Ger J Exerc Sport Res 2018 · 48:508–515
<https://doi.org/10.1007/s12662-018-0531-2>
 Received: 24 November 2017
 Accepted: 10 July 2018
 Published online: 8 August 2018
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What is the subject matter of physical education?

In hardly any school subject other than physical education (PE) does the “mind–body problem” form both lesson content and its aims. In spite of the subject’s apparent and original competence on this topic it is hardly discussed within the discipline itself.

For me the “mind–body problem” presents itself as a fundamental curricular challenge (Craig, You, & Oh, 2013) that demands for a corresponding theoretical inspection.

The two American discourses discussed below will be incorporated and made accessible to PE. This does not mean that different approaches—especially approaches from continental Europe—should be discriminated against or ignored. These should complement the chosen discourses without having to mention other discourses in detail.

The first discourse is on American Pragmatism and, in a narrower sense, on the dualism of body and mind. In the following, given the mind–body dualism, PE shall be looked at from a new perspective, in order to constitute it generally at the same time.

Starting from this discourse, first, subject-specific curricular problems will be developed (1), in order to subsequently introduce a continuum that can be used as a guideline for PE (2). In a third part, “practices of action” and a related concept of experience are explained (3).

Afterwards, a second American discourse will be looked at and related to PE. The American discourse on competencies—especially in its historical roots—can help to specify and differentiate the discourse of competencies in one’s very own discipline. This representation will also be used to develop an original subject model for PE (4). The

conclusion will delineate the guideline function of this curricular model against other demands in PE (5).

The dualism of body and mind as the constitutive of PE

Many narratives of the pedagogic tradition of thought can be reduced to dualisms: disposition and environment, individual and community, practical and cognitive work, vocational and general education, work and leisure etc.

A dualism that is crucial and probably most effective for PE is the supposed opposition of body and mind. Following René Descartes, Ryle calls this dualism “Descartes’ Myth” (Ryle, 2009, p. 1). Ryle’s criticism is directed towards the fundamental premise of the myth, according to which the divide of body and mind separates life itself in two worlds. “It is assumed that there are two different kinds of existence or status. What exists or happens may have the status of physical existence, or it may have the status of mental existence” (Ryle, 2009, p. 3).

The human being has been interested in the relation of body and mind since he or she was aware of the ability to think. Whereas from ancient times to modern age body and mind had been looked at as an opposition, at the beginning of the 20th century this idea was subject to increasing criticism¹ and was claimed to be the most fatal separation in education by Dewey. “I do not know of anything so disastrously affected by the tradition of separation and isolation as is this particular theme of body–mind” (Dewey, 1928, p. 5). In Dewey’s view the mind–body

dualism is a central misunderstanding of learning and is less of a theoretical problem than grounded in the educational practice itself because for Dewey ideas are not statements of what is or was but statements of what can be put into practice. Furthermore, the mind–body dualism also contradicts current concepts, for example, the capability of acting, and in terms of physical education, the emphasis on competencies. Ideas and thoughts are basically without value if they do not turn into action. These, however, only originate from “being in the world” and for this reason demand a *physical* presence.

Ryles’ criticism on the Cartesian dualism indicates the practice to divide not only life but also school subjects into two “worlds”. Cognitive subjects concentrate on the mind, PE on the body. It is hardly surprising that the Cartesian dualism also has an impact on the curricular discourse in PE in order to redundantly confirm the difference of body and mind (Craig, You, & Oh, 2012, p. 6).

Hence, for PE as well the Cartesian gap between mind and body seems to be ontological and at the same time risky. The rationale behind the dualism first formulates the purpose in a mental process before one acts physically. This scheme of purpose and means leads to excluding creative as well as reflective activity from the performed action itself. By consequently applying the idea of the two phenomena *mind* and *body* being mutually exclusive to the practice of sports, the pitfall of this not very helpful differentiation can be illustrated much more easily. A volleyball player decides within a split second whether he or she wants to smash longline or cross in order to hit the gap in the opponent’s team. This

¹ Cf. Joas (1996), Rorty (2013) and Shusterman (2008).

