Modifying Indoor Facilities Appropriate to Children

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Sharing the experience of the CEReKi

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Physical literacy concept

Mount Royal University (Canada)

“Physical literacy can be described as the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life.”
(M. Whitehead, 2016)
How to develop Physical literacy?

Physical literacy is the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life. (International Physical Literacy Association)

Influence of an adapted pedagogical approach?
How to develop Physical literacy?

- **Active time**
- **Emphasize success**
- **Positive feedback**
- **Confidence**
- **Stimulate Self Confidence**
- **Stimulate imagination**
- **Optimal security**
- **Enjoyment – Fun – Play**

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The influence of the environment

- **Game and activity induced by equipment and disposition, and thus environment**

- **Clear evidences that environment influence children’s behaviour with consequences on physical activity level, motivation and motor development** (Haywood, 1986; Barbours, 1999; Fjortoft, 2004; Stratton, 2005; Willenberg, 2010).

- **Environment has to be attractive and stimulating**

- **Environment has to afford possibilities and challenges** for children to explore their own abilities for exercise.

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**Affordance theory**

- Multiple affordances of an object due to (a) horizontal position (b) vertical position. Atmodiwirjo, P. (2014).
The CEReKi example

• How indoor facilities are modified at CEReKi?

Privileged outdoor environment

Sport centrum

Gymnastic hall

Not adapted for children

Not adapted for children

Gymnastic hall

Gymnastic hall

Needs more affordance for children

Unsuitable swimming pool for children

25x12m swimming pool

Multi sports hall

The CEReKi example

• 25 years ago a reflexive approach has been conducted at CEReKi ...

What do we want to do?
To develop adapted activities where children will stimulate fundamental motor skills, perceptuals and physical competences

What are children’s characteristics?
From 3 to 6 yr, with inter-individual differences

What are our environment characteristics?
Gymnastic hall, multi-sports hall, swimming pool, with big and small equipment...

Key questions
How can we adapt the environment in order to induce adapted children behaviour and to favour motor development?
How should we conduct the activities?

REFLECTION
The CEReKi example

- Indoor facilities transformation to be appropriate for children

Multi sports hall

1. Unihoc game
2. Throwing game
3. "Mouse house" game

Unihoc game

Basketball court

Multi sports hall

Unihoc game
**The CEReKi example**

- Indoor facilities transformation to be appropriate for children

*Multi sports hall*
The CEReKi example

- Indoor facilities transformation to be appropriate for children

1. Floor zone

Gymnastic hall

2. Rings & bars zone

Gymnastic hall

How can we adapt it for the children?
The CEReKi example

- Indoor facilities transformation to be appropriate for children

Gymnastic hall

Adapted to the children

Not adapted
The CEReKi example

- Indoor facilities transformation to be appropriate for children

Not adapted  
Gymnastic hall  
Adapted to the children

Not adapted  
Gymnastic hall  
Adapted to the children
The CEReKi example

- Indoor facilities transformation to be appropriate for children

The swimming pool

Aquatic circuit built to be adapted for 3 to 6 yo children

Mary Vandermeulen

The CEReKi example

- Different circuits have been imagined in order to stimulated different categories of motor skills

Gymnastic circuits:
- Rotation
- Balance
- Adventure
- Trampoline

Athletics circuits:
- Jumping
- Throwing
- Running

Ball games:
- Football
- Basketball
- Volleyball
- Unihoc

Rotation circuit
The CEReKi example

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• Adventure
• Trampoline

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• Jumping
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• Throwing

Ball games:
• Football
• Basketball
• Volleyball
• Unihoc

Jumping & running circuit

Basketball circuit
CEReKi approach and experience

- Modifying physical environment is not enough !!!
- Pedagogical approach has to be relevant and adapted

- Active time
- Pedagogical approach
- Develop a large panel of FMS
- Emphasize success
  - Positive feedback
- Stimulate Self Confidence
- Optimal security
- Enjoyment – Fun – Play
- Stimulate imagination

Diversify motor experiences
- Take into account inter-individual differences
- Good knowledge of the equipment
- Good knowledge of children's development

CEReKi approach and experience

Knowledge of the equipment

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.
CEReKi approach and experience

Knowledge of the equipment

Increasing complexity for trampoline

Identical disposition but adapted instruction

Knowledge of children’s development

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

Let's analyse children behaviour at CEReKi

The influence of the environment & instruction

Children behaviour without any equipment
The influence of the environment & instruction

Children behaviour with soccer balls (without any instruction)

Soccer – Instruction to keep hands in the back - structured game
The influence of the environment & instruction

Soccer – circuit – guided discovery

Gymnastic – Floor games
The influence of the environment & instruction

Gymnastic – Floor games with mats
The influence of the environment & instruction

Gymnastic circuit – climbing – free play

The influence of the environment & instruction

Gymnastic circuit – climbing – guided discovery
Instruction: Just find a height
The influence of the environment & instruction

Gymnastic circuit – climbing – guided discovery
Instruction: Let's find all the heights

The influence of the environment & instruction

Gymnastic circuit – climbing – guided discovery
Instruction: explore the mountains and follow the path (circuits – guided discovery)
The influence of the environment & instruction

What do you think about children’s adaptation to an increasing difficulty?

What do you think about children’s social behaviour?
Thanks for your attention

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