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To cite this article: Erik Backman, Mikael Quennerstedt, Björn Tolgfors & Gunn Nyberg (08 Sep 2023): Peer assessment in physical education teacher education – a complex process making social and physical capital visible, Curriculum Studies in Health and Physical Education, DOI: [10.1080/25742981.2023.2256327](https://doi.org/10.1080/25742981.2023.2256327)

To link to this article: <https://doi.org/10.1080/25742981.2023.2256327>



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Published online: 08 Sep 2023.



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Peer assessment in physical education teacher education – a complex process making social and physical capital visible

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ABSTRACT

Peer assessment has been proven to improve learning for both the observer and the observed. One dimension of peer assessment that has been given little attention in the context of physical education teacher education (PETE) is the tension that exists when peers give feedback on each other's work. In this paper, we report on Swedish preservice teachers' (PST) views on peer assessment used in PETE school placements. Our findings reveal four mechanisms of peer assessment assigned value in PETE: (i) building social relations, (ii) making 'what to learn' visible, (iii) giving correct feedback, and (iv) handling sensitive and gendered comments. Inspired by Bourdieu, we discuss learning potentials and complex challenges with peer assessment, where the combination of *social capital* and *physical capital* decides what is possible to say and to whom when peer assessment is used in the PETE school placement and in school physical education (PE).

KEYWORDS

Physical education teacher education; peer assessment; social capital; physical capital

Introduction

Assessment for Learning (AfL) is a well-established model for assessment that improves learning in higher education (Knight, 1995; Sambell et al., 2012). This is also argued to be the case within physical education teacher education (PETE) (Eather et al., 2017; Macken et al., 2020; Patton & Marty-Snyder, 2014; Tolgfors et al., 2021) and within school physical education (PE) (MacPhail & Halbert, 2010; Tolgfors, 2018). A key AfL learning strategy is to activate peers as resources for learning, sometimes operationalised as *peer assessment* (Thompson & Wiliam, 2007). In PETE, which is the research context for the study reported in this paper, peer assessment (or peer-assisted learning in a broader sense) has been proven to improve learning for both the observer and the observed (Eather et al., 2017; Lamb et al., 2013).

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One dimension of peer assessment that has been given little attention in the PETE context (Macken et al., 2020), but that has been highlighted in research on peer assessment in general teacher education (see, for example, Kilic, 2016; Sluijsmans et al., 2002; Tait-McCutcheon & Knewstubb, 2018; Wen & Tsai, 2008), is the tension that exists when peers give feedback on each other's work. According to Kilic (2016), PSTs 'do not feel comfortable when critiquing another student' (p. 137) and Tait-McCutcheon and Knewstubb (2018) argue that 'peer assessment could reflect friendships more than learning outcomes' (p. 773). Further, it has been highlighted that it is not only the observer who feels uncomfortable when giving honest feedback but also the peers receiving the feedback (Wen & Tsai, 2008).

Research further demonstrates a complexity with regards to the potential for peer assessment in PETE. On the one hand, PSTs talk about how giving peers feedback creates a positive, safe, equal, and relaxed learning environment (Lamb et al., 2013) and peer assessment reportedly increases competence, confidence, and self-efficacy among PSTs (Eather et al., 2017). On the other hand, a study by Macken and colleagues (2020) reported that PSTs believe their pupils would be unkind to each other if they (the pupils) were to use peer assessment during PETE school placement. In this paper, we aim to further explore the complexity of peer assessment in PETE in order to gain a deeper and more differentiated understanding of this phenomenon as an answer to the call for more knowledge about assessment strategies in PETE (Scanlon et al., 2023).

Our overall aim is to contribute with knowledge about how PSTs in PETE, and as a consequence, pupils in school PE, can be employed as resources for learning without risk of causing harm. This is done through an investigation of Swedish PSTs' views on different forms of peer assessment used in PETE school placements and how these forms of peer assessment are discussed for use in school PE. Two research questions have guided the study and our analysis: (i) What mechanisms of peer assessment are assigned value (or not) in the PETE school placements? (ii) What functions do the identified mechanisms have in PETE school placement?

