

SYMPOSIUM

Éducation physique et sportive, entre développement durable et Anthropocène : forces, faiblesses, opportunités et menaces.

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ARIS 2024

Revue de portée : **éducation à la durabilité** & éducation physique

Quelles prises en compte du **changement climatique** par les **enseignants d'EPS** ?

Évaluation des **compétences d'action** et de la **valeur environnementale** de **futurs enseignants**

Éduquer à l'environnement : quelles innovations en EPS ? Analyse de l'expérience des **élèves** dans un dispositif en course d'orientation environnement.

Redéfinir la **santé** pour redéfinir l'EPS ?

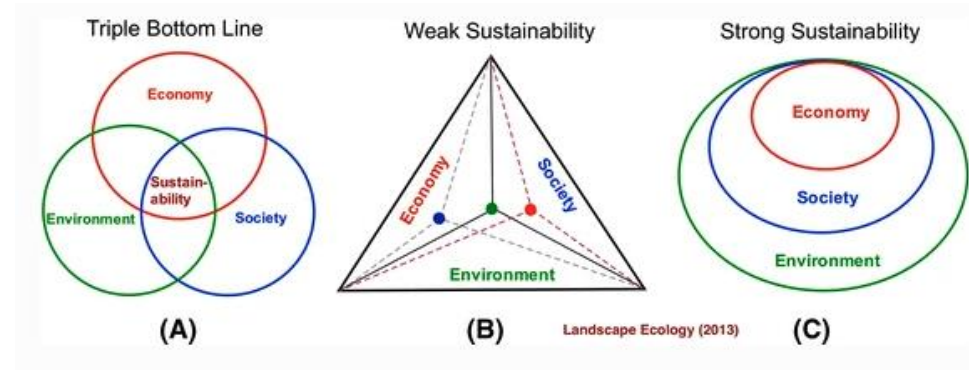
Implementing an innovative education for sustainability through physical education : a systematic scoping review

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O. Vors
V. Cece
V. Lentillon-Kaestner

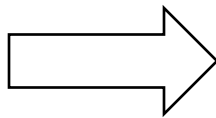


Sustainability: A Complex and Controversial Concept

"meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs" (Bruntland, 1987, p. 292).



