

The Lifesaving Foundation, 2011, 50-52
© 2011 The Lifesaving Foundation Ltd.

Bridging the Gap: From Pool to Open Water

Robert Keig Stallman

*Norwegian Lifesaving Society (Norway); Tanzanian Lifesaving Society (Tanzania);
Norwegian School of Sport Science (Norway)*

Most drowning occurs in open water (Brenner, Moran, Stallman, Gilchrist, McVan, 2006). In HICs most learn to swim in a pool (Brenner et al, 2009). Even in LMICs, many learn in closed water (Rahman, et al, 2011). The risk and challenges are greater in open water. Wind, waves, etc create a gap between the pool experience and the open water experience. There is a transition phase between pool and open water. When the gap is too great, many fail in an emergency, to make the transition. That learning in a pool cannot completely cover the challenges of an open water emergency has not been widely accepted. What transfers from quiet water to open, rough water, to what degree, why and how, is poorly understood. The aims of this short presentation are to present the concept of the gap between closed and open water, suggest a few examples of how to reduce this gap, and urge a change in attitude regarding the role of pool teaching in a drowning prevention context.

Transfer of Learning

Transfer of learning from one skill to another has long been researched. Can anything transfer from tennis to badminton, from the volleyball serve to the tennis serve, from quiet to open water? It is generally agreed that for transfer to take place, the two skills must have many common elements (Perkins & Salomom, 1992). The rougher an open water setting, the less it has in common with quiet water and the less likely transfer will take place. Tipton and colleagues (Tipton, Reilly, Rees, Spray & Golden, 2008) showed that the least skilful among beach lifeguards suffered the greatest loss of performance from pool to open water and to surf. In other words, the efficiency level in the pool influenced the degree of transfer to open water.

Level of Efficiency and Degree of Transfer

Some believe that different skills are needed to survive a moderate challenge (pool) than the greater challenge of open water. While this may be true to a certain degree, it is our opinion that the level of efficiency achieved first in quiet water, in foundational skills (e.g. breath control, buoyancy control) is far more important. The difference is more in degree than in kind. Better skills are needed more than different skills. This has yet to be demonstrated and quantified.



Figure 1: The Freight Train.



Figure 2: The Whirlpool Machine.



Figure 3: The Magic Carpet.



Figure 4: Dominoes.

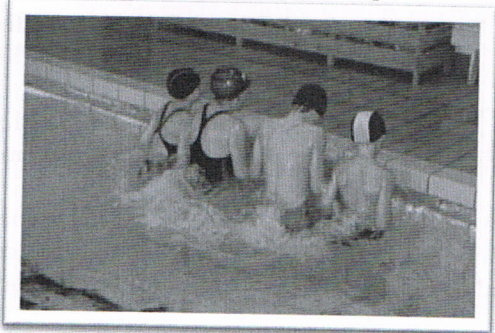


Figure 5: The Wave Machine.



Figure 6: Fireman's Drill.



Figure 7: The Tunnel.



Figure 8: Carnival Time.

Simulating Open Water Conditions in the Pool

Below we present a few of many activities which simulate open water in a quiet water teaching situation. Such activities may reduce the gap, helping to bridge it, allowing greater transfer and a better chance of survival in an open water emergency. In *Freight Train*, pupils stand in a line. The others, one at a time, glide past. The standing pupils receive and send the glider to the next man. Considerable speed can be developed (figure 1). In the *Whirlpool Machine*, the pupils run in a circle holding their hands. Releasing hands they float or swim in the circulating water (figure 2). In the *Magic Carpet*, two lines of pupils hold their hands. One lies up on the hands and is rhythmically rolled forward by the alternate sinking and lifting of hands of the others (figure 3). In the *dominoes*, sitting closely in a line on the edge of the pool, the pupils hold around the shoulders of the one in front of them. First man falls and the others follow as dominoes (figure 4). In the *Wave Machine*, shoulder to shoulder, pupils pull and push simultaneously, creating waves. The others swim or float in the waves (figure 5). In the *Fireman's Drill*, with a long pole butted on the bottom, the pupils first climb down then back up the pole, experiencing depth. Can be done while holding the breath or blowing out, and with combinations of these (figure 6). In the *Tunnel*, the pupils stand with legs apart after one another. This is simply the old game of diving under another's legs but with several in line, the challenge is greater (figure 7). Finally, in the *Carnival Time*, the pupils are gradually introduced to moving with more and more clothing, performing routine activities. On a special occasion they can dress up, carnival or Halloween style (figure 8).

Summary

The unique aspect of the open water experience, which can only be realized in open water, is simply – *being* in open water. This aspect cannot be learned in a pool. Since most drowning occurs in open water, pool teaching should be seen as preparation for open water. With this in mind, every effort should be made to simulate open water during pool teaching, using games, role playing, etc. In addition, the quality that largely determines transfer thus reducing the gap, is movement efficiency. The better any skill is performed in the pool, the more easily it will transfer to open water. Simulating open water and achieving movement efficiency (especially in foundational skills) will hopefully reduce the gap between pool and open water sufficiently to meet the needs of an open water emergency.

References

- Brenner, R.A., Moran, K., Stallman, R., Gilchrist, J., & McVan, J.T. (2006). Swimming ability, water safety education and drowning prevention. In J.J.L.M. Bierens (Ed) *Handbook on Drowning* (pp. 114-117). Springer-Verlag, Berlin.
- Brenner, R.A., Taneja, G.S., Haynie, D.L., Trumble, A.C., Qian, C., Klinger, R.M., Klebanoff, M.A. (2009). Association between swimming lessons and drowning in childhood: Archives of Pediatric Adolescent Medicine, *163*(3), 203-210.
- Rahman, A., Rahman, F., Hossain, J., Talab, A., Scarr, J., Linnan, M. (2011). Survival swimming – Effectiveness of SwimSafe in preventing drowning in mid and late childhood. In Scarr, Sharp, Smeal, Khoudair (Eds.) *Proceedings World Conference on Drowning Prevention* (p. 430). DaNang, Vietnam: ASNANA and International Life Saving Federation.
- Perkins, D.N., & Salomon, G (1992). Transfer of Learning. In: International Encyclopedia of Education, 2nd edit. Oxford, England: Pergamon Press
- Tipton, M., Reilly, T., Rees, A., Spray, G., & Golden, F. (2008). Swimming performance in surf: the influence of experience. *International Journal of Sports Medicine*, *29*(11), 895-898.