



The Changing Face of Age Group Swimming

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You may be aware, either from reading articles in *Swimming Times*, or from information through your County, or from your club coach, that the ASA is looking at some changes in competition for young swimmers. The information in this leaflet should help you to understand why changes should be beneficial and what these changes may be.

Full details are on

www.britishswimming.org

click on age group swimming

Background

During the latter part of the 1990's there was concern as to whether the competition structure at age group level was helping to nurture our talented swimmers through to senior level. There were serious concerns that swimmers who were successful at the national age groups at 12 would then be under constant pressure to repeat that success at 13, 14, 15 and 16. It was clear that many of the youngsters who achieved success early, did so, because, as well as being talented, they were physically early developers. When other swimmers who developed later came through to challenge them, it was often difficult to retain that sense of achievement and success.

In 1997 the ASA put together a group of people with various areas of expertise to look at this situation. They began with a blank sheet of paper and started by analysing the development of children and the bodily systems that are most needed to develop a good swimmer.

What did they find?

The findings showed that all people go through the same developmental stages, though at different times and each stage can vary in length. Two of the main systems that affect swimming are:



the nervous system, which controls the ability to determine movement patterns (stroke technique), the ability to accurately repeat these and basic speed (reaction) times.

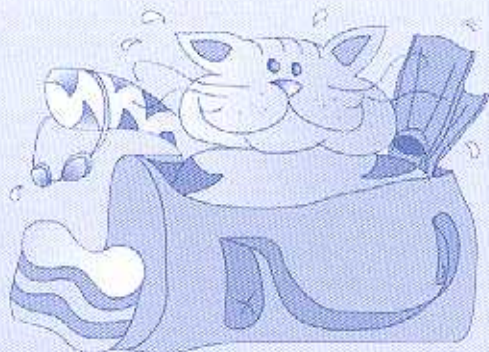


the muscular system, which controls mainly strength.

The nervous system is almost fully developed by the time a child is 8 years old and so this is a good time to work on aspects which use this human development characteristic, specifically technique, starts, turns and finishing skills. The effectiveness of these skills is demonstrated particularly in short distance events.

The muscular system however develops at a much slower rate and the strength gains that are produced by training are not maximised until after puberty.

The other area of the body which needs to be developed is the cardiovascular system which determines the efficiency of the heart and lungs. These organs are developed through building up work on longer distances.



In addition it is clear that from a very early age children should work on a wide range of movements. Younger children should experience as wide a number of sports as possible. If a child then looks to specialising on swimming it is equally important that **this range of skills is developed by a multi-stroke approach to training and competition**. A multi-skilled approach also reduces the likelihood of injuries.

Studies have also shown that whilst swimmers who do not specialise early have a slower initial increase in performance, they ultimately reach a higher level of achievement and have a longer life in the sport. This is in contrast to **early specialisation producing an initial rapid increase in performance, but a lower level of achievement and early retirement**.

None of this research is new - it has provided the principles behind good coaching for many years. However, the programme of competitions provided by the Governing Body to which coaches are expected to respond was not reflecting these principles.






One other factor which needs consideration, is the way the body produces energy for the various distances swum. The body has three complementary energy systems - the first two are anaerobic, which instantly provide energy and do not use oxygen - but will only produce energy for 45 - 55 seconds. The third system is aerobic and needs a constant supply of oxygen. It is a slower and more economical system of energy production.

Simplistically, the anaerobic systems are the major provider for 25m and 50m sprints whilst the 200m events, and longer, are mainly served by the aerobic system. The difficult event is the 100m which uses each energy system as they overlap each other. This is particularly difficult for youngsters whose bodily systems are not fully developed and even then requires a skilled transition provided by the necessary training programmes.

How can this information be used?

So, the challenge is to devise a system of competition which would support all these known coaching principles for our young swimmers and which would provide the incentives for coaches to adopt correct training methods.

The current thinking is that swimmers in the 10-13/14 age groups should be encouraged:

-  to compete in a range of events
-  to include both short sprints and distance events
-  not to compete in 100m events too soon

The initial approach is to reward the swimmers who are successful over a range of events - in combinations determined by the age of the swimmer. The proposed groupings are 'sprints', 'medleys', 'form strokes' (back, breast and fly) and 'distance freestyle'. So, firstly, the whole range of events must be available to younger swimmers, particularly the 200m on back, breast and fly. Then with a points system -like an athletics heptathlon or decathlon - awards can be made to those swimmers with the most points over an agreed range of events rather than to the individual winner of single events.

