



MODIFYING PHYSICAL ENVIRONMENTS TO BE APPROPRIATE FOR CHILDREN

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AIESEP 2015, Madrid, Spain

SYMPOSIUM: IMPROVING THE HEALTH OF CHILDREN IN EARLY CHILDHOOD
Len Almond – Arja Sääkslahti

Theoretical background

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Researches on « environment » + « Physical activity » or « motor development »

- ▶ Barbour, 1999
 - ▶ Playground design influence children physical competence, play behavior, and peer relationships.
- ▶ Fjortoft, 2004
 - ▶ Children playing in natural environment including forest, open field, rocks, and slopes ↑ motor fitness in comparison with children playing in traditional playground.
- ▶ Stratton & Mullan, 2005
 - ▶ Multicolor playground marking ↑ children physical activity
- ▶ Verstraeten et al, 2006
 - ▶ Providing game equipment during recess ↑ physical activity level



Playgrounds



The Kindergarten and the Forest



Multicolor marking

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Theoretical background

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- ▶ Clear evidences that environment influence children's behaviour with consequences on physical activity level and motor development (Haywood, 1986 ; Barbours, 1999 ; Fjortoft, 2004 ; Stratton, 2005 ; Willenberg, 2010).
- ▶ Environment has to be attractive and to afford possibilities and challenges for children to explore their own abilities for exercise.
 - Stimulating environment
- ▶ For children, adapted environment should :
 - ▶ favours spontaneous game
 - ▶ focus on fundamental motor skills, perceptual and physical fitness
 - ▶ Be adapted to the children's level

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CEReKi approach and experience

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- ▶ Since 25 years a reflexive approach is used at CEReKi (Liège, Belgium) in order to imagine adapted activities.



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CEReKi approach and experience

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- ▶ Since 25 years a reflexive approach is used at CEReKi (Liège, Belgium) in order to imagine adapted activities.

We modify the environment with adapted equipment

We organise the activity with an adapted pedagogical approach



ACTION

According to the results, we validate the activity or we change what didn't worked

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CEReKi approach and experience

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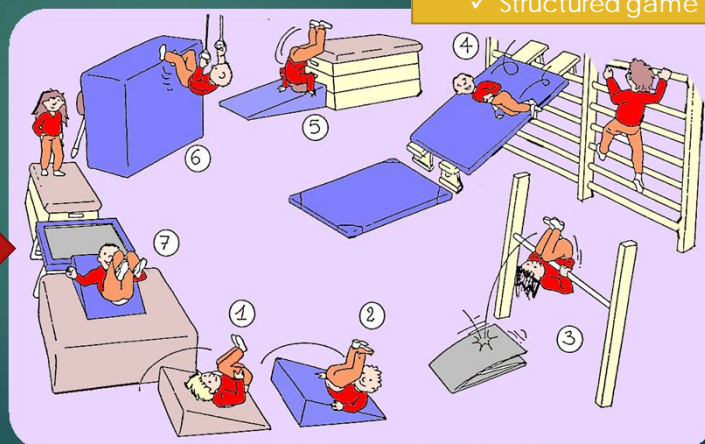
- ▶ Example 1 : the rolling circuit

According to children age/level

- ✓ Free play
- ✓ Guided discovery
- ✓ Structured game



We want to develop :
**Rolling
fundamental
motor skill**



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▶ Example 2 : the running & jumping circuit

We want to develop :
Running & jumping

ACTION

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▶ Example 3 : the aquatic circuit

We want to develop :
Water familiarization

Children's age :
3 to 6 YO
Not able to swim

Environment : swimming pool
25x12m , 80cm depth, not
adapted to the the children. No
padding pool.

REFLECTION

Adapting the environment was crucial

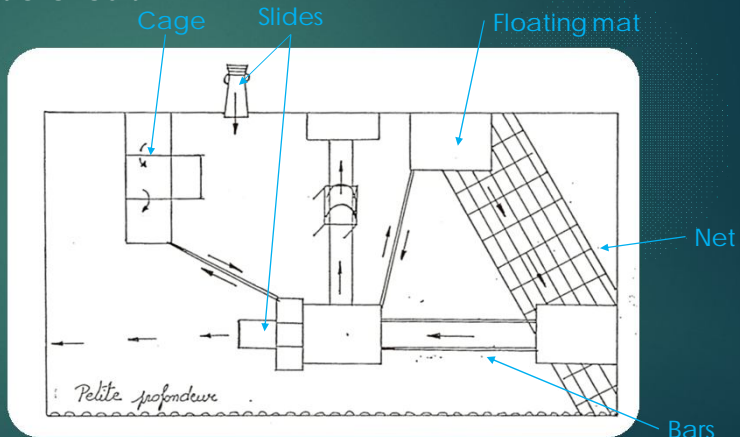
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▶ Example 3 : the aquatic circuit



