

**Symposium**  
**Aquatic Literacy or water competence  
for children**  
**Objectives-Programs-Evaluations**  
Liège, 28 Febr 2020

**General introduction**  
Kristine De Martelaer

**Validation of aquatic fundamentals sequence of development**  
Boris Jidovtseff et al.

**Children's water competence as evaluated by parents, children & the swimming teacher**  
Arja Sääkslahti

**Relationship between children's and parents' perceived water competence of the child**  
Lise Buelens



**Motor competence → Water Competence**

**Physical Literacy → Aquatic Literacy**

“.....”

## Water competence

≠ swimming (skill/ability) → often ‘stroking’  
Swimming ability < water competence

= all around aquatic movement development,  
**Fundamental aquatic skills (FAS)**

+ **knowledge & judgement + attitudes & values**  
(cognitive & affective qualities)



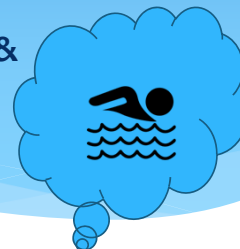
Moreno-Murcia, 2016; Moran, 2012, 2013; Reijman, 2013; Stallman et al. 2017

**Table 1.** Proposed water competencies related to drowning prevention

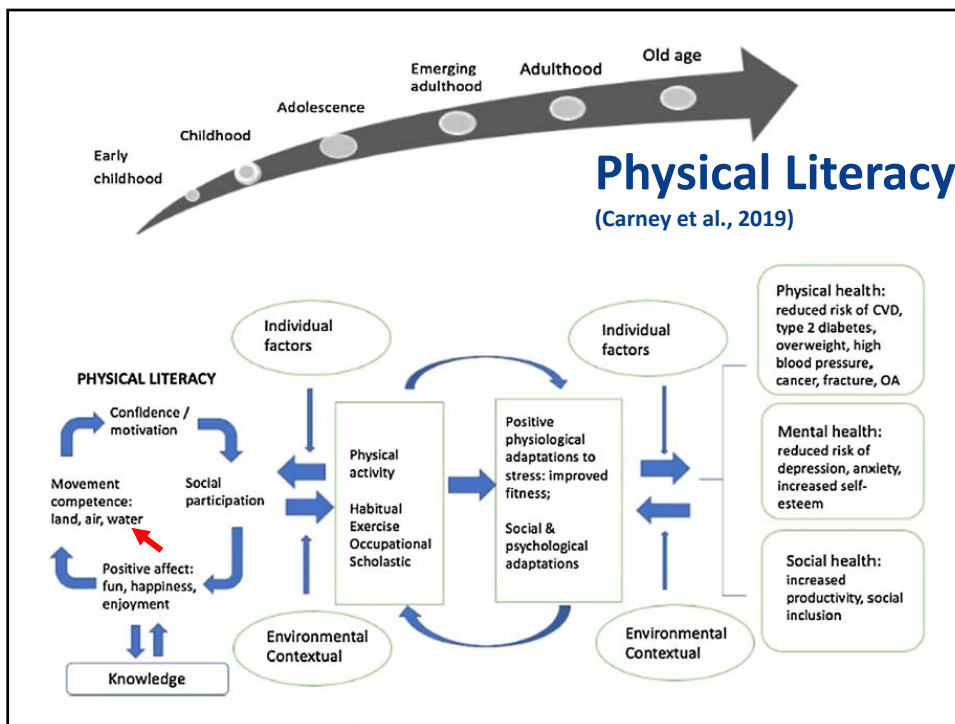
Water Competencies			
1	Safe entry competence a) Entry into water b) Surface and level off	9	Clothed water competence
2	Breath control competence Integrated and effective breathing	10	Open water competence
3	Stationary surface competence a) Buoyancy control: floating b) Treading water	11	Knowledge of local hazards competence
4	Water orientation competence a) Roll from front to back, back to front b) Tum, L & R, on front & back	12	Coping with risk competence - awareness, assessment, avoidance
5	Propulsion competence a) Swim on front b) Swim on back and/or side	13	Assess personal competence
6	Underwater competence a) Surface dive b) Underwater swimming	14	Rescue competence a) Recognize a drowning person b) Assist a drowning person safely
7	Safe exit competence	15	Water safety competence a) Attitudes b) Values
8	Personal flotation device (PFD/lifejacket) competence		<b>Stallman et al. (2017)</b>

