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Developing the practising model in physical education: an expository outline focusing on movement capability

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Abstract

Background: Physical educators currently have a number of pedagogical (or curricular) models at their disposal. While existing models have been well-received in educational contexts, these models seek to extend students' capacities within a limited number of 'human activities' (Arendt, 1958). The activity of *human practising*, which is concerned with the improvement of the self, is not explicitly dealt with by current models.

Purpose: The aim of the paper is to outline how a model of human practising related to movement capability could be enacted in physical education.

Findings: Building on a theoretical exposition of human practising presented in a separate paper, this paper provides a practically oriented discussion related to: (1) the general learning outcomes as well as teaching and learning strategies of the model; (2) an outline of five activities that describe how the model could be implemented; and (3) the non-negotiable features of the model.

Discussion: The model's potential contribution to the ongoing revitalization of PE as an institutionalized educational practice is discussed. Points concerning how the model relates to wider physical cultures, its position regarding transfer of learning, standards of excellence, and social and cultural transmission are considered.

Conclusion: The paper is concluded with some reflections on pedagogical models generally and how they relate to the pedagogical model of practising movement capability presented in this paper.

KEYWORDS: Practising; movement; models; skill development; practical knowledge

Introduction

Physical educators currently have a number of pedagogical (or curricular) models at their disposal (Casev 2014; Metzler 2011). These models deal with different aspects of physical education (PE) ranging in focus from health (Haerens et al. 2011) to game tactics (Harvey and Jarrett 2014) to sport cultures (Siedentop, Hastie, and van der Mars 2011) to expression and experience (Standal 2015). While generative in a practical sense, the existing family of models seeks to extend students' capacities within three general forms of human activity (Arendt 1958): namely labour (related to sustenance of the body), work (which has to do with the production of physical and social artefacts), and action (which concerns the expression of ourselves in relation to others). A fourth general human activity – that of practising (Sloterdijk 2013) which is concerned with the improvement of the self – is not explicitly addressed by current models. Building on our theoretical treatise (Aggerholm, Standal, Barker, and Larsson 2017), the thesis developed in this article is that a pedagogical model located in the philosophy of practising (Aggerholm 2016) is useful and complements existing models. Our specific aim is to outline how a model of human practising related to movement capability could be enacted in PE. We begin our exposition with a short recapitulation of the main tenets of practising. We then introduce the notion of movement capability as an appropriate content for the development of the practising model. With the underpinning tenets of practising and a working definition of movement capability in place, we set about our main task of outlining how a practising model could look in the classroom. This section is divided into three subsections covering: general learning outcomes and teaching/learning strategies; a proposal for specific activities that could be used by physical educators; and a consideration of the practical implications of the non-negotiable features of the model. Using four relational issues that have been associated with PE as an institutionalized practice (Kirk 2013), we then consider the model's potential for contributing to PE as an institutionalized practice. The paper is concluded with a discussion of the value of the pedagogical model.

Principles of human practising

It is not our intention to restate the contents of our theoretically oriented paper in detail (see Aggerholm et al. 2017). It is, however, worth briefly revisiting the central characteristics of practising for reference purposes. Practising is a form of activity in which humans seek to improve their capabilities through repeated efforts. Practising involves *agency* in that the practising person is to some extent aware that s/he is actively pursuing some kind of personal

transformation and participates by her/his own volition. It is a *goal oriented* activity because one always practises towards something. An expected or desired improvement – whether it be a more nuanced understanding of hydrodynamics in sailing or the ability to perform a new gymnastics movement, for example – is crucial. Related to improvement, practising involves an acceptance of better (and worse) ways of doing things. Sloterdijk (2013) refers to this characteristic of practising as *verticality*. Verticality is in turn associated with *effort*. From a practising perspective, effort is seen as meaningful and as an essential element in effecting personal change, rather than an element of experience that needs to be reduced or removed. Finally, *uncertainty* is a fundamental element of practising. If there is no room for improvement, then one cannot be said to be practising.

