



Foster knowledge and integration of healthy behaviors among Belgian pupils : impact of the Oblomov methodology



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Introduction - Oblomov project

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oblomov
obesity and low motility victims

HOME TEAM ACTIVITIES FOR SPORT FOR SCHOOL PARTNERS NEWS

I do believe in movement! I do, I do!

2

Introduction - Oblomov project



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UNIVERSITY OF JYVÄSKYLÄ



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THESSALY



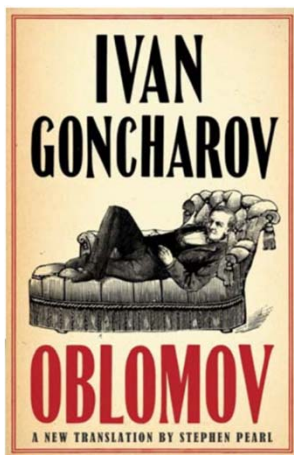
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DI MILANO

Partners



3

Introduction - Oblomov project



- Well-known novel written by Ivan A. Gončarov
- Oblomov = nobleman who is unable to undertake any action
- Oblomov is a symbol of procrastination and laziness
- Related to inactive lifestyle and the dissemination of the overweight and obesity epidemic



4

Goals of the project

GOALS



1. Promoting an **active and healthy lifestyle** among pre-adolescents (11-13 years-old)
2. Developing autonomy, **creativity**, and **cooperation**
3. Using new **technologies**
4. Involving **youths' entourage** (parents, family, school, associations)
5. Producing resources for **sustainable changes**

5

General and specific principles

General principles



open scenario
heater



(Piccolo Teatro di Milano, Italy)

HIIT
WORKOUT



high intensity
interval training

6

General and specific principles

1. HIIT = at least as efficient as moderate intensity endurance training (MIT) and... (Eddolls et al., 2017)



1. Time-efficient
2. Shorter distances and duration
3. Obese/sedentary kids can participate with others
4. Natural children's movements are mostly intermittent
5. Less boring and funnier

(Vitale, 2018 ; Bailey et al., 1995 ; Milanovic et al., 2015)

2. Imaginary context of the exercises/lessons = motivation to be physically active... (Pasetti, 2018)



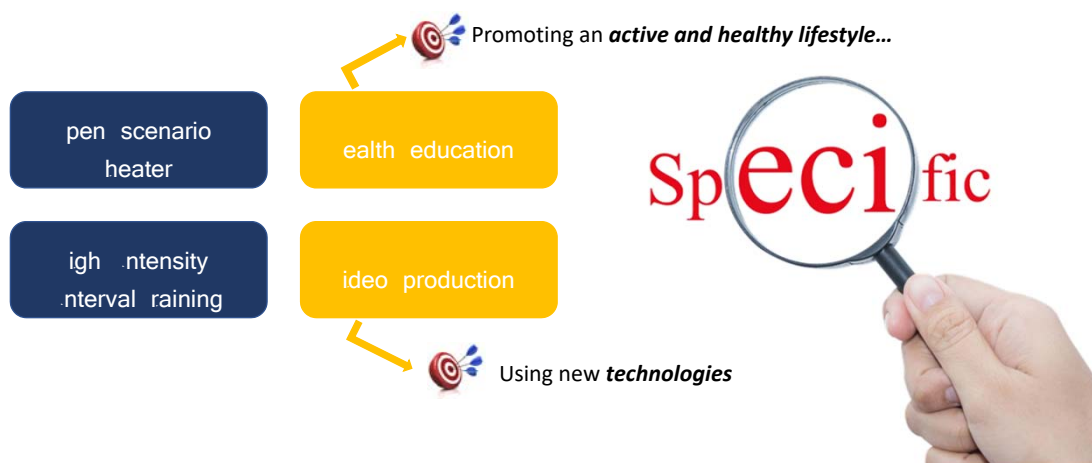
1. Complete transformation of an ordinary lesson by the imaginary context
2. Imagination = fun and engagement factor
3. Distracts from the strenuousness of the effort
4. Makes possible to repeat exercises without realising it