Wu, 2013

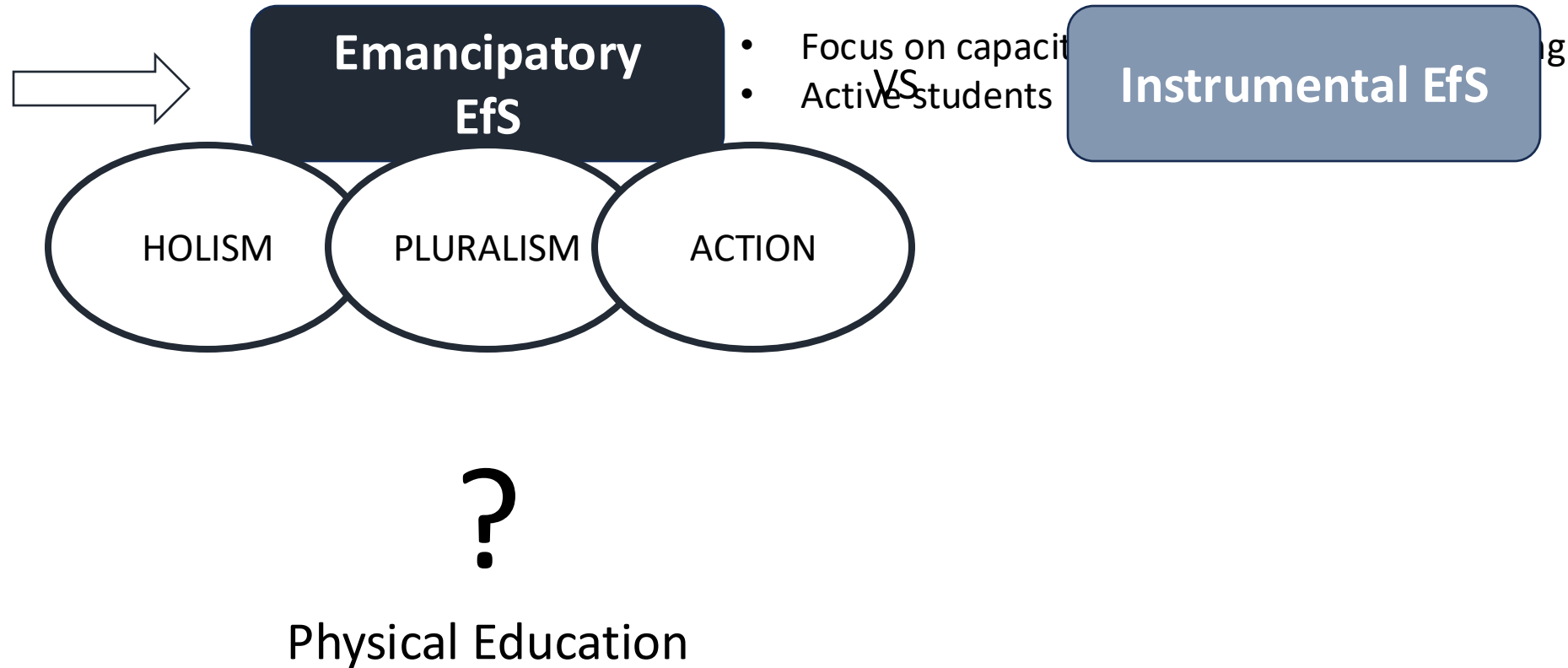


- Three linked & non- substitutable dimensions
- Temporally and spatially defined
- Requires individual and structural levels of action

Education for sustainability

Education for Sustainability: An Emergent Fragmented Concept

To cultivate **skilled and active citizens**, informed and **motivated** to live sustainably and contribute to a more sustainable society (Carbach & Fischer, 2017)