With *mechanisms* we mean assessment processes in which peer assessment take place in the practice of PETE school placement. According to Hay and Penney (2013), assessment strategies provide mechanisms for assigning value to certain privileged positions in education. We will discuss our results in relation to different forms of Bourdieu's concept symbolic capital (Bourdieu, 1990; Broady, 1990), more precisely *social capital* (Beames & Atencio, 2008) and *physical capital* (Redelius & Hay, 2009), to direct our attention to how value is assigned to different mechanisms of peer assessment and thus how certain types of behaviour, bodies and movements are assigned value in PETE school placement.

Activating peers as resources for learning

In recent decades, AfL has been proven to enhance learning in schools (Wiliam & Leahy, 2015) and in higher education (Sambell et al., 2012). AfL builds on five key strategies that according to Wiliam (2011) regulates learning processes: (1) sharing learning intentions with students, (2) engineering effective classroom discussions, tasks, and activities, (3) providing feedback, (4) activating students as learning resources for one another, and (5) activating students as owners of their own learning. In the study reported in this paper, we focused on the fourth key strategy. More specifically, we ask what mechanisms

are assigned value in peer assessment in the PETE school placement as well as how these mechanisms function.

Several studies of general teacher education reveal that peer assessment is complex and that has both strengths and weaknesses (Kilic, 2016; Sluijsmans et al., 2002; Tait-McCutcheon & Knewstubb, 2018). Wen and Tsai (2008) claim that ‘training in peer assessment can enhance teachers’ ability to design assessments, to communicate with others, and to respect and respond to peers’ opinions in the work field’ (p. 56). Further, Lynch and colleagues (2012) suggest that peer assessment supports deep learning. The limitations and risks that come with peer assessment are also well documented in teacher education research. Studies have shown that the act of giving feedback and critique to friends is difficult and that PSTs doubt their peers’ objectivity (Kilic, 2016; Sluijsmans et al., 2002). Furthermore, it has also been claimed that peer assessment is stressful and only supports surface learning (Tait-McCutcheon & Knewstubb, 2018).

There are few studies specifically on peer assessment in PETE. Eather et al. (2017) report that in general, PSTs ‘valued and respected the different perspectives provided by their peers’ (p. 79). Patton and Marty-Snyder (2014) emphasise that peer assessment should not replace feedback from the teacher educator but that it is a ‘pedagogically sound method to help PSTs gain assessment skills and receive more feedback on their teaching skills’ (p. 30). However, Macken et al. (2020) show that PSTs fear negative feedback from their peers and argue for the importance of reflecting on the complexity of peer assessment rather than focusing solely on the benefits. This variation in results raises questions about *what* mechanisms PSTs assign value when they use peer assessment in the PETE school placement. In addition, it raises questions about *how* peer assessment can be used to improve learning (Scanlon et al., 2023).

Although our own study focuses on PSTs’ views on peer assessment in the *PETE school placement*, the complexity surrounding peer assessment in *school PE* is important when it comes to an understanding of the consequences that PETE might have for school PE. In school PE, AfL has been put forward as a potential solution to the lack of alignment between the aim, the content and the assessment involved in the teaching process (see, for example, Hay & Penney, 2013; MacPhail & Halbert, 2010). According to Chng and Lund (2018), ‘peer assessment can benefit both the observers and the learners. While the learners learn by doing, the observers learn by observing, analysing performance, and giving performance-related feedback’ (p. 32). Gibbons and Kankkonen (2011) found that involving pupils in peer assessment provides more ways to receive and give feedback compared to if teachers are to give the feedback by themselves. However, Tolgfors (2018) has proven that AfL can have different educational consequences depending on teachers’ interpretation. As Nurmi and Kokkonen (2015) report, pupils can be overly self-critical and embarrassed by their mistakes while teaching. In a study by Leirhaug and Annerstedt (2016), many of the PE teachers participating in their study were not open to peer assessment, and participating pupils felt it was difficult to be honest to their peers.