Fig. 1 ◀ The teaching Continuum Expanded (Green, 1964, p. 292)

decision would, following the rationale of the Cartesian dualism, hardly be related to the mind because the player is seldom able to justify his or her decision in a reflective way. The player's decision can be identified as cognitive but eludes rational consciousness. Similar examples can be found in sport climbing, dancing, gymnastics and further sport disciplines. Often decisions which are made in split seconds determine if the athlete falls or can go on climbing, dancing and doing gymnastics in full flow (Csikszentmihalyi & Csikszentmihalyi, 1975).

Thus, Gumbrecht (2006, p. 63) rightly subdivides the phenomenon sport in "action" and "ritual". Athletes' and players' rituals are often deeply immersed, in a way that the contrast of mind and body is dissolved. Consequently, the unreflective action while moving is also based on "thinking". This type of thinking, however, cannot be described nor defined by the widespread idea of a difference between body and mind.

In order to define the object—the center—of PE from a curricular point of view, the question is how the curriculum can or should dissolve the dualism that is criticized here. I utilize Green's "teaching continuum" (1964, p. 292) that has been used by Oelkers for his "Standard Analysis of Teaching" (Oelkers, 1985).

Green's "teaching continuum"

The "teaching continuum" does not interpret the Cartesian gap in a dualistic manner, but according to Ryle's contrast of knowledge and knowing-how (Ryle, 2009, p. 16 ff) as something consistently interrelated (cp. [Fig. 1](#)). Green can be read from the pupil's view (→on the upper side of the continuum), but also from the teacher's view (→directly on the continuum). In this continuum, no contrasts but poles are depicted. On the one hand, it is a matter of developing knowledge and understanding, on the other, it is a matter of practicing knowing-how and performance. Therefore, the two sides are not seen as opposites but complement each other.

According to Green, in a democratic system of education, only the area of intelligence is opportune to processes of learning. Correspondingly, one finds conditioning and training on one side and instructing and indoctrinating on the other side of teacher activities.

From the pupils' view limitations to the contents and competencies of PE lessons can be seen clearly and the model does not lead to a dualistic interpretation of the subject—in particular the dualism of body and mind. In that respect, the subject PE can be read in a continuum between knowing-how and knowl-

edge. The two aspects—respectively activities of the teacher—classical conditioning and training are most likely to improve the physical abilities and the motor-technical competencies. This is also obvious in daily language. If we talk about *training*, we commonly think of repetitive and automated movements (and metaphorically in foreign language acquisition, for example, of practicing vocabulary). On the opposite side of the continuum *briefing* and *instruction* ideally support the pupils' knowledge and understanding.

Green's model shows that contents and aims of PE lessons should not be interpreted in a dualistic way. However, the model also indicates the limitations to lesson-related activities and for this reason it highlights the potential contents of the subject PE.

Setting limits marks an important determining factor of the discipline; but there still is the question of the subject matter of PE.

Practices of action

In order to overcome the dualism of body and mind in PE lessons and to find the center of the subject, it is mandatory to analyze the pupils' activities. For this kind of focus the concept of experience in John Dewey's version (1988) suggests

itself. In the center, there isn't a specific area of competence but practices of doing that claim to solve sportive problems.

Experience is always experience of something, of colors and forms or of bodies (and here the diminishing dualism of object and subject becomes the topic). Experience, on top, is also *for something*, e.g. colors are received in the eye and rotations along the longitudinal axes is an experience for kinesthetic receptors in the Golgi apparatus. Put differently: Only because there are eyes are there colors. This is the reason why—which is important for my further analysis—the subjective and the objective side of experience are the same.

