



Efficiency of water familiarisation :

CEREKI'S RESEARCHES AND EXPERIENCES IN WATER HABITUATION

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I. Tests battery development*

- 20 gradual tests estimate 5 basics of water habituation

- Water entry
- Flooding and viewing
- Floating and water balance
- Propulsion
- Breathing

- in 3 depth's levels

- Small depth (30-40 cm)
- Medium depth (70-80 cm)
- High depth (+150 cm)

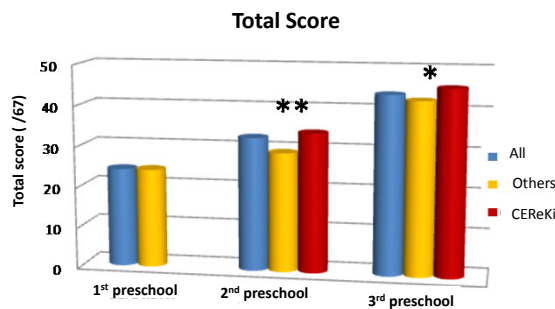
- Assessment was

- Entertaining
- Longitudinal
- Reachable
- Fast



*Mise au point d'une batterie de tests en accoutumance à l'eau pour des enfants de 3 à 6 ans et analyse de leur niveau d'accoutumance (Schiettecatte, Vandermeulen et Jidovtseff, 2010)



- 250 children from 18 different classes
 - 1st preschool (3-4 years) : N = 42
 - 2nd preschool (4-5 years) : N = 51
 - 3rd preschool (5-6 years) : N = 157
 - Including 82 children of CEReKi (2nd et 3rd preschool)
- Water Habituation increases with age
- Very important interindividual variability
- CEReKi >>> others



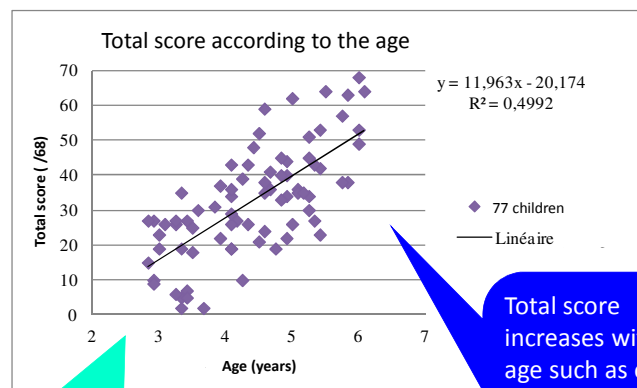
II. Comparison of two methods**

Pretests water habituation (September 2011)			5-month intervention (aquatic lessons)
CEReKi sample	Tradition sample	Control sample	
N = 25	N = 25	N = 27	
Non appropriate pool CEReKi's equipment Free games and guided exploration	3 ≠ and progressive depths Good learning conditions Directed activities	No regular water habituation	
		No aquatic lesson	
Post-tests water habituation (February 2012)			

**Analyse de l'efficacité de l'accoutumance à l'eau chez l'enfant préscolaire (Mornard, Deflandre, Delvaux et Jidovtseff, 2012)