Research displays that certain types of behaviours, bodies and movements are assigned value when peer assessment is used in PETE school placement and in school PE. In this study, we turn to Bourdieu and the concepts *social capital* (Beames & Atencio, 2008) and *physical capital* (Redelius & Hay, 2009) to direct our attention to how value is assigned to different mechanisms of peer assessment in PETE school placement.

Social and physical capital

Capital, in the Bourdieusian sense, has been defined as ‘what social groups recognise as valuable and assign value’ (Broady, 1990, p. 171, authors’ translation). Together with the concepts *habitus* and *social field*, Bourdieu used capital to illustrate how positioning in a field could give ‘access to the specific profits that are at stake in the field, as well as by their objective relation to other positions’ (Bourdieu & Wacquant, 1992, p. 97). Academic knowledge and course exams can accordingly constitute *cultural capital*, and material items and financial resources can constitute *economic capital*. The reproduction and accumulation of cultural and economic capital can be transferred into different forms of *symbolic capital*. By symbolic capital, Bourdieu (1990) refers to what is recognised as valuable in a certain social context and this capital can be constituted for example by knowledge, contacts, behaviours and expressions (Bourdieu, 1990). Whether the individual habitus is valid as symbolic capital is determined in the social context, i.e. on the field, where the individual is active (Bourdieu & Wacquant, 1992).

Two forms of symbolic capital that have been used in Bourdieu-inspired studies of outdoor education and PE are *social capital* (Beames & Atencio, 2008; Pang et al., 2018) and *physical capital* (Redelius & Hay, 2009). In line with these scholars, we use social capital and physical capital to discuss *what* mechanisms are assigned value, and *how* these mechanisms function in peer assessment in PETE school placement (Hay & Penney, 2013). With regards to social capital, we use the following definition:

From a Bourdieusian perspective, social capital, in various amounts and forms, is accrued by individuals through their investments in particular social relationships. This perspective suggests that institutions play a crucial role in developing social networks that can be drawn upon by individuals to garner social capital. (Beames & Atencio, 2008, p. 101)

As highlighted by Beames and Atencio (2008) as well as other researchers (Pang et al., 2018; Redelius & Hay, 2009), sport and PE are two institutional contexts that contribute to the development of social capital. We suggest that *social capital* can help explain the role that social relationships play when PSTs or students are to give feedback to each other. For example, what can they say and what can they absolutely not say to their peers, and what role does friendship play in this?

Researchers have used the concept *physical capital* to discuss the central role of the body, bodily appearance and bodily movement in PE and sport (Kennedy et al., 2020; Redelius & Hay, 2009; Shilling, 2004). According to Redelius and Hay (2009), those who possess physical capital are ‘the physically able students’, and physical capital can be constructed as ‘performance (the high standard of movement execution) and appearance (the body shape and its health and fitness symbolism)’ (pp. 286–287). Some researchers have specifically highlighted that the dominant classes with amassed financial and cultural resources are better equipped to acquire physical capital (Kennedy et al., 2020).

In this study, social and physical capital have helped us frame how certain behaviours, bodies and movements are assigned value when peer assessment is used in PETE school placement and to discuss the findings in this study. The specific purpose of the study reported has been to investigate what mechanisms of peer assessment that are assigned value in the PETE school placements and what functions the identified mechanisms do have in PETE school placement.

