be considered really serious in terms of the competitive nature of the sport. Changing this twilight zone should be the major focus of every club and national programme.

Sweetenham advocates four simple rules for development of stroke technique .

1. All movements in swimming from recovery through to underwater pulling , have a slow into fast action.
2. If the head is elevated, the hips are down . This causes maximum resistance. If the head is down , the hips are up . This causes minimum resistance.
3. You cannot learn or improve anything if you cannot 'feel' for water .

Speed and Effort

Understanding the relationship between speed and effort is also important in planing optimum quality within a programme .Effort can be given at any time , regardless of the state of fatigue of the athlete . However , true speed training requires that an athlete practice 100% speed at 100% effort . Exerting 100% effort at high sub-maximal speeds (85% for example) develops endurance . Performing at 100% speed with high sub-maximal effort (95% for example) develops efficiency at speed.
Understanding the difference between swimming "fast" and swimming 'easy' is a vital skill that must be taught and continually rehearsed at a young age .

Swimmers must understand that you can train and race too hard , but you can never train and race too fast . High speed at sun-maximal effort are the goals of every training or racing situation . For example, a swimmer can go out too hard in any given race, but not too fast . The ability to swim fast and easy during the early stages of a race improves the likelihood of a strong finish.These skills are teachable and controllable .

Competition

It is widely acknowledged that:
"British Age Group swimmers compete too often and train too little " (Sweetenham)

Whilst in full training , the following competition targets are recommended :
Heats : 3% of Personal Best Time
Semi Final : 2% of Personal Best Time
Final : 1% of Personal Best Time

For a competition where a swimmer is specifically prepared the following targets are recommended
Heats : 2% of Personal Best Time
Semi Final : 1% of Personal Best Time
Final : -1%of Personal Best Time