Just as the human activities of labour, work, and action can be conducted in various ways, so too can practising. In other words, practising does not prescribe a *specific* content, although *a* specific content is a necessary feature of practising. One could practise dancing, or running, or writing scientific articles, for example. In one respect, practising most accurately refers to the way in which actions are conducted rather than the actions in and of themselves. With this in mind, the next section introduces movement as one possible field in which actions could be practised. Below, we outline what we mean with the term 'movement capability', describe how it could be developed, and explain why we think it is appropriate to practise moving in PE.

Movement capability

Being able to move in different ways has been referred to as physical or motor 'ability' (Theodoraki and Kampiotis 2007), 'motor skill competence' (Stodden et al. 2008), or more commonly 'skill' (Avery and Rettig 2015; Drost and Todorovich 2013). Such terms have often been a part of a traditional motor learning discourse. This discourse entails a whole raft of assumptions about the nature of movement and more importantly for our purposes, how one learns to move (see Barker, Bergentoft, and Nyberg [2017] for a detailed discussion of assumptions underpinning movement education). To avoid 'slipping into' traditional assumptions and reproducing the movement education that already takes place in many PE lessons, we are going to draw on the work of Gilbert Ryle's perspective on capability (Nyberg 2014a; Nyberg and Carlgren 2015). Ryle (2009) suggests that 'knowing how' to do something is not an act but an embodied disposition, or complex of dispositions. When we watch an individual perform, we are not witnessing the performance of a skill per se but an actualization of the person's disposition. For Ryle (2009), being able to move in particular ways

constitutes a kind of knowledge that is situated and subjective. When someone moves successfully, that person 'fits' with the environment. According to Ryle, the actualization of skilful dispositions is embodied in that it does not involve a double-process of doing *and* theorizing; indeed these processes cannot be divided. Instead, one 'moves-thinks' simultaneously.

Ryle's perspective on skill learning accords relatively neatly with the notion of practising, even if the terminology is somewhat at odds. For Ryle, the essence of skilled performances is that enactments are modified by preceding attempts. From this perspective, knowledgeable agents are considered to be always still learning. A significant part of becoming better involves the setting of tasks which learners are 'not quite capable of accomplishing' (Ryle 2009, 58).

There are at least two reasons why focusing on movement capability from a practising perspective is warranted. First, despite movement capability occupying a central position in the logic of the school subject (Brown 2013; Larsson and Nyberg 2016) and a wealth of motor learning literature (Barker, Bergentoft, and Nyberg 2017), traditional forms of PE have not been conducive to the development of movement capabilities (Kretchmar 2006; Siedentop 1994). Indeed, a recurring criticism has been that introduction-type lessons repeated with students regardless of age or developmental level have provided little scope for improvement (Kirk 2010). Second, pedagogical accounts of how to employ embodied approaches to movement capability have been relatively rare in PE scholarship (Standal 2015; Whitehead 2013). In school settings, physical educators have been inclined to rely on dualistic pedagogies, dividing movement capability into various cognitive and corporeal functions (Smith 2016). The result has been a focus on drills, and in senior levels of school PE, examining movement in terms of isolated principles. There is thus a general need to think more about how embodied approaches to movement pedagogy can be implemented in PE contexts.

A practising model of movement capability

So far, we have summarized the characteristics of practising and outlined a specific conception of movement capability. This section contains: (1) a description of general learning outcomes and the teaching/learning strategies which align with these outcomes; (2) an outline of how the model could look in practice; and (3) a discussion of the practical implications of the model's non-negotiable features.

General learning outcomes and teaching/learning strategies of the practising model

The instrumental idea of learning outcomes and the notion that one can *finish* learning fits relatively poorly with the notion of human practising. As noted, practising involves iterations where any improvement leads to new challenges and potential for further change (Aggerholm 2015). Still, we can say that the general goal of the pedagogical model as it relates to movement capability is for students to develop better, more holistic understandings of themselves as 'movers' where this knowledge is itself embodied. The goal is in other words, to expand one's potential for *becoming*, which will be reflected in the ways one moves. Learning outcomes for individuals are by definition subjective and learner-referenced since improvements in moving can only be understood in relation to learners' previous dispositions.