ACTION



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▶ Example 3 : the aquatic circuit



Cage



Floating mat



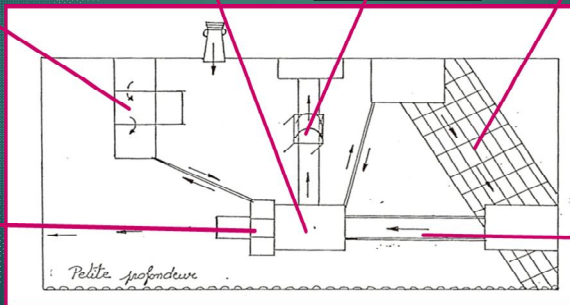
Hoops



Net



Slide



Bars

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► Example 3 : the aquatic circuit



Circuit has to be a stimulating environment for the 5 fundamentals of water habituation

- 1) Enter into the water
- 2) Submersion
- 3) Floating
- 4) Breathing
- 5) Propulsion

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► The net = very interesting equipment for beginners as it stimulates most fundamentals



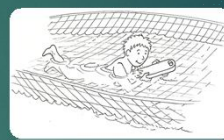
Water entry



Confidence



Immersion



Breathing control



Arm propulsion

Body Balance

Horizontal position

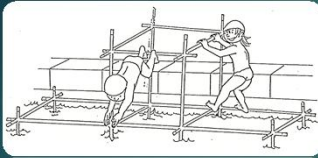


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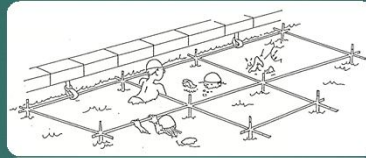


- ▶ The "shark's cage" allow to explore fundamentals in the "play pool" and in the "deep pool"

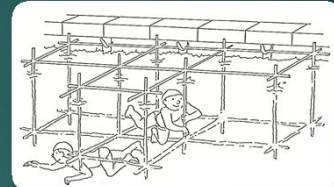


Immersion

Put the head in the water



Breath control



Propulsion

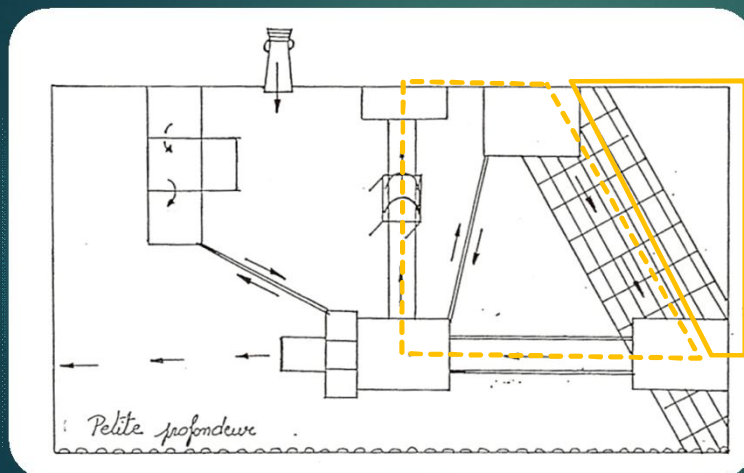
Confidence deep water

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- ▶ Challenging & stimulating environment for different level children



