

11-1-2007

## Swimming: Steps to Success (3rd Ed.)

Stephen J. Langendorfer

Bowling Green State University, [slangen@bgsu.edu](mailto:slangen@bgsu.edu)

Follow this and additional works at: <https://scholarworks.bgsu.edu/ijare>

---

### Recommended Citation

Langendorfer, Stephen J. (2007) "Swimming: Steps to Success (3rd Ed.)," *International Journal of Aquatic Research and Education*: Vol. 1 : No. 4 , Article 9.

DOI: 10.25035/ijare.01.04.09

Available at: <https://scholarworks.bgsu.edu/ijare/vol1/iss4/9>

This Media Review is brought to you for free and open access by ScholarWorks@BGSU. It has been accepted for inclusion in International Journal of Aquatic Research and Education by an authorized editor of ScholarWorks@BGSU.

---

## MEDIA REVIEWS

---

*International Journal of Aquatic Research and Education*, 2007, 1, 378-380  
© 2007 Human Kinetics, Inc.

### ***Swimming: Steps to Success (3rd ed.)***

By David G. Thomas. Published 2005 by Human Kinetics. 188 pages, \$17.95 U.S.

*Reviewed by Stephen J. Langendorfer, Bowling Green State University*

I simply had to review this third edition of the classic instructional text *Swimming: Steps to Success*. It is a personal thing. I first met the author, Dave Thomas, professor emeritus from the State University of New York, Binghamton, way back in 1969. I was a “wet-behind-the-ears” first-year swimmer on SUNY Cortland’s men’s swimming team, and Dave was the Binghamton men’s swim coach who already was in his third decade of teaching swimming and coaching. I am pretty sure Cortland won that long-ago meet, but I was forever impressed with what a class act Dave Thomas was and with the fact that he personally had designed Binghamton’s brand-new competitive swimming pool. After having only swum in old “tile tubs” in high school and college, I was fascinated by how fast the sleek new deck-level pool at Binghamton was. I just knew anyone who was smart enough to design that nice a pool was someone special. Years later I was proud to get to know Dave on a more professional level when we were both members of the now-defunct Council for National Cooperation in Aquatics. It should be no surprise that perhaps Dave’s greatest claim to fame was his design and creation in 1972 of the course materials for the first national certified pool operator’s course in the form of the *Swimming Pool Operators Handbook*, which was published by the old National Swimming Pool Institute.

*Swimming: Steps to Success*, now in its third edition, was first published 18 years ago in 1989 and has stood the test of time as a basic instructional text in swimming. Any swimming instructor, regardless of training background or certification agency, should find this text to contain some great instructional resources. The third edition has preface material including a brief historical overview, safety considerations, helpful training equipment, and general procedures for a learning/training session. These introductory materials are followed by what amounts to 13 chapters, called steps in this series, that overview basic foundational swimming skills, all of the formal strokes (including turns), surface dives and underwater swimming, basic diving, sculling, and stunts, games, and novel strokes. The steps, or chapters, contain plentiful illustrations in the form of line drawings that illustrate many of the drills and learning activities. For the most part, the text appears to be oriented mainly to adolescent and adult learners, not children.

Although swimming agencies such as the Red Cross have been focusing more and more on the four competitive swimming strokes (i.e., front and back crawl, breaststroke, and butterfly), Dave has insisted on maintaining chapters and information on all the traditional advanced formal strokes, as well as some lead-up foundational skills. The interested reader will still find full chapters with teaching and learning progressions for basic backstroke, sidestroke, and the trudgeon strokes

in addition to ones for the four competitive strokes. One of my personal pet peeves is the habit of referring to the front crawl as “freestyle” (which is a competitive event, not a stroke). It was refreshing to see that Dave Thomas has resisted that modern tendency and has described the front crawl by its appropriate stroke name. Way to go, Dave!

Given the criticisms in the editorial in this fourth issue of *IJARE* that I leveled at swimming-instructional programs for their general failure to do more with aquatic assessment, I was particularly impressed to see the assessment rubrics that this text contains throughout. For every drill and learning activity presented throughout the text, an assessment rubric has been provided that uses a relatively simple point scale. The assessment rubrics are described at the end of the description of each drill and learning activity, and then a comprehensive summary record table of all the assessment rubrics appears at the end of each step. The assessment rubrics are oriented for either use as self-assessment by the individual swimmer herself or by an instructor. To my knowledge, this is the first and most extensive creation of quantitative aquatic assessment rubrics in the instructional aquatic literature.

