

*A comprehensive program for identifying,
training, and coaching excellence*

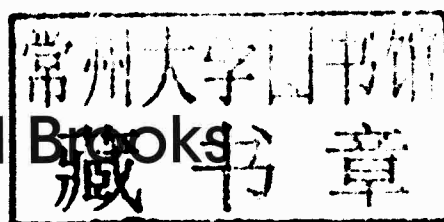
Developing Swimmers



Michael Brooks

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In Memoriam

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Albert Einstein is said to have quipped that he had only one original idea in his life. That warning alone should make any author soberly consider the predecessors, influences, and mentors who have contributed to his thoughts. I understand my debts, and they are numerous. Because a complete listing would be longer than the book itself, I must confine my acknowledgments to only a few of the major influences in my coaching.

I never met several of my most important mentors. Instead, I read and studied their books, thought about their ideas, took what I liked, and tried to apply their lessons and wisdom to my coaching. I owe a huge debt to John Wooden (UCLA men's basketball) and James "Doc" Counsilman (Indiana men's swimming), both deceased, and to Anson Dorrance (UNC women's soccer) and Keith Bell (sport psychologist), both still practicing their crafts.

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In the past few years, I have been involved with a small group of coaches at the York YMCA who are dedicated to building the best developmental swimming program ever. The help, advice, effort, and friendship of Andy Steward, Janet Borowski, Sandy Zamalis, Nate Gentzler, and Clyde Vedder have been invaluable in building a program, fashioning its principles, and writing about it.

But any thoughts, principles, or theories that inhabit a coach's mind are tried and tested by the swimmers in the water. It is cliché but true that any coach who is paying attention learns a lot more from his swimmers than they do from him. So, to all of my swimmers past and present, thank you for trying to teach me how to coach.

Introduction

Ever since I started coaching, I have been obsessed with the idea of development. How does an eight-year-old struggling to keep her head steady on backstroke become a national-level athlete over the course of six or eight years? What is the best way to take a swimmer from entry-level novice to national-level athlete, and what are the important steps along the way? What skills or talents do the elite athletes have; how do I best teach these to my age-group swimmers, and in what order should I teach them? How do I keep my swimmers continually improving and motivated to train hard and swim fast for years on end? This book is the fruit of struggling to find answers to these questions—in short, it is about developing swimming talent.

An obvious question arises: What do we mean by *age-group swimming*? Coaches argue about precise definitions here and never come to an agreement. In the absence of any consensus, I take the term to mean training programs for swimmers 14 years old and younger. Though some late-starting swimmers may be categorized as age-groupers when 15 or 16, most programs have their high school swimmers training in their senior programs. And even though some strong females will be at the national level and doing senior-level training by age 14, the large majority are still training and racing as age-groupers. Thus, though there may be some overlap at the boundary of age-group and senior swimming, 14 is a reasonable cutoff for discussing age-groupers.

When we watch elite athletes on television, competing at the Olympics, for example, we are rightfully impressed at their extraordinary physical and mental abilities. We marvel at what they can do, but we rarely think about how that phenomenal athleticism was developed. As viewers, we see only the last few minutes in a long developmental process that spanned 8 or 10 years of daily practices.

That long developmental process is crucial: As the twig is bent, so it grows. The likelihood that athletes will reach elite levels as seniors is much higher if they have participated in well-constructed age-group developmental programs. Teaching stroke skills to older swimmers who missed out on the early years of concentrated stroke development or building aerobic capacity in older swimmers who missed the early years of aerobic training is possible. However, in both cases, it is much more difficult and takes much longer. Swimmers who start late or who swim in poorly constructed programs have fewer options when they are older, and they generally have lower performance ceilings.

Good coaching is crucial to building a solid age-group foundation, and that fact is problematic. For better or worse, swimming is not a sport for the solitary; swimmers train with teams under coaches who develop training programs, and the swimmers on any team will largely be limited by the vision, aim, talent, and knowledge of the coaches who train them. At most swimming clubs, the age-group coaches are novice coaches with little experience. They may be enthusiastic, but they are not yet knowledgeable about coaching. The former collegiate swimmers among them may know swimming but not necessarily how to coach it. Coaching someone else to swim, especially hyperactive 10-year-olds, is very different from swimming yourself.