Dewey, therefore, does not see knowledge and learning as a paranormal achievement of the mind but as given by experience. Even the simplest experience is an activity and involves suffering, and at the same time, the experience of a relation. It is precisely for this reason that in Dewey's interpretation of experience abstract concepts and particular situations are dependent on each other. Abstract concepts have an instrumental value, they transcend the concrete situation and help to create new possibilities for action. Dewey dissociates himself agreeably from progressive educational phantasies which state that action alone is responsible for gaining knowledge (e.g. Kerschensteiner, 1930). He stresses simultaneously that content is not arbitrary:

"It is also essential that the new objects and events be related intellectually to those of earlier experiences, and this means that there be some advance made in conscious articulation of facts and ideas. It thus becomes the office of the educator to select those things within the range of existing experience that have the promise and potentiality of presenting new problems which by stimulating new ways of observation and judgment will expand the area of further experience" (Dewey, 1988, pp. 50–51).

Dewey's statement refers to the central aspect of the problem-based approach in physical education. The basic question for PE is: Is there a problem-based approach in PE? A didactically relevant problem-based approach can only

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What is the subject matter of physical education?

Abstract

The school subject Physical Education (PE) deals explicitly with the body and movement. Therefore, it is essential to define the content of PE based on these two aspects. Historically, school is mainly oriented towards the mind, which has recently been named competency. For that reason, the mind-body problem is omnipresent in PE. Additionally, the recent shift to developing competencies in PE is intensifying the dualism of mind and body by opposing knowledge and knowing-how. In a first step, this categorical difference between mind and body will be explained in the course of a philosophical discussion and illustrated with appropriate examples. As will be shown, the mind-body contrast should be considered as a continuum instead of a dualism. Therefore—in a second step—Green's teaching continuum will give an answer to the question if the subject matter of PE is a combination of cognitive and motor activity or not. In a third step, Dewey's concept of

experience will be outlined, based on which the practice of doing sport is explained and developed. A fourth step will be to develop a complementary curricular model that attempts to connect the two poles "mind" and "body" by linking performance with content standards (forms of sport), based on the current discourse on competencies and standards. In this manner, the presentation of a curricular model for PE overcomes the Cartesian contrast between mind and body. Additionally, it gives an answer to the current discussion about competencies and standards in PE that emanates from other disciplines and should be self-confidently discussed in our own discipline.

Keywords

Body-mind dualism · Sports didactics · Physical education · Teaching methodology · Teacher training

Gibt es eine Mitte des Sportunterrichts?

Zusammenfassung

Das Schulfach Sport („physical education“) beschäftigt sich explizit mit dem Körper und der Bewegung. Daher scheint es notwendig, den Inhalt des Fachs auf der Grundlage dieser beiden Aspekte zu definieren. Historisch gesehen orientiert sich die Schule aber eher am Geist, der modern formuliert auch als Kompetenz bezeichnet wird. Aus diesem Grund ist das Geist-Körper-Problem im Schulfach Sport konstitutiv. Zusätzlich intensiviert die aktuelle Fokussierung auf Kompetenzen im Sportunterricht den Dualismus von Geist und Körper, indem Wissen und Können einander gegenübergestellt werden. In einem ersten Schritt wird dieser kategorische Unterschied zwischen Geist und Körper im philosophischen Diskurs erläutert und mit Beispielen aus dem Sport illustriert. Diesem Diskurs folgend, drängt sich ein Kontinuum statt eines Dualismus auf. In einem zweiten Schritt wird deshalb das Kontinuum von Green dargestellt, als mögliche Antwort auf die Frage, ob der Gegenstand (oder die Mitte) des Sportunterrichts eine Kombination aus kognitiver und motorischer Aktivität

