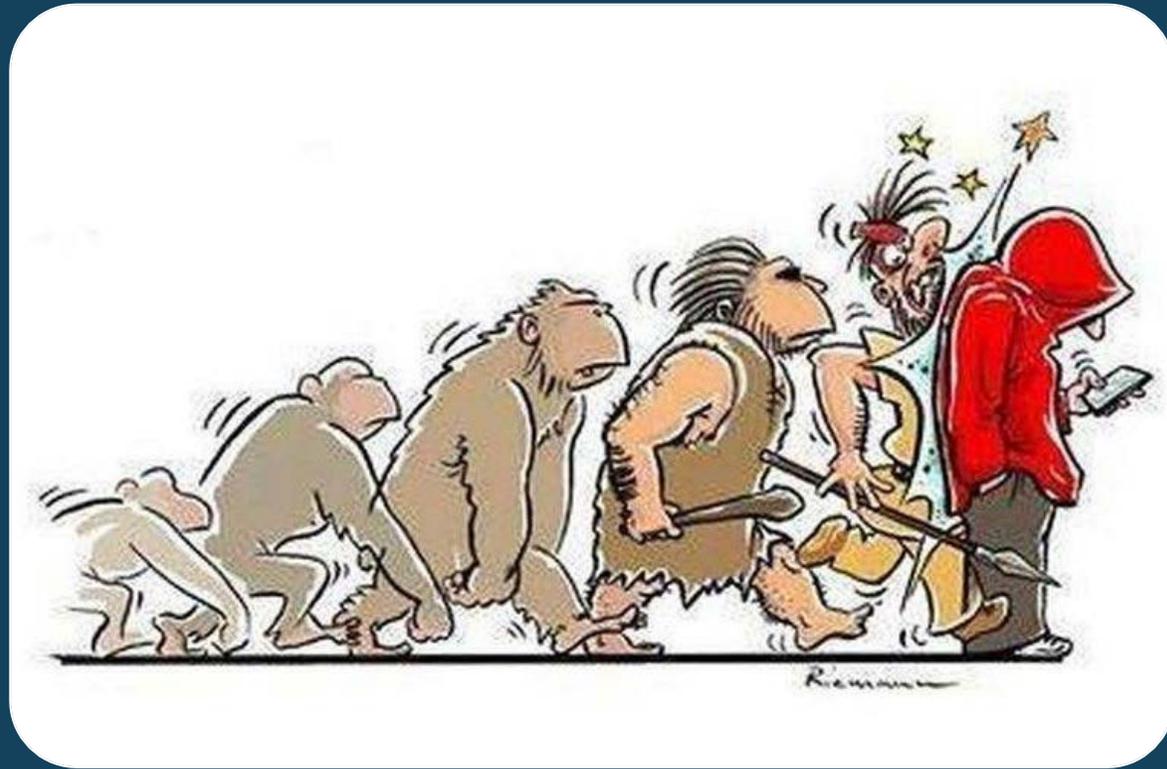


Four levels of intervention to structure physical education teachers' action as physical activity promoters

Prof. Marc CLOES

Sport & Rehabilitation Department – University of Liege

2020 Yokohama Sport Conference – O16-PS10



What you need to know



On September 25, 2015, United Nations adopted a set of Sustainable Development Goals. They are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection. <https://www.un.org/sustainabledevelopment/>

KAZAN ACTION PLAN

Worldwide policy!

I.3 Foster quality physical education and active schools

Active schools, in which physical activity is placed at the heart of the school, support the establishment of healthy lifestyles, behaviour and learning. In addition, quality physical education is a necessary component of primary and secondary education. **It supports the building of physical skills and fitness, life skills, cognitive, social and emotional skills, and values and attitudes that frame socially responsible citizens.** This is most attainable when it is fully resourced, respected and valued for its holistic merits. Fostering quality physical education and active schools needs provision that is varied, frequent, challenging, meaningful and inclusive. Learning experiences in physical education are most effective when they are positive, challenging and developmentally appropriate, to help children and young people acquire the knowledge, skills, attitudes and values necessary to lead a physically active life, now and in the future.

UNESCO (2017). Kazan Action Plan - MINEPS VI. SHS/2017/PI/H/14 REV (p.7). Available on : <http://unesdoc.unesco.org/images/0025/002527/252725f.pdf>



What you need (also) to know ...

Despite the actions ...



Eurobarometer (2017)

Two in five Europeans (40%) exercise or play sport at least once a week, including 7% who do so regularly (at least five times per week). However, almost half of respondents (46%) never exercise or play sport.

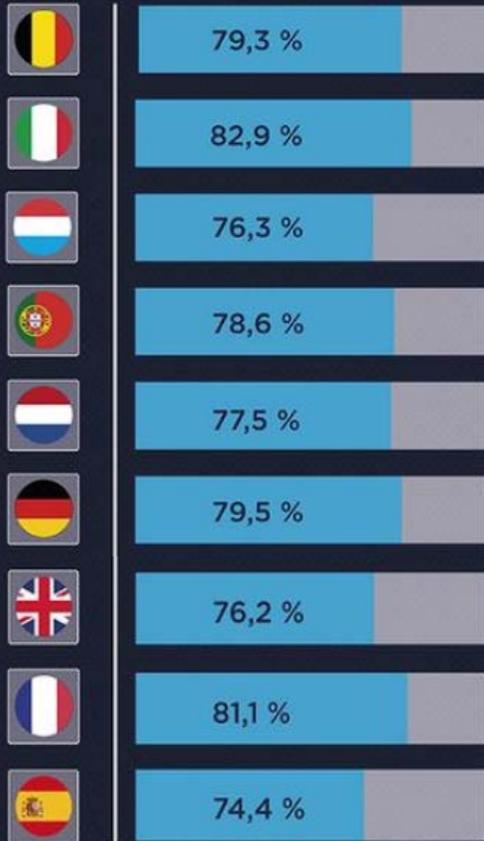
Levels of participation have not changed substantially since 2013. However, the proportion of those who never exercise or play sport has increased from 42% to 46%, and this is a continuation of a gradual trend since 2009.

Less than half of respondents (44%) do some form of other physical activity (such as cycling, dancing or gardening) at least once a week, while 35% never do this kind of activity at all (increasing from 30% in 2013).

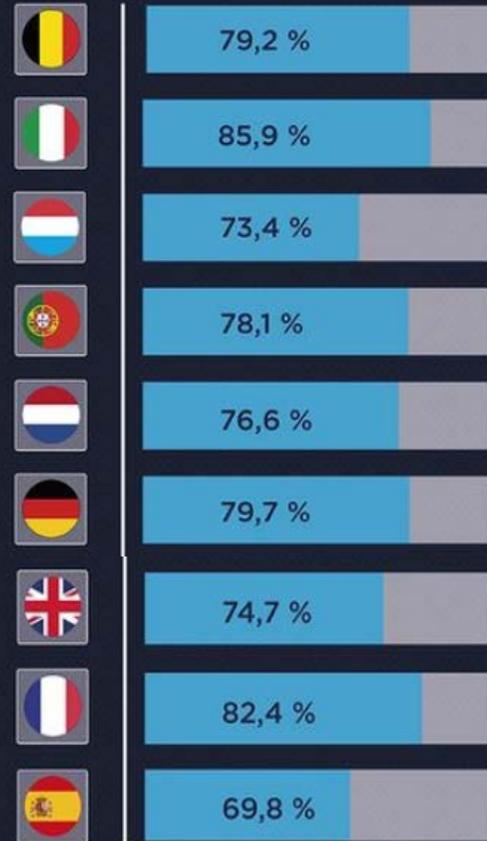
BOYS 11-17 years-old

POURCENTAGE DU NOMBRE DE GARÇONS EN DESSOUS DE LA MOYENNE D'ACTIVITÉ PHYSIQUE CHEZ NOS VOISINS.

IN 2001



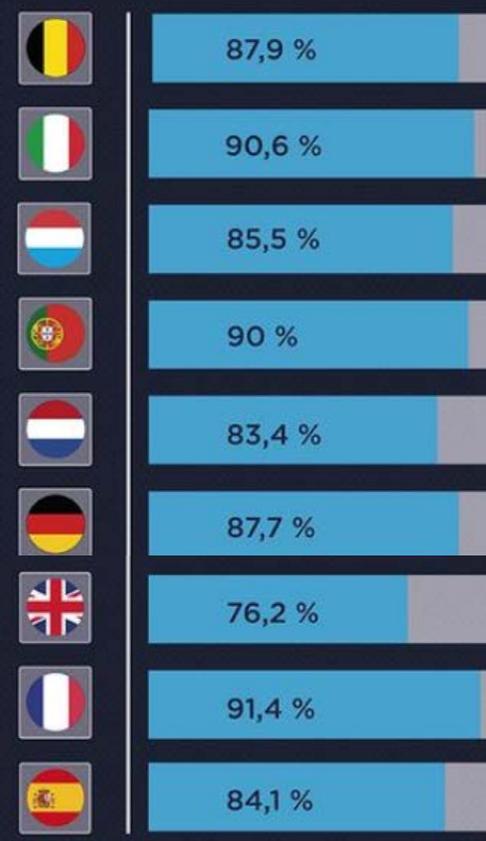
IN 2016



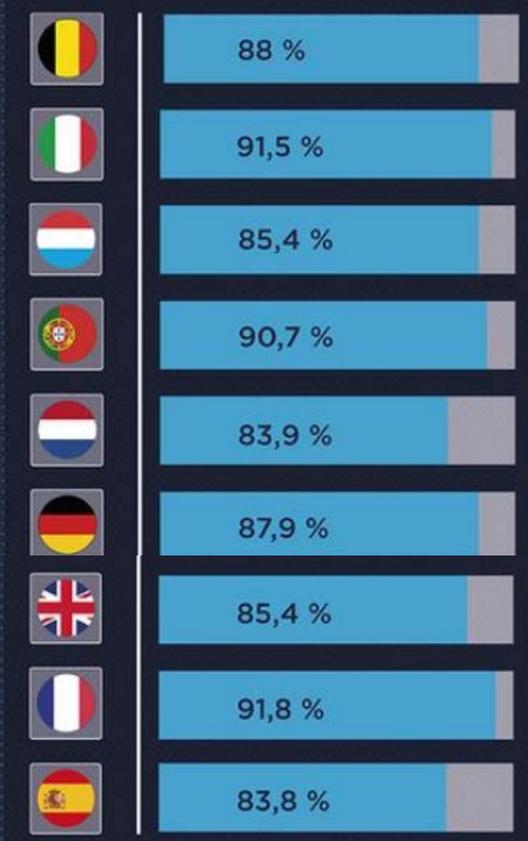
GIRLS 11-17 years-old

POURCENTAGE DU NOMBRE DE FILLES EN DESSOUS DE LA MOYENNE D'ACTIVITÉ PHYSIQUE CHEZ NOS VOISINS.

IN 2001



IN 2016



Percentages of young people below recommendations !!!

Current reforms of educational systems: A global trend

- Major modification of PE

- ⇒ Growing importance of physical activity, wellness, and health
- ⇒ Central role of PE
- ⇒ Example in the Wallonia-Brussels region



Implications for PE teachers

Passing from Physical Education and Sport (EPS) ...

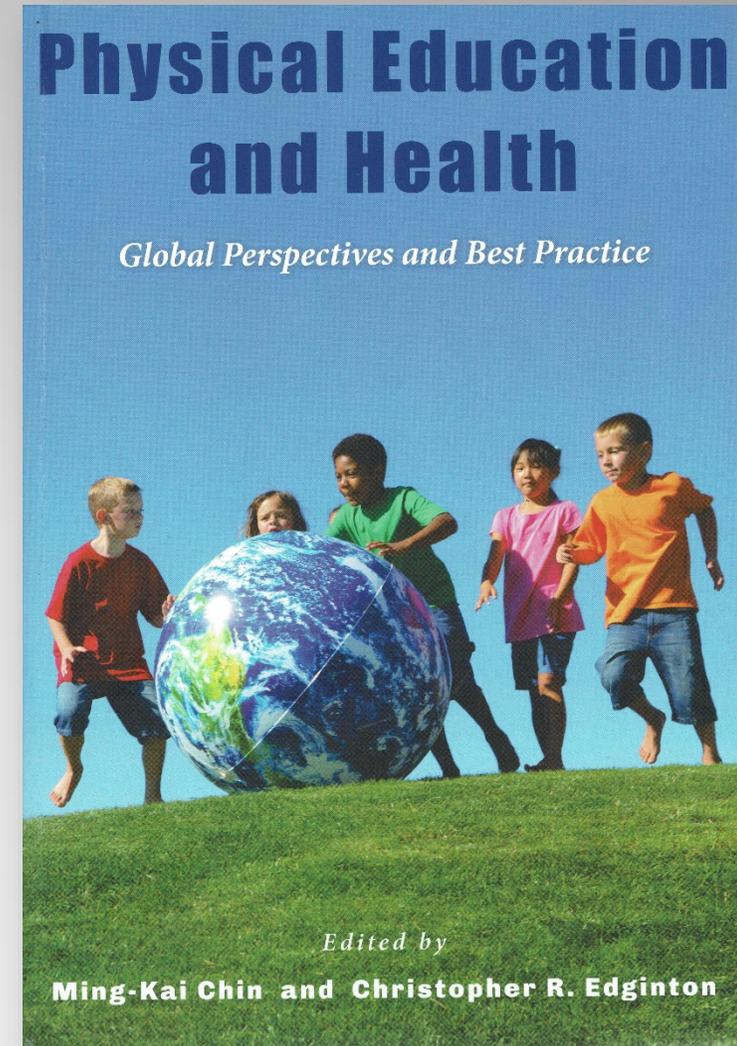
... to Physical Education and Health (EPH)



PHE around the world

- 40 countries
- 23 from Europe

Chin, M.-K. & Edginton, C.R. (2014).
Physical Education and Health Global Perspectives and Best Practice.
Urbana, IL: Sagamore.