Water habituation level

Beginners

2,5-4 yo

- Entry by the net
- Immersion
- Balance
- Horizontal position

———— Main pathway

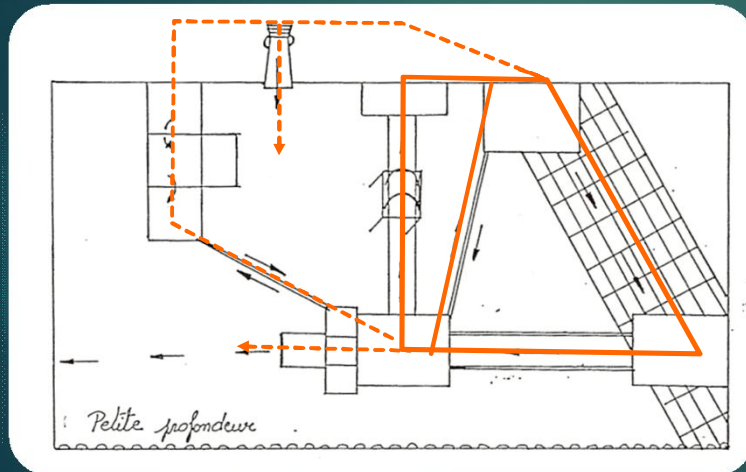
- - - - - Challenging pathway

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- Challenging & stimulating environment for different levels children



Water habituation level

Intermediate

4-5 yo

- Entry by slide
- Immersion
- Horizontal position
- Breathing
- Propulsion

— Main pathway

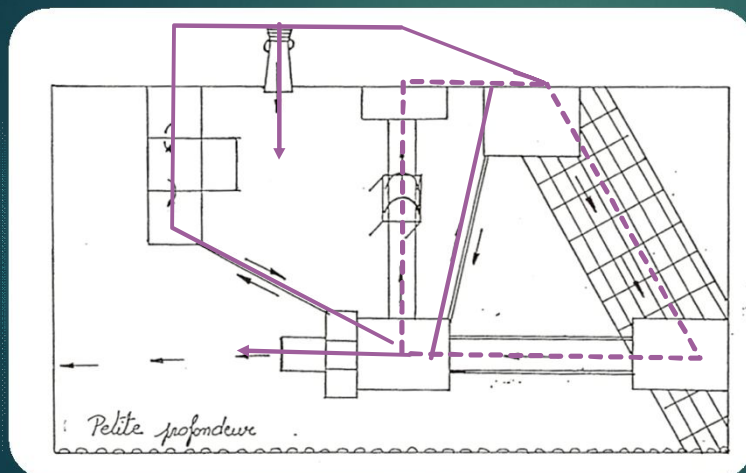
- - - Challenging pathway

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- Challenging & stimulating environment for different levels children



Water habituation level

Familiarized

5-7 yo

- Entry by slide
- Immersion
- Horizontal position
- Breathing ++
- Propulsion ++
- Confidence in deep water

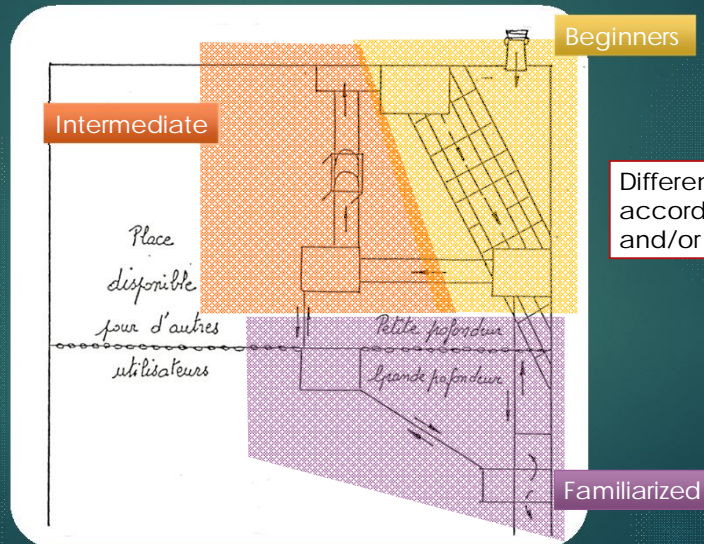
— Main pathway

- - - Mastered pathway

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- ▶ Challenging & stimulating environment for different levels children

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Different circuit models according to the context and/or the period in the year

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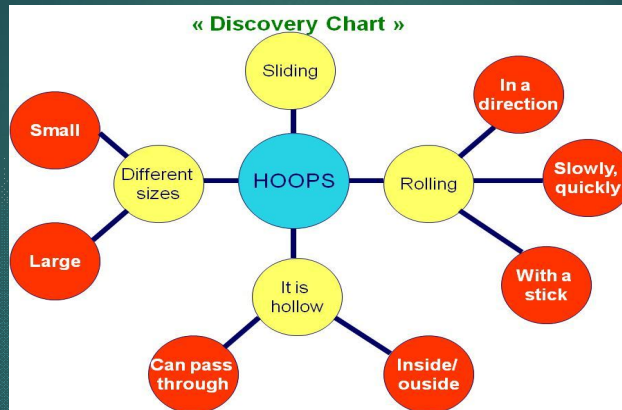