sein könnte. In einem dritten Schritt wird anhand von Deweys Konzept der Erfahrung die Praxis des Sports – oder das eigentliche Tun – analysiert und diskutiert. In einem letzten Schritt wird ein komplementäres Fachmodell entwickelt und dargestellt, das versucht, die beiden Pole „Geist“ und „Körper“ durch die Verknüpfung mit inhaltlichen Standards (Sportarten) zu verbinden. Auf diese Weise überwindet das hier präsentierte komplementäre Modell für das Schulfach Sport vielleicht den kartesischen Kontrast zwischen Geist und Körper. Zusätzlich gibt es hoffentlich eine Antwort auf die aktuelle Diskussion über Kompetenzen und Standards im Sportunterricht, die aus den anderen Schulfächern importiert wurde und selbstbewusst in der eigenen Disziplin diskutiert werden sollte.

Schlüsselwörter

Dualismus von Geist und Körper · Sportdidaktik · Sportunterricht · Fachdidaktik · Lehrerbildung

Fig. 2 ◀ A complementary curricular model for physical education (cf. Messmer, 2013, p. 32; Messmer, 2012, p. 210)

be recorded if the individual can find meaning in his activity. However, in sports “purposelessness” is constituent. “A perfectly executed quadruple axel in a figure skating routine clearly has no goal in everyday life, and yet this multiplicity of individual body movements converge in producing the impression of purposiveness” (Gumbrecht, 2006, p. 44).

The original problem solving in sports and with it also in PE probably lies more in the direct link of action and decision. Joas (2015) defined this link as “situated creativity”. This term illustrates typical decision-making situations in daily practice and in sports in general:

“The basic idea is that creativity emerges in connection with problematic situations of action, and that receptivity with regard to the key features of the situation and one’s own impulses is a necessary condition for such creativity. Without receptivity, no creativity. Action constantly encounters unexpected obstacles” (Joas, 2015, p. 586).

The concept of “situated creativity” shows the kernel of sports and so can be used as an indicator for the “center of PE”. Only if action, be it bodily or otherwise, occurs in direct relationship to reflection, can one talk of “situated creativity”.

Thereby, two aspects are addressed. On the one hand, decisions in sports—in contrast to decisions in other subjects—have to be made spontaneously (cf. the above-mentioned smash). On the other hand, decisions cannot be made accidentally and without reflecting, else you could not talk of learning anymore. The interaction of expert knowledge and deciding right in the situation marks the performance in sports. Thus, a creativity in the situation to act is desirable, or as Joas puts it: “The alternative for the

teleological interpretation of action and its dependence on the Cartesian dualism, which has been passed on, consists of the following: perception and realization should not be put before action but as a phase of action which helps to direct and redirect action in its situational context” (1996, p. 232) [Translated by Roland Messmer]².

Thereby, the action in the decision-making is admitted a cognitive aspect itself, which can be called “Creative Intelligence” (Dewey, 1917, p. 65) in a pragmatic style. The notion of experience thereby receives a supplement that is crucial for PE lessons: learning is not only seen as a subordinate reflection and problem solving but as a prior rating of alternatives.

This kind of extension to the notion of experience in PE learning processes has significant consequences for the relation of cognitive and motoric performance in general. PE lessons require problems that not only formulate *movement tasks* (Messmer, 2012, p. 202) in the sense of movement instructions but *problem-based tasks* that respect both polarities in Green’s continuum. In dependence on cognitive subjects that call for “cognitive activation”, problem-based tasks in PE lessons ask for “motoric activation” on top.

With that, both the *center*—as practices of action—and the *limitations*—in Green’s continuum—are determined and the subject PE can be ontologically identified as such.

In the terminology of the current educational discourse one can also identify the standards and competencies of PE.

A complementary curricular model for PE

Following the concept that physical education has its curricular center in a continuum of body and mind, it becomes difficult to associate this idea with a cognitive concept of competence used in other subjects.