(Brougère, 2010 ; De Sousa Morgado & Jidovtseff, 2017 ; Terré, 2015)

7

General and specific principles

General principles applied in Liege 



8

Purposes of this study



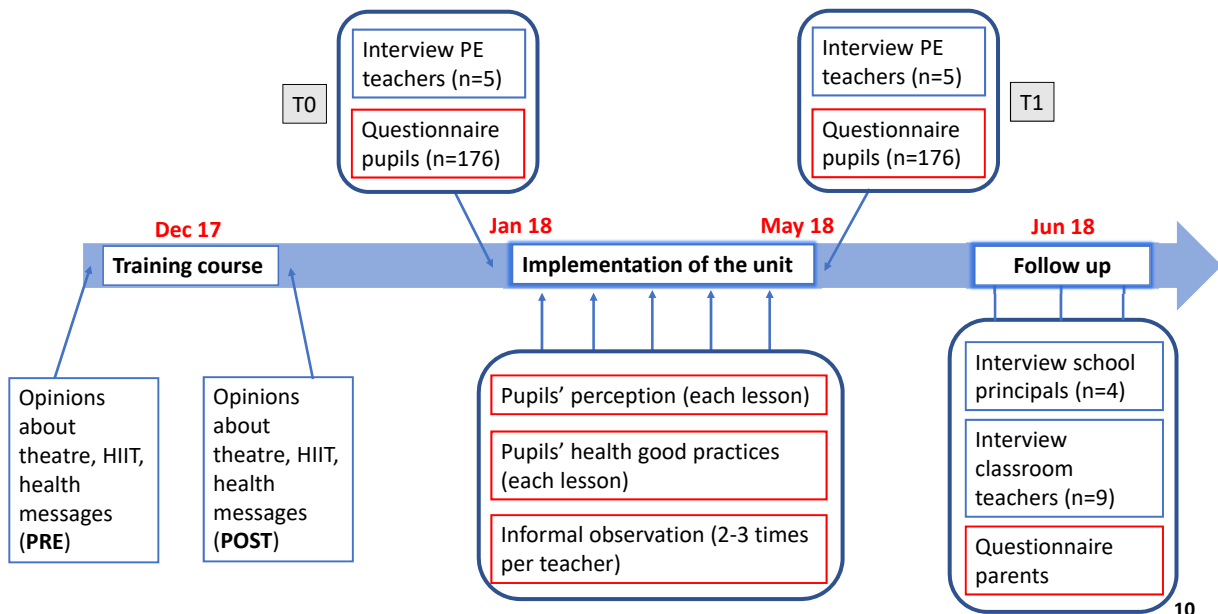
1. To analyse the impact on pupils of a 10 lessons-unit applying Oblomov's principles :
 - Effects on pupil's health knowledge ?
 - Quality of the video productions ?



2. To determine how the Oblomov-unit is able to encourage pupils to adopt an active lifestyle:
 - Effects of health good practices proposed by the pupils ?
 - Parent's involvement in the project

9

Methodology – Design



10

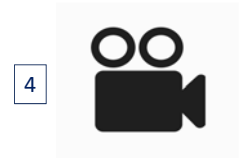
Methodology – Overview of the approach

	L1	L2	L3	L4	L5	L6	L7	L8	L9-L10
1 Open scenario	National Geographic	Eurosport and The Olympic Games	24	Survivors	Ninja Warrior	Fort Boyard	The Simpsons	Favorite lesson	Video
2 HIIT Protocol	10 x 20s Rest = 90sec (Ratio 1 :4)	10 x 20s Rest = 90sec (Ratio 1 :4)	10 x 30s Rest = 90sec (Ratio 1 :3)	10 x 30s Rest = 90s (Ratio 1 :3)	10 x 40s Rest = 90s (Ratio 1 :2)	10 x 40s Rest = 90s (Ratio 1 :2)	10 x 45s Rest = 90s (Ratio 1 :2)	10 x 45s Rest = 90s (Ratio 1 :2)	Video
3 Health Topic	Hydration	Physical Activity	Breathing and Effort Management	Balance Food	Back Ergonomics	Sleep	Sedentari-ness and Inactivity	General knowledge about sport	Video