Methodology

The Swedish PETE context and the project design

Sweden has eight PETE institutions that hold the right to award teaching degrees in PE at the secondary and the upper secondary school level (Backman et al., 2020). The study presented in this paper is part of a larger project that aims to explore the importance of PETE in relation to school PE. For the larger project, we have invited PSTs from two Swedish PETE institutions. The PSTs in the larger project were in their final year of studies in order for us to be able to follow them during the transition to their first year as PE teacher. The participants all studied PE as one of two subjects, certifying them to teach up to upper secondary school. Due to reasons of accessibility, the two PETE institutions included in the larger project, are the ones where the authors have, or have had, their main affiliation. In the final year of the program, PSTs at the chosen PETE institutions take one campus-placed course in assessment and one school placement course: these constituted the contexts from which we collected data for the study reported in this paper (Backman et al., 2023).

Participants and collection of data for the study

Four classes from two PETE institutions (two from each uni) participated in the study during a period of two years. From the total of 45 invited PSTs, 21 (10 from uni A and 11 from uni B) accepted to participate and no one was excluded. The collection of data comprised the following datasets:

- (1) Three audio-recorded seminars (90–120 min each) from the campus-based assessment courses. One seminar at uni A (PST A-I) and two at uni B (PST BH-BO at the first, PST BE-BG at the second) that took place *before* the PSTs' school placement. The seminars were about assessment strategies in the PETE school placement and in school physical education, and conversations covered grading as well as assessment for learning (AfL).
- (2) Seven individual semi-structured interviews (each 40–70 min) (Kvale, 1996) conducted *during* visits at the PSTs' school placements (all from uni A, PSTs A-E and H-I). The interviews were uninterrupted, face-to-face, audio-recorded, and took place directly after Researcher 1 (R1) observed the interviewee's lesson. The interview questions focused on assessment strategies during the PETE school placement, and the interviewee was asked to comment on R1's observations.
- (3) Five individual Stimulated Recall (SR) interviews conducted *during* visits at the PSTs' school placement. At uni A there was one SR-interview (PST J) and at uni B there were four SR-interviews (PSTs BH-BK). The interviews were uninterrupted, face-to-face and audio-recorded, and were conducted while the interviewing researcher (either R1 or R3) and the interviewee watched the filmed lesson taught by the interviewee. The interviews followed SR-interview procedure (Vesterinen et al., 2010), the aim being to stimulate the interviewee's reflection on teaching practice during the PETE school placement (Endacott, 2016). While watching the filmed sequences, the interviewer prompted the interviewee with questions related to assessment strategies.

The participating PSTs all practiced various assessment strategies as part of their school placement. Initially, the intention was to conduct individual SR-interviews with all participants. The differences in number of participants with regards to dataset and university were partly due to number of acceptances from PSTs and partly due to the delay in ethical approval for SR-interviews. For the most part, conversations during seminars and interviews dealt with the PSTs' reflections on what it was like to use peer assessment in the PETE school placement and what it would be like for a PE teacher to use peer assessment. Since the questions addressed peer assessment in a PETE school placement context, some PSTs also made parallels with peer assessment in PETE campus courses. Although this study was conducted in a PETE context, the results can be discussed in relation to potential consequences for school PE as well.

Analysis

The whole process of analysis was partly inspired by an *abductive approach* (Alvesson & Sköldbberg, 2017), allowing us to oscillate between theory and data, and partly by interpretations of different forms of symbolic capital (Beames & Atencio, 2008; Pang et al., 2018; Redelius & Hay, 2009). Firstly, a process of *familiarisation* was initiated in which all four researchers were involved. This initial step, which involved reading through the whole data set, was intertwined with a process of *coding*, i.e. identifying and labelling forms of peer assessment used in PETE school placements and how these forms of peer assessment are discussed for use in school PE. Here, the identification of social relations and certain types of bodies and movements as *assigned with value* (Broady, 1990) guided our attention towards *social capital* (Beames & Atencio, 2008; Pang et al., 2018) and *physical capital* (Redelius & Hay, 2009). We then used these concepts to *formulate the final version of our two research questions*: (i) What mechanisms of peer assessment are assigned value (or not) in the PETE school placements? (ii) What functions do the identified mechanisms have in PETE school placement?