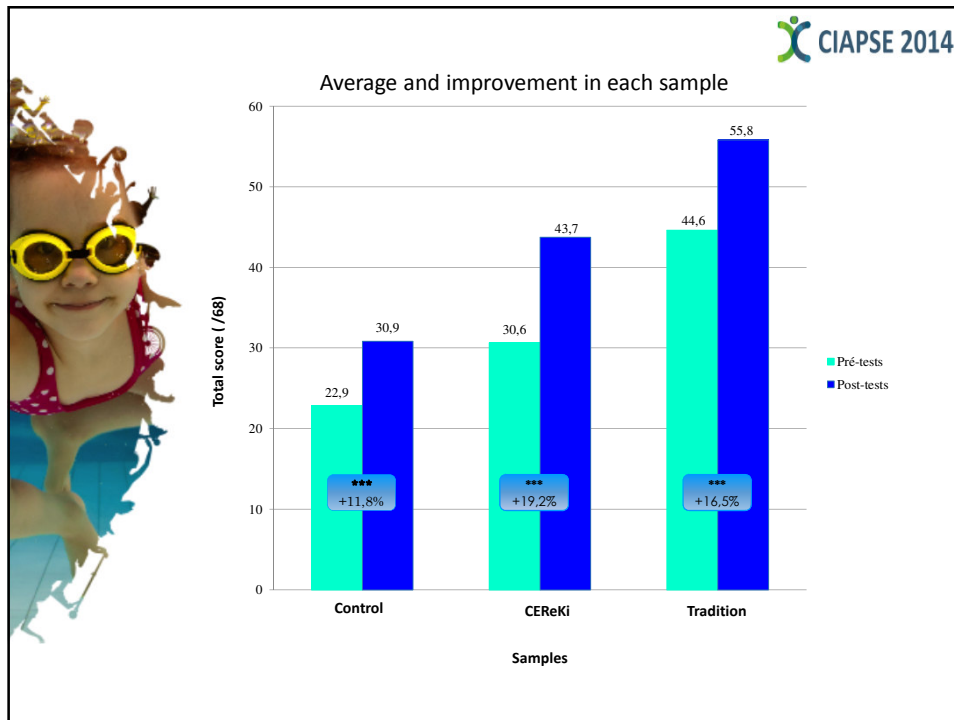
Intervention analysis in two schools

- 13 video-recorded lessons
 - 6 in CEReKi (3 with 1st and 2nd preschool and 3 with 3rd preschool)
 - 7 in traditional sample (3 with the beginners-group, 3 with the intermediate-group and 1 with the experts-group)
- Quantitative and qualitative analysis



Very important interindividual variability

Total score increases with the age such as other studies :
Schiettecatte, 2010
Moreau, 1995
Francotte, 1999



Tradition sample = CEReKi sample

BUT ...

- Some children of the Tradition sample reached the limit of the battery (improvement in technical swimming that is not measurable)
- CEReKi is as efficient as Traditional approach with less lessons (13x30' >> 29x40') regarding water habituation

Intervention analysis (quantitative)

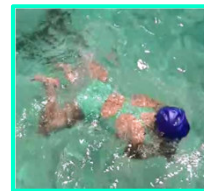
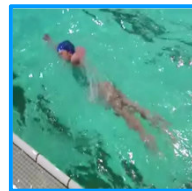
	Tradition	CEReKi 1°-2°
Lessons volume (***)	29 x 40 min = 1160 minutes	13 x 30 min = 390 minutes
Motion time (***)	24% (278 minutes)	47% (183 minutes)
Waiting time (***)	49% (468 minutes)	17% (66 minutes)
Free games (***)	7%	47%
Guided Activities (***)	17%	0%
Non appropriate behaviours (**)	1%	3%
Reprimands (**)	1%	0,2%
Emotional interventions (***)	5%	13%

Intervention analysis (qualitativ)

Sample	Lesson	Water entry	Flooding Viewing	Floating Equilibration	Breathing	Propulsion
Tradition Beginners	1	++	+	++	++	+
	2	+	++	+++	++	
	3	+	++	++	+	+
Tradition Intermediate	1	+	+	+++	+	+++
	2	++	+	+++	+	+++
	3	++	+	+++	+	+++
Tradition – Experts		++	+	+	+	+++
CEReKi 1 st et 2 nd preschool	1	++	++	++		+
	2	++	++	+++		++
	3	++	++	+++	+	++
CEReKi 3 rd preschool	1	++	+	+++	+	+++
	2	++	+	+++	+	+++
	3	++	+++	+	+++	++

III. Improvement of the initial test battery***

- The first test battery (Schiettecate & al., 2010) can not assess the improvement in technical swimming (Mornard & al., 2012)
- The 3rd study aims to add some tests about swimming (backstroke, crawl and breaststroke)
- Score in water habituation (WH) AND in technical swimming (TS)



***Amélioration d'une batterie de tests afin d'évaluer le niveau d'accoutumance à l'eau d'un enfant de trois à neuf ans (Delsupexhe, Mornard et Jidovtseff, 2014)

- 194 children 3 to 9 years of age
- Divided into 4 groups
 - Preschool CEREKi (N = 43)
 - Prechool others (N = 37)
 - Primary school old CEREKi (N = 20)
 - Primary school others (N = 94)

Technical swimming score according to habituation water score