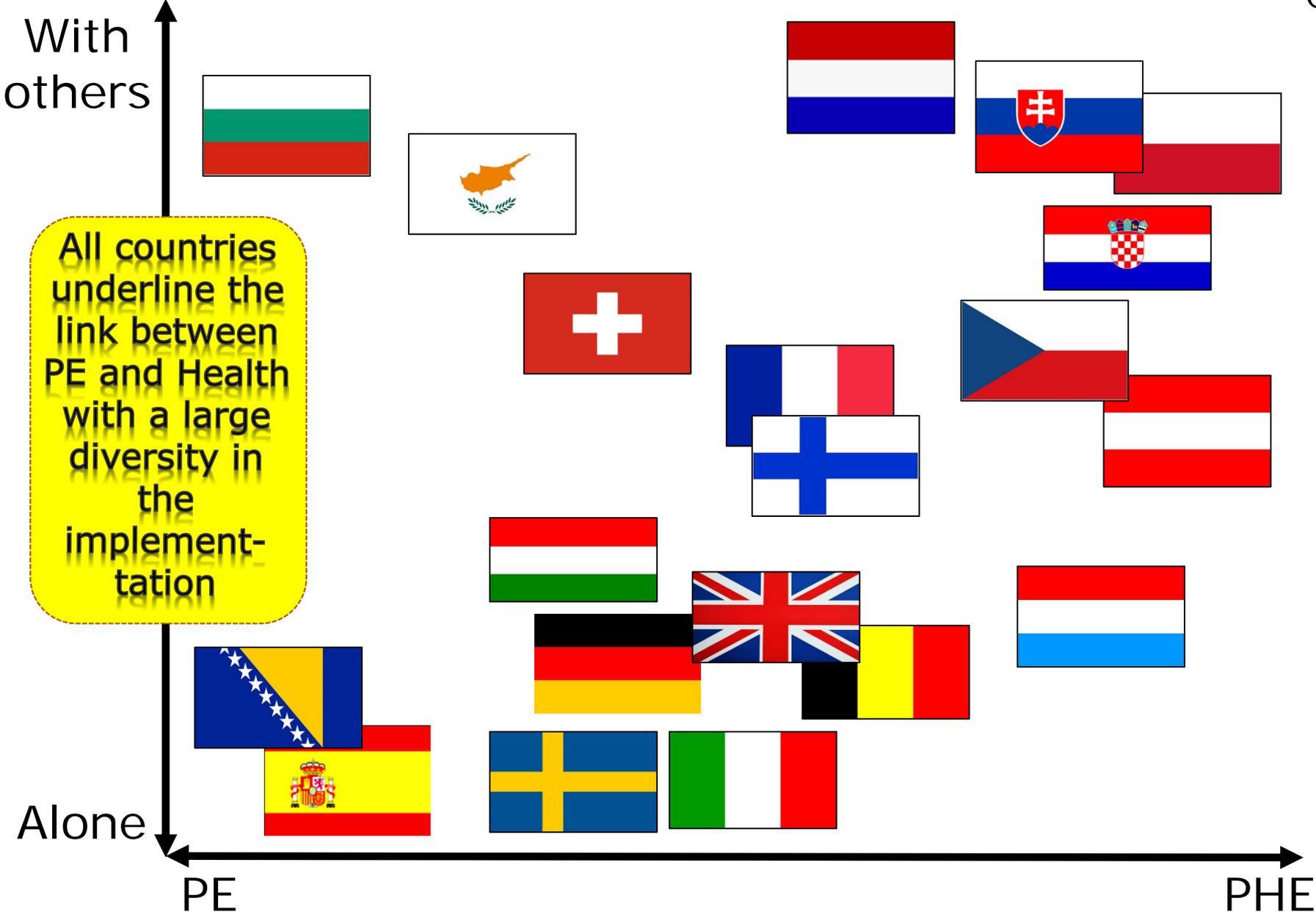


Comparison of the European countries

- Austria
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- England
- Finland
- France
- Germany
- Hungary
- Italy
- Luxembourg
- Poland
- ~~Romania~~
- ~~Serbia~~
- Slovakia
- Spain
- Sweden
- Switzerland
- The Netherlands
- ~~Ukraine~~



Cloes (2017a)



With others
↑
Alone
↓
EP

Knowledge about PA



EPS

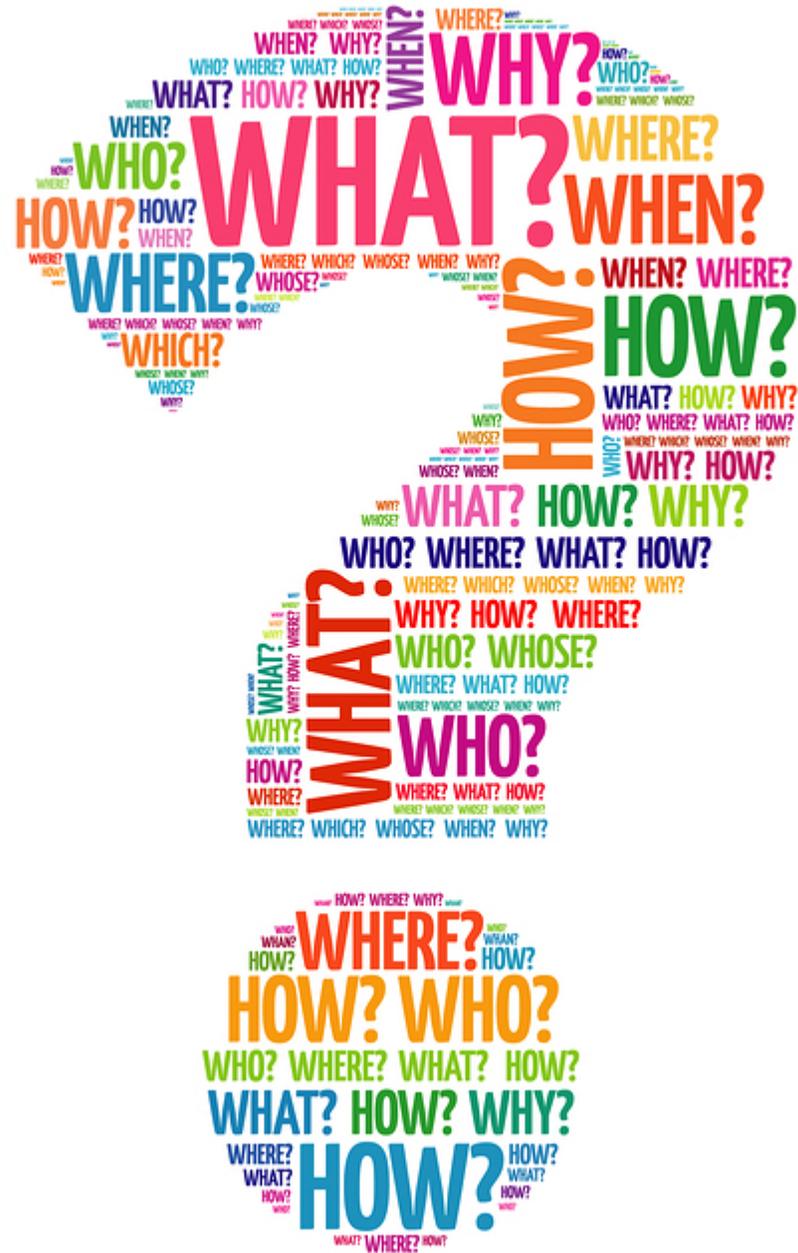


Representations of PA → A priority !!!

- Starting point of any lifestyle modification
- Five aspects/questions to consider
 - Definition – What is it?
 - Impact – Why to do it?
 - Recommendations – What do I really have to do?
 - Assesement – Do I do the right thing? Am I ready to change? What's stopping me?
 - Possibilities to act and maintain – How can I do what is recommended? How to avoid relapses?

Cloes (2016)

DIRAP



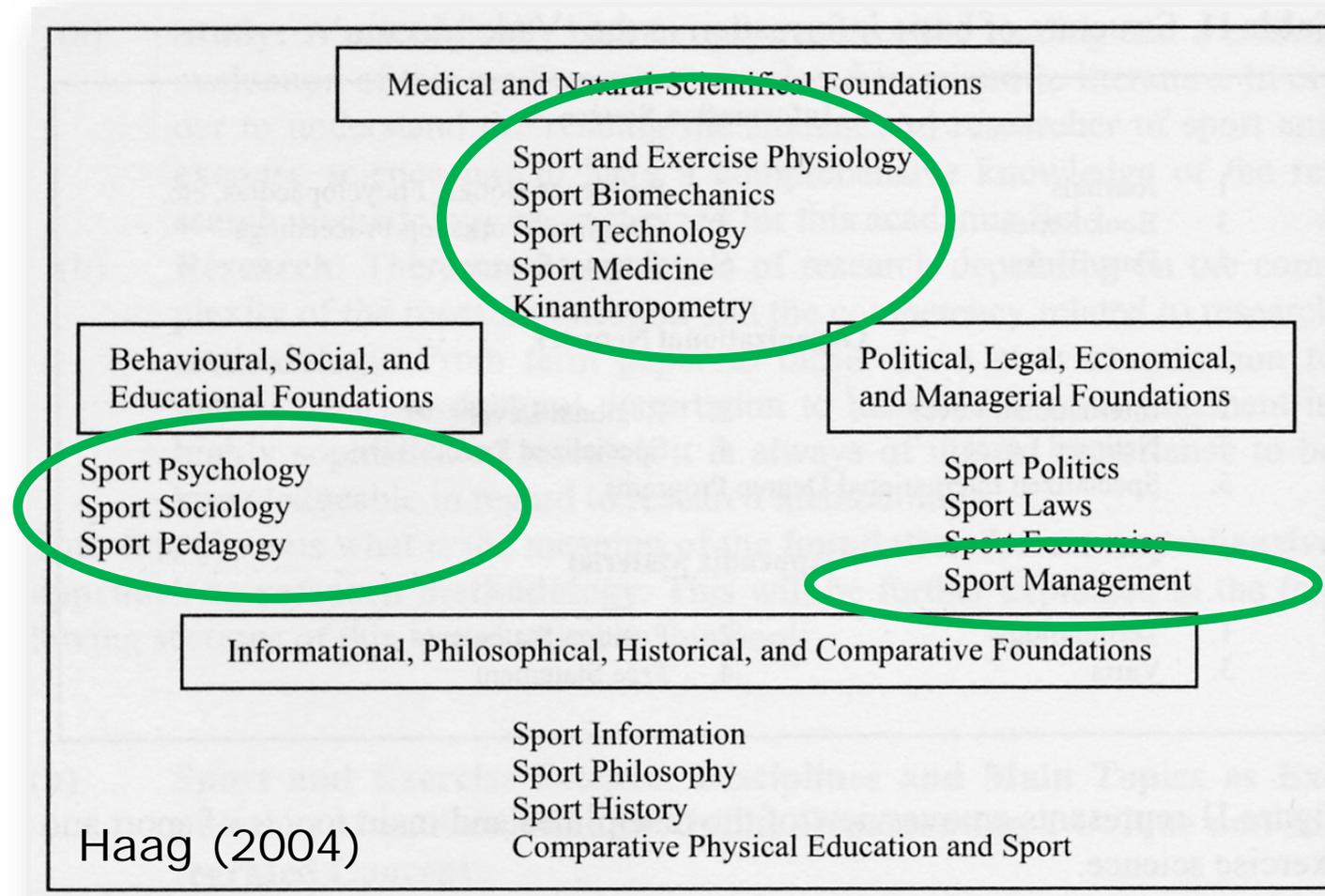
Questions in that presentation ?

- 1) Why can PE teachers be considered as key actors in promoting an active and healthy lifestyle among young people?
- 2) How can we help them to work in this perspective?



PE teachers at the centre of PEH

PE teachers' education allows them to acquire the required competencies



PE teachers are the PA specialists at school

JOURNAL OF TEACHING IN PHYSICAL EDUCATION, 2004, 23, 281-299
© 2004 HUMAN KINETICS PUBLISHERS, INC.



Physical Education: A Cornerstone for Physically Active Lifestyles

Marlene K. Tappe
Purdue University

Charlene R. Burgeson
National Association for Sport and Physical Education

An expectation of the society

- “Physical education is the most effective means of providing all children and youth with the skills, attitudes, values, knowledge and understanding for lifelong participation in society.”



United Nations
Educational, Scientific and
Cultural Organization



MINEPS V

5th International Conference of
Ministers and Senior Officials
Responsible for Physical Education
and Sport

https://www.unesco.de/fileadmin/medien/Dokumente/Bildung/MINEPS_V_-_Declaration_of_Berlin__Original_English_Final_-4_02.pdf

DECLARATION OF BERLIN

The Ministers meeting at the 5th International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport (MINEPS V), held in Berlin (28-30 May 2013),

The starting point ...

- Refocus the purpose of the PE(H) course

PE teachers

Ensuring that the students entrusted to us become physically educated citizens

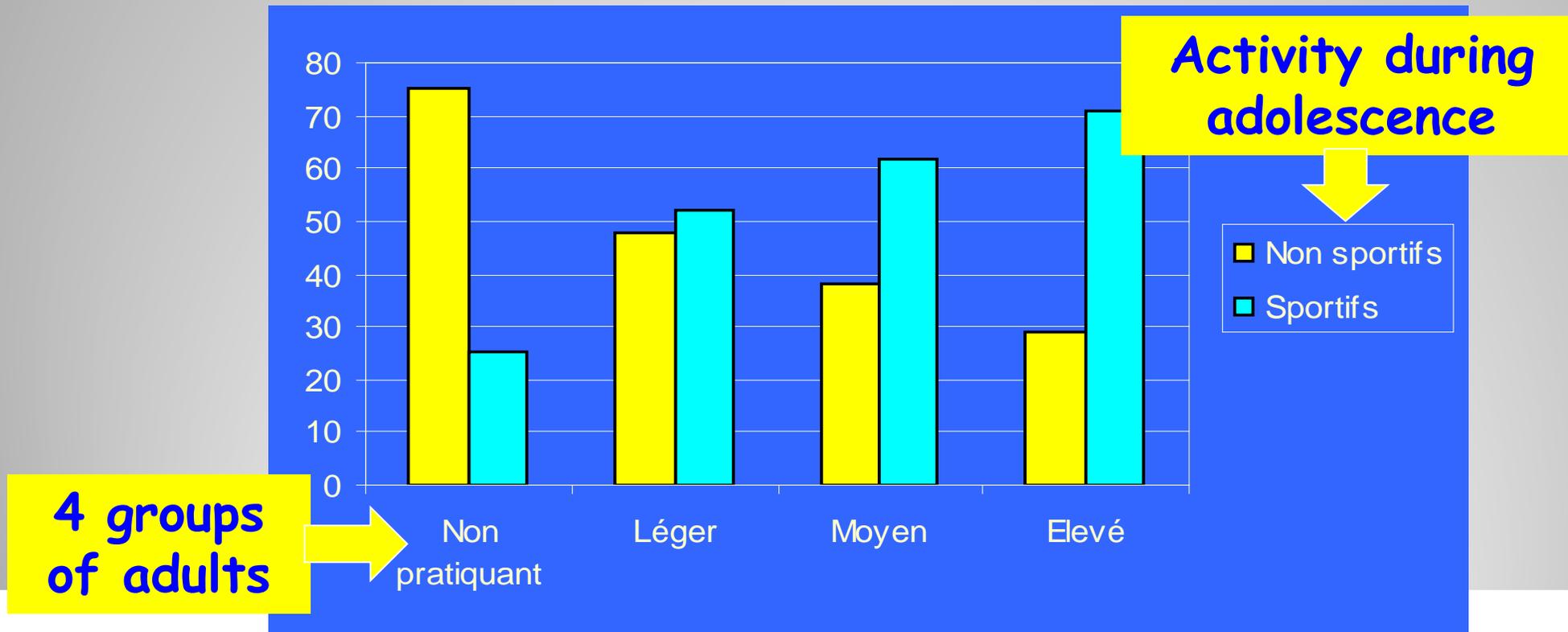


**A priority:
Act as soon as possible**



Why to act as soon as possible?