In the second step, we conducted an in-depth analysis of the identified mechanisms focusing on the *what-aspects* regarding peer assessment that PSTs assign value (our first research question). Moving to the second research question, we then analysed the functions of the identified mechanisms, answering *how* the identified mechanisms work in PETE school placement. The results were discerned through *careful inclusion and exclusion* of what seemed to fit in the identified themes.

Results

Our analysis reveals four different mechanisms of peer assessment assigned value: (i) building social relations, (ii) making 'what to learn' visible, (iii) giving correct feedback, and (iv) handling sensitive and gendered comments. Within each theme we first describe the mechanism and then the functions it has.

Building social relations

Building social relations is a mechanism assigned value in peer assessment in PETE school placement through social relationships between the PST and the pupils but also

between the pupils themselves and in that sense building trust in the group. In terms of *social relations*, PSTs and pupils need to learn the codes for what behaviour works in certain social contexts so that they can function in future work environments. For peer assessment to work well, there should consequently be ‘good chemistry’ in the relationship between teacher and pupil, and also in the relationship between peers.

- G: I’d also try to make sure that those working in pairs were comfortable with each other.
 D: Yes, exactly!
 G: Because there can be enormous pressure if there is somebody they don’t get along with in the class.
 D: It may not need to even be the case that they don’t get along with them for them to feel uncomfortable being evaluated by the other [pupil].
 G: And it’s hard. You become a kind of amateur psychologist who’s supposed to know who can work with whom. But maybe you can have a sort of disguised wish in some way when you put them into pairs. (PSTs D and G, Uni A, seminar)

In the conversation above, the two PSTs highlight the importance of feeling comfortable and of the peers getting along. This is the case when it comes to not only pupils’ relationships with each other, but also their relationship with the teacher. PST C emphasised the importance of introducing strategies that help pupils build social relationships early on in upper-secondary school (age 16): ‘Because they’re going to be spending three years together, and they need to learn how to help each other because this they’ll need later on in the workplace’ (PST C, Uni A, individual interview).

One important function that the mechanism social relationships have in peer assessment is *building of trust*. As PST J explained, lack of trust from the pupils could be an obstacle when trying to implement peer assessment during school placement: ‘they [the pupils] find it difficult and it is tough, and they don’t have total trust in me’ (PST J, Uni A, individual SR-interview). For the mechanism social relationships to build trust during peer assessment, PSTs, it would seem, need continuity, enough practice and time, and they must invest their time and effort with a teacher guiding them. As PST BI described, ‘when it [peer assessment] is introduced, they [the pupils] may feel a bit, you know, lost. But if you work with it on a continuous basis, then they get used to it’ (PST BI, Uni B, individual SR-interview).

It is obvious that some PSTs feel the odds are against them when they are to use peer assessment during a school placement period that can be two weeks long. However, not all PSTs felt limited during the school placement. One of them (PST BJ, Uni B, individual SR-interview) felt that the fact he was *new and unfamiliar* in relation to the pupils could in fact attract pupils’ attention. Social relationships are an important mechanism for peer assessment to work during PETE school placement. The building of trust between peers, or between the PST and the pupils, is a function that PSTs generally experience as being restricted by the institutional frames of PETE school placement. This sheds light on the meaning that organisational frames can have for PETE school placement.

Making ‘what to learn’ visible

The mechanism making ‘what to learn’ visible is about how certain forms of knowledge, such as sport skills, are assigned value in terms of analysing, demonstrating, and articulating movement ability. This, in turn, makes the feedback intelligible and also shifts the

responsibility for learning. This mechanism was discerned in the discussions of peer assessment in PETE school placement with PSTs. It became clear that *certain forms of knowledge* are assigned value in peer assessment in school PE. One PST described how the pupils' *sport skills* could be assigned value in a hypothetical teaching situation in school PE.