Unfortunately, the career path for most serious and ambitious young club coaches perpetuates this problem of inexperience. They plan on paying their dues for a few years, coaching age-groupers before they graduate to coaching seniors. By the time they have learned their craft, they are no longer developing young swimmers. Every time an experienced coach moves to the senior level, another novice coach comes in who will practice being a coach on younger swimmers during their crucial developmental years. This book is intended to accelerate the learning curve of these newer coaches to the benefit of the age-group swimmers training under them.

The most common sources of information about age-group swimming are inadequate. Swimming knowledge is available at the click of a mouse over the Internet. But the Internet has made everyone an expert, no matter how wise or foolish, and as a result, cyberspace is awash in bad information. Further, information tends to be limited in scope and scattered piecemeal across articles or Web sites based on conflicting assumptions and with conflicting aims. Making music out of this cacophony is nearly impossible, in particular for new coaches who cannot put each article or argument into context or properly evaluate it.

Much of the good information about swimming is not applicable. Most nationally known coaches have trained and developed Olympians and world-record holders—elite senior athletes—and most began coaching these athletes late in their development, guiding them the last few steps to the summit. Talks or articles by these coaches discuss that short but important climb. However, an age-group coach trying to teach a child to swim butterfly or train a talented 12-year-old doesn't need to know what Michael Phelps did when he was 22 and preparing to win eight gold medals. The needs of an age-group swimmer and age-group coach are different from those of the senior elite athlete and coach.

The last comprehensive book on age-group swimming, *Coaching the Young Swimmer* by Orjan Madsen, was published over 25 years ago and was based primarily on Eastern European research. A lot has changed, and it is time to incorporate what has been learned in the meantime. Further, Madsen seemed to assume an ordered world rather than real life with all its messiness, where coaches have to deal with inadequate pool time and space, kids getting caught between divorced parents, swimmers involved in multiple extracurricular activities, and some kids who pay attention and work hard and some who do not.

There is a desperate need for a practical manual for developing age-group swimmers—a book that is self-consistent, as simple as possible but no simpler, based on sound principles, and tested by experience. This book offers conclusions

reached after much observation of my own and others' swimmers, many discussions with successful age-group and senior coaches across the United States, much reading and study, and years of experimentation in attempting to construct the perfect age-group developmental program. Realizing that what works with one situation or swimmer might not with another, I hope to be generous with suggestions and guidelines but modest with inflexible rules.

Part I explores recognizing and developing swimming talent. The concept of talent is usually misunderstood and equated with early success. I assume a more comprehensive idea of talent with many components; for instance, a swimmer can have a talent for technique, for speed or endurance, or for staying calm in stressful situations. All of these and more are necessary for high performance, all are separable, and all can to an extent be taught by the coach and learned by the swimmer. Skillful coaches have their eyes open all the time to discover what their kids do well and to build on those little victories. By creating good programs, coaches can create talent or at least uncover talent that had previously lain hidden.

We aim to develop talent over the course of a swimmer's career. Long-term development is the overarching strategy, and the coach must plan for years down the road. The ultimate goal is not speed right now but slow and patient building of the skills and capacities necessary for swimmers to be great when their bodies are mature. In this building process we take advantage of critical biological periods when the athlete's body is primed to make large gains relatively easily. We try to give kids what they need when they need it—mentally, technically, and physiologically.

Psychology is the underpinning of this developmental program. *Arete* is an ancient Greek word for all-encompassing excellence. This is what we are aiming to instill in our athletes. What is going on inside the heads of your swimmers determines what their bodies will do. Coaches can create a culture of excellence by setting properly high expectations and by ensuring that everything agrees with this message of excellence. Continual goal setting produces continual improvement. One of the secrets of great teams is that excellence, improvement, and mastery of skills are a lot more fun than mindless mediocrity, even for a 10-year-old.

Part II covers assessment and refinement of stroke technique. For most swimmers, the great obstacle to high performance is efficiency (technique) in the water. Though improving technique should be a main focus for swimmers at any step in the progression, the 10-and-under years are dominated by stroke technique work. For technique work to be effective, coaches must know what to teach. They must have models for each of the four competitive strokes while allowing for differences in how swimmers are built and for different combinations of strengths and weaknesses. Next, since it is one thing to know what a stroke should look like and quite another to get kids to look that way, the book examines how to teach technique so that the lessons stick from one day to the next and from practice to meet. Finally, the four strokes and the starts and turns are broken into fundamentals that can be taught to swimmers of any age.