- ◆ Because children's habits are found in their adulthood



from Van Reusel et al. (1990)

Why to act as soon as possible?

- ◆ Because an active lifestyle develops very early in the childhood and remains stable at adulthood with a moderate to highly probability

Tracking of Physical Activity from Early Childhood through Youth into Adulthood

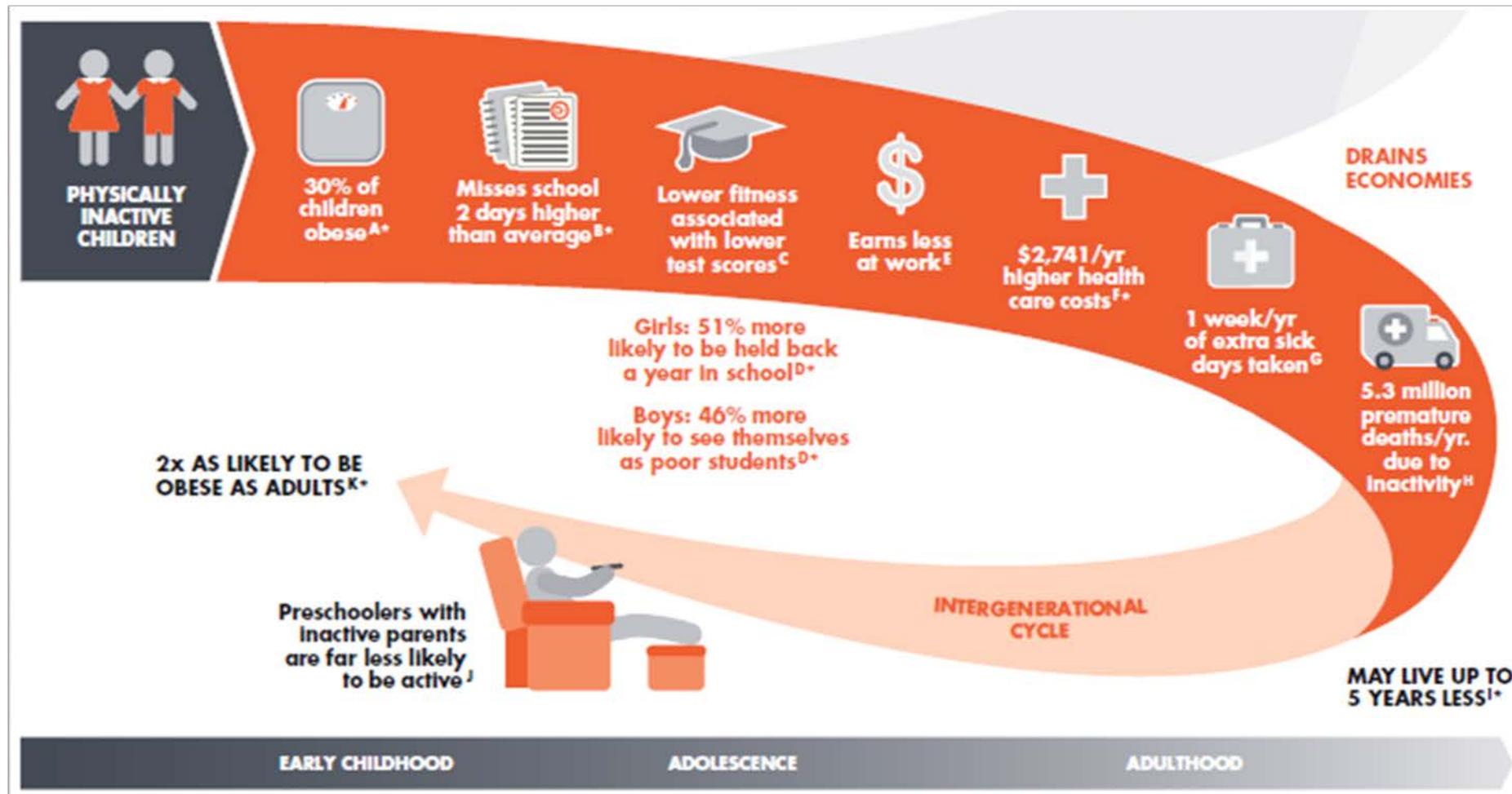
RISTO TELAMA¹, XIAOLIN YANG², ESKO LESKINEN³, ANNA KANKAANPÄÄ², MIRJA HIRVENSALO¹,
TUIJA TAMMELIN², JORMA S. A. VIIKARI⁴, and OLLI T. RAITAKARI⁵

¹*Department of Sport Sciences, University of Jyväskylä, Jyväskylä, FINLAND;* ²*LIKES–Research Center for Sport and Health Sciences, Jyväskylä, FINLAND;* ³*Department of Mathematics and Statistics, University of Jyväskylä, Jyväskylä, FINLAND;* ⁴*Department of Medicine, University of Turku and Turku University Hospital, Turku, FINLAND;* and ⁵*Department of Clinical Physiology, Turku University Hospital and Research Centre of Applied and Preventive Cardiovascular Medicine, University of Turku, Turku, FINLAND*

Telama et al. (2014)

3596 boys and girls from 3 to 18 years-old who participated to a study in 1980 have been followed in 1986, 1992, 2001, and 2007

Today's children may be the first generation with a shorter life expectancy than their parents ...



Act at school because, there one ...

- ... meets all youths
- ... have appropriate facilities
- ... find competent educators



And PE(H) goal becomes ...

Getting young people to value and appreciate physical activity for life so that they are (intrinsically) motivated to become/stay active outside PE(H)

And if one speaks about PE(H), there is also ...



- Nutrition
- Hydration
- Sleep
- Stress
- Smoking
- Alcohol
- Substances

- Sex
- Risk behaviours
- Drugs
- Hygiene
- Harassment
- ...



How to support such responsibility?

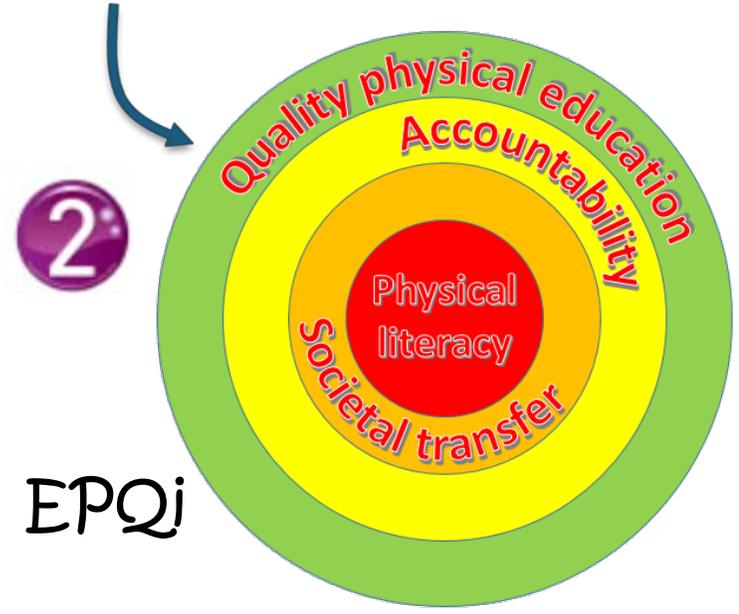
A 4 levels model: A maelstrom of concepts



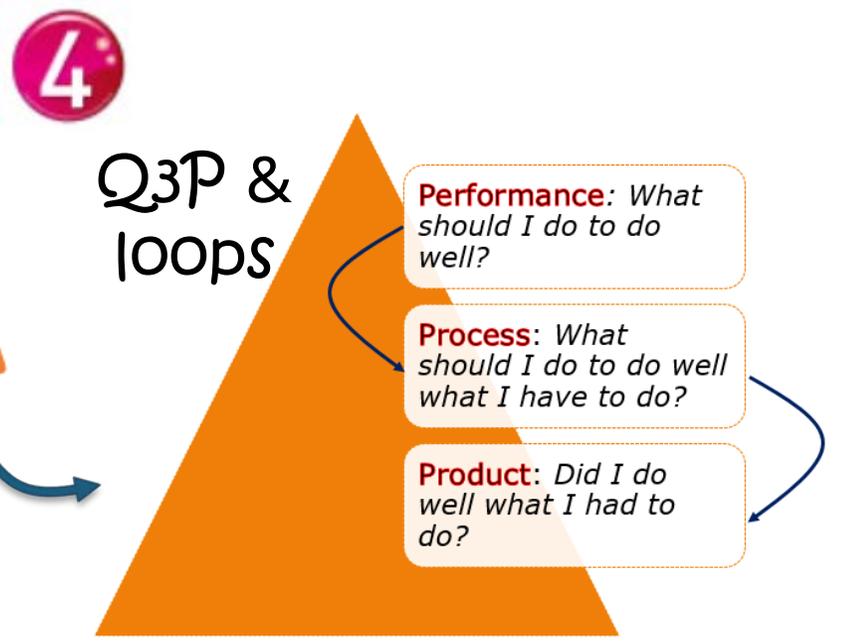
1 School policy



Active school



3 PAMIA



1st level – An active school as starting point

- PE(H) teachers coordinate PA promotion at school
- They have to be involved in their course but also in the other dimensions of PA at school
- They have to collaborate (they are not alone)



Six dimensions of an active school

Snyers et al. (2014)

1

School policy

Inclusive Quality Physical Education

Extracurricular physical activity

Active transportation

Environment (recess, ...)

Classroom physical activity



- PE(H) teacher is invited to:
 - get involved in a school policy focused on physical activity, wellness, and health
 - act during the specific course (inclusive quality physical education, societal transfer)
 - stimulate extracurricular physical and sport activities
 - galvanize and strengthen active transportation
 - initiate adjustments to the school environmental management
 - encourage collaborations in the context of interdisciplinary activities



1 School policy

Inclusive Quality Physical Education

Extracurricular physical activity

Active transportation

Environment (recess, ...)

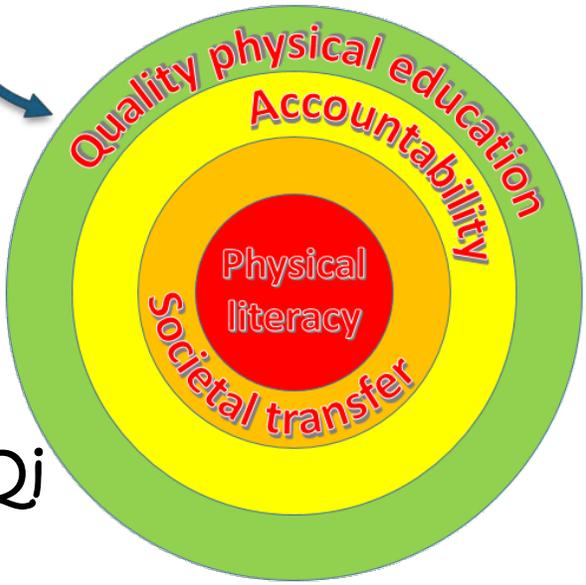
Classroom physical activity



Active school

2

EPQI

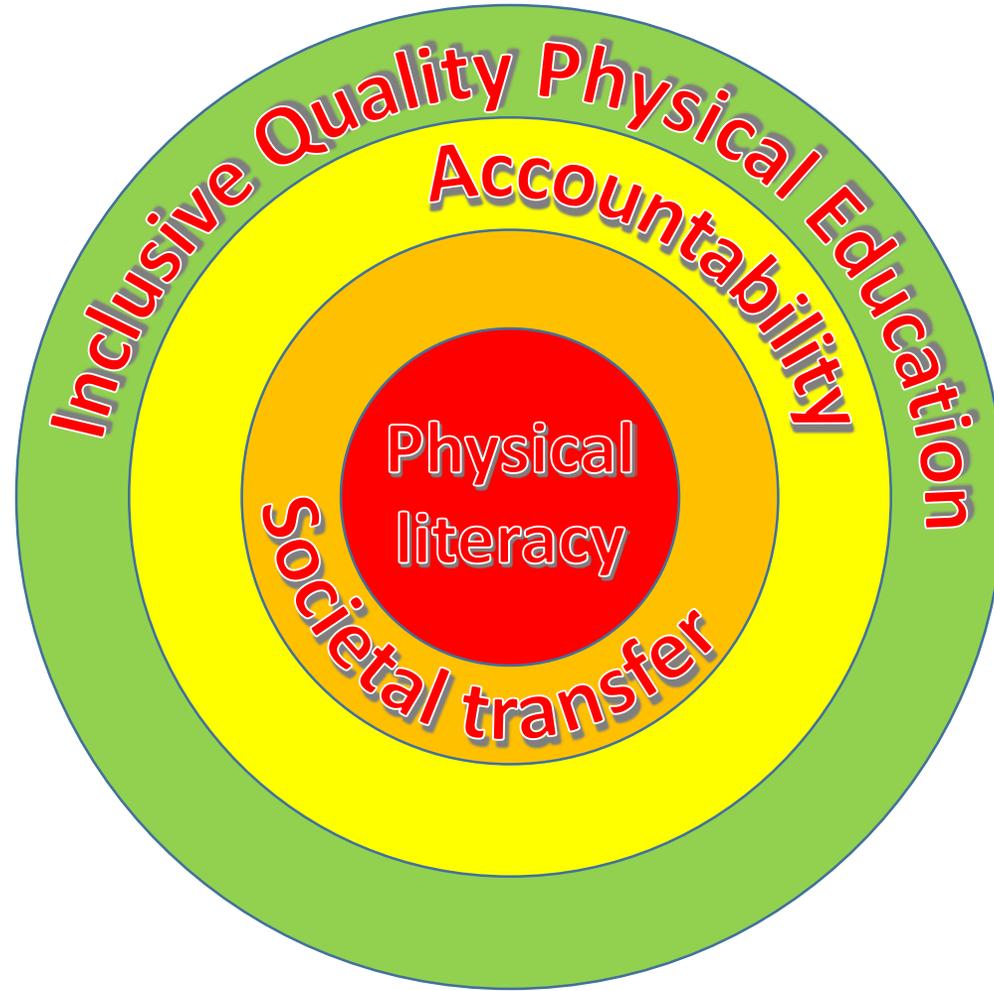


2^d level – Inclusive Quality Physical Education

- The most important pillar of an active school



Inclusive Quality Physical Education



Physical literacy

is the...