So, there are three boys, and they are fantastic at handball and way more skilled than I am. Because of this, I don't think it's necessary for me to use it [their sport skills]. It's better for me just to talk to them before and just say "it's time for handball, boys, and I know you know how to play handball – but now I want you to focus on this" for example, that they are sort of model players – that they lead the way for the others. (PST E, Uni A, individual interview)

In the example above, it is clear that the sport skills these three handball players possess is a mechanism that gives them certain privileges and positions of power when this sport is to be introduced in school PE. As a rare contrast to the value of sport skills, one PST described how the ability to *analyse movement* could also be a mechanism assigned value, at least hypothetically:

But you can still be really bad at something yet have a good eye for it. (...) Some people are really bad at playing golf but play it and are golf trainers who are good at analysing movement. It can be the same in PE – I might not be a good dancer, but I can still see who is and how they can do something better. (PST BG, Uni B, seminar)

The mechanisms of peer assessment that are assigned value in the PETE school placement context is much about *sport skills*, but that it can also be about *analysing movement*. While the former is primarily communicated through *demonstrating movements*, the latter demands some kind of *articulating ability*.

When addressing the articulation of peer feedback, the PSTs in this study express that pupils need to learn to see and to express *what* in their peers' achievements was good and *how* it can be improved. One PST suggested that for pupils to achieve this, they 'need to sort of build a mutual language' (PST BJ, Uni B, individual SR-interview). Certain forms of knowledge (such as a sport skill or an ability to analyse movements) can function to stimulate learning in peer assessment if pupils are able to *make their feedback intelligible* for their peers. One PST said:

To be able to put words to what it is that's good or what needs to be improved. And that, I think, is really important because good doesn't say that much. Instead, you need to be able to put into concrete terms what it is that was good. Was it the running, the passing, the swimming, the speed? (PST BH, Uni B, individual SR-interview)

It was also expressed that peer assessment could be benefitted by a *shift in the responsibility for learning* from teacher to pupil. One PST described that peer assessment involved 'that pupils must learn to take responsibility for their development. If not, the whole purpose of school will fail' (PST A, Uni A, individual interview). The possession of certain forms of contextually dependent knowledge, whether it may be a sport skill or an analysing ability, can be mechanisms assigned value in peer assessment.

Giving correct feedback

The idea that *giving correct feedback* is important in peer assessment in PETE school placement is a mechanism assigned value by the interviewed PSTs. This mechanism

highlights how of ability are preserved in this process. This idea was clearly illustrated in the conversation with PST J below, whose reflection on what to do when a student (A) gives another student (B) ‘incorrect’ feedback on running technique highlighted the importance of correct feedback.

- R1: But how are you meant to address that then? If you’re the teacher and (...) you hear that there’s disagreement [regarding what is correct feedback]. What are you supposed to do as the teacher?
- J: No, I would have probably, I thought ... that I could have dealt with it better, I think. But if I had the chance to do it all again, I would probably discuss things with them in more detail more than “was it really the heels”? Can we ask the pupil to run again perhaps? Can we watch together, or, does the pupil really run on the heels? You know, really go into details and then review things back and forth so that she gains a different understanding. (PST J, Uni A, individual SR-interview)

PST J obviously faced a dilemma here. In the heat of the moment, he accepted the ‘incorrect’ feedback from pupil A, but in hindsight, J felt that he could have handled the situation differently. It was as if J did not want to say directly what he thought was the correct and incorrect running technique but instead wanted pupil A to reconsider their initial feedback on their own: or, in the words of J, ‘I finally said, half-smiling, that ‘yes, present your critique then’’ (PST J, Uni A, individual SR-interview).

The continued conversation with J about the situation with pupil A (who gave ‘incorrect’ feedback) highlighted the fact there are rules about who is entitled to give feedback and to whom. J said that, ‘it’s that pupil (pupil B, whose technique was evaluated as incorrect) who runs fastest of them all’ (PST J, Uni A, individual SR-interview). From the quotes by J, it would seem that correct feedback has the function of *preserving the hierarchy in the class and keeping the skilled pupils satisfied*. Further, J’s post-reflection on the situation highlights that it could be problematic for pupils to permit the ‘incorrect’ feedback from peers.