1 **Scenario** : Caught by their TV, children are going to travel from one TV show to another

2 **HIIT** : ✓ Progressive increase of the effort duration (20 to 45s)
 ✓ Variety (exercises, objectives, muscles involved)

3 **Health** : ✓ Interactive and playful activities (Quiz, true or false, brainstorming,...)
 ✓ Transfers towards the house thanks to health good practices (**accountability**)



11

Methodology - Health education activities

Quiz on back ergonomics (10 questions)

At the sport hall, when I have to carry a bench with a friend ...
 A. ... I lean forward to grab it and straight up to lift it.
 B. ... I raise it without thinking.
 C. ... I bend my legs to grab him and hold them to lift him.



Health education

7 health topics:

1. Hydration
2. Physical activity recommendations
3. Breathing and effort management
4. Balanced food
5. Posture/back ergonomics
6. Sleep
7. Sedentari-ness, inactivity

Use of bottles of water

- Show the amount of water to be ingested daily using bottles
- Does it differ by sex?
- Does it differ when playing sports or physical activity?
- What consequences if you do not drink enough? Can we drink too much water?
- Show how much soda should be ingested daily
- Pyramid of hydration



Brainstorming by groups on sleep and sharing of ideas

1. Why is it so important to sleep well?
2. Name 3 good habits to sleep well
3. Name 3 bad habits that prevent you from sleeping well
4. How many hours would it be ideal to sleep per night?



True / False about recommendations and definition of physical activity

1. Define the concept "physical activity" (distinction physical activity-sport, 5 dimensions of physical activity)
2. True or false
 - I must be active at least 1 hour every day, even on weekends. T-F
 - 10 minutes of physical activity is not enough to have positive effects on health. T-F

Methodology - Health education activities

Health education

Health good practices (« Post-it »)

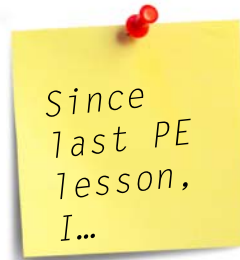
Ton code secret:

La thématique santé que tu as appliquée en dehors du cours (entoure ton choix) :
hydratation/recommandations en activité physique/
respiration et relaxation/alimentation/protège ton dos/
sommeil/sédentarité

Qu'as-tu fait concrètement, la semaine dernière, pour
appliquer ce que tu as appris dans cette thématique ?
(Explique en quelques mots)

.....
.....
.....
.....

Vas déposer ta fiche dans la bonne boîte aux lettres ☺



At the beginning of the lessons, pupils are invited to write good practices about previous health activities



Methodology – Video production

Video production



Fiche exercices HIIT et principes à respecter		
Membres supérieurs	Tronc	Membres inférieurs
- Pompe sur genoux	- Gainage de twist : planche tronc fixe -> bassin qui tourne.	- Montée de genoux
- Dips	- Mountain climber -> chute faciale et on ramène les genoux.	- Palheur
- Burpees (poser la poitrine au sol)	- Gainage dynamique (lever-descendre).	- Fentes
- Demi-Burpees sans la pompe.	- Gainage.	- Fentes sautées.
- L'oiseau	- Superman	- Squat
	- Relever bassin	- Jump squat
	- Abdominaux	- Jumping Jack
	- Abdominaux essuie-glace (jambes tendues en l'air)	- Sauts groupés
	- Abdominaux croisés	- Extension jambes fléchis (chute faciale = sur les genoux)
	- Levées jambes sur le côté (petit chien)	- Chaise
	- Sit-ups	- Relever bassin
	- V-ups	- Mountain climber
		- Levées jambes sur le côté (petit chien)

* Tous les exercices vus lors des différentes séances

- Respecter le principe d'alternance
 - o Exercice 1 : Membres supérieurs
 - o Exercice 2 : Tronc
 - o Exercice 3 : Membres inférieurs
 - o
- Respecter les temps de repos ! Minimum 30 secondes
- Respecter le temps des exercices ! Maximum 30 secondes /exercice !