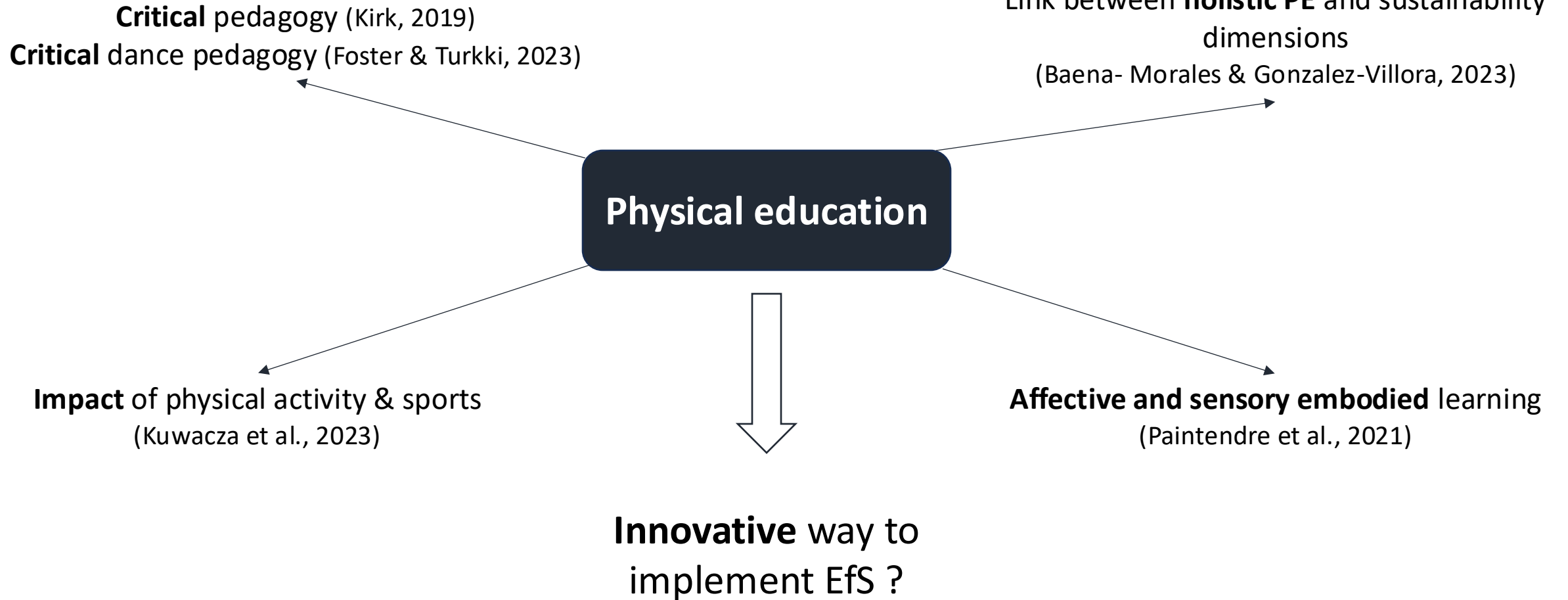
Introduction

Methods

Results & Discussion

Conclusion

Education for Sustainability in Physical Education



5-step methodological framework (Arksey & O'Malley, 2005)

(1) Research Questions

- Kind of research on EfS & PE topic
- Implementation of EfS learning sequences in PE classes

(2) Identifying relevant studies (PRISMA-ScR) (Tricco et al., 2018)