Handling sensitive and gendered comments

Handling sensitive and gendered comments is a mechanism involving identifying sensitive comments on pupils’ bodies and ways of moving, and also how to manage these comments when using peer assessment, since assessment of what peers are allowed and not allowed to comment on in the PETE school placement and in school PE becomes a delicate matter.

The identification of sensitive and gendered comments on bodies and movements is important in peer assessment in PETE school placement and was a mechanism assigned value by the PSTs. Examples of statements were ‘the thing about movement and it can be a bit embarrassing, people’s bodies differ, maybe it’s difficult’ (PST BN, Uni B, seminar) and ‘it [commenting on peers’ movements] can be sensitive for them ... it can easily become like critique’ (PST E, Uni A, individual interview). One PST maintained that what peers can or cannot give feedback on may *depend on the activity*. For example, orienteering and ball games were less sensitive sports to comment on, while dance was more sensitive ‘because there is more focus on the body, how a person looks and moves, that sort of thing’ (PST I, Uni A, seminar). The gendered dimension of sensitive comments on peers’ bodies and movements was specifically highlighted. One PST said

it depends on whether or not it's boys or girls – things like that. And then we have our mobiles too, which sometimes make an appearance and then someone moves in a funny way and they can very well end up on Snapchat. (PST BN, Uni B, seminar)

In the best-case scenario, the identification of sensitive and gendered comments on bodies and movements has the function that PSTs can also *manage these comments*. However, the interviews with the PSTs raised some doubts regarding management. After a class with 16-year-old girls who were practising giving each other feedback, one frustrated PST said 'So they stared each other out and laughed mockingly at each other. There was a lot of silliness. Some came at the start of the lesson and totally refused to take part' (PST C, Uni A, individual interview). In the following conversation, PST C expressed lack of knowledge and tools for how to act based on the observation in this matter and this was also common among other interviewed PSTs. The function of the mechanism makes it obvious that for peer assessment 'to work', future teachers in school PE need to manage the sometimes gendered sensitivity that leads to many pupils assigning more value to certain bodies and certain movements than to others.

Discussion

In this study, we take on the challenge presented by Scanlon et al. (2023) to expand on existing knowledge about assessment strategies in PETE. In line with their call, we have focused on PSTs' views on different forms of peer assessment used in PETE school placements and how these forms of peer assessment are discussed for use in school PE. The process of peer assessment can produce and uphold positions of power in the PETE school placement and in school PE, positions of power that have learning potential but that can also cause harm.

Our data builds on interviews from university courses as well as school placement courses in PETE, which are contexts that serve as important backdrops for an understanding of what peer assessment in PE can be and how it can be used. Our analysis reveals four different mechanisms of peer assessment assigned value in PETE school placement: (i) building social relations, (ii) making 'what to learn' visible, (iii) giving correct feedback, and (iv) handling sensitive and gendered comments. In the following section, we have outlined two issues in which we have used Bourdieu's concepts of *social capital* (the first heading) and *physical capital* (the second heading) to deepen the discussion of our results.

The importance of building social relationships over time – consequences for PETE

School placements are key workplaces for PSTs during PETE. The structure of these and the opportunity PSTs have 'to get to know' pupils are contextual rules that need attention if assessment strategies are to be successful. The results of this study add to existing research on this topic (Tolgfors et al., 2021). The identified mechanisms indicate that if peer assessment is to be used, it is important for PETE educators to create opportunities for PSTs to build social capital during school placements (Beames & Atencio, 2008; Pang et al., 2018). Our findings align with the work of Tolgfors et al. (2021) and Lorente and Kirk (2013) in their arguments for continuity in PSTs' contact with

pupils during school placements and for practical experience of varying assessment practices (such as peer assessment) during PETE. If peer assessment is not practised during the school placement nor in the university courses, PSTs may learn the theoretical foundations of peer assessment, but they will not gain the experience or acquire the tools they need to best use it.