The teaching and learning strategies that align with this general goal are learner centred. Learners should have opportunities to make decisions relating to, for instance, the kinds of transformations in movement capability they seek to experience, the ways they will attempt to bring about such transformations, and the means by which they will determine whether they have been successful. Differentiated practising can take place in at least two ways. More conventionally, all students in a class can practise ways of moving from the same movement culture. In this situation, students decide to practise the related ways of moving that they deem appropriate in light of their own movement histories. Students could, for instance, practise a table tennis forehand shot with backspin, topspin, or no spin, in games or in rallies, depending on their movement histories and their dispositional aims. Alternatively, students or groups of students in the same class can be practising ways of moving from entirely different movement cultures. Modules could, for example, involve students practising martial arts, athletics events, and dance performances at the same time. Learning would occur socially in both situations since regardless of intended learning outcomes, students would have opportunities to interact with one another. Further, forms of interaction that occur would constitute, belong to, and to a large extent depend on, the classroom 'practising culture'. Such a culture would involve valuing effort, persistence, and the acceptance of vulnerability for example, and include norms such as congratulating and supporting one another and remaining on task.

Irrespective of whether students practise movements from one or many movement cultures, the teacher should pose questions, provide constructive feedback, and suggest opportunities for exploring further embodied actions. While students will make decisions, these decisions should be informed

and here, teachers have a central role to play. As in other learner centred approaches, teachers are more likely to take on 'facilitator' (Goodyear and Dudley 2015) rather than instructor roles although forms of teacher-centred instruction may be appropriate in particular moments (for instance, when students intend practising in risky or dangerous ways).

An activity-based outline of the practising model

We want to provide a more detailed outline of how the pedagogical model could look in PE lessons. The suggested series of activities is aimed at grade nine students (aged 15–16) although with modifications, the activities could be implemented with older or younger students. We would like to stress that the movement capability activities are just one way in which practising could be done in PE. The content is in other words, negotiable. Further, we have had our own Swedish and Norwegian curricula in mind when we designed these activities (SNAE 2012; UDIR 2015). While the improvement of movement capabilities is a common feature across many PE curricula (see for example, SHAPE 2013), we recognize that any proposition for educational practices needs to be considered in light of local policy contexts.

Activity one

Students should describe and discuss their own movement histories by considering the ways that they can move, or have been able to move, in the past. This could be done through pair or group discussions, the production of written and/or visual texts including videos or still photos, or enacted corporeally. The aims of this activity are for students to come to a greater appreciation of: (1) the ways in which they move; (2) the experiences that have led them to move in certain ways; and (3) how/why certain ways of moving are valued in particular contexts. Students might talk, for example, about how they throw a ball, moments when they have thrown balls, and the situations in which being able to throw a ball is seen as important.

In order to implement Activity one effectively, teachers need to provide questions and discussion cues textually (written on the whiteboard, projector

^{1.} By the end of year nine, Swedish students should, for example, be able to: "participate in games and sports involving complex movements in different settings, and vary and adapt their movements to some extent to activities and context. In dance, and movement and training programs to music, pupils adapt to some extent their movements to beat, rhythm and context... Pupils in a basically functional way can set up goals and plan their training and other physical activities. Pupils can also evaluate activities by talking about their own experiences and applying simple and to some extent informed reasoning about how the activities together with dietary and other factors can affect health and physical capacity (...)." (SNAE 2012, 54, emphasis in the original)

or handouts) so that students can continue to orient their actions to the cues independently. Teachers should decide whether they want students to complete the activity verbally, textually or in an alternative format. They should also decide whether Activity one will be a short, introduction-type activity or a more comprehensive activity that can be used as part of formative assessment and that may even extend outside the classroom. As an example of how teachers could initiate this activity, teachers may provide students with the instruction:

Create a movement timeline that shows major movement learning milestones in your life. You might start with things like learning to crawl or walk, learning to ride a bike, learning to swim ... and work through to today. Be as thorough and accurate as you can.