...to be

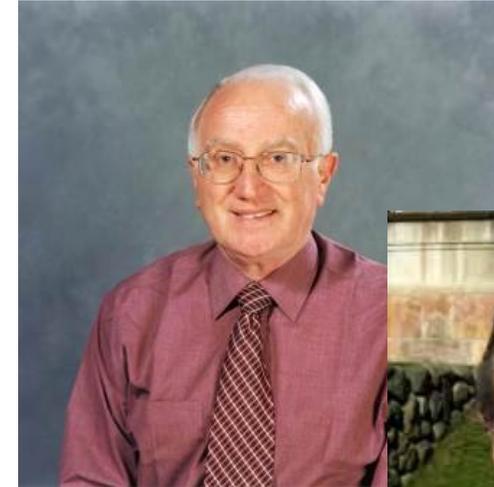
active for life

Physical
literacy

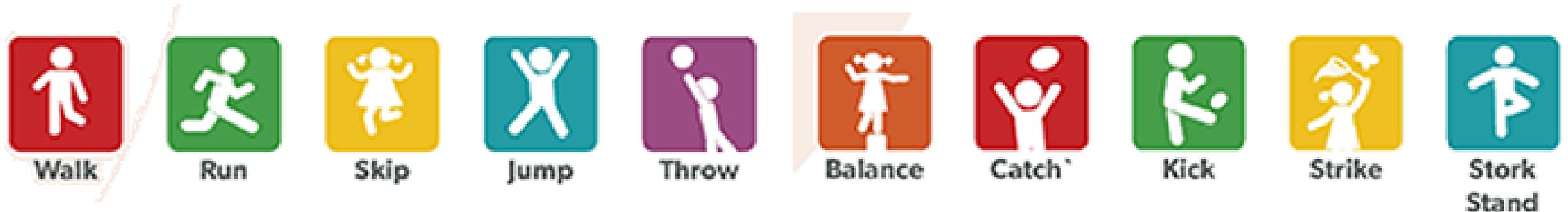
Physical literacy

Physical Literacy

- ➔ Concept created in 1993
- ➔ Margaret Whitehead, Len Almond ...
- ➔ A wealth of interpretations
- ➔ *A Design Thinking Approach* AIESEP seminar

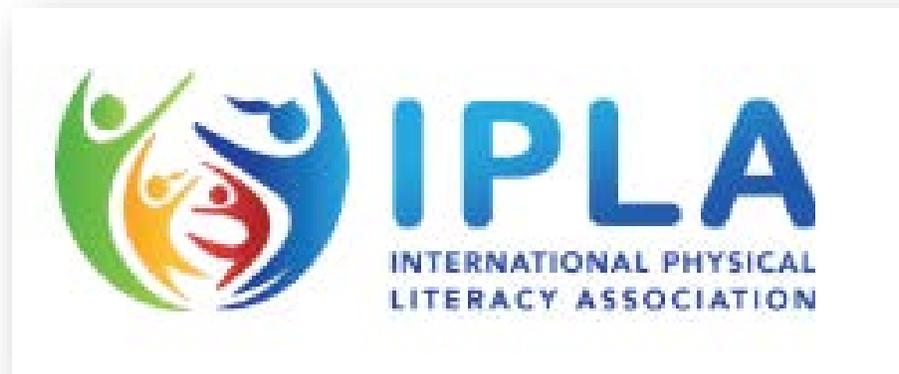


Whitehead (2013)



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



Physical literacy

- Development of motor skills (running, throwing, catching, jumping ...) and fundamental physical qualities (endurance, strength, speed, flexibility) that children need
- Acquisition of basic knowledge allowing to understand and learn



Walk



Run



Skip



Jump



Throw



Balance



Catch



Kick



Strike

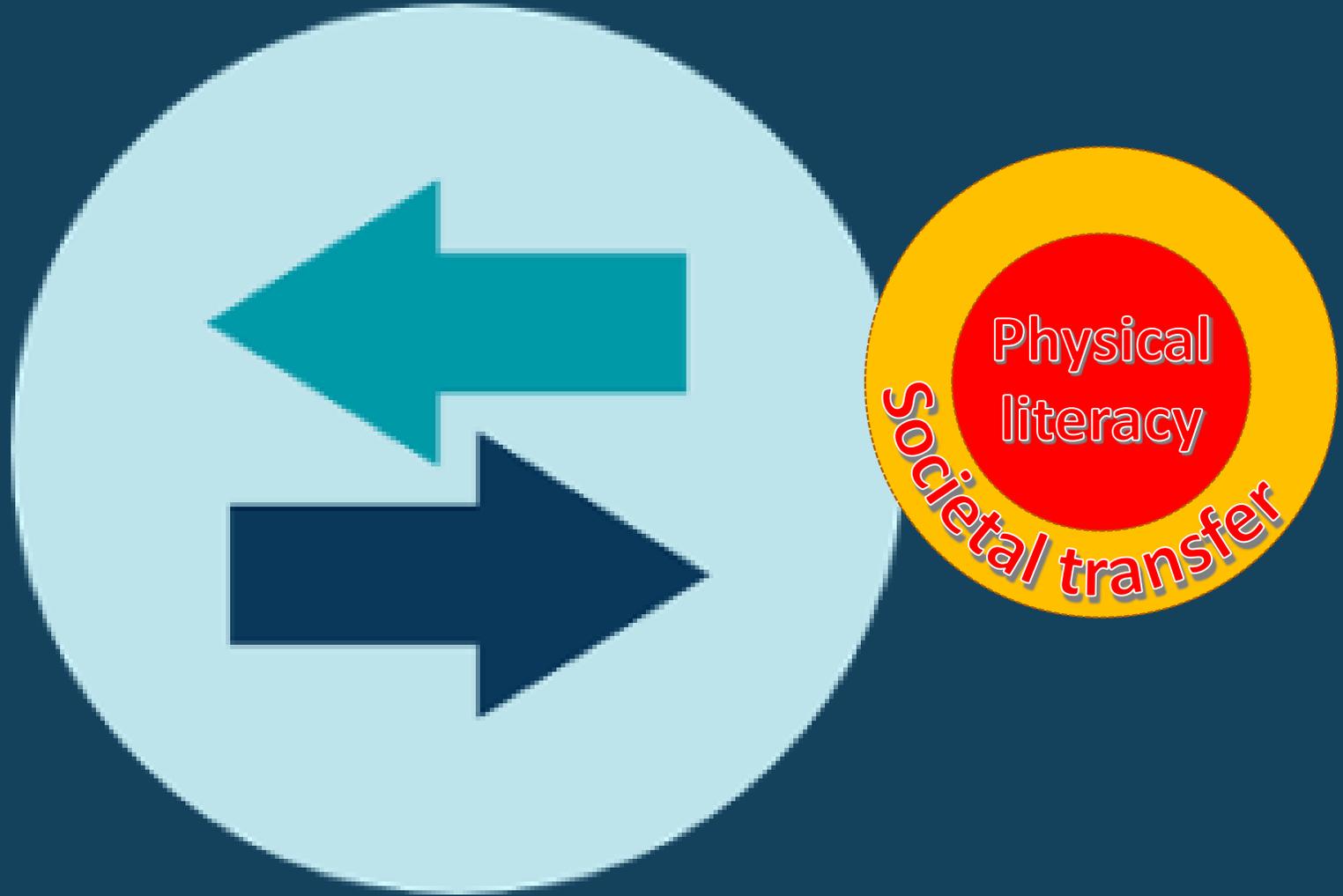


Stork
Stand

Developmental goals

Domains	Objectives
Motor	Learning and/or mastery of motor and sport skills (laterality, identification of the dominant foot, running technique, tennis serve, breaststroke, ...)
Fitness	Improving of the physical fitness, lifestyle habits, avoiding injuries, acquiring healthy attitudes (warming up, stretching, adapting the workload ...)
Cognitive	Improving the knowledge about sport, its rules and practice
Psychological	Learning to control ones' emotions, stress, developing a sense of competence, improving motivation ...
Social	Learning cooperation in a competitive context, develop character (respect, honesty, fair play, resistance to doping ...)
Health	Developing well-being, guaranteeing the maintenance of the mobility, weight control ...

Martens (2004)



Societal transfer

Societal transfer

- PE(H) teaching approach ensuring that what is learned in the course can be practically used by pupils/students in their everyday life

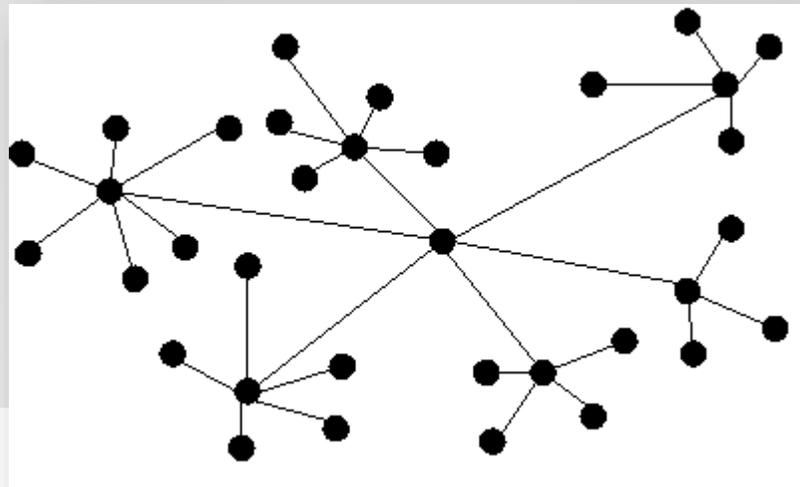
Cloes (2017)



Societal transfer

Cloes (2017)

- It involves ...
 - ☞ linking learning to the students life contexts
 - ☞ planning short, medium and long term interventions rather than reacting to opportunities
 - ☞ promoting students' awareness of the possible concrete applications of what is learnt



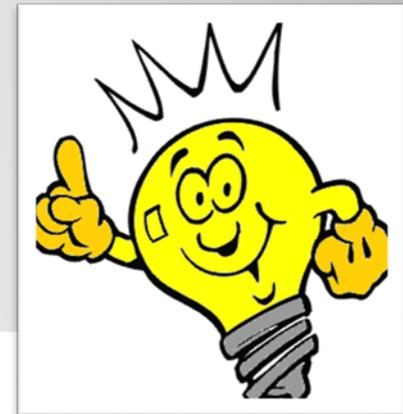
Societal transfer

Cloes (2017)

- 5th level of the 'Teaching Personal and Social Responsibility model' (Hellison, 1995)

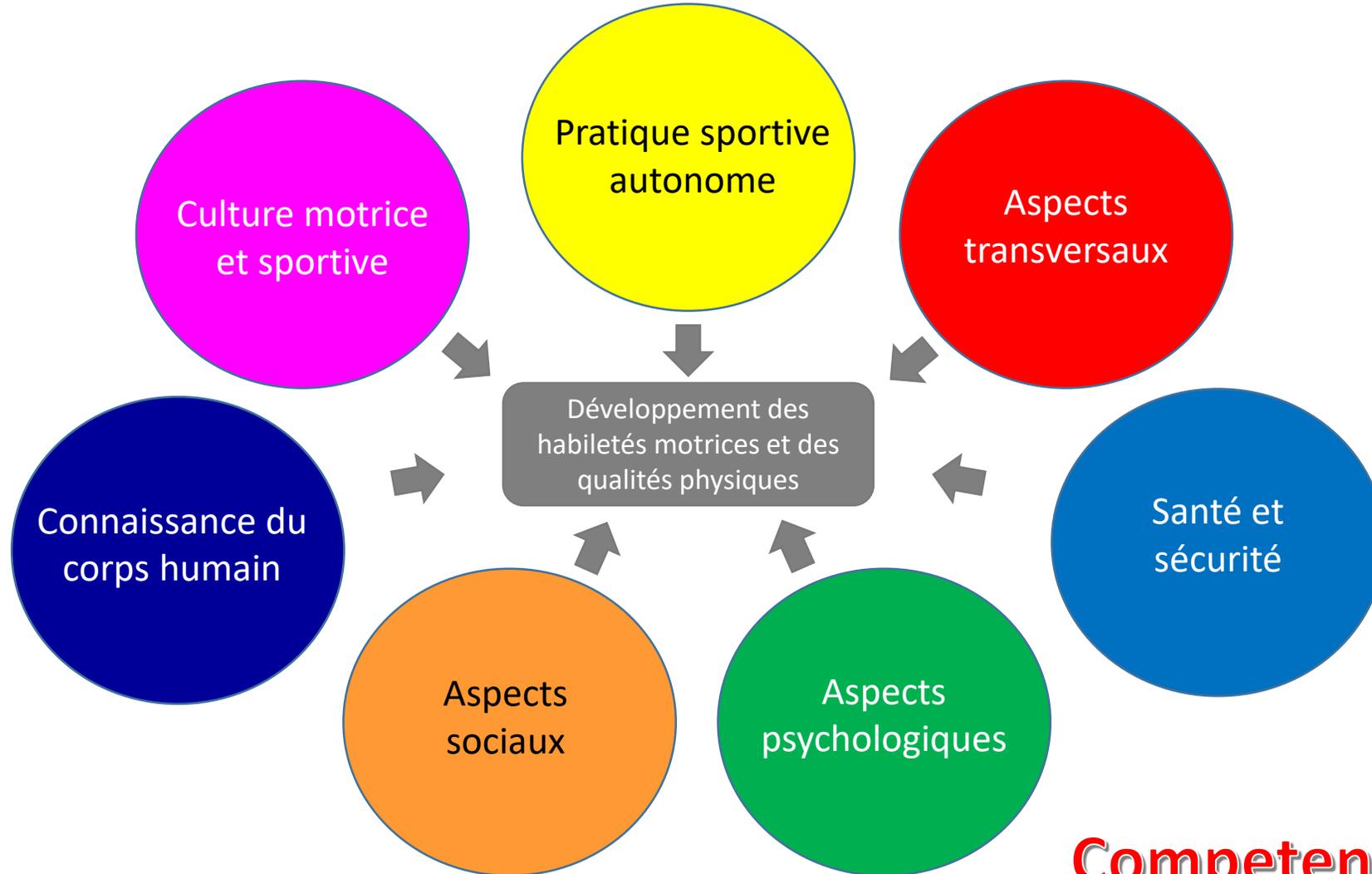
"Transfers responsible behaviors to life settings outside the gym, personal responsibilities for actions"