The swimming-assessment rubrics would appear to have at least logical or content validity. It would be particularly interesting and useful for someone (an undergraduate aquatic major or master’s student, perhaps) to perform validity and reliability tests on selected exemplars from the many assessment rubrics presented in this third edition. If the text could cite the degree of validity and reliability for each assessment rubric based on actual research-based tests, it would gain a degree of rigor that most similar texts lack. I certainly encourage the conduct of such a straightforward research project, which, if adequately conducted, would be readily publishable in *IJARE*.

My only major criticism of *Swimming: Steps to Success* is its primary orientation from the “error model.” Of course, the error model is the predominant perspective used in aquatics, so for most readers it is not a concern. I briefly described the error model in my editorial in Volume 1, Issue 2 of *IJARE*. As a developmentalist, I prefer to view the development and learning of motor skills from a change orientation known as the developmental perspective. The developmental perspective focuses on how any motor skill such as an aquatic task or stroke naturally changes over time as a swimmer gains experience, changes body size and strength, and perhaps gets coaching or teaching.

The error model presumes that there is a single “correct” way that anyone should perform any motor skill including swimming strokes. That correct way typically is the coordination pattern used by elite competitive adult swimmers that serves as a template with which everyone’s movement is compared. All failures to perform a swimming stroke according to the preferred pattern are labeled as “errors” (hence the name of the perspective). The error model generally fails to consider the impact of body type and size, body composition, fitness levels, and other individual characteristics on how a person’s coordination patterns emerge.

I expect many readers of this review at this point might be asking themselves, So what is so bad with the error model? The reality is that most people do not swim like the proposed elite template, and thus they all have “errors” in their strokes, a decidedly negative approach to stroke mechanics. From a developmental perspective, a stroke normally would not be labeled as either correct or incorrect but should be located somewhere along a developmental continuum that identifies

strokes as either less or more efficient and less or more effective. Efficiency refers to the level of energy utilization, so greater efficiency (e.g., lower pulse rate) is desirable. Effectiveness refers to the degree of achieving the goal of a task, which in the case of swimming strokes could be measured either by the time it takes to cover a specified distance (i.e., velocity) or the number of stroke cycles required to cover a distance (e.g., number of arm strokes or use of the arm-stroke index). Lower times and higher velocities plus fewer arm strokes to cover any distance are evidence of higher levels of effectiveness.

Another personal concern I have as a developmentalist comes from the negativity of the error model and its subtle potentially demotivating effect, especially on children and inexperienced swimmers. In general, even when an inexperienced swimmer “corrects” one mistake, many more “errors” still exist. When viewed from a long list of “errors,” it can seem to an inexperienced swimmer as if there is no achievement of the desired perfection presumed by the error model. The error model also subtly presumes that the primary cause for learning comes from the environment that includes the actions by a swimming instructor or coach rather than as an interaction between what swimmers actively do themselves as part of the change process, the environment, and task characteristics.

Having criticized *Swimming: Steps to Success* for its lack of a developmental perspective, I do have to acknowledge the excellent use of learning progressions that Dave Thomas has created in the text. Each separate step (chapter) appears to be organized in a logical fashion with separate drills and learning activities for arm pulling, leg kicking, breathing, and combined stroke plus turns. Although I would personally prefer seeing learning activities and assessment rubrics that reflect the expected developmental changes, the way the text is organized maximizes the transfer from one drill to another and from one stroke to another.

All in all, Dave Thomas and Human Kinetics have produced an impressive swimming-instruction text that provides extensive drills and learning activities along with an extensive and sophisticated set of assessment rubrics. Even those of us who are “dyed-in-wool” developmentalists certainly can locate valuable drills and learning activities that may be useful in teaching swimming. If you have not recently examined an edition of *Swimming: Steps to Success*, I suggest it is time you do so. Both instructors and coaches will want the current third edition as part of their professional library.