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## Which Stroke First? No Stroke First!

Robert Keig Stallman, Guest Editor

Our editor-in-chief eloquently addressed the question above in his editorial in the November 2013 issue [7(4)] of the *International Journal of Aquatic Research and Education*. He was asked whether he had an opinion, and he certainly did! Thank you very much, Professor Langendorfer. I also have an opinion (equally long and abiding as Professor Langendorfer). I share my opinion with our readers to support the previous editorial. But, I also feel the need to add several comments to those of the previous editorial. In spite of the fact that this may be the most often asked question related to the teaching of swimming, I consider it to be long-outdated, unnecessary, and irrelevant – in other words, not only is it the *wrong* question, but it ought to be a non-question!

### No Stroke First! – All Strokes First!

This subtitle is taken from an article I wrote some years ago in which I first characterized this issue as outdated. Not only do I believe this is an irrelevant question, it is usually approached from the naïve assumption that the choice is between breaststroke and front crawl. In fact, both are extremely poor choices of a first stroke for inexperienced, novice swimmers. Less experienced instructors might then ask, “Well, is it back stroke [meaning back crawl], or is it butterfly?” Again, in their innocence, many instructors today know only four strokes. They forget that before 1956, in fact, there were only *three* competitive strokes. A generation before, there had been only two recognized competitive strokes, and in 1896 in Athens at the very first Games of the modern era, there was only one. That today we have four competitive strokes is merely an historical accident and not relevant for helping learners to achieve a broad repertoire of skills and to become safer in, on, and around the water.

### Why No Stroke First?

The rationale for arguing metaphorically that *no* stroke should be taught first is simply that, although swimming strokes are important, other aquatic skills are so much more important that they should come first. This is, of course, exactly the point of the previous editorial. Breath control and buoyancy control are the foundation for all other aquatic or swimming skills. No stroke can possibly succeed without these firmly in place first. Unfortunately, many who engage in this debate think of swimming as what one does with arms and legs and start virtually immediately with propulsion. They then proceed to build a structure on an incredibly weak foundation. Exaggerated use of artificial flotation devices prevents learners from

becoming acquainted with a key principle of our good friend, Archimedes. Over 250 years ago, Benjamin Franklin wrote that the recognition that the water will hold one up is the turning point in learning to swim. And later, when ready for a (any) stroke, we obviously select the easiest. This will result in different solutions for different learners, often including differing combinations of arm, leg, and breath control patterns.

## What Is a Stroke?

We must not only accept that other skills must come first, but we must also address the question of *what is a stroke*. As implied above, many instructors today only know four strokes. Some may have vague familiarity with one or two others (e.g., sidestroke or elementary backstroke). I suggest that an acceptable description of any identifiably unique (i.e., named) stroke is that it is a specific coordination of movements of the limbs plus the whole body (movement of the limbs is usually the cause – movement of the body is the effect and usually the goal) plus the integration of effective breathing which promotes effective movement, *according to the task at hand*.

I once challenged swimming instructor candidates-in-training to list all of the leg strokes (i.e., kicks) they could think of. For argument's sake, let's say there are 5 (i.e., flutter kick, breaststroke kick, scissors kick, dolphin kick, egg beater kick). Then, if moving on the front (i.e., prone position), how many ways can you use the arms? Again, let's say 5 for the sake of the discussion (i.e., alternating with over water recovery, alternating with underwater recovery, simultaneous with over water recovery, simultaneous with underwater recovery, and alternating with one arm recovering over water, the other underwater). We agreed that this should represent 25 different strokes. Repeat this on the back and now we have 50, and on the side and we have perhaps 150! Can the arms and legs be coordinated in 2–3 different ways? Over 300! Can we regulate breathing at 2–3 different places and directions? Over 600!

