

A SWIMMING TECHNIQUE MACROCYCLE

**Content for a Club-oriented Multi-stage
Stroke Development Program**

**Brent S. Rushall, Ph.D.
Sports Science Associates
and
San Diego State University**

**The Coaches' Manual for the
Cherrybrook Carlile Swimming Club
and
Team Andrew Indie Swimming**

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Brent S. Rushall
4225 Orchard Drive
Spring Valley
California
USA
91977
(619-469-1537)

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January 18, 2013

DEDICATION

This book is dedicated to the three Hall-of-Fame coaches who were my mentors and friends and who provided me with opportunities and experiences in swimming that have uniquely molded my approach to and appreciation of the sport.

The late Professor James Edward "Doc" Counsilman PhD

Mr. Donald Talbot OBE, AO

and

Mr. Forbes Carlile MBE

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PREFACE

This manual is a follow-up companion to my 2011 book, *Swimming pedagogy and a curriculum for stroke development* (Second Edition). It attempts to describe a program of macrocycle length that develops the techniques of the four competitive strokes in a swimming group/club situation.

The details of all microcycles, which could equally be termed "lessons", are extensive. The principles and recommendations are supported by the observable and measureable records of very elite swimmers videotaped in their winning performances, usually at Olympic Games or World Championships¹. When the observations are replicated across genders, race distances, and champions from a number of countries, the accuracy and validity of the content is substantiated. The descriptions produced pertain to how a swimmer should perform in a race or at training that involves race-pace work. Applying the content to slower than race-pace swimming will enhance the swimming at the slower-pace but those effects are unlikely to transfer to race velocities in racing circumstances. The Principle of Specificity strongly and convincingly supports that contention. It is reasonable to assert that how a swimmer trains best reflects how that swimmer performs.

There is considerable overlap in the content of microcycle explanations. That is necessary because technique features flow from one element to the next in the total stroke cycle. For example, when talking about the end-of-stroke position, one has to understand how to get there from the power-phase and how to leave it in the recovery without any interruption. Consequently, throughout the manual stroke features are described in relationship to the microcycle topic. It is helpful to consult the index to see where all the mentions of technique elements occur. By consulting all the references, those in the Reference section, and within the text through direct URLs, a better perspective of a topic will be gained than limiting a reference exclusively to the appropriate microcycle.

This manual is inspired by the same reasons as those that drove my companion book (Rushall, 2011a). A major factor is the observation that few swimming coaches know much about teaching motor skills, perhaps the single most-important characteristic of an effective swimming coach. The manual covers implementing a total incremental shaping program for developing competitive swimming strokes. This was also the intention of Rushall (2011a) but the skill of developing a program from a curriculum has proved to be difficult for those not trained in the appropriate pedagogical skills for that task. This manual should go a long way to closing that gap.

Why is there a need for this manual? There are many answers to that question. Some of the reasons that could be proffered are listed below.

1. Many swimming coaches are not trained teachers despite a strong case being made for teaching being the major element in effective swimming coaching.
2. Swimming coaches talk a very good "*game*". When discussing techniques, often correct elements are described and advocated. However, their swimmers do not exhibit those features. Knowledge alone does not make a good coach. Communicating that knowledge and effecting permanent behavior changes in swimmers do.
3. The myopic approach of using physical conditioning as the only avenue for stimulating "*improvements*" in swimmers is doomed to failure. While occasional champions emerge despite such coaching, the conditioning approach fails in many ways and in turn, deprives many swimmers of the opportunity to improve.

¹ See the *Swimming Science Journal*, "How champions do it" section at <http://coachsci.sdsu.edu/swim/index.htm>.

Some coaches are so focused on physical conditioning as being the avenue for swimming performance improvements, that the structuring of programs is treated meticulously and according to "*exact*" formulations, so that it outwardly appears to be a very exact science. However, such an approach is based on several false premises and/or the denial of some important performance principles (see the *Preface* in Rushall, 2011b).

The evidence is now clear and incontrovertible that swimming technique and velocities are linked directly. Change velocity and technique features have to be altered accordingly to produce the most efficient form of progression through water at the altered velocity. The belief that one can transfer techniques from one pace to another is now a disproved myth. The Principle of Specificity still remains a major principle of behavior despite swimming coaches attempting to disprove it over the past 60 years. A tacit implication of the specificity principle is that only by combining skill instruction and physical conditioning, with the emphasis being on the former, can one expect continued performance improvement throughout a swimming career. A failure of a swimmer to improve is a failure in coaching.

This manual attempts to focus on the important factors involved in teaching technique when coaching serious swimmers. It describes why content should be taught and in its structure, how to implement a program of technique change and/or refinement. It describes the "what" and a part of the "how" of swimming pedagogy.

No apologies are made for haranguing about "*bad*" coaching, although it is proffered with the best of intentions. It is necessary to make some sense out of what is known about performance and coaching for the benefit of swimmers, not coaches. Swimming is a sport of skill. Therefore, swimming coaching requires an emphasis on the instruction of good skill content for high levels of success to be achieved.

I hope this manual proves to be of value to coaching attempts to change competitive swimming skills for the better.

I want to thank Coach Greg McWhirter from the Cherrybrook Carlile Swimming Club in New South Wales, Australia and Coaches Peter and Tina Andrew of Team Andrew Indie Swimming in Kansas, USA for allowing me to test this manual's content on their swimmers and for providing both encouragement and feedback.

From Spring Valley, California

Brent S. Rushall

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