- Link to the concept of authentic instruction/connectedness (Newmann & Wehlage, 1993)
- Link with the 'transposition didactique' (Amade-Escot, 2006)



Societal transfer

Providing concrete learning that will be used outside the 'gym'



Competencies linked to the daily life

Autonomous active lifestyle



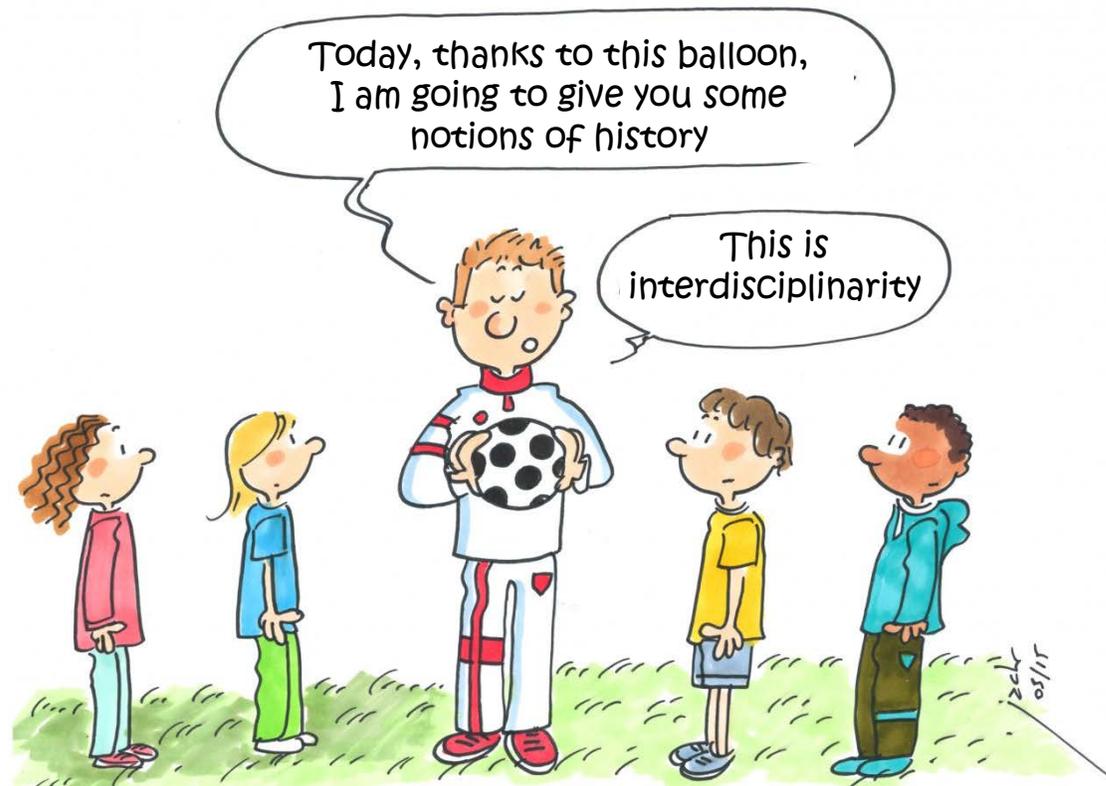
- Elements allowing the student to practice any physical activity and / or sport independently and responsibly (e.g. give a training plan for running)



Transversal aspects



- Elements that do not have a direct link with sports practice but can be used in everyday life (ICT, interdisciplinary activities, budget management, organization of an activity, information on geography or history, etc.).) (e.g. proposing notions of the highway code)



Health and safety



- Elements allowing to acquire a better hygiene of life and to adapt oneself to different levels of danger (e.g.: to learn first aid, questions related to hydration during effort ...)



Psychological aspects



- Elements allowing personal development (e.g. learning refereeing to develop self-confidence ...)



Social aspects

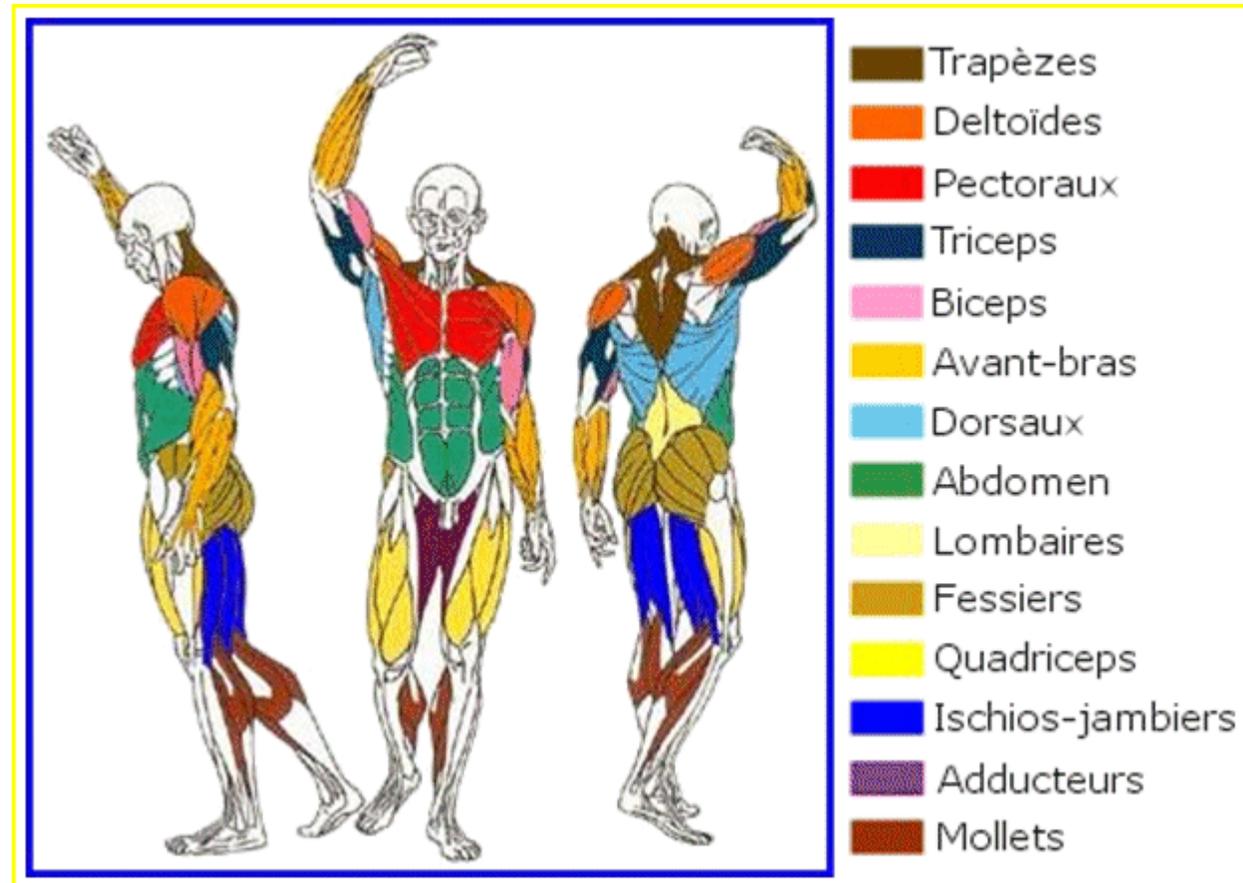


- Elements for improving social life and integration in society (e.g. working blind, collective challenges ...)



Knowledge of the human body

- Elements allowing to understand the functioning of the human body (e.g. to explain to the students the stretched muscles ...)



Motor and sports culture



- Elements enabling the student to understand the field of physical and sporting activities (e.g. talking about famous athletes, the history of sport, its organization ...)

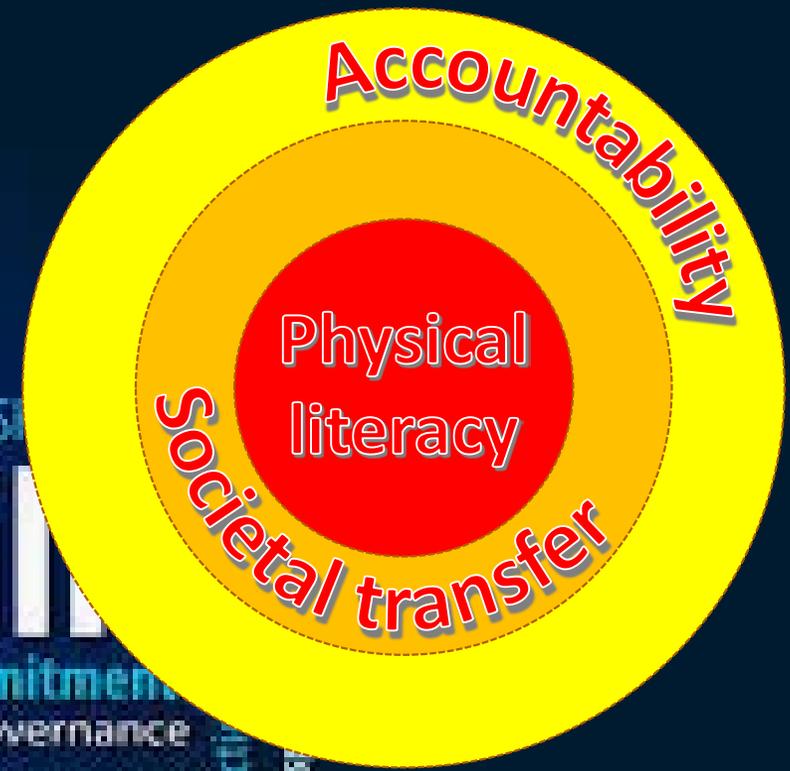


POINTS VERTS



Accountability

Values
Morals
LIABILITY
Trustworthiness
Job
Ethics
CARE
BUSINESS
Honesty
Accountable
CORE VALUES
PRIDE
OWNERSHIP
RESPONSIBILITY
ACTIONS
Honorable
Diligence
ETHICAL
RESPONSIBLE
Blameworthiness
TRUST
Reliable
Commitment
Governance
MORAL
STABILITY
Ethical
TRAIT
Functi
Res



Accountability

- Production of concrete changes by the pupils/students = Impact of the teaching
- Direct link with the objectives
 - ☞ Motor, physical, cognitive, psychological, emotional, and social dimensions
 - ☞ Adoption of a healthy lifestyle

Pate et al. (2011)



TARGET



TARGET



TARGET

Accountability

- Change of the philosophy of the teachers' work → *'Does my teaching bring real changes in pupils/students' life?'*
 - ☞ Implementation of the social transfer goals
 - ☞ Real planning with a strategy
 - ☞ Regular follow up
 - ☞ Use of a panoply of tools (questionnaires, personal diaries, tables of discussion ...)

The PE teacher as a PA&H counselor



In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.



In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.



In the third image, the systemic barrier has been removed. The system has been changed so that everyone can see over the fence. The systemic barrier has been removed.



Inclusive Quality Physical Education

Inclusive quality physical education (UNESCO)

McLennan & Thompson (2015)

- This teaching philosophy of physical education brings a planned, progressive, and inclusive learning
- It acts as the foundation for a lifelong engagement in physical activity and sport
- It aims the acquisition by the students the psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life