In fact, performing all named swimming strokes which may provide a unique contribution to water competence should be included in any comprehensive aquatic education program. At present, there are between 10–15 named strokes, each of which may be a single best solution in some given situation; these have survived the test of time. All of these ought to have equal value, each in its own way. The tendency to devalue some compared to others is regrettable. These three examples among many others ought to suffice to illustrate my point: It is easier to see where you are going on the front; it is easier to breathe on the back; and swimming on the side sometimes offers the best of both!

## Why All Strokes First?

Again, this notion echoes the words of our editor in his previous editorial when he argued for introducing several strokes at the same time. Most simply stated, back crawl is only crawl upside down (or vice versa). This is enough for many learners (and with a demonstration, more than enough). Surely we benefit from introducing both front and back crawl at approximately the same time. There are other possibili-

ties, for example. Once comfortable on the back, from a beginner stroke on the back (crawl flutter kick + finning or sculling with the hands and arms), the elementary backstroke arm movement is logical and natural. This could be combined with either the flutter or breaststroke kicks. Arguments for all strokes first then might be:

- Even when ready for a stroke (perhaps any), no stroke suits all. The easiest for one, may not be the easiest for another. Individualized teaching requires us to teach several simultaneously.
- Again in the interest of individualizing, we might introduce two types of arm strokes at more or less the same time (e.g., perhaps one alternating, crawl-like, the other symmetric, breaststroke-like). Each learner will quickly show us instructors the way that is best for them (at that point in time). This will provide added motivation both because the (1) learner has been involved in making the choice (probably subconsciously), and (2) having made an appropriate choice, progress will be more rapid, and no learner is left behind, waiting for what is appropriate for them at that point in time. When offering two choices in such a situation, if we later repeat the process, asking all now to work on the one they have *not* chosen first, they will soon become proficient at both.
- Starting with several skills/strokes at the same time gives the learner a head start in acquiring a variety of skills as a broad aquatic skill repertoire. It also opens the way for possible transfer of learning from one to another skill or setting. Another common example here is floating on the front and floating on the back. While several studies suggest that most learn to float first on the front, those who float first on the back are very normal, just not as common. Introducing both at roughly the same time prevents any from having to wait for what suits them best.

## So – What Really Comes First?

The editor and I have agreed that foundational skills come first, including breath and buoyancy control along with a certain amount of postural and rotational control. Even if the wise instructor has carefully helped to lay the strongest possible foundation of “readiness” skills first, when the learner is ready for propulsive skills, some choices need to be made. Ideally, we guide the learners using a degree of individualized flexibility, allowing each some choice. But this instructional process need not be intimidating to instructors. At these points in the learner’s progress, there are rarely more than two choices. One who has begun to get a feeling for a particular leg stroke such as the flutter kick could be introduced to two potential arm movements at the same time. For example, on the front, a crawl-like arm stroke and a breaststroke-like arm movement could both be used with a flutter kick. Some will naturally choose one, some the other. Again, no one has to wait for what suits them best; the learner shows the way!

The so-called beginner strokes in fact are *real* strokes. They are as old if not older than the named “traditional” competitive strokes. When adhering to the principle of progressing from known to unknown, such as crawling before walking, the easiest (for each individual) is what comes first. The crawl (i.e., flutter) kick combined with either finning or sculling with the hands may be the absolute easiest

of choices on the back. On the front, it may be a more crawl-like stroke, but with an underwater arm recovery. By the way, the human stroke, named in the previous editorial is *not* the same as the so-called “dog paddle.” In the human stroke, the face is in the water and the arm strokes are longer, with the beginnings of both a pull and a push phase. This is for many a useful step on the way to acquiring the front crawl stroke with its out-of-water arm recovery. And many learn rotary breathing more easily when coupled with an underwater recovery. But, some learners may choose a symmetric arm stroke first with a flutter kick. Both of these also are real strokes. Hopefully readers can discern that using this approach the novice learner may have acquired 3–4 different strokes, none of which are among the four traditional competitive strokes. By the time a learner has managed to swim at least 200 meters, my experience is that they certainly should have acquired 4–5 different strokes, especially if we include these beginning strokes.

It’s time to put this age-old question to rest. No single stroke should always come first!

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