- Groups of 4-5 pupils
- Creation of a scenario
- 5 minutes & 3 exercises
- A short story or an integrated scenario
- Video prepared by the teacher



Results

15

Health knowledge

- Positive influence on children's health knowledge (3.22 Vs 4.37 ; p-value<0.000)

- Significant improvement 🏆
BUT also significant deficiencies !

	T0	T1	p-value
Health knowledge (/10)	3,22	4,37	<0.000

- Underlines the need of actions to improve pupil's health knowledge



- Health education was not Oblomov primary goal

➡ No teaching, no lessons ➡ games, quiz, playful activities



1. PE = effective tool
2. PE & PE teacher : role to play in health education
3. // PE Curriculum reform in Federation Wallonia-Brussels 🇧🇪

Health good practices – During the unit

Class	Hydration	Physical activity	Relaxation, breathing	Eating	Back ergonomics	Sleep	Sedentary lifestyle	Overall /class	Number pupils	GP /pupils
C1	25	21	10	21	7	6	1	91	17	4,5
C2	15	20	9	1	8	1	4	58	24	2,4
C3	6	9	1	2	0	0	0	18	19	0,9
C4	18	12	1	0	0	0	0	31	16	1,9
C5	4	11	1	2	0	0	0	18	19	0,9
C6	26	18	20	24	21	25	2	136	32	4,3
C7	21	11	13	12	19	19	0	95	24	3,9
C8	19	13	18	6	22	22	0	100	25	4
Number GP	100	101	51	57	53	55	6	423	176	2,4

Teacher involvement
Classroom behavior
Teacher involvement

More opportunities to complete

Less opportunities to complete

Overall number

- Link theory-practice = necessary in health promotion at school (Poland et al., 2010)
- **Accountability** = PE teacher's responsibility to produce concrete changes for pupils (Clements, 2013)
- « Societal transfer » (Cloes, 2010) ; « Transfer » (Hellison, 1995)

Health good practices – After the unit

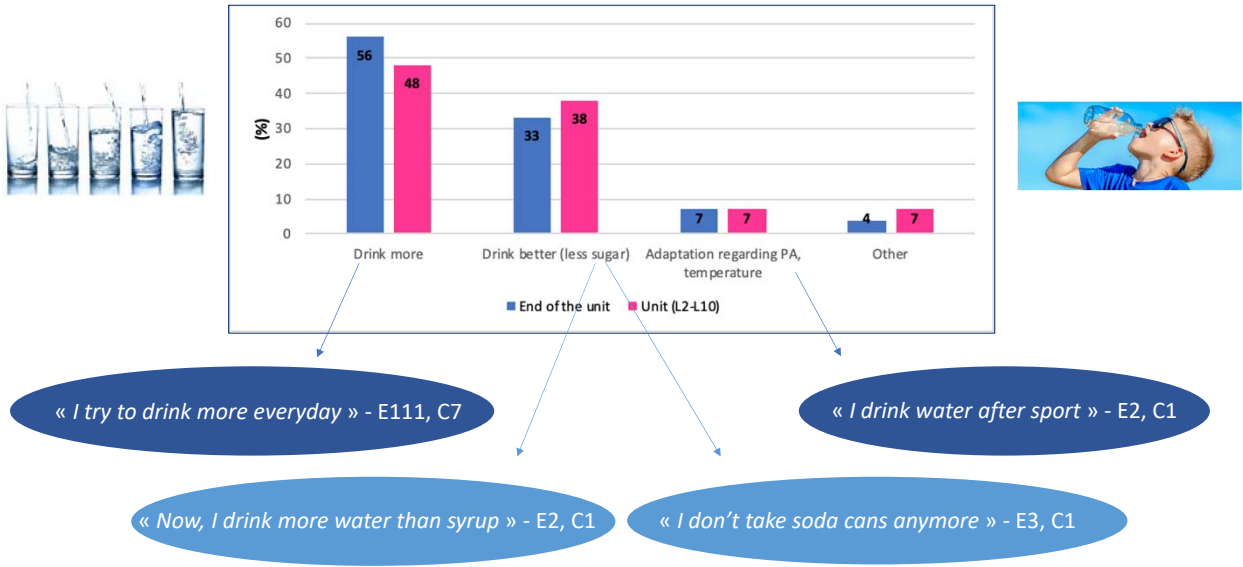
Hydration	113
Physical activity	55
Breathing - emotions management	61
Food	62
Back ergonomics	54
Sleep	58
Sedentary behaviors	62
	445



