



What is Long Term Development? What is Progress?

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NAC is an organization that prides itself on our commitment to long-term athlete development. A firm understanding of our philosophy on long-term athlete development is necessary to understand how our program is structured, as well as where your athlete fits into this progression.

Long-term athlete development has two main areas of focus: **skill development** and **training development**. While other areas of focus exist outside of these two, such as life skills development, this document will focus on these two main areas of focus in order for the foundations of our program to be understood.

Neither skill development or training development can be identified as more important than the other when viewed in terms of long-term athlete development. However, it is easier to prioritize skill development for 12 and Under athletes and training development for 13 and Over athletes. Research at USA Swimming has found that athletes who are the most successful long-term essentially have the exact same stroke technique *strengths* at 12 years old as they do when they reach their world-class level. While weaknesses may exist as a 12 year old, it is these weaknesses that get ironed out in the process of pursuing a higher level of swimming success. Therefore, it is a priority in our program to ensure that 12 and Under athletes have the lion's share of the skill and stroke development that they will need for long-term success.

It is very difficult for an athlete who has done tens or hundreds of thousands of repetitions incorrectly to change as a senior level athlete!

How do we manage this **skill development**?

Beginning with the Green Group, each group in the NAC program has a specific set of skills that an athlete must master by the time they exit the group. This *does not* mean that each swimmer will have 4 perfect strokes and skills by the time they exit ANY group. For example, one of the skills required for exiting the Blue Group, the highest level of our age group program, is proficiency in butterfly. Certain skills have points in time in athlete development where they can be most rapidly acquired and ultimately perfected, so the expectation that a 9 year old exiting the White Group should have a perfect butterfly is unrealistic. Another example is that it is

developmentally inappropriate to expect a Green Group athlete to be able to kick 25 yards underwater without a breath.

The objectives that are outlined for each group build upon those learned in the group before, so that the Green Group athlete who can only kick a developmentally appropriate 10 yards underwater can then kick 12.5 yards underwater in the White Group, 15 meters underwater in the Red Group, and finally kick 25 yards underwater by the time they exit the Blue Group.

Of course some athletes do have the perfect butterfly or fantastic underwater kicking at 9 years old. There exists in any collection of human beings those that are able to acquire skills and abilities at different times than their peers - both sooner and later. In order to maximize the development of all athletes in our program, the skills have been laid out at the proper times so that we are able to capitalize on the things an athlete of the proper age and ability level is able to learn and add as a tool in their toolbox for swimming success!

Swimming is known in the academic community as a training-based sport. This means that there is a certain amount of training of the human body necessary for an athlete to have success. NAC keeps a very keen eye on **training development** from one group level to the next and it is an incredibly important piece of the long-term success of any athlete!

For example, in a typical Senior Group workout, a Senior Group athlete may swim 6,000 yards. Senior Group athletes are typically 13 years of age or older. With this in mind, the program is set up so that athletes can maximize their progress within the amount of swimming that we find to be developmentally necessary. That is to say that an 8-year old athlete *could* swim 4,000 yards a day. But at 4,000 yards per workout, there is not a lot of room for an athlete to continue to improve based on increases in training load as they age.

NAC aims for a 20-30% increase in training load as athletes progress through our training groups. We have found that this is an increase that leads to proper progression to the Senior Group, but also does so with two factors in mind: a manageable increase for athletes allowing them to gain confidence, and an acceptable increase with regards to injury prevention. With the 4,000 yard example mentioned above, an 8 year old doing 4,000 yards per workout in the Green Group would need to be doing approximately 10,000 yards per workout at the Senior 2 level of our program. That is an unnecessary and irresponsible training load and is a training amount we feel is ultimately detrimental to athlete performance.

There is also not a necessity for an 8-year old athlete to swim 4,000 yards in a day. When viewed through the prism of long-term skill development as outlined above, the majority of the swimming that needs to be taking place in the pool for an 8-year old is the development of the skills (stroke technique, kicking, streamlining) that are crucial for their continued success as a competitive swimmer. Generally, those types of exercises in the time allotted for practice do not allow for “yardage” driven workouts. Some “training” based swimming does need to occur - specifically as an athlete reaches the Red group. This training is developmentally necessary

and age appropriate, and is often based around skill development. For instance, the teaching of race strategy or the understanding of training terms to be used in the Blue and Senior groups such as descending, building, etc.

Too much too early is a real phenomenon in swimming, as it is in any training based sport. NAC is very firmly committed to ensuring that our athletes are able to continue to improve as swimmers based on their ability to swim *better*, but also *more* than they have from year-to-year or season-to-season.

How We Define Progress

As swimmers, times are only one piece of the puzzle that is progress. Typically, as a parent or athlete, time is the only true concrete measure by which performance can be compared from one period of time to the next. However, when we look at NAC's philosophy on long-term skill and training development, the coaching staff defines progress in a variety of other ways. It is the other ways in which we view progress that help determine our evaluation of the training design and the continued planning for each group as a season progresses.

For example, the Red Group may be emphasizing their butterfly skill development at a certain point in the season. As such, when the meet arrives, the coaches are looking not at how fast the athletes are swimming their butterfly races, but instead how they are performing in relation to what they have been teaching in practice! Is the timing improved? Are the breathing patterns improved? A White Group coach may be working on butterfly and evaluate progress based on a totally different set of developmentally appropriate questions: Is every athlete touching with two hands? Are the arms recovering an appropriate distance in front of the body? In these instances, coaches are evaluating **skill development** factors that help to define progress.

At the Red or Blue Group levels, coaches may be observing whether athletes are finishing races correctly, splitting longer races correctly, or taking an appropriate number of underwater kicks off of each wall - factors of **training development** that help to define progress.

When a meet ends, the coaching staff meets and determines the effectiveness of the instruction being provided in practice for both skill and training development, and hones in on a new approach or can be satisfied with the progress and can choose a new focus for the weeks ahead.

Finally, *progress* itself, as defined by **skill development** and **training development**, is ultimately dependent on an athlete's physical age and not necessarily their numerical age. Athletes move through the program with their physical age being the primary age consideration. Numerical age plays a role in determining peer-appropriate groups, but the physical age oftentimes provides much more information on an athlete. As athletes develop all the way through our program, including the Senior Group levels, numerical age and physical age can vary in relation to one another both up and down. As a result, the path each athlete takes

through the program can be very different due to their maturation. However, with the long-term development approach, all athletes reach the end point with the same skill set. ***Athletes should never be compared to one another with respect to performance, because the number of factors affecting their progress can be wide-ranging.*** At the Senior Group level, we have athletes with all sorts of maturation backgrounds who ultimately achieve a high level of performance because of their long-term development.