Teachers can complement written instructions with an exemplary graphic of their own timeline or the timeline of a fictional student. This example will scaffold the task and provide the students with an idea of what is expected of them. Students can complete the task on paper or digitally using tablets, depending on resources and how the students are used to working. If the task is done as part of formative assessment, teachers will collect texts produced by students during Activity one. To encourage students to think about why the movement timeline looks like it does, teachers can ask students to select two or three movement milestones from the timeline and describe the circumstances in which the event happened (where ways of moving were developed, the people who were influential, what it felt like ...). Again, teachers can decide whether students should write about the circumstances of each milestone or discuss with peers.

Activity one is intended to provide a norm critical starting point for learning (Larsson and Quennerstedt 2012) and should encourage students to consider cultural as well as individual or biographical perspectives on movement. Students could, for instance, discuss how factors such as gender and social class have influenced their own and others' recreation and participation habits, and how these patterns leave what Ryle might call 'dispositional traces' in terms of movement capability. To encourage reflection in this area, we suggest that as a separate but related task, teachers ask students to develop hypotheses about the timelines of the whole class. Teachers can provide examples, such as: 'More than half the class will be able to ride a bike', 'Less than ten people will be able to ski', and 'Approximately three people will be able to do a cartwheel'. Irrespective of whether these hypotheses are 'tested' against the class's timelines, the hypotheses can be used as starting points for further discussion around why

students have certain assumptions about particular movement capabilities. We expect that sharing expectations about movement capability will allow for reflection and, if done sensitively, will facilitate appreciation of cultural aspects of moving and values associated with moving in certain ways.

Activity two

Working from a critical starting point, students should: (1) select movements that they would like to practise; (2) provide a biographically and socially oriented rationale for why they have chosen to practise particular movements; and (3) estimate the dispositional changes they expect to see during their practising periods. Movement selection needs to be done in negotiation with the teacher and setting necessary limits on the possibilities for movement practising at the beginning of Activity two – most likely related to equipment and/or space - will help teachers to streamline the process. Even with delimiting possibilities, we recommend that students submit their selected movement capabilities in written format so that teachers can approve selections and make suggestions for alternatives if necessary. If the timeline task from Activity one has been used, providing a biographically and socially oriented rationale for movement selection can be explained as a follow-on task, where students write about 'where they have come from and where they are going' in terms of movement capabilities. Students can, for example, relate their selection to the ways of moving that they have developed in the past, either as extending existing movement habits or adding new ones. Awareness of how social factors affect movement selections can be demonstrated with discussions related to issues such as ability, gender, age, and social class

Estimating the dispositional changes that the students expect to see during their practising periods can be seen as similar to goal setting, and as noted, human practising should be understood as goal oriented. The language of goal setting may thus provide teachers with a useful way of making the task of estimating change meaningful for students. The teacher should, however, stress that goals are dispositional. In other words, over the course of the module students should become *different people*, at least in small ways, with different possibilities for being rather than simply acquiring new motor skills. Dispositional changes that can be expected are related to the length of the period that the students will spend practicing (discussed later) and teachers will need to ensure that students have realistic expectations of the changes they can expect to experience.

From a practising perspective, it is also imperative that students select ways of moving in which they are interested and cannot already do. In line

with the idea of uncertainty, it must be possible for students to extend or adjust the ways of moving if they learn more quickly or more slowly than they anticipate. Estimates of potential learning will be flexible and may change once students have begun practising. Irrespective of how practising is organized inside and outside of lessons (as part of a homework assignment, for example), students need to consider access to facilities and equipment and how access issues will impact on their practising sessions. Ideally, students will practise both within and beyond PE settings and learning will take place across institutional and personal boundaries.

