

COGNITIVE ACTIVATION VS. MOVEMENT TIME: FINDINGS OF A PARTICIPATORY GROUP MODEL BUILDING WITH PE STAKEHOLDERS

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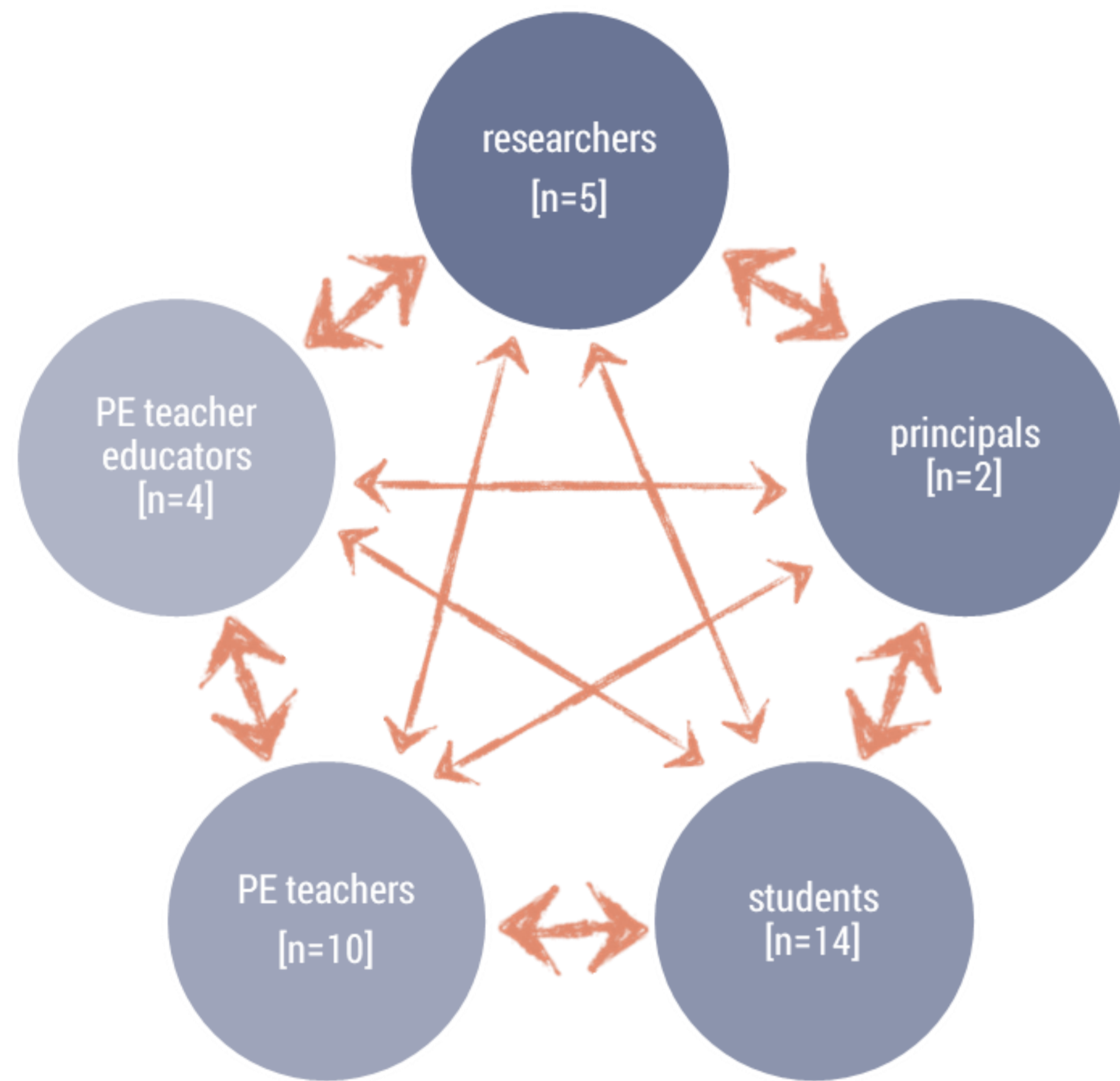
INTRODUCTION

Cognitive-reflective dispositions such as knowledge are regarded as essential facets of students' physical literacy (Cale & Harris, 2018; Ennis, 2015). Approaches such as cognitive activation or cognitive engagement can foster the development of this dimension (Wang et al., 2019). However, some studies show difficulties in the realization of a cognitive-reflective activating PE (Bröcheler & Pfitzner, 2014; Nathan, 2016; Ptack, 2019).

This study explores the question of what reasons PE stakeholders see in the sometimes scarcely cognitive-reflective activating PE.

METHODS

We initiated four Cooperative Planning groups including overall 35 stakeholders of PE (e.g. pupils, PE teachers, sports scientists). Cooperative Planning is a participatory approach that fosters „Interactive-Knowledge-2-Action“ (Rütten et al., 2017).



At the beginning of the planning process, participants were involved in a **Group Model Building** (Bergmann et al., 2012). All PE stakeholders were asked about hypotheses on the following questions:

Why are PE lessons often not cognitively activating to the extent necessary to develop students' health-related knowledge and understanding?

- 1) **Models of four planning groups** (group model building)
 - Individuals presented their hypotheses within the groups.
 - Each group developed a model of factors that may contribute to the problem.
- 2) **Meta-models** developed in two researcher groups.
- 3) **Qualitative content analysis** based on discussion protocols and audio recordings.