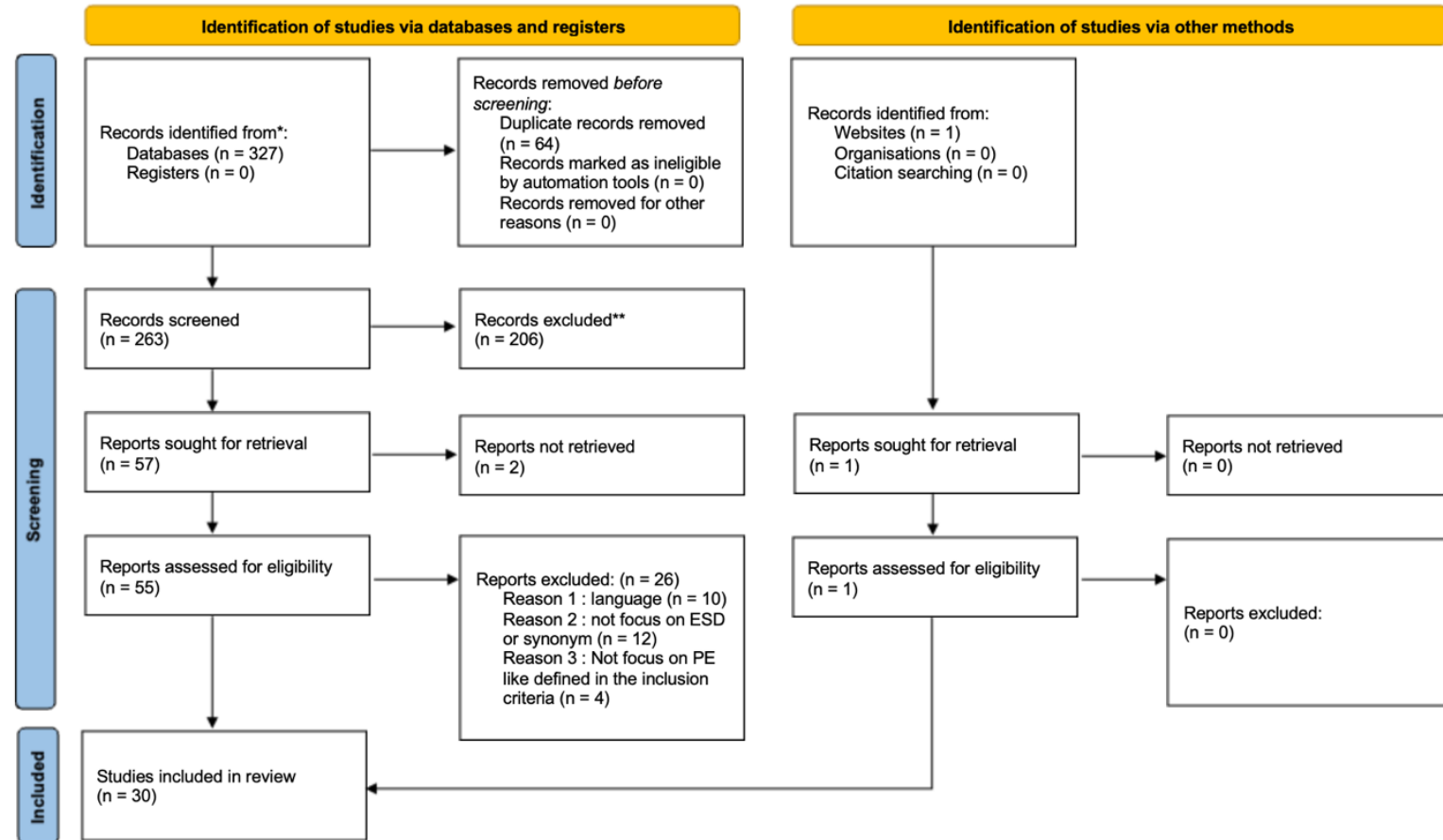
(3) Study selection

(4) Organizing the data

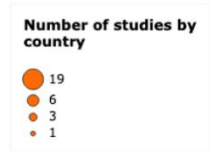
(5) Collating, Summarizing, and Reporting the results

Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
EfS (or synonym) mentioned explicitly and linked with PE	Authors do not adopt an EfS approach
Focus on PE in an educational context (primary, secondary (including upper secondary school), higher education)	Focus on PA or sports
Peer-reviewed	Not peer-reviewed, book, book chapter
Article published in English	Article published in a language other than English

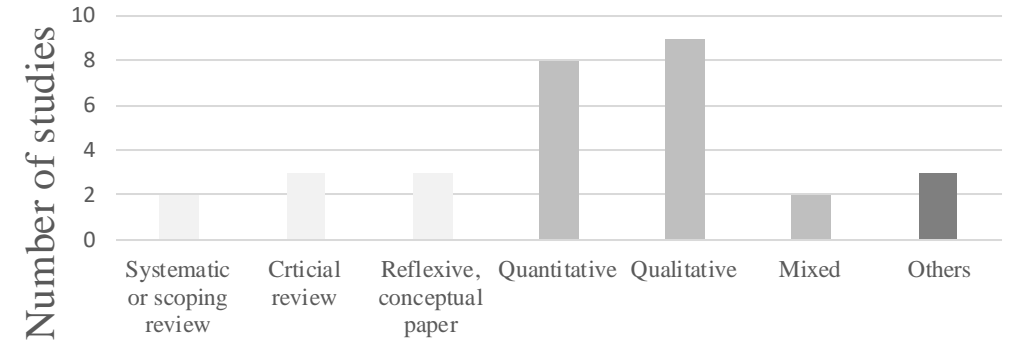


Mapping of the Literature Concerning EfS in PE: Recent and Diverse Research Focused in Europe



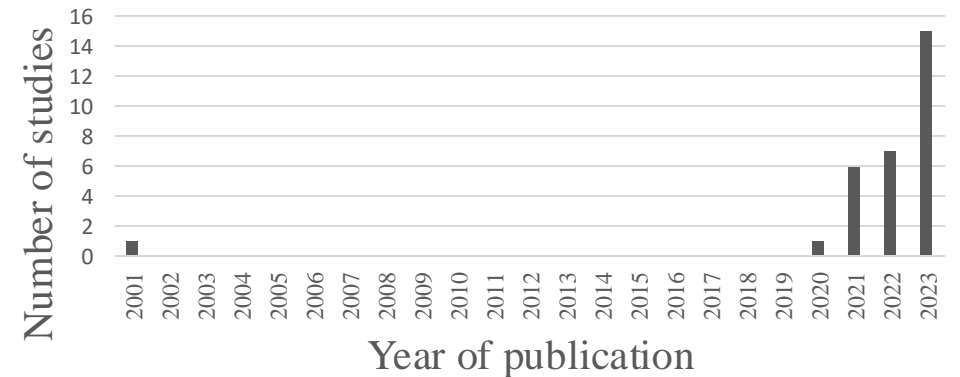
basemap from Natural Earth (CC0)