Activity three

Students locate various sources to create personal instructional and inspirational sets of aids that will help them to develop their movement capabilities. Traditional sources such as books and magazines can be used. If an internet connection is available, online videos and websites like www.wikihow.com and online communities will provide students with immediate access in a format that allows movement in motion to be discerned (Casey, Goodyear, and Armour 2017). Regardless of whether students are using print or digital sources, teachers should encourage students to share information. An important part of teachers' work during Activity three is to facilitate group work. This can be done by designating areas for certain types of movement in the classroom or gymnasium, grouping students together in learning pairs, and encouraging students to show each other the resources that they find. Teachers may ask students to identify a specific number of instructional and inspirational sources, specific kinds of sources, and/or make some kind of commentary on the sources that they find (why they have chosen certain books or websites over others, for instance) depending on how much emphasis they want to put on using aids for movement learning.

The use of sources and learning aids will enable individuals and groups of students to practise independently during Activity four. They will also support 'vertical intersubjectivity' (Aggerholm 2015) since resources collected from outside the classroom can provide students with role models, masters, and people with admirable movement qualities. Incidentally, Evans and Penney (2008, 42) have suggested that PE policy informed by the developmental learning theory has led to 'vertical hierarchies', which disadvantage young people that are already marginalized due to social class and cultural backgrounds. The vertical intersubjectivity we are proposing here is intended as an alternative to implicit hierarchies that work in classrooms. An aim of Activity three is for students to acknowledge that some members of movement communities have more sophisticated embodied

understandings than they do, as a result of practising. While it is not necessary to rank themselves against other movement culture members, it is useful to recognize and learn from members with 'excellent' movement competence.

Activity four

Using resource sets collected in Activity three, students engage in a series of sessions where they practise the movements that they have selected. During these sessions, student activity will resemble the choreography stage of a dance unit where students work with different personal projects. While teachers will leave a number of decisions to be made by students (for instance, the kinds of tasks in which they will engage, the duration and intensity of the practising spells, the kinds of equipment that will be used, when to use instructional and inspirational sources for help), teachers need to be familiar with their students and their students' aims. Teachers need to be aware of the kinds of general challenges that are involved in practising to move, such as not knowing how to get started, losing motivation with lack of progress, and being afraid of physical or emotional consequences associated with trying to move in new ways. In these cases, teachers need effective interactive strategies that they can employ to ensure that the principles of practising relating to repetition, agency, and effort continue to guide classroom interactions. Teachers may consider their task not so much as telling students how to proceed as entering into 'shared communications' (Barker, Quennerstedt, and Annerstedt 2015) in which they aim to reach agreement on aspects of bodily experiences that can be felt, altered, or improved.

Teachers will also need to be accustomed to the advantages and limitations of technology if technology forms a significant part of the students' learning resources. Many digital sources include recommendations regarding safety, tips for overcoming challenges, inspirational commentary that is intended to put learners in the right frame of mind for learning, and suggestions for further learning possibilities. This is not universally the case and just as in any PE lesson, teachers need to monitor their students' actions, support where appropriate, and intervene when necessary.

As part of Activity four, students should record parts of their learning experiences (or learning 'journeys') in video and/or short textual format. In the case that video is used, recording should focus on practising at various stages of the module, and at the very least should include clips from the beginning, middle, and end of the module. Accordingly, the teacher should designate 'filming days' when students make clips. The teacher should also decide approximately how long the clips should be (probably between one and three minutes). If clips are to be uploaded on the school intranet site,

considerations of file size will become important. Students should select the movement sequences that they want to have filmed and have the possibility to film as many sequences as they want before selecting one(s) to share (see Activity five). In the case that textual format is used, students should keep a reflective diary in which they complete prompting sentences such as 'I learned ...', 'I feel ...', 'I am noticing differences such as ...', 'I am finding it difficult to ...'. Diaries can be completed at the end of each lesson or in selected lessons. Diaries should be detailed enough to give a vivid picture of how the learner experienced dispositional changes over the course of the module.

Activity five

At the end of the practising module, students should use the video and/or textual records kept during Activity four to produce a short presentation of their learning journeys. These presentations will focus on the moments that students found meaningful and the dispositional changes that students have undergone over the practising period. For one student, the material might, for example, show how she became more confident in kicking up into a handstand, how she can hold her handstand for longer and more steadily, and how she knows when she is in a balanced position. These kinds of dispositional changes can be illustrated in video and in text. We recommend the use of both media – video with subtitles or student voice over – as a way of representing learning. Claims about changes in dispositions could, in turn, be made by the students themselves, the students' peers, or the teacher. Indeed, these types of evidence open up opportunities for different parties to engage in assessment procedures collaboratively.