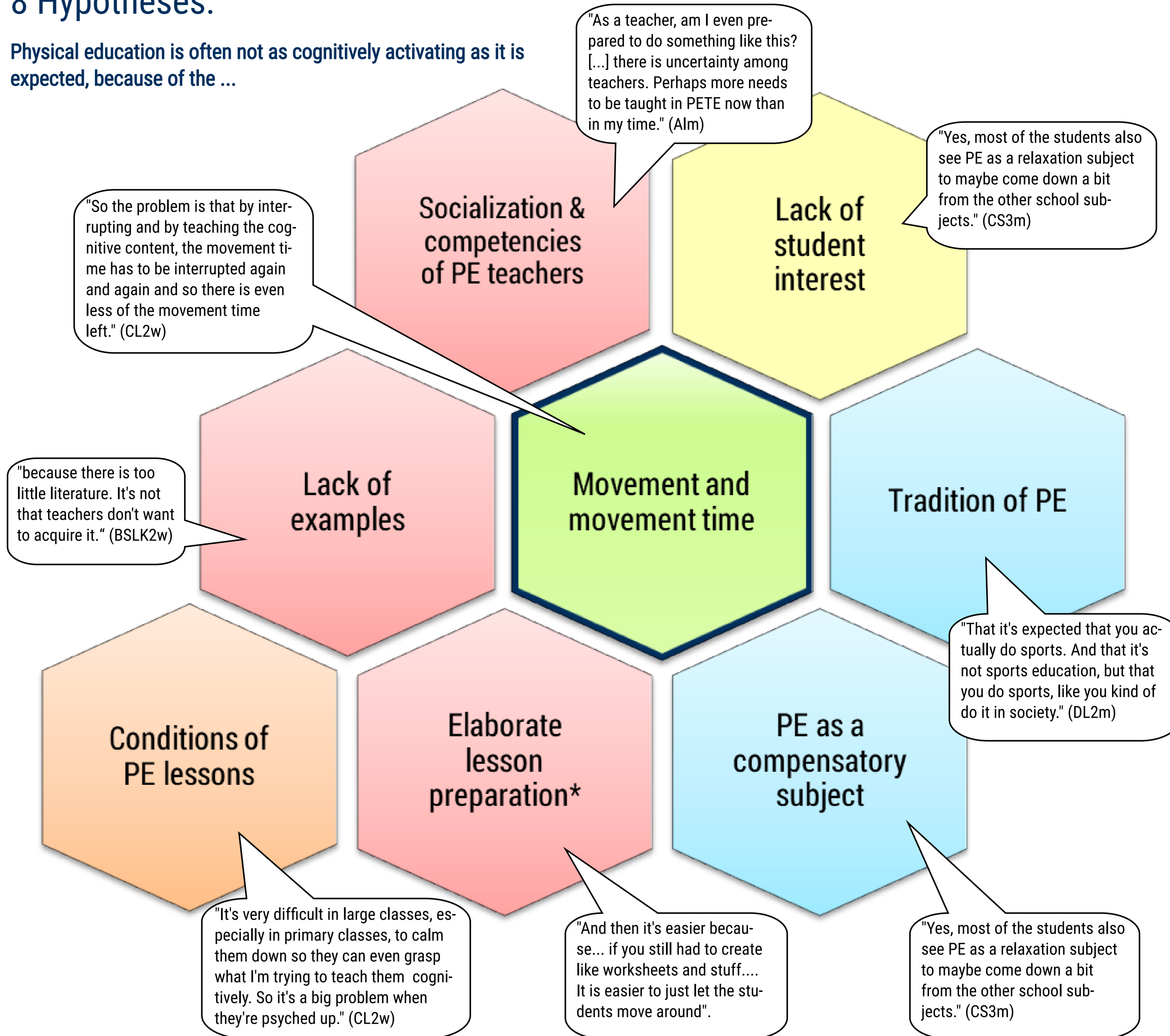
Selected references:

Bergmann, M., Jahn, T., Knobloch, T., Krohn, W., Pohl, C., & Schramm, E. (2012). *Methods for Transdisciplinary Research: A Primer for Practice*. Campus.
Wang, Y., Chen, A., Schweighardt, R., Zhang, T., Wells, S. & Ennis, C. D. (2019). The nature of learning tasks and knowledge acquisition: The role of cognitive engagement in physical education. *European Physical Education Review*, 25, 293-310.

FINDINGS

8 Hypotheses:

Physical education is often not as cognitively activating as it is expected, because of the ...



Movement time was dominantly listed as an important component of PE and at the same time understood as a 'counterpart' to cognitive activation. This is not only made clear by the PE teachers, but also by the students. In that sense, PE is also regarded as an instrument to compensate a lack of pupils' movement time during a school day. Furthermore, stakeholders see reasons partly in a limited didactic knowledge of the PE teachers. Both PETE and the current lack of further training opportunities are held responsible for PE teachers not being fully capable of teaching a cognitive-reflective activating PE. Consequently, PE stakeholders either follow different goals in PE or they simply don't see the possibilities to implement it.

DISCUSSION

The present findings emphasize that the stakeholders' understanding of the goals of physical education sometimes diverges strongly from the educational demands of PE and largely ignore the promotion of knowledge acquisition and knowledge utilisation. In line with other research, cognitive-reflexive PE and movement time seem to exist in an antinomial interrelation (Chen et al., 2018).

Despite the fact, that a cognitive-reflective activating PE has been proved to be feasible and effective in some studies (Chen et al., 2018; Nathan & Haynes, 2013), further consequences need to be taken into consideration: Further debates are necessary to clarify the goals of PE in detail and spread them in PETE as well as the related teaching didactics. In addition, physical activity needs to be discussed as an overall objective of schools and not only in PE functioning as a compensatory valve.

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