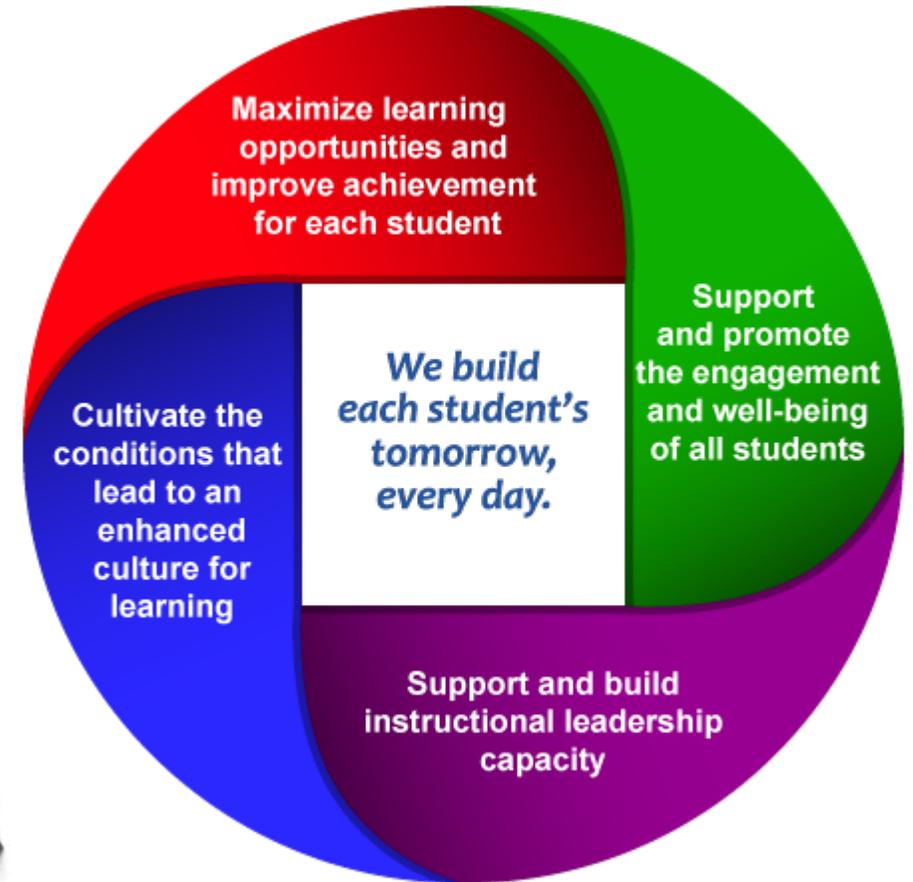
Inclusive Quality Physical Education

- For each pupil/student

- 👉 Individualizing

- 👉 Integration

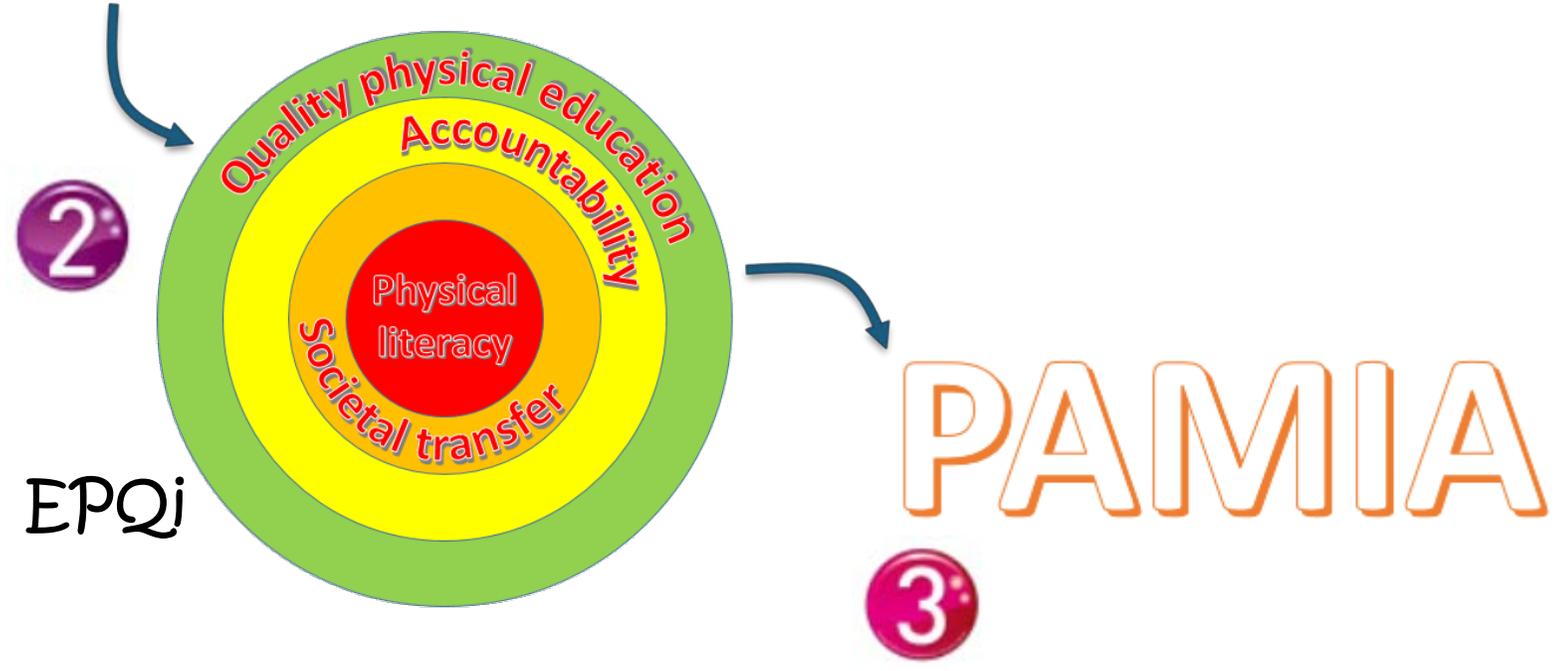
- 👉 Inclusion



1 School policy



Active school



EPQI

PAMIA

3rd level – The PAMIA Principles

Cloes (2017)

- A way to plan, teach and reflect PE(H)



The Self-Determination Theory



Deci & Ryan (2000)
Reeve et al. (2004)
Sarrazin et al. (2006)
Cox et al., (2008)
Gillet et al. (2010)
Haerens et al. (2011)
Harens (2013)

PAMIA

2017, *Retos*, 31, 245-251

© Copyright: *Federación Española de Asociaciones de Docentes de Educación Física (FEADEF)* ISSN: Edición impresa: 1579-1726. Edición Web: 1988-2041 (www.retos.org)

Preparing physically educated citizens in physical education. Expectations and practices **Preparar ciudadanos físicamente bien educados en Educación Física. Expectativas y prácticas**

Marc Cloes

University of Liege (Belgium)

Pleasure - Foster enjoyment by giving
meaningfulness and positive climate



PAMIA

TRETIEN SPA RENOVATION AMENAGEMENT DES ABORDS

Achievement - Foster self-esteem and learning by guaranteeing «delicious uncertainty»



PAMIA

OVATION AMENAGEMENT DES ABORDS

Tel. 04 380 31 26

Movement - Foster activity by proposing situations that lead students to expand energy



PAMIA

Interaction - Foster contacts with others and with the environment



PAMIA

Autonomy – Foster learners' opportunities to make decisions



PAMIA



A questionnaire has been developed to analyze students/teachers' perceptions

During the lesson ...

• I had the opportunity to practice	0	1	2	3	4	5
• I had fun	0	1	2	3	4	5
• I had the opportunity to choose my learning goals	0	1	2	3	4	5
• I learnt new things on the activity	0	1	2	3	4	5
• I found that there was a nice atmosphere	0	1	2	3	4	5
• I had the opportunity to interact with the teacher	0	1	2	3	4	5
• I have been involved into the activity	0	1	2	3	4	5
• I was able to do some self-corrections	0	1	2	3	4	5
• I had the opportunity to interact with other students	0	1	2	3	4	5
• I improved my skill level	0	1	2	3	4	5

Before the lesson: the PE teacher can determine if what is planned respects the principles
After the lesson: the PE teacher can determine if what was taught respects the principles
the students can explain how they perceive their experience

Student training



First results

- Gymnastic unit to PE students
 - ☞ Principles used to plan the sessions
 - ☞ PAMIA questionnaires + interviews
 - ☞ Confirmation of the interest

Theunissen et al. (2020)

- Participation of overweight adolescents to PA a program
 - ☞ Principles used to plan the sessions
 - ☞ PAMIA questionnaires + interviews
 - ☞ Confirmation of the interest

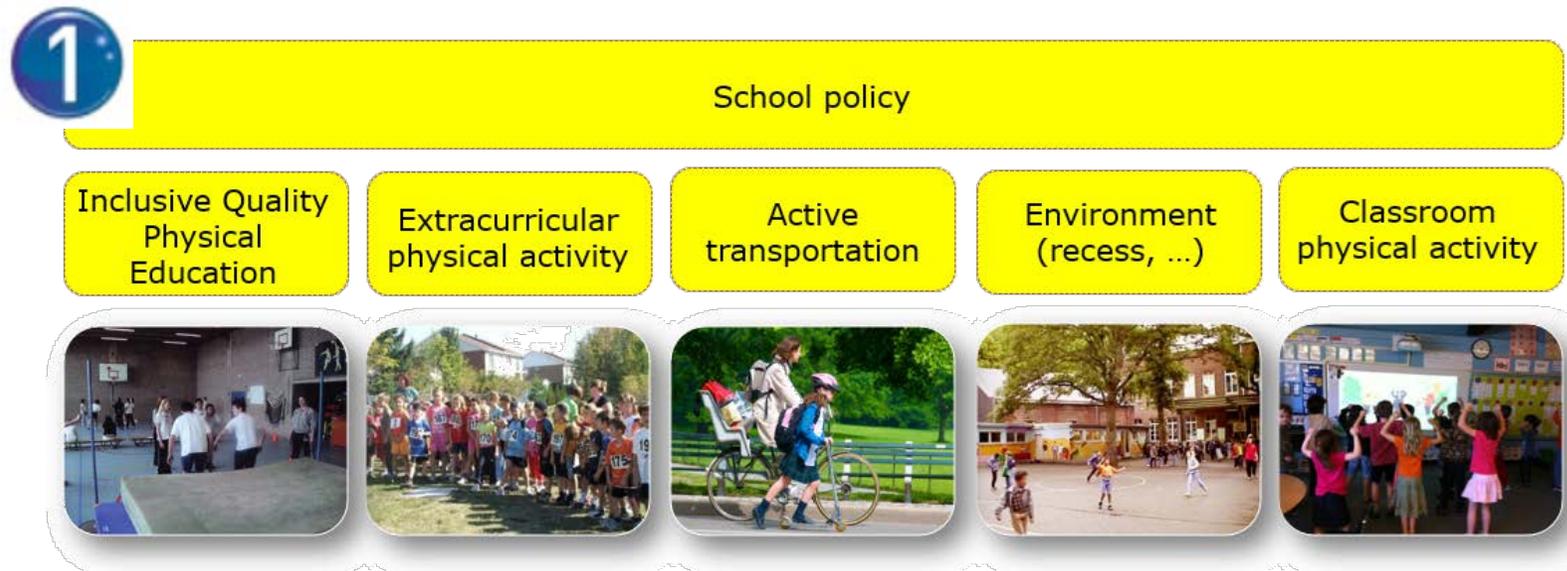
Rompen et al. (2020)

Fitness trainer

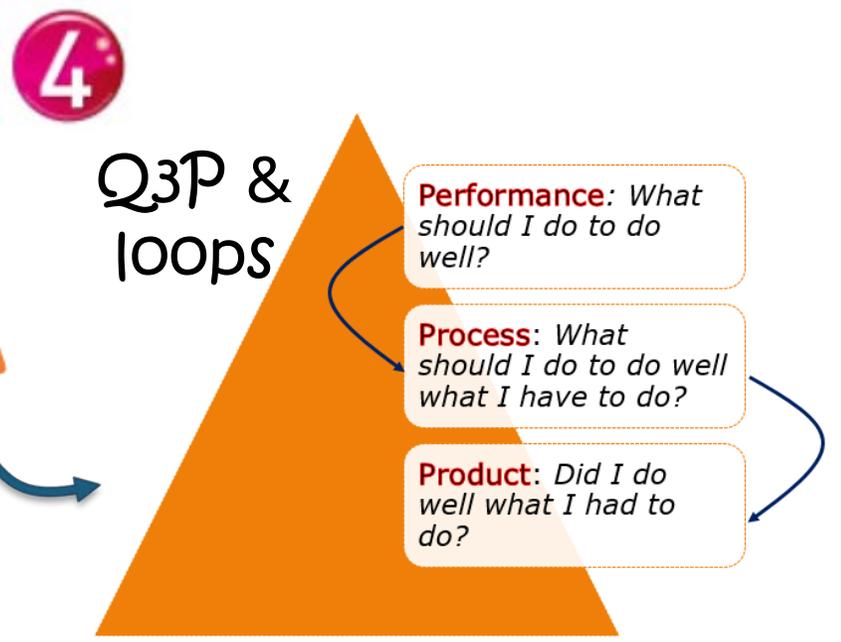
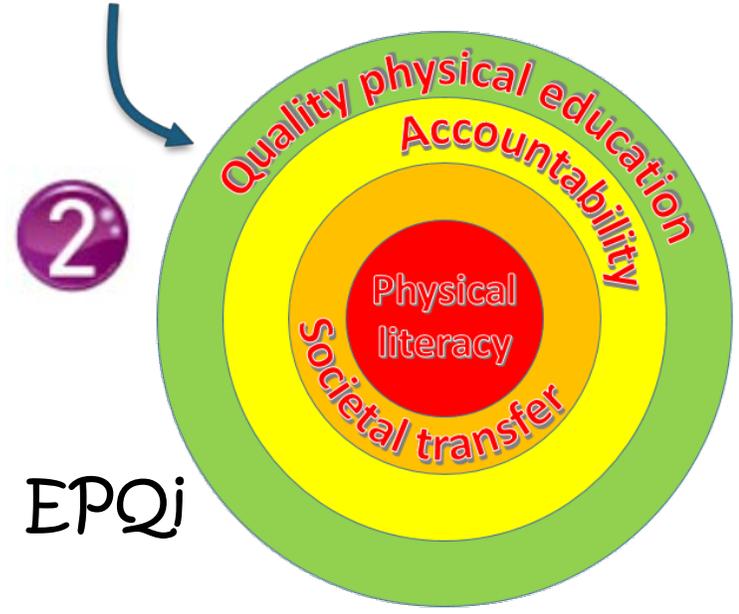