Students can present their journeys to either the whole class or to groups within the class. The presentations need not have a performance orientation. Akin to showing time lapse photos, the main purpose is for students to share aspects of change in the learning experience rather than demonstrate what they can do. Presentations can serve as prompts for further discussion and reflection. Students should reflect on issues such as similarities and differences between learning particular movements, various aspects of their bodily experiences, common experiences during their learning journeys, and the ease or difficulty they had in remaining in a state between 'I can' and 'I cannot'. Students may also discuss whether they intend to continue practising and provide reasons for their answers.

The non-negotiable features of the practising model

In our theoretical treatise, we outlined four non-negotiable features of a practising approach, namely that it must: (1) acknowledge subjectivity and provide meaningful challenges; (2) focus on content and the aims of practising, (3) involve the specification and negotiation of standards of excellence, and (4) provide adequate time for practising (Aggerholm et al. 2017). Returning to these non-negotiable features will help underscore critical aspects of the practising model and enable us to extend our consideration of the practical implications of practising to develop movement capability.

We proposed that acknowledging subjectivity and providing meaningful challenges is an essential feature of the model. In the activities above, we stress the importance of student decision-making. It is, however, important for teachers to understand students' justifications of their choices and for students to reflect on their own justifications. Teacher and students should continually question what makes certain ways of moving meaningful, interesting, and fun. At the core of these questions is an attempt on the part of students to understand themselves as individuals, each with their own dispositional (movement) project. From a teacher perspective, we are reminded of Evans's (2004) recovery of the term 'educing' (see also Nyberg and Larsson 2014), or the idea of bringing out that which is already 'in' people. Through dialogue and reflective interaction, teachers (and students) should better understand the kinds of 'movers' that learners are attempting to become.

Focusing on content and the aims of practising is vital for both teacher and students. If students are not practising to move with specific aims in view, they cannot be said to be practising. Aims could be outlined with varying degrees of precision. Our sense is that the greater the level of precision, the better. Teachers should encourage students to think about how moving will look, how it will feel, how it will sound. Rather than aiming to juggle with three bean bags for example, a student might aim to juggle with three bean bags and hold a conversation at the same time and be able to adjust the height that one throws the bean bags and feel like one can stop when s/he wants to stop and make it look smooth and rhythmic. As one practises and begins to appreciate different aspects of moving, teachers can help students to develop more precise, clearly distinguished aims. A third non-negotiable is that standards of excellence must be specified and negotiated. In PE, standards of excellence still often emerge implicitly as general movement norms excellence becomes synonymous with winning games, fast times, and displays of enthusiasm (Svennberg, Meckbach, and Redelius 2014). The practising model encourages students to transport standards of excellence from

movement cultures to PE lessons. A student practising a karate kick, for example, might explain to his teacher and other students the leg position, the stance, and the breathing of an excellent kick. These characteristics have already been determined by a community of karatekas, or karate practitioners and are part of an existing movement culture. Standards of excellence should be identified in Activity Three while students are collecting instructional and inspirational resources. These standards will function as a necessary background when a student is practising a movement capability in the PE context. The final non-negotiable feature of the practising model concerns length or duration. Since practising involves repetition, it is important that students have adequate time to build on earlier attempts. In the activities above, we did not specify how long the module should last. Our view is that students' aims should be calibrated against the length of time that the class has available for the practising module. A class that has 20 weeks before they present their learning journeys in Activity five would necessarily have more ambitious learning aims than a class that has only eight. The question of how many practising sessions are 'enough' is probably best answered in specific contexts and with consideration of the number of pragmatic factors such as school holidays, reports, availability of materials, and facilities and so forth that affect the implementation of all PE modules.