Types of studies included in the scoping review



Types of studies

Year of publication of the studies include in the scoping review



Assessment of the studies included

Review		Opinion		Quantitative		Qualitative		Questionnaire validation	
Quartile	Score	Quartile	Score	Quartile	Score	Quartile	Score	Quartile	Score
100% Q1	3.6	100% Q1	4.33	25% Q1	3.75	73,6% Q1	3.73	0% Q1	3.75

Research Results on EfS in PE: a Thematic Presentation

PE and Education for the Sustainable Development Goals (SDGs)

- Link SDGs & **PE** : 52 of the 169 targets related to PE (Baena-Morales & Ferriz-Valero, 2023)
- **Perception of PE teachers** to contribute to SDGs : SDG 3, 4, 5 & 10 (Merma-Molina et al., 2023)
- Link SDGs & **PE curriculum** : SDG 3, 4, 5, 10 & 16 (Fröberg & Lundvall, 2022)

SDGs Framework **Omnipresent**



Avoid a **fragmented vision** of the SDGs

Adopt a **critical approach** to SDGs



Research Results on EfS in PE: a Thematic Presentation

Education for sustainability in the PE programs

Few explicit references to sustainability or EfS in PE programs :

- Australian context (Olive & Enright, 2021)
- Swedish context (Fröberg & Lundvall, 2022 ; Fröberg et al., 2023 ; Lundvall & Fröberg, 2023)

Failure of the UN Decade of ESD

Difficulty of introducing EfS in the **K-12 curriculum**

Research Results on EfS in PE: a Thematic Presentation

PE teachers facing Education for sustainability

- **Misconception / misunderstanding** of the sustainability and EfS concepts (Lohmann & Goller, 2023 ; Baena-Morales et al., 2022, Merma-Molina et al., 2023)
- ... BUT **high perception of competence** related to sustainability (Baena-Morales et al, 2023), in particular in social dimension (Fröberg et al, 2022) ...
- High level of **sustainability consciousness** (Baena-Morales et al, 2021) ; **positive attitude** toward EfS (Lohmann et al, 2023) ; **importance** to implement EfS (Lohmann & Goller, 2023) ...
- ... BUT few teachers had taught about sustainability in PE classes (26%) (Fröberg et al, 2022)

Necessity for **initial and continuing specific training**

Some avenues : service-learning (Garcia-Rico et al, 2021), body communication (Arteaga-Checa et al., 2022)

Research Results on EfS in PE: a Thematic Presentation

Implementing education for sustainability in PE classes

- Improved **environmental awareness** : self-construction of materials (Botella et al., 2022) ; plogging (Martinez-Mirambell et al., 2023a et 2023b)
- Working on **social competences** : cooperative learning competences (Bassachs et al, 2020) ; social and emotional skills (Delgado-Montoro et al, 2022 ; Lavega-Burgues et al., 2023 ; Martinez et al, 2023)
- 1 protocol paper with a holistic approach to EfS in PE (Bucht et al, 2022)

Lack of **holistic** dimension

Lack of **pluralism**

Lack of explicit reference to **sustainability contents** (social dimension)

Absence of **motor / physical dimension** (measure, methods)

Research recommendations :

(1) PE teachers:

- Levers and barriers
- Initial and in-service training programs

(2) Emancipatory, holistic, pluralist and action-centered EfS learning sequences in PE

(3) Body and embodied learning in EfS

(4) Specific assessment tools

Practical implementation :