These will be known as British Age Groups Categories or BAGCATS



What is the points system?

In order to support the new approach to age group competition for the younger competitors, it is necessary to introduce a new point scoring system into British swimming.

The system comprises two elements:



British Comparative Performance Tables



British Age Group Correction Factors

Comparative Performance Points Systems

Comparative Performance Points Tables have been used in the UK since the 1970's in order to compare swimming times across the standard range of strokes and distances. British swimming has used LEN (the European Governing Body), and more recently, FINA (the World Governing Body) tables. Both of these are based on world performances and reflect the parity between events at the top level of the sport. These tables have been used for scoring major open team competitions, such as the GB Club Teams and are accepted by the swimming community as provision of a fair comparison across the range of events.

Unfortunately, when these tables are applied to age group swimming, especially at the younger ages, the value of the comparisons across events becomes less valid. This is a direct consequence of the way in which the human physical systems develop.



In the light of these findings it is clear that a mechanism was required to establish a fair comparison across the sexes and the events and the ages. In addition, to satisfy the needs of the changing age group programme the requirements are for:



A mechanism for comparing performances across the range of events



A method that reflects the different achievement levels as a consequence of age-related physical development



A method related to world standards



A method that recognises the achievement levels at the younger ages in British swimming

British Comparative Performance tables (GB points) have been developed in order to provide the sport with total ownership of the stability and availability of quality comparative performance tables. This arises as a consequence of the shortcomings in both the LEN and FINA systems.

LEN points are based on the World long course records only - and as a result are perceived to be biased in those events where the record was set by an exceptionally talented swimmer (for example - Mary T Meagher's 200m butterfly record set in 1981). In addition, because they are based on Long Course (50m) records there is an additional difficulty as the majority of swims in the UK are made in Short Course (25m) pools. Using LEN tables therefore requires converting times for pool length - an additional process which the swimming community prefer to avoid.

FINA tables are considered to have a much more acceptable basis than LEN as they are published in both Long and Short Course versions and are based on a more equitable datum - the average of the eight World All Time Best swims. The major problem with the FINA tables is that the underlying mathematical equations are not known and, perhaps most detrimentally, the relationships between times and points can change significantly between annual revisions. Because such changes have not been known in advance they have produced considerable confusion within the user community.

British Comparative Performance Tables (GB points)

These will have exactly the same upper end starting point as that used for the FINA tables, (i.e. 1000 points corresponds to the average of the world all-time top eight performances). The essential difference is that the lower end of the tables extends to appropriately defined slower times in order to cater for the youngest age groups and development ability levels.

British Age Group Correction Factors

Everyone recognises that some events are relatively more difficult for the younger swimmers. This observation is proven by statistical analysis of the relative achievement levels of British age group swimmers since 1995. For the 11 year girls age group analysis of the top ten all time best British swimmers shows that the 200m butterfly scores only 483 points, compared with 659 points for the 400m freestyle. (See page 9)



In order to relate the performance of two different events within a single year age group a simple age correction factor has been determined between events within each single sex and age group.

These factors are based totally on observations of British swimming performance levels. For each age group the reference times used are the average of the ten all time top British performances in each event. The factors are then determined by establishing the ratio between the number of points for the highest scoring event and each of the other events in each single year age group.

Example: 11 YEAR GIRLS

Event	Average Time	GB pts	AC Factor	BAG pts
50 fr	30.59	581 x	1.1362 =	659
100 fr	1:04.17	630 x	1.0460 =	659
200 fr	2:21.95	598 x	1.1020 =	659
400 fr	4:47.08	659 x *	1.0000 =	659
800 fr	10:21.61	570 x	1.1561 =	659
50 bk	35.03	553 x	1.1917 =	659
100 bk	1:12.46	597 x	1.1039 =	659
200bk	3:05.19	584 x	1.1284 =	659
50 br	38.72	570 x	1.1561 =	659
100 br	1:21.25	607 x	1.0857 =	659
200 br	3:05.19	504 x	1.3075 =	659
50 fly	33.88	538 x	1.2249 =	659
100 fly	1:11.03	603 x	1.0929 =	659
200 fly	2:46.71	483 x	1.3644 =	659
100 IM	1:18.06	532 x	1.2387 =	659
200 IM	2:37.46	616 x	1.0698 =	659
400 IM	5:49.25	526 x	1.2529 =	659

* time with most points = nearest to world standards

So, to find the British Age Group points (BAG points)

- 1) look up the time in the tables.
- 2) find the points that relate to this, and then
- 3) multiply the points by the age correction factor.