Putting the practising model in the big picture

Proposing a pedagogical model constitutes an attempt to change existing practices. In our view, PE can be improved and we agree with Kirk (2010) when he contends that PE needs to continually renew itself as an institutionalized practice. Kirk (2010) suggests further that in order to revitalize itself, PE needs to consider four relational issues: its place with respect to wider physical cultures; possibilities for the transfer of learning; standards of excellence; and social and cultural transmission. In this section, we use these relational issues as a framework to consider how effectively the practising model might contribute to the continuing regeneration of PE as educational practice.

Understood as the bodily practices of play, games, sports, and 'other leisure physical activities that help define the social fabric of local and national communities' (Evans 2004, 106), physical culture assumes an important place in the model in two respects. Depending on how the module is implemented, physical culture can be reflected in the students' choices of movement capabilities. Students should select capabilities from the bodily practices in which they are already engaged or those in which they would like to become engaged. The possibility of multiple and varied aspects of physical cultures being explored during the same lessons means that relevance can be

established in personal ways. Further, the prospect of using technology as a means to facilitate practising means that digital elements of physical culture can become legitimate components in the learning process. In many respects, keeping pace with technological advances is an important way for PE to remain relevant to physical culture in contemporary society (Casey, Goodyear, and Armour 2017).

One point should be added here: the model focuses on movement capabilities but has little to say about other aspects of moving such as tactics or strategies in games. As a result, the model could be charged with decontextualizing movement capabilities (see Kirk 2010). At the same time, we would question PE's capacity to ever fully contextualize movement learning. Taken to its logical extreme, the context argument would throw into question the modern concept of 'schooling' (see also Sfard 1998). Our position is that it is justifiable to develop movement capabilities, techniques even, in PE if learning involves possibilities for moving between the institutional borders of PE and other movement cultures. In line with other models advocates (Haerens et al. 2011; Williams and Wainwright 2016), we also recognize that pedagogical models such as Sport Education (Siedentop, Hastie, and van der Mars 2011; Williams and Wainwright 2016) and TGfU (Harvey and Jarrett 2014; Stolz and Pill 2014) will be more effective in developing other capacities related to physical cultures. Nonetheless, an appreciation of practising seems valuable for developing all capacities and the practising model is not necessarily mutually exclusive to other models.

The idea of learning transfer, essentially the notion of equipping learners with knowledge and skills to be utilized in other arenas, relies on a metaphor of learning related to acquisition where learners 'pick up' knowledge and take it with them to other contexts (Quennerstedt, Öhman, and Armour 2014; Sfard 1998). This view of transfer is wedded to behaviourist and information processing perspectives of learning (Ward 2013) which have been influential in PE practice (Tinning 2010). Understanding movement capability from a Rylean perspective (Nyberg 2014b) and employing Sloterdijk's (2013) notion of practising results in a conception of learning that is more aligned with participatory and situated perspectives of learning knowledge (see for example, Kirk and Kinchin 2003). Learning from this perspective involves embodied dispositions and different ways of becoming. That said, if the general learning outcome of the model – to develop better, more holistic understandings of self – is approached successfully, then students should gain greater capacities to become movers in movement-oriented settings beyond PE.

We have discussed standards of excellence in the preceding sections and do not have so much to add here. It should be clear that a key intention of teachers and students employing the practising model is to identify and strive towards specific standards of movement capability. As such, the model has potential to help physical educators more clearly articulate objectives of learning (Svennberg, Meckbach, and Redelius 2014) and avoid the criticism of having only vague conceptions of expected learning (Placek 1983). As posited in Activity five, these standards support personally and contextually referenced rather than normative or criteria-based forms of assessment.