PAMIA principles
made the difference





Active school



4th level – The 3Ps' questions and the loops

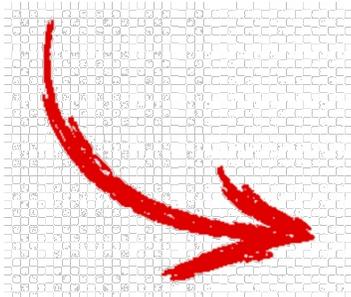
- The very last concept

Q3P &
loops

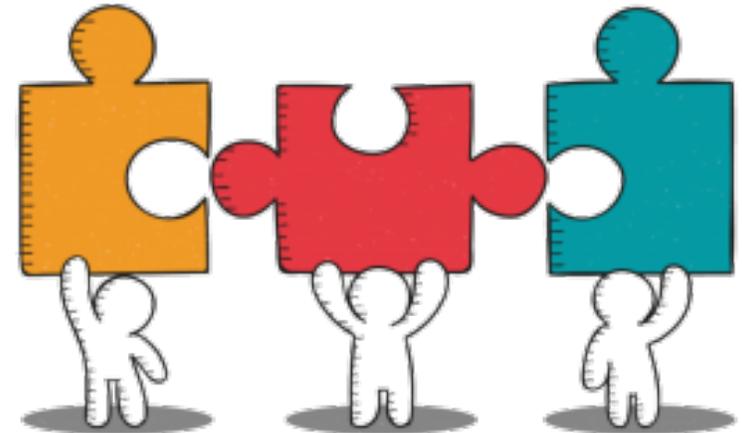


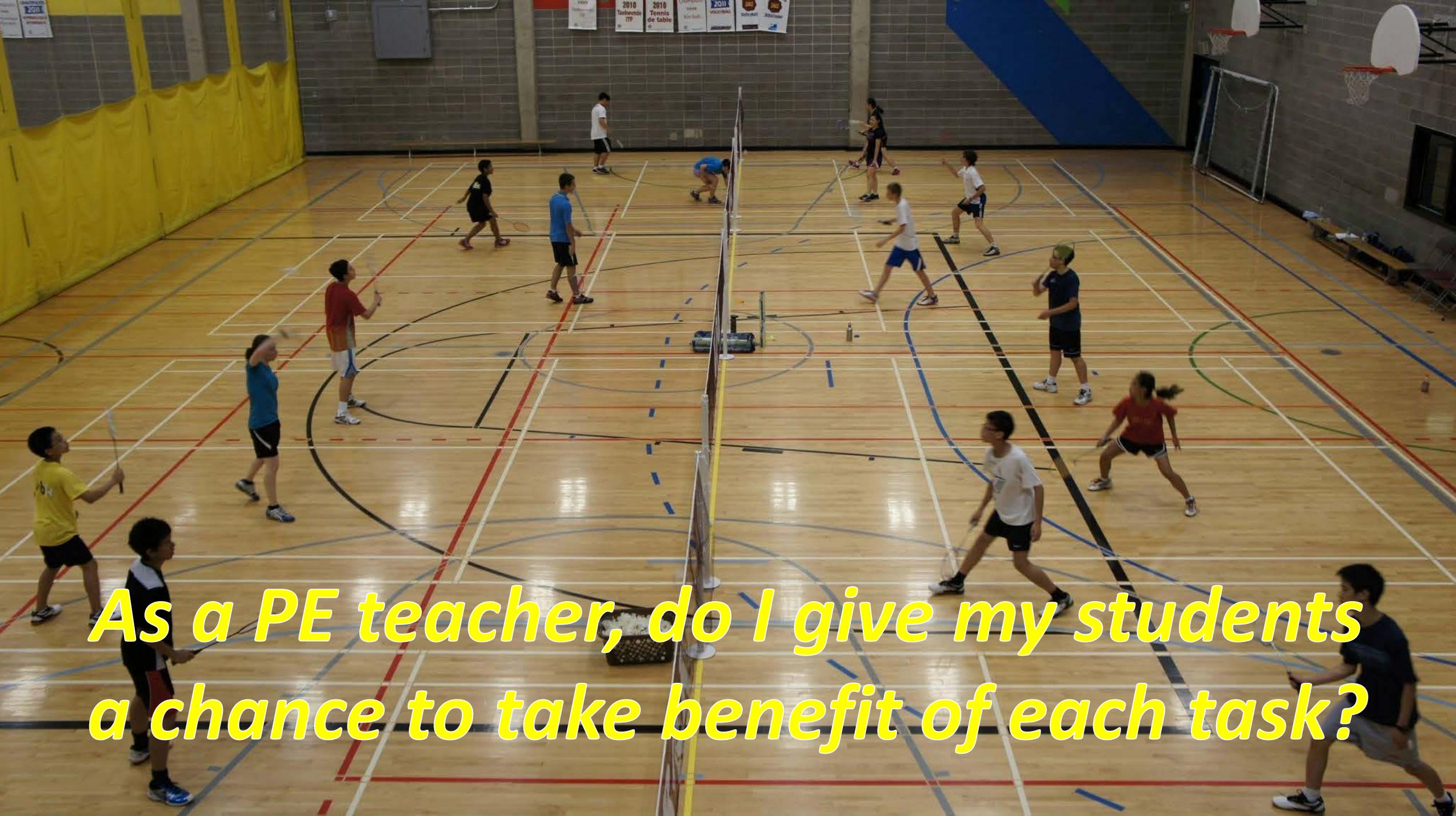
Learning tasks

- A task corresponds to any activity that the teacher proposes to reach the objectives
- But does the learner know *'the name of the game'* ?
- If not, how to expect her/his involvement?



Mediating process paradigm
Socio constructivism





As a PE teacher, do I give my students a chance to take benefit of each task?

When a pupil/student has to do a task ...

- ... he/she should be able to answer to three questions

Performance: *What should I do to do well?*

Process: *What should I do to do well what I have to do?*

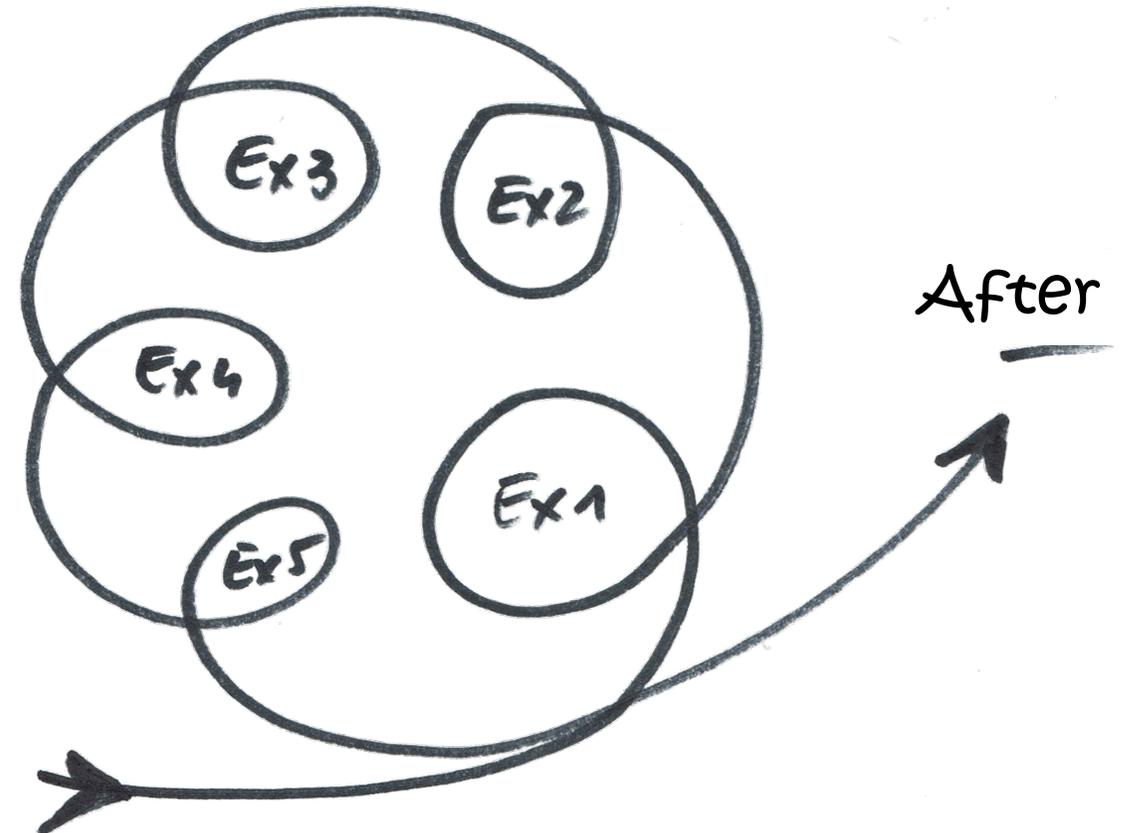
Product: *Did I do well what I had to do?*

When a pupil/student follows a lesson ...

- ... he/she should go through a logical way to the goal ...
- ... that he/she will have made aware of (verbalization, explanation, opinion, etc.)

Before

Lesson



3Ps questions and the loops

- Why ?

Meaningfulness

Self-esteem

Relevance

Involvement

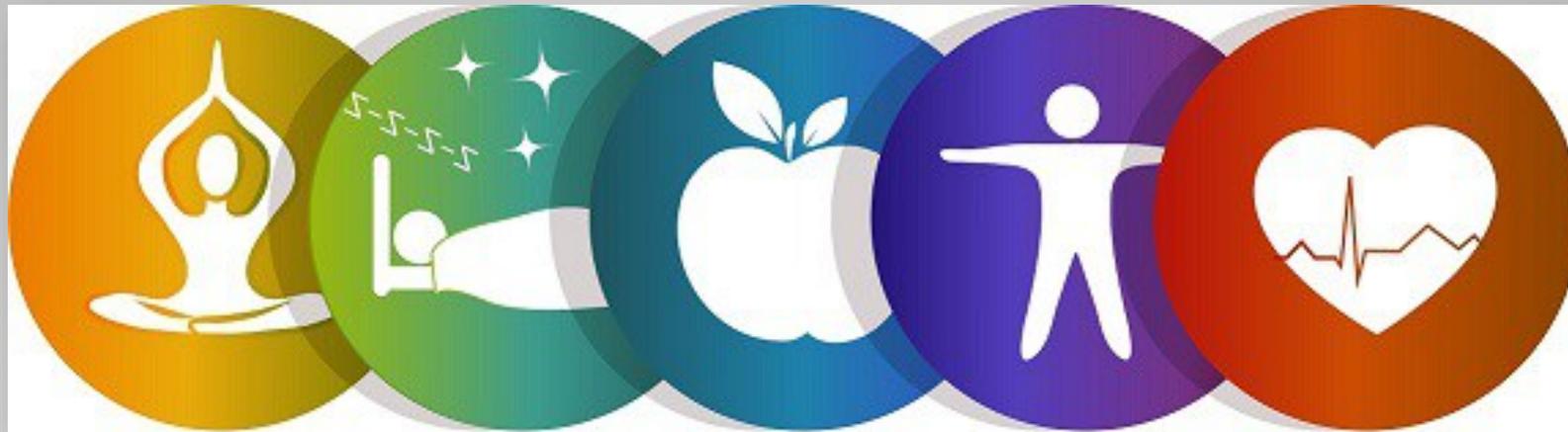
3Ps questions and the loops

- Is it a new concept?

**No, but it seems that
it is often forgotten**



And the other dimensions of health



Starting from physical activity

- It is the DNA of the course !
- Movement facilitates learning

**Need to integrate
additional concepts:
engineering / creativity**



*Take
home message

Now is the time

1

PA school policy



Quality physical education

Extracurricular physical activity

Active transportation

Life environment (recesses, spaces)

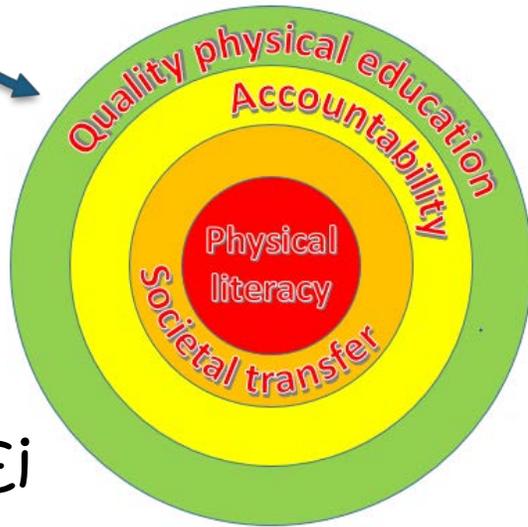
Physical activity in the classroom



Active school

2

QPEi



3

PAMIA

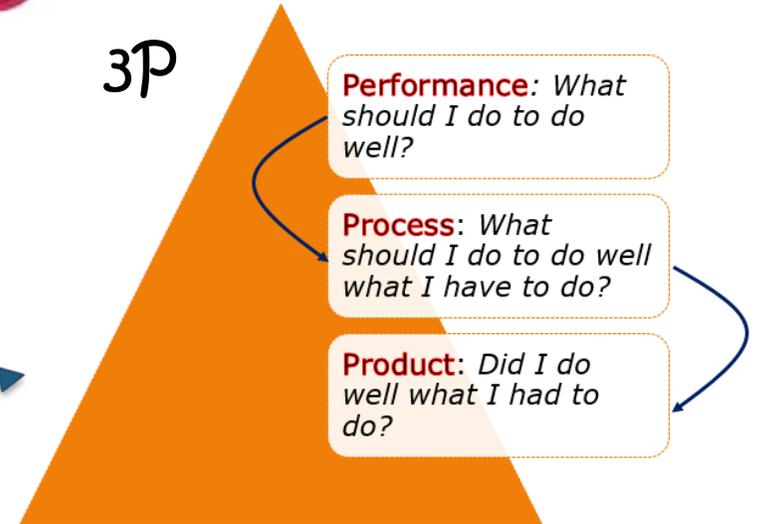
4

3P

Performance: What should I do to do well?

Process: What should I do to do well what I have to do?

Product: Did I do well what I had to do?