## Perceived Water Competence

- Knowledge of ones **own real skill level** in water in different aquatic contexts +
  - Knowledge of **local hazards**, perceived danger / risk awareness → risk assessment mentality (judgement & behaviour, attitude)
- **avoiding overestimation own skills & underestimation of risk**



Stallman et al. 2017





## Water safety

= all collective efforts of any society to promote all aspects of drowning prevention, be it local, provincial, national or international


Stallman, 2014

## Water safety education

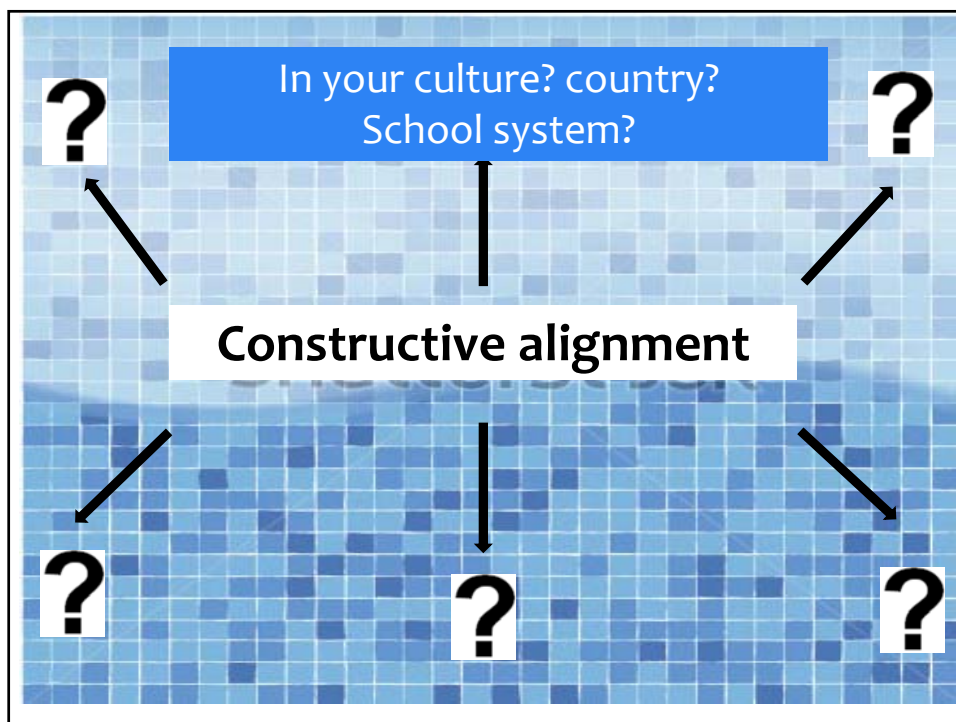
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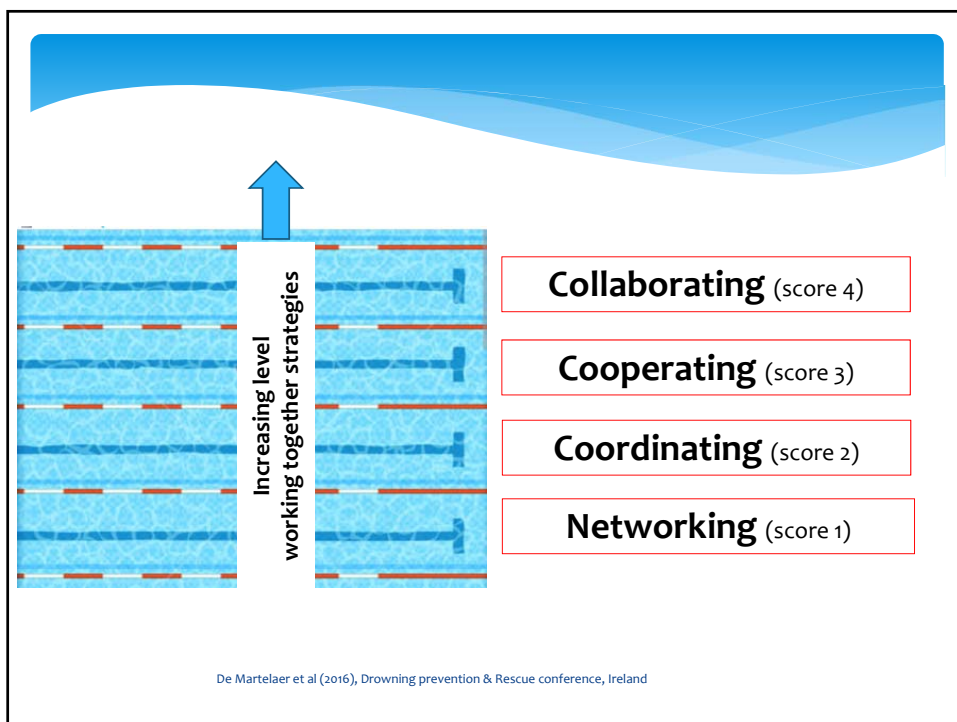
- a) provision of water competence instruction
- b) water safety awareness taught in the school classroom, during swimming course, sports camp
- c) awareness campaigns for the general public
- d) the training of swimming and water safety instructors and lifeguards