(1) Institutional leaders

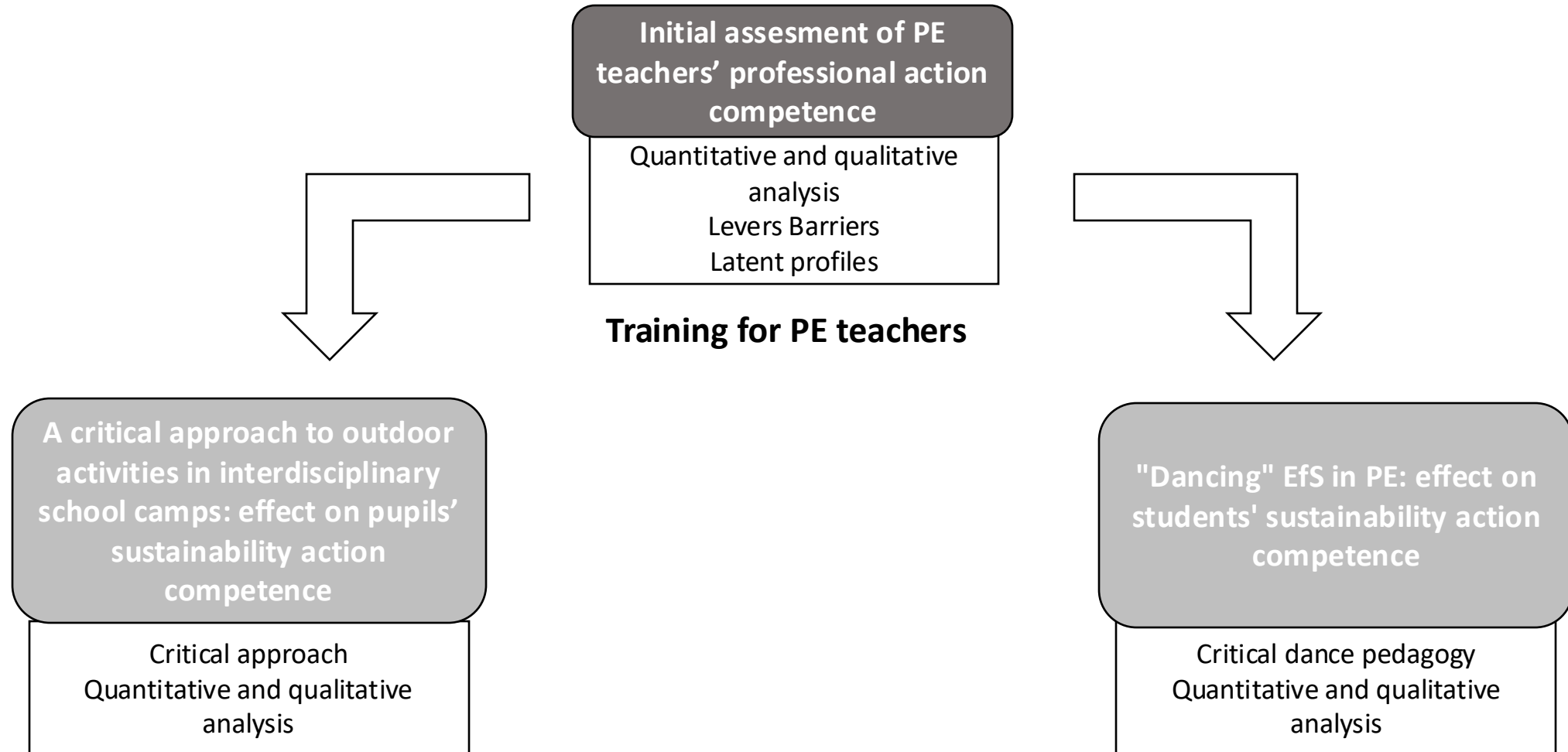
(2) Integrate **specific training** on EfS in PE into both initial and in-service training of PE teachers.

(3) Promote a **collaborative pedagogical approach** among teachers

(4) Take a **holistic approach to EfS**, addressing the complex interrelationships between environmental, social and economic dimensions.

SUSTAINABILITY ACTION COMPETENCE Sass et al, 2020

Develop students' knowledge, willingness and self-efficacy to take action in order to solve sustainability issues



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