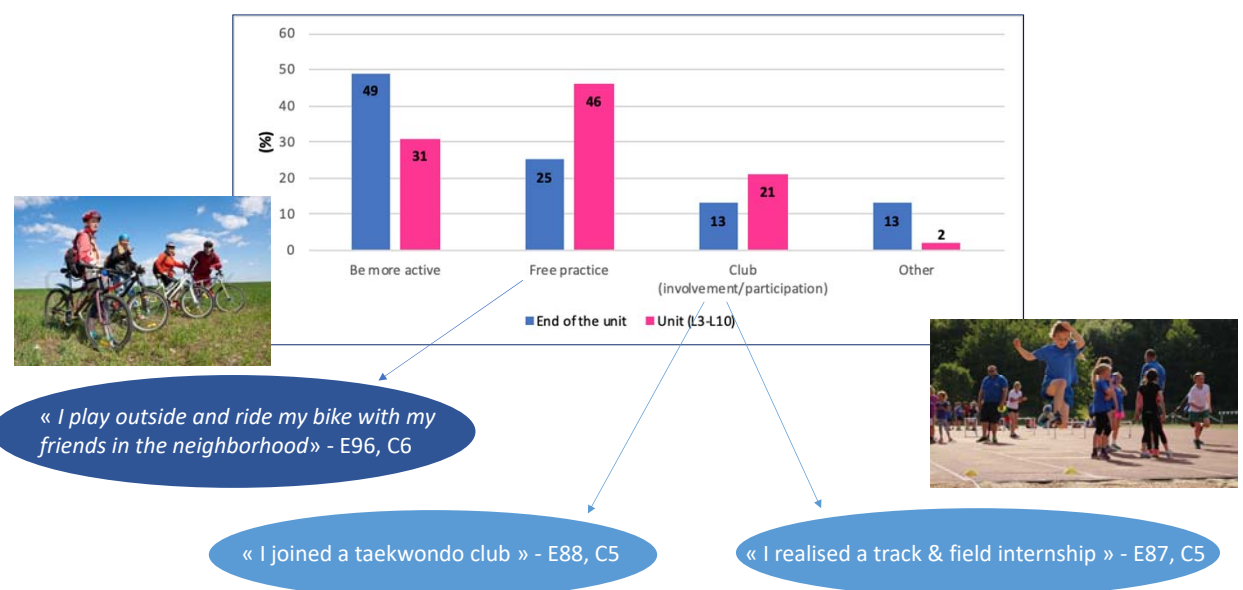
918 good practices



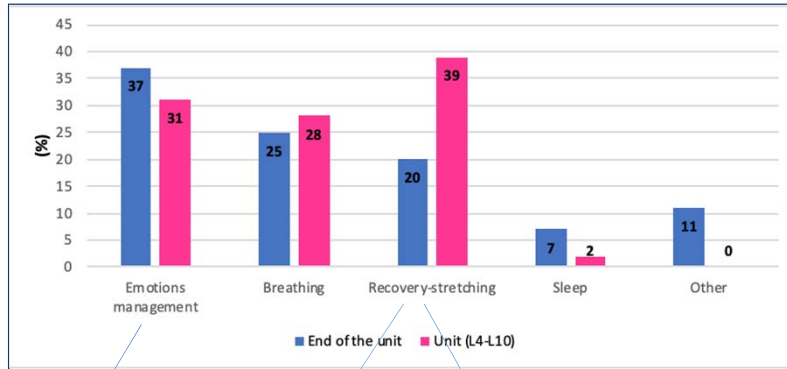
Health good practices - Hydration



Health good practices – Physical activity



Health good practices - Breathing

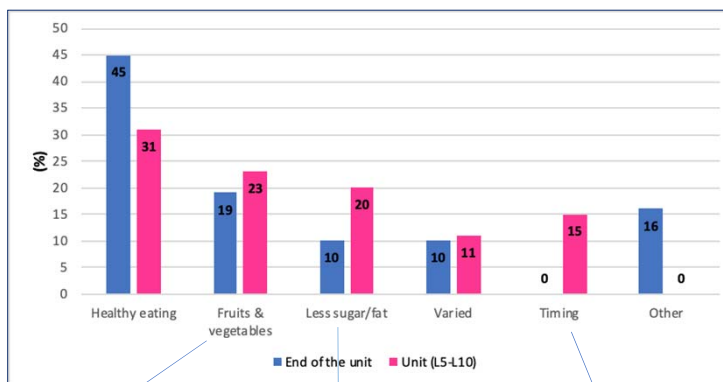


« I know how to calm down when I feel anxious » - E113, C7

« I have learned how to breathe when I run » - E129, C7

« I take 1 min. to control my breathing after an effort » E77, C5

Health good practices - Food

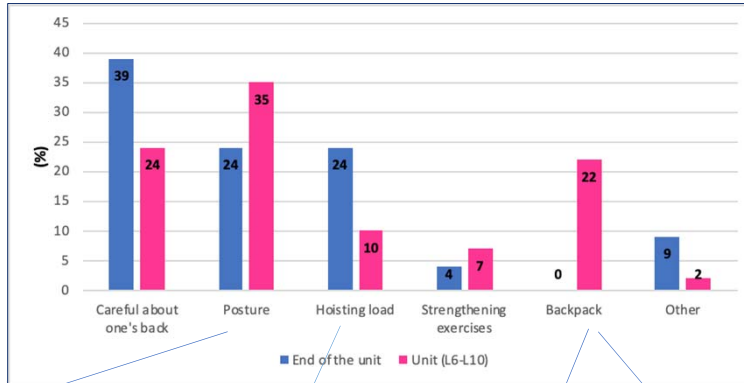


« I take one fruit everyday instead of candies » - E111, C7

« I have not eaten crisps and groceries since Monday » - E129, C7

« I frequently avoid sugar in the morning now » - E5, C1

Health good practices – Back ergonomics



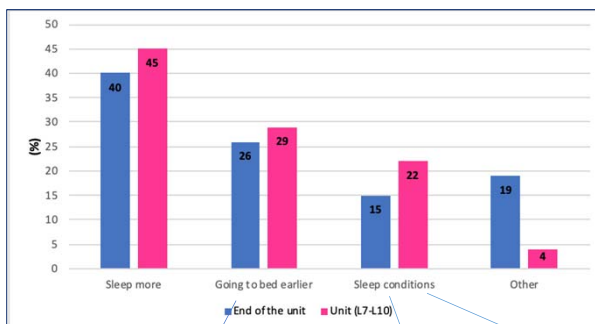
« I pay attention no to curve my back » - E13, C1

« I only take what I really need at school » - E169, C8

« I removed my heavy books » - E170, C8

« I use my legs to carry something heavy » - E27, C2

Health good practices – Sleep



« I go to bed 30 minutes earlier everyday » - E13, C1

« Less lights in my bedroom » - E40, C2

« I don't look at my mobile phone before going to bed » - E3, C1



Conclusion

25

Conclusion



=

Pleasure
Achievement
Movement
Interaction
Autonomy



PAMIA (Cloes, 2017)




&



- Health education activities
- Health good practices sharing

Next steps

- **Curriculum adaptation in Wallonia :** 
 - ✓ PE teachers will have to raise children awareness about **food, nutrition and impact of addictions**
 - ✓ ObLoMoV methodology should be integrated among tools proposed to the teachers



- **To be effective :**
 1. PE Teacher engagement
 2. Collaboration with the parents

Enables concrete adaptations of lifestyle and increases accountability



Parents' engagement = necessary to promote health at school



(Lewallen et al., 2014)