Stallman, 2014



Coaching





## Himmelman's working together strategies (2002)

Strategy	Description	Score
Networking	<i>Exchanging information for mutual benefit</i> Low levels of trust Limited time availability Reluctance to share turf Informal relationship	1
Coordinating	<i>Exchanging information and altering activities for mutual benefit to achieve a common purpose</i> Moderate levels of trust Minimal time availability Limited access to partners' turf Formal relationship	2
Cooperating	<i>Exchanging information, altering activities, and sharing resources for mutual benefit to achieve a common purpose</i> High levels of trust Moderate time availability Moderate access to partners' turf Involves more organizational commitments which may include written agreements Shared resources, such as material, financial, or human resources Formal relationship	3
Collaborating	<i>Exchanging information, altering activities, sharing resources and enhancing others' capacity for mutual benefit to achieve a common purpose</i> Involves a willingness of individuals and organizations to enhance each other's capacity Mutual interdependence Help other organizations to be their best Shared risks, responsibilities, and rewards of working together Long-term commitment Formal relationship	4

4 levels



Source: Adapted from Himmelman (2002)

Brenner, R.A. ; Moran, K., Stallman, R.K., Gilchrist, J., & McVan, J. (2006). Swimming ability and the risk of drowning. In J.J.L.M Bierens (Ed.), *Handbook on Drowning: Prevention, rescue treatment*, Chapter 3.8.1 (pp. 112-117). Berlin: Springer-Verlag

Cairney, J., Dudley, D., Kwan, M. et al. (2019). Physical Literacy, Physical Activity and Health: Toward an Evidence-Informed Conceptual Model, *Sports Med* (2019) 49: 371. <https://doi.org/10.1007/s40279-019-01063-3>

Moran, K. & Stanley, T. (2006). Toddler drowning prevention: Teaching parents about water safety in conjunction with their child's in-water lessons. *International Journal of Injury Control and Safety Promotion*, 13(4), 279-283.

Langendorfer, S. J. (2015). Changing learn-to-swim and drowning prevention using aquatic readiness and water competence. *International Journal of Aquatic Research and Education*, 9(1), 2. DOI: 10.25035/ijare.09.01.02

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Stallman, R.K.; Moran, K.; Quan, L.; & Langendorfer, S. 2017). From Swimming Skill to Water Competence: Towards a More Inclusive Drowning Prevention Future. *International Journal of Aquatic Research and Education*, 10, 2, article 3. DOI: 10.25035/ijare.10.02.03