Four key messages for PETE

- Presenting the model to PE students can help them to structure their approach of teaching
- In inservice training, teachers explain that the model allowed them to confirm their field observations
- Stakeholders and parents say that such vision of PE would have changed their own experience
- That is finally not a revolution but the realization that usual PE teaching can easily become a agent of change

C'était un professeur, un simple professeur
Qui pensait que savoir était un grand trésor
Que tous les moins que rien n'avaient pour s'en sortir
Que l'école et le droit qu'a chacun de s'instruire

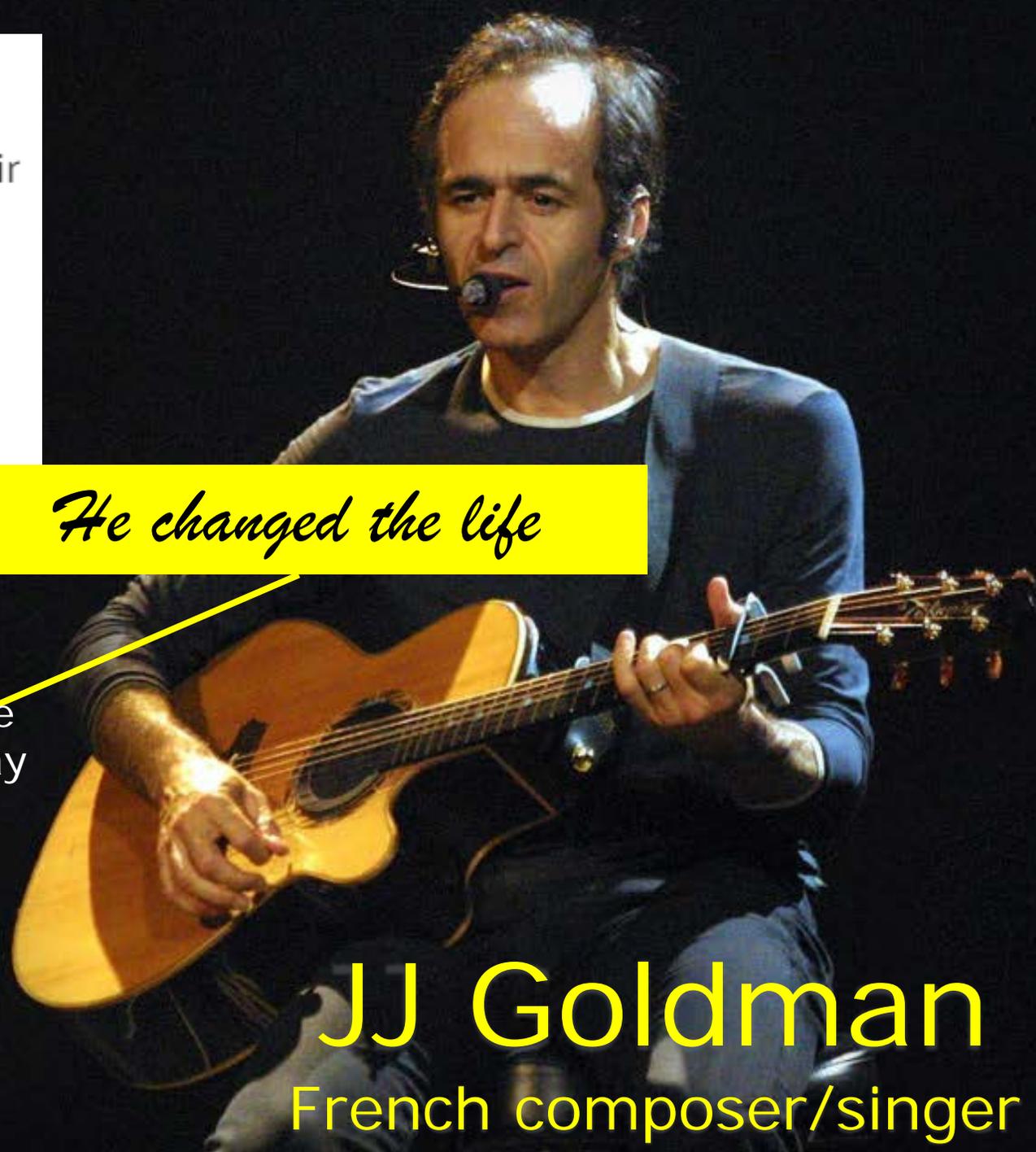
Il y mettait du temps, du talent et du cœur
Ainsi passait sa vie au milieu de nos heures
Et loin des beaux discours, des grandes théories
A sa tâche chaque jour, on pouvait dire de lui
Il changeait la vie

He was a teacher, a simple teacher
Who thought that knowing was a great treasure
That all the second class people had to get away
That school and the right of everyone to learn

He put time, talent and heart into it
So spent his life in the middle of our hours
And far from the rhetoric, the great theories
To his task every day, one could say of him
He changed the life

He changed the life

JJ Goldman
French composer/singer



Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has

Margaret Mead

The next step belongs to us all !!!



ありがとう

Arigato * Thank You

Marc.Cloes@uliege.be

References

References

- Center for Disease Control and Prevention (2014). Whole school, Whole community, Whole child. A Collaborative Approach to Learning and Health. Available on : https://www.cdc.gov/healthyschools/wsc/WSCCmodel_update_508tagged.pdf
- Chin, M.-K. & Edginton, C.R. (2014). *Physical Education and Health Global Perspectives and Best Practice*. Urbana, IL: Sagamore.
- Cloes, M. (2016). L'activité physique, cette inconnue. In, G. Ferréol (Dir.), *Egalité, mixité, intégration par le sport – Equity, diversity, integration through sport* (pp. 17-29). Louvain-la-Neuve, Belgique: EME Editions. Available on : <http://hdl.handle.net/2268/203442>
- Cloes, M. (2017a, July). *Health and physical education from a European perspective*. Paper presented at the 22nd Annual ECSS Congress 'Sport Science in a Metropolitan Area'. Essen, Germany. Available on : <http://hdl.handle.net/2268/212658>
- Cloes, M. (2017b). Preparing physically educated citizens in physical education. Expectations and practices. *Retos*, 31, 245-251. Available <http://recyt.fecyt.es/index.php/retos/article/view/53497/32304>
- Cox, A. E., Smith, A.L., & Williams, L. (2008). Change in Physical Education Motivation and Physical Activity Behavior during Middle School, *Journal of Adolescent Health* 43, 506–513. doi: 10.1016/j.jadohealth.2008.04.020
- Cuypers, K., Lebacqz, T., Bel, S. (2015). Introduction et méthodologie. In, T. Lebacqz & E. Teppers (Eds.), *Enquête de consommation alimentaire 2014-2015. Rapport 1* (pp. 1-35). Bruxelles: WIV-ISP.
- Deci, E. L., & Ryan, R. M. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67.
- Haag, H. (2004). *Research Methodology for Sport and Exercise Science. A comprehensive Introduction for Study and Research*. Schorndorf: Verlag Karl Hofmann.

- Haerens, L. (2013, July). *Physical education teachers inspiring young people towards a physically active lifestyle?!: Motivational dynamics in physical education*, Paper presented at the 2013 AIESEP International Conference 'Physical education and sport: Challenging the future', Warsaw, Poland.
- Haerens, L., Kirk, D., Cardon, G., & De Bourdeaudhuij, I. (2011). Toward the Development of a Pedagogical Model for Health-Based Physical Education, *Quest*, 63:3, 321-338.
<http://dx.doi.org/10.1080/00336297.2011.10483684>
- Lepage, S., Cloes, M., & Rompen, J. (2020 Février). *Analyse de la participation d'adolescents en surcharge pondérale à un projet visant à promouvoir l'activité physique*. Communication orale présentée lors de la 11^{ème} Biennale de l'Association pour la Recherche sur l'Intervention en Sport : 'Former des citoyens physiquement éduqués : Un défi pour les intervenants en milieux scolaire, sportif et des loisirs'. Université de Liège, Liège, Belgique. Available on : https://events.uliege.be/sepaps2020/wp-content/uploads/sites/40/2020/03/aris_2020_session_4_salle_5_lepage.pdf
- Martens, R. (2004). *Successful Coaching* (3rd edition). Champaign, IL : Human Kinetics.
- McLennan, N. & Thompson, J. (2015). *Quality Physical Education. Guidelines for Policy-Makers*. Paris, France : UNESCO.
- Pacte pour un enseignement d'excellence (2017). *Avis N° 3 du Groupe central*. Available on : http://www.pactedexcellence.be/wp-content/uploads/2017/04/PACTE-Avis3_versionfinale.pdf
- Pate, R., O'Neill, J., & McIver, K. (2011). Physical activity and health: Does physical education matter? *Quest*, 63(1), 19-35.
- Reeve, J., Deci, E.L., & Ryan, R.M. (2004). Self-determination theory: a dialectical framework for understanding socio-cultural influences on student motivation. In D.M. McInerney & S. Van Etten (Eds.), *Big Theories Revisited*, Greenwich, CT, Information Age Press, 31-60.
- Sarrazin, P., Tessier, D., & Trouilloud, D. (2006). Climat motivationnel instauré par l'enseignant et implication des élèves en classe : l'état des recherches. *Revue française de pédagogie*, 157, 47-177. Available on : <http://rfp.revues.org/463>

- Snyers, J., Halkin, A.-S., Lejacques, T., Schmit, J., Williot, J., Cloes, M. (2014). Multidimensional Analysis of the Importance Given to Physical Activity Promotion in Secondary Schools of French-Speaking Belgium. *The Global Journal of Health and Physical Education Pedagogy*, 3, 3, 212-227. Available on Internet: <http://hdl.handle.net/2268/171066>
- Tappe, M.K. & Burgeson, C.R. (2004). Physical Education: A Cornerstone for physically active lifestyles. *Journal of Teaching in Physical Education*, 23(4), 281-299.
- Telama, R., Yang, X., Leskinen, E., Kankaanpää, A., Hirvensalo, M., Tammelin, T., Viikari, J.S., & Raitakari, O.T. (2014). Tracking of physical activity from early childhood through youth into adulthood. *Medicine & Science in Sports & Exercise*, 46, 5, 955-962. doi: 10.1249/MSS.0000000000000181
- Theunissen, C., Westenbohm, S., & Cloes, M. (2020 Février). *Avis des étudiants et du formateur quant au respect des principes PAMIA lors d'un cycle de gymnastique associé à un carnet de suivi de cours*. Communication affichée présentée lors de la 11^{ème} Biennale de l'Association pour la Recherche sur l'Intervention en Sport : 'Former des citoyens physiquement éduqués : Un défi pour les intervenants en milieux scolaire, sportif et des loisirs'. Université de Liège, Liège, Belgique. Available on : https://events.uliege.be/sepaps2020/wp-content/uploads/sites/40/2020/03/aris_2020_poster_theunissen_et_al.pdf
- TNS opinion & social (2017). Special Eurobarometer 472 – Wave EB88.4. Brussels, Belgium: European Union. Available on : https://ec.europa.eu/health/nutrition_physical_activity/eurobarometers_fr doi:10.2766/599562
- Turcotte, S., Desbiens, J-F., Trudel, C., Demers, J., & Roy, M. (2011). L'inclusion de l'éducation à la santé dans les programmes canadiens d'éducation physique. *Revue PhénexEPS*, 3(1), 1-21.
- Van Reusel, B., Renson, R., Lefevere, J., Beunen, G., Simons, J., Claessens, A., Lysens, R., Van den Eynde, B. & Maes, H. (1990). Sportdeelname. Is jong geleerd ook oud gedaan? BLOSO, *Sport*, 32, 3, 68-72.
- www.designedtomove.org (2012). Designed to move. A physical activity action agenda. Beaverton, OR: Nike.

- 02 - <https://www.pausecafein.fr/culture/illustration-droles-evolution-homme-technologie.html>
- 05 - <https://www.hubertybreyne.com/fr/herge-studios/dessin/la-belgique-malgre-tout>
- 15 - https://www.123rf.com/photo_45100570_stock-vector-question-mark-question-words-concept.html
- 17 - <https://www.triwnnews.com/columns/welcome-to-the-future-or-at-least-2020/>
- 21 - <https://www.gchatelain.com/post/apprendre-%C3%A0-avoir-tort-pour-%C3%A0tre-mieux-dans-ses-baskets-et-%C3%A0tre-plus-efficace>
- 22 - <https://www.learning-petals.com/2018/03/7-simple-steps-for-keeping-teeth.html>
- 26 - <https://www.wallpaperflare.com/search?wallpaper=thumbs+up>
- 30 - <https://lukeshadbolt.com/maelstrom-2016>
- 31 - <https://www.educatout.com/activites/themes/les-chiffres.htm>
- 32 - <https://www.les-aventures-de-la-famille-bourg.com/2014/05/compter-ses-doigts-us-vs-fr/> (idem 36/62/76)
- 38 - <https://sportpourelavie.ca/litteratie-physique/>
- 41 - <https://betweenfriends.ab.ca/inclusive-pathways-physical-literacy/>
- 44 - <http://www.juanico.fr/2014/09/24/commission-denquete-sur-les-difficultes-du-monde-associatif-trois-nouvelles-tables-rondes/>
- 45 - <https://managersante.com/2017/12/29/connexions-familiales-une-premiere-en-france-pour-la-psychoeducation-familiale-des-tpl/>
- 46 - <https://www.paperblog.fr/2983521/petits-trucs-utiles/>
- 48 - <https://sierra.mmhc.net/bouger.html>
- 49 - <http://www.snepfsu-guadeloupe.net/2018/03/16/la-situation-de-leps-greve-du-22-mars-et-mutations-intra-2018/>
- 50 - <http://www.wtsfirstaid.co.uk/automated-external-defibrillator-course/>
- 51 - <http://goaconference.org/awards/goa-citation/?tag=mental-health>
- 52 - <https://antoniomorenosanch.wixsite.com/supercapacitados/juegos>
- 53 - https://webboulari.ac-noumea.nc/IMG/pdf/carnet_concois_tes_propres_entraitements_au_poids_de_corps_1_.pdf
- 54 - <https://www.dhnet.be/sports/omnisports/nina-derwael-il-faudra-un-peu-de-temps-pour-s-en-remettre-5e7b2cdcd8ad58163167984c>
- 54 - <https://fr.metrotime.be/2016/08/14/must-read/rio-2016-a-21-ans-nafissatou-thiam-est-championne-olympique-de-lheptathlon/>
- 54 - <https://twitter.com/Hockeybelgium/status/956052174802505728>
- 55 - <https://patimes.org/does-the-public-sector-experience-real-accountability/>
- 56 - <https://www.buzzfeed.com/christopherhudspeth/15-new-mandela-effect-examples-that-are-going-to-turn-your>
- 58 - <https://lipreadingmom.com/2019/10/11/what-is-equity-a-look-at-inclusion-from-a-teacher-with-hearing-loss/>

- 59 - <http://reppop69.fr/une-activite-physique-adaptee-familles/>
- 60 - <http://www.houghtonregisprimary.co.uk/values-and-ethos/>
- 62 - <http://www.dragynstudios.com/about/approach/>
- 63 - https://en.wikipedia.org/wiki/Self-determination_theory
- 70 - <https://www.winterstreehouse.com/forms-and-resources>
- 70 - <https://fr.wikimini.org/wiki/Fichier:Point-d%27interrogation-Quiz.png>
- 72 - <http://www.piperhillschool.net/teacher-training>
- 74 - <https://www.youtube.com/watch?v=cTqXLSpvS30>
- 76 - <http://www.businessobjectif.com/idees-de-petits-business-rentables-avec-peu-dinvestissement/>
- 77 - https://fr.freepik.com/vecteurs-libre/concept-travail-equipe-personnes-tenant-pieces-puzzle_1832493.htm#page=1&query=puzzle%20personnes&position=16
- 78 - <https://slabrosemont.org/project/badminton-cours/>
- 83 - <https://sspjphysicaleducation.weebly.com/health.html>
- 88 - <https://www.ouest-france.fr/leditiondusoir/data/929/reader/reader.html#!preferred/1/package/929/pub/930/page/20>
- 89 - http://www.sighthoundfilms.org/p/blog-page_16.html
- 90 - <https://www.pinterest.com/pin/299278337728935381/>