Part III examines training and preparing swimmers to be their best. Training builds the physiological engine to power high performance. Age-group training emphasizes distance-base and individual medley training. Young children are facile at learning stroke skills, and their bodies are aerobic sponges, able to make huge

gains with the right sort of training sets. The gains made in these developmental years will serve as the foundation for their senior swimming to come. Dryland training supplements water training to build basic strength, crucial flexibilities, and general athleticism. With the gradual demise of physical education in schools, more and more dryland training may be needed to make up for physical deficits in swimmers.

The basic goal of training is continual improvement. This is a tremendous challenge for both coach and swimmer. To get the most benefit from everything we do, we plan, monitor, and evaluate daily practices as well as the order and flow of practices throughout a week or season. We discuss how coaches steer a course and how they can keep their hands on the tiller so that their swimmers head in the right direction.

Supportive parents make the challenge of ensuring swimmers' continual development much easier. We discuss how to get the right families into the program and how to educate and communicate so that they stay supportive and remain in the program.

Part IV explores how to develop the competitive edge. It is frustrating for swimmers, coaches, and parents if athletes work hard and make progress in training, then get to a meet and fall flat. Unfortunately, most swimmers race inconsistently. Adopting proper racing attitudes can help swimmers overcome many of the challenges to consistent excellence. Further, physical and mental preparation for competitions take some of the chance out of racing and allow swimmers to use all they have. Finally, we discuss how coaches can systematize their meet scheduling and event choices to help swimmers improve more consistently.

I have been blessed in being able to coach for a living, which means that I get to work with a group of kids and watch them grow up before my eyes (and steer them in productive directions). Young swimmers drink in the lessons you try to teach them, just as their bodies are drinking in the training you give them, and the tremendous effect coaches can have on their charges is obvious from one season to the next. The time on the pool deck is easily the best part of the day. It is certainly satisfying to see a swimmer that you coached from the cradle make it to the national level. But it is just as satisfying to see the day-to-day improvement and growth in a group of kids and to imagine the mighty oaks that these little acorns can become.



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PART I

Recognizing and Developing Talent

Recognizing Swimming Talent

In thinking about talent, the starting point for just about every club coach is not a scientifically chosen group of seven-year-old children with exceptional motor skills and drive to excel but a disparate group with kids of varying sizes, ages, skill levels, fitness levels, and levels of interest and motivation. Some come to practice every day and are focused on swimming; others attend only a couple of times a week and participate in several different activities. Some do things right all the time; others only when the coach is standing over them nagging. Some are beautiful and easy in the water; others look like they are having convulsions. Some will gladly work themselves to exhaustion; others rarely get their heart rates north of 70 beats per minute. The daily process of talent development isn't a pretty, perfect laboratory world but rather a messy, imperfect world that coaches must make the best of.

My perspective as a coach conditions my thoughts on talent and talent development. Every day I am confronted with a group of kids and expected to do something with them. In order for me to do my job well, I must be attuned to as many kinds of talent in as many kids as I possibly can. Although I might wish every swimmer who walks on my pool deck to be genetically gifted and to have parents who are tall, coordinated, elite athletes, I have no control over what they come in with. My emphasis is on the factors that can change, not on those that cannot; I aim to improve my swimmers' fitness, technique, and competitive mentality. I attempt to maximize my swimmers' performance by constructing a program that develops what they have and brings out their potential.

A coach must assume that there are talents in the pool and that his job is to find and develop them. He must keep his eyes open for talent to show up in unlikely places. A seemingly unpromising swimmer may suddenly stretch out her stroke and achieve a long and beautiful body line, a nondescript racer may finally put his head down for the last 20 meters to win a relay, or a previously unmotivated swimmer may come alive and race her guts out in a 30-minute straight swim. These are the little sparkles of diamond amid the dirt and rocks, the glimpses of perfection that reveal something promising to build upon.

Having a broad view of talent helps more than just the coach. Pointing out the little daily excellences builds swimmers' confidence, feelings of competency, and motivation. Children like to do things they are good at and things they are able to improve upon, but they often aren't sure of their excellence until a coach tells them. When coaches define *success* correctly—not as winning but as getting better—every child can be on a long road to developing his talents.