It is important to note that the age correction factor applies only within each one-year band and it is not intended to relate performances between different ages and sex.

Note: The Age correction factors have been based on the GB Ranking Database, which covers the period 1995 to 1999. As more swimmers participate in the traditionally less swum events the variation between correction factors will relate more closely to just the physiological differences.

What is happening now?

Following pilot programmes in 2000, British Age Group categories for the 10-13/14 year ages will be adopted at the National Age Group Championships in 2001 and at different levels across the Districts and Counties.

What you may be asking is:

“How do we enter now?”

This has not changed and will be by qualifying times where these are used.

“What awards will be given?”

It is recommended that for the age groups that come with the BAGCATS the major awards should be based on the categories. This may go down further than the usual 1-2-3, but that will be a decision for the promoter of the event. Some organisations may decide not to give awards for individual events in these age groups.

“What will the category points be used for?”

They will become part of nationally identifying talented swimmers at a first level of the World Class programmes to track their progress.

This is a developing project and information will be published from time to time in *Swimming Times* and further details will be added on the ASA website. You can find more in depth information about the research behind this programme and how it fits into club coaching programmes together with more answers to “frequently asked questions”, on the ASA website.

www.britishswimming.org



The ASA is committed to ensuring that the sport provides the best opportunities for your child to achieve their full potential. The emphasis on skills and aerobic capacity at the right stage in their physical development will also equip your child for other activities or sports that they attempt throughout their life.



Support Materials

In order to support the use of the points systems, the following is available for use by the swimming community:



A printed version of the British Comparative Performance Tables 2000 - 2001 (GB points), with the British Age Correction factors for each sex/event/age, for both Long and Short Course pools
- available from ASA Merchandising (Tel: 0800 220292)



A computer program to display straight GB points & BAG points for a given swim - available free of charge on request with the printed version or from ASA Customer Services Department
cserv@asabg.org.uk

New self adhesive tables with the revised factors will be issued as the tables are updated.



ASA has adopted SPORTSYSTEMS as their preferred software for Meet Organisation and Ranking. Enhancements to these systems include:

- Uncorrected British Points - GB points
- British Age Group corrected points - BAG points
- Total BAG points scores by age category comprising a number of event groups.

This leaflet is available to clubs free of charge in packs of 50
Please contact ASA Customer Services at
ASA, Harold Fern House, Derby Square, Loughborough LE11 5AL
or e-mail cserv@asabg.org.uk



British Group Categories (BAGCATS)

		Boys			Girls
County Age Groups					
10 years	Sprint Form Distance IM	best 50m best 200m form stroke 200 free best 100*/200 IM	Sprint Form Distance IM	best 50m best 200m form stroke 200 free best 100*/200 IM	
County and District Age Groups					
11 years	Sprint Form Distance IM	best 50m best 200m form stroke best 200 / 400m free best 100*/200 IM	Sprint Form Distance IM	best 50m best 200m form stroke best 200m / 400m free best 100*/200 IM	
County and District Age Groups					
12 years	Sprint Form Distance IM	best 50m best 200m form stroke best 200m/400m/**800m free best 100*/200 IM	Sprint 100's Form Distance IM	best 50m best 100m best 200m form stroke best 200m / 400m / 800m free best 100*/200 IM	
County District and National Age Groups					
13 years	Sprint 100s Form Distance IM	best 50m best 100m best 200m form stroke best 200m/400m/1500m free best 100*/ 200 / 400m IM	Sprint 100s Form Distance IM	best 50m best 100m best 200m form stroke best 200m/400m/800m free best 100*/200 400m IM	
County District and National Age Groups					
14 years	Sprint 100s Form Distance IM	best 50m best 100m best 200m form stroke best 200m/400m/1500m free best 100*/200/400m IM	Note: Girls 14 years and over and Boys 15 years and over will start to specialize on individual events and awards will therefore be given accordingly		
* the 100IM is only applicable to County and District events staged in a short course pool					
** the 800m freestyle for boys is optional - it may be included as a link to 1500m freestyle					