Finally, Kirk (2013) suggests that physical educators need to consider the cultural transmission of knowledge and values. In Kirk's view, this issue concerns how inequalities are reproduced through PE with the effect of yielding benefits to some students and disadvantages to others. In taking a practising approach to movement capability, the model avoids privileging students with particular movement histories. Because students are invited to practise ways of moving that extend from their own movement histories, no students should be excluded from learning as a result of lacking 'common knowledge'. This is not to suggest that the activities that we outlined above are entirely inclusive. Students that are less familiar with technology, for example, could be disadvantaged, at least in the outline that we provided. Technology access/familiarity may in turn be linked to socio-economic background (Anderson 2015). In our illustration, textual literacy is also necessary and students that may normally fare well in a school subject that requires less reading and writing than other school subjects may experience difficulties. Further, since student agency is an important feature of the practising model, teachers need to pay attention to how power relations influence student deliberations involved at various stages of the module. As in any other form of PE, teachers should ensure that all students can make their voices heard, regardless of embodied disposition (Barker and Quennerstedt 2016; Larsson and Quennerstedt 2012).

Conclusion

The aim of the paper was to outline how a model of human practising related to movement capability could be enacted in PE. We began our exposition by revisiting the principles of practicing and sketching out a Rylean view of movement capability. From there, we introduced the general learning outcomes of the model along with the teaching and learning strategies that align with these outcomes. Student-centred learning and the idea of differentiation – both connecting to the practising notion of agency – were key themes in this section. We then outlined a series of activities that could be done with students

in PE lessons. Through the description of these activities, we illustrated how concepts of verticality, uncertainty, agency, and effort could be operationalized in movement education. Following this description, we returned to the non-negotiable characteristics of the practising model which we explored in detail in our theoretically oriented paper to illuminate further implications of the model. Finally, using Kirk's (2010) identification of relational issues as a framework, we discussed the model's potential to contribute to the ongoing revitalization of PE as an institutionalized practice. The main thrust of our argument was, perhaps unsurprisingly, that the practising model has much to offer PE.

Nonetheless, there are potential limitations and challenges that deserve consideration. As some of our colleagues have pointed out, the practising model for movement capability places relatively high organizational demands on the teacher. Simply providing equipment for 28 students who could be practising 28 different ways of moving would prove time consuming and challenging. Further, equipment and facilities will always restrict the kinds of moving capabilities that students can practise. This point raises questions about whether all students will have opportunities to practise moving in ways that they find meaningful. Our position is that these issues are most likely to be resolved only with the help of PE teachers' pedagogical knowledge. It is, in our view, precisely these kinds of issues that make trialling and further investigation of the model necessary.

Some PE scholars have critiqued the idea of models (Casey 2014). Stolz and Pill (2014), for example, claim that a models approach 'involves the teaching of discrete bodies of knowledge in a rigid non-negotiable way [which] creates unnecessary artificial boundaries that are logically problematic' (151–152). The model of movement capability presented here is prescriptive and is based on constructed analytical boundaries. We have proposed, for example, that practising how to move does not also constitute moving for health reasons, moving to understand games and sport, or moving to develop relations with others. In our view, the argument against conceptual boundaries constitutes one side of a two-sided dilemma (see Billig (1988) and the notion of an 'ideological dilemma'). It is also possible to rehearse arguments about the 'advantages of boundaries' related to clarity, depth and so forth and conversely the limitations and advantages of holistic thinking. Our position is that boundary thinking can be useful and, as we have shown through consideration of Arendt's (1958) different human activities, can generate a more differentiated understanding of human experience. Further, we would propose that prescriptive approaches have a place in teacher practice as long as they are not 'overly prescriptive'. For us, over-prescription is unlikely and we imagine most teachers would necessarily adapt the activities above to fit their own contexts. This re-creative potential through translation is a positive aspect of models in general, in our view.

We would like to make one final reflection on the interplay between content and pedagogy. We have proposed that practising is more about the manner in which something is done than what is done. It is probably most accurate, however, to say the practising is *just as much about* the way something is done as what is done since the two cannot be separated. Content and the approach to the content constitute a unified whole. This is what Haerens et al. (2011, 324) imply when they propose that pedagogical models 'highlight the interdependence and irreducibility of learning, teaching, subject matter and context'. The important implication of this point is that in the case of practising, as with other models, teachers and students need to develop not just a sound understanding of, but also a commitment to, the philosophy of the model if they are to implement it successfully.

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