Problems With Talent Discussions

Common discussions of talent are often dissatisfying. When quizzed about talent, many coaches respond that a talented swimmer is one who has good feel for the water, looks easy in it, is quick to learn new skills, and has good distance per stroke (meaning that when she pulls, her body moves forward a long way). Swimmers with this feel are rare and can be spotted instantly; their talent is on the surface. In this view, talent is confined to a physical gift, and more specifically, a neurological one.

Being easy and efficient in the water is important. Most coaches spend a lot of practice time trying to make their swimmers look beautiful, and I admit to saying a little prayer of thanksgiving when a new swimmer has great feel from the start. But we're not aiming at swimmers who are beautiful but slow, or who are beautiful but not interested in coming to practice and working hard. Beauty is necessary but not sufficient.

Other popular views of talent seem at best meaningless and at worst offensive. Talent is often equated with being fast. But simply defining fast people as *talented* begs the question of what talent really is. Worse, by calling any great performance

By calling any great performance the simple result of talent, we don't even try to understand how athletes become great.

the simple result of talent, we don't even try to understand how athletes become great. Instead, we just assume that fast now means fast forever, that slow now means slow forever, and that a swimmer has no hope without the right genes. Worst of all, talent is often used to rob great athletes of the credit for their accomplishments and the choices that created those accomplishments, including years of hard work, long and grueling practices, gradual refinement of technique, improvement of physical capacities, and excelling under enormous pressure. If

great athletes are simply given their gifts, then they are not responsible for their successes, and their excellences are not true benchmarks by which the rest of us can evaluate ourselves.

Talent is often spoken of as a single quality that a person either has or doesn't have and that determines who will be successful and who will not. This distinction is often made when children are still young, and it is usually made on the basis of current performance levels. A fast 10-year-old is seen as talented and doted upon, while a slow 10-year-old is seen as untalented and not encouraged. This is highly problematic. The swimming world is littered with kids who were superstars when they were 10 or 12 but left the sport by 14 or 16. Conversely, there are many stories of kids who were plodders when young but who persevered and kept improving until they ended up at nationals.

Quite often, the fastest young kids are those who are early developers biologically. They are bigger and stronger than the rest of the kids their age, and they succeed because of that initial but temporary physical advantage. When their advantage disappears, usually between the ages of 14 and 16 as the late bloomers catch up, success is much harder attained, and they often stop enjoying the sport they no longer dominate. A swimming career is a marathon, not a sprint, and staying power is rewarded over a quick start. But if those who were slower off the mark leave the sport because they were considered hopeless, they aren't around to finish strong.

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Talent predictions are usually wrong. Anyone who has paid attention to the annual drafts for professional sport leagues knows how unscientific and uncertain the process of trying to predict success is. This is the case even when billions of dollars hang in the balance, when scouts and general managers have mounds of data and videotape for each prospect, and when the athletes being evaluated are much older and closer to the next level than those we are discussing. How much more uncertainty is there when the athletes in question are 10 years old? We would be more often wrong than not, to the detriment of those kids selected for future greatness who do not pan out and of those rejected as having no potential. Because we cannot see into the future, we had better give the kids we work with the benefit of the doubt, and we had better use a big dragnet when trawling for talent.

A New Vision of Talent

In this book, we use the word *talent* broadly, comprehensively, pragmatically, concretely, and usually in the plural: talents. Certain skills, qualities, behaviors, habits, abilities, and attitudes that lead to success in swimming are talents. No one talent will make a swimmer a champion; conversely, there is no one talent whose relative lack will prevent a swimmer from becoming a champion. Just as no swimmer has every talent, no swimmer has none of them. Coaches can teach these talents, or at least most of them, and swimmers can develop them. These talents fall into three groups: psychological qualities or skills, physical qualities or capacities, and anatomical characteristics.

Psychological Qualities

Most people don't think of psychological qualities or skills as talents, especially not in an obviously physical sport such as swimming. Swimming is about getting from here to there faster than anyone else. However, the mind plays a great part in deciding how fast an athlete will swim. For instance, without toughness an athlete backs off when he starts to hurt or when put under pressure and thus chooses not to use his more physical capacities. Without persistence, an athlete will give up when he isn't instantly successful and again will not put in the time to develop his physical skills. These psychological skills