However, deciding on how much emphasis to put on the meaning of social capital is a delicate matter. As we have seen in this study and others, the peer teacher's status is a construct based on power and status within a group (Nurmi & Kokkonen, 2015). Sometimes, the distribution of social capital tends to reproduce PSTs' and pupils' reluctance to work with some peers. With regards to peer assessment, some problems come to light when PSTs' and pupils' are not friends (with their peers) and other problems come to light when they are. As highlighted by Tait-McCutcheon and Knewstubb (2018), the positioning of those without social capital as 'others' (i.e. pupils that are often somewhat marginalised) can improve the significance that power and status might have for learning and lead to bias in peer assessment. In conclusion, PETE needs to develop parameters for the school placement that allow PSTs to build social capital with and among pupils; they also need to learn how to balance the benefits and constraints that come with the accumulation and distribution of social capital.

Who is allowed to say what to whom? The consequences of the distribution of physical capital

What works as physical capital becomes, as Shilling (2004) argued, apparent in specific contexts. As we have seen, in PETE school placements, social capital alone is not enough for peers to acknowledge feedback from each other and take the feedback seriously. Skills and performance in sport and physical movement, as well as physical appearance, are features for pupils that possess physical capital in school PE (Redelius & Hay, 2009). What works as physical capital in PETE, in this study emphasised in views on the school placement, accordingly seems similar to what is the case in competitive sport. PSTs describe how physical capital not only gives the 'physically able' pupils status in relation to other pupils but also works as a controlling mechanism in terms of who is allowed to give feedback to whom. In this sense, physical capital has a *convertability* to social capital in the peer assessment process. It might not be acceptable for a pupil with less physical capital to give critical feedback to a student with more physical capital. However, how are we to use this observation in our efforts to improve PSTs' assessment strategies?

If PETE is to challenge the distribution of social and physical capital, we believe it is important to acknowledge the role of (physical) education in the tradability of capital in socio-cultural and economical reproduction. As Kennedy et al. (2020) argue, dominant classes in society are better equipped to acquire physical capital. We argue that PETE should not only prepare PSTs to prevent unequal distribution of physical capital, but PETE educators should also work to widen the perspectives on what physical capital and 'correct movements' can be in the eyes of PSTs and their future pupils. When it comes to peer assessment in PETE, it is clear that helping peers develop movement capability (Nyberg & Larsson, 2017) in a broader sense (i.e. taking the role of the teacher and acknowledging cognitive and affective aspects of movement capability) is not assigned as much value as physical capital in terms of performing sport skills. An important message

for PETE educators with regards forms of physical capital that are expressed in the use of peer assessment is also that PSTs needs to be better prepared to identify and manage pupils' (sometimes disparaging) comments regarding body and gender.

Conclusion

In conclusion, we have shown how mechanisms within peer assessment are assigned value and how these mechanisms function in PETE school placement. As Redelius and Hay (2009) highlight, 'assessment contributes to the definition of resources that may operate as capital in PEH fields' (p. 278). Inspired by their work on concept of capital and answering the call from Scanlon and colleagues (2023) for more knowledge on *how* to work with assessment strategies in PETE, we have found that peer assessment is an educational method that both holds learning potential and presents several complex challenges where the combination of social and physical capital decides what is possible to say and to whom. With reference to Shilling (2004), a potential consequence of having accumulated physical capital is that it 'provide[s] different opportunities for *converting* physical capital into other forms of capital' (p. 477 authors' emphasis). Hence, an issue for further studies could be what forms of capital a conversion of physical and social capital could result in, and we align with Hay (2005) in the statement that 'assessment mechanisms need to be scrutinized' (p. 47) in order to make privileged as well as marginalised capabilities in PETE and in school PE visible.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Swedish Research Council.

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