- ▶ Modifying physical environment is not enough !!!
- ▶ 3 other key points to guarantee a successful activity :
 1. Good knowledge of the equipment
 2. Good knowledge of children development
 3. Adapted pedagogical approach

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1. Knowledge of the equipment

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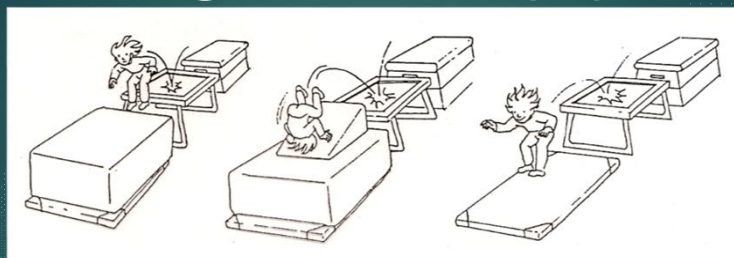


A good knowledge of the equipment is important to find more ideas about what to do with it, and you find more easily alternative solution when you want to individualize your teaching.

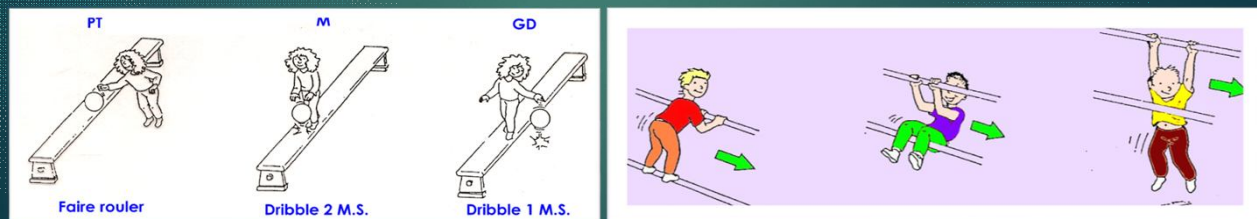
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1. Knowledge of the equipment

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Increasing complexity for trampoline



Identical disposition but adapted instruction

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1. Knowledge of the equipment

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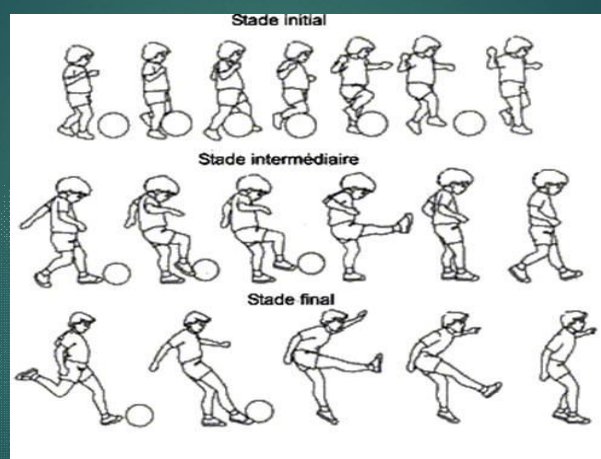


Parallel bars can be used in a different way according to children age and level

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2. Knowledge children's development

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To identify children level in fundamental motor skills is essential for adapted intervention

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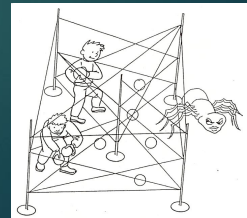
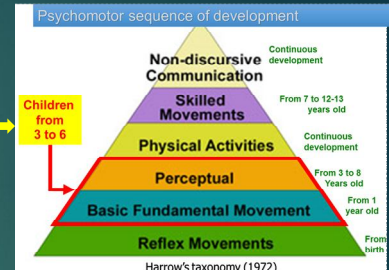
3. Adapted pedagogical approach

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► From our experience it is important:

1. to maximize active time
2. to favor fundamental motor skills and perceptual development,
3. to alternate between spontaneous game, guided discovery and structured games
4. to take into account inter-individual differences,
5. to favor amusement, imagination and self-confidence,
6. to emphasize motor progress and not performance,
7. to guarantee optimal security.



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Thanks for your attention



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