In the currently used concept of competencies, the unconditional orientation towards cognitive dimensions—as it is pursued particularly in the German-speaking discourse (Weinert, 2001)—points also to a one-sided development of the discourse. The discussion about standards and competencies in the USA was triggered by the report *A Nation at Risk* (The National Commission on Excellence in Education, 1983). Later, Diane Ravitch (1995) attempted to grasp the diffuse expression of “Educational Standards” from a conceptual point of view (cf. Oelkers, 2007). In general, the term “Standard” is used with a double meaning: on the one hand, as an objective itself and on the other, as a measure of goal achievement. Ravitch (1995, p. 12) distinguishes three types of standards:

- Opportunity-to-learn Standards
- Performance Standards or Principles
- Content Standards

Opportunity-to-learn Standards include the resources on which the possibilities of learning are dependent. Years later, this discussion is gaining importance in a philosophical and political way, especially by Nussbaum and Sen’s use (2011, 2009) of the term “capability”.

² [Original citation] “Die Alternative zur teleologischen Deutung des Handelns und der in ihr tradierten Abhängigkeit von den cartesianischen Dualismen besteht darin, Wahrnehmung und Erkenntnis nicht der Handlung vorzuordnen, sondern als Phase des Handelns aufzufassen, durch welches das Handeln in seinen situativen Kontexten geleitet und umgeleitet wird.”

The *Performance Standards* or *Principles* are used to define areas of knowledge and knowing-how, which encompass essential principles of the discipline itself. In this way, they define the output range of a school subject. For mathematics, Ravitch describes these standards as follows:

“The mathematics and science taught in one modern country are not—and should not be—markedly different from the mathematics and science taught in other modern countries. Number systems operate in exactly the same way regardless of the race, gender, ethnicity, or religion of the person performing the mathematical operation. Nor are the principles of science culturally determined” (Ravitch, 1995, p. 10).

Content Standards determine the persistent content of a discipline and are—in contrast to the *Principles*—culturally and socially shaped. This aspect is obvious, especially in sport. For example, ice hockey is particularly played in countries that are ice hockey conscious (Sweden, Finland, Switzerland)—in contrast to Germany, which can be called a real field hockey stronghold.

The distinction between these three standards is important because it is only in the interdependence of these three standards that specific competencies can be determined.

“These three types of standards are interrelated” (Ravitch, 1995, p. 12). That is why Ravitch follows consequently with a focus on pupils’ competencies. However, knowledge and knowing-how are not to be understood as the inventions of learners.

This means that the areas of competence of a subject must be determined from the subject itself, according to Ravitch’s differentiated system as *Performance Standards*. The continuum of Green discussed above (cf. ■ Fig. 1) delimits these *Principles* as *recurring patterns* of the subject against noneducational aims and, thus, becomes constitutive for the subject itself. This requires a version of the subject which does not define the subject from an individual pole, but rather interprets it complementarily in the sense of “complementary to the other pole”. The potential

of this version is that areas of competencies can be defined and assigned to the continuum without falling back on the historical dualism (cf. ■ Fig. 2).

The idea of a complementary combination of sensory perception and conceptual thought processes follows a traditional educational concept. Shusterman (2000b, p. 264) is referring to Baumgarten’s “*Aesthetica*”, published in 1750, pointing out “the cognitive value of sensory perception, celebrating its rich potential not only for better thinking but for better living”.

The antagonism of the body—as an antithesis to the rational use of thought—seems to be of more recent date. Horkheimer and Adorno write in their dialectics of the Enlightenment in 1988: “The body is mocked and pushed as subordinate, enslaved, and at the same time coveted as the forbidden, reified, alienated” (Adorno & Horkheimer, 1988, p. 247) [Translated by Roland Messmer].³

That is why Shusterman wonders if—based on this complementary curricular model—the newfound focus on the body, the rejection of the rationalist ideal, must necessarily be a bad one (Shusterman, 2000a, p. 156).

The presented curricular model in its complementary version represents the attempt to connect these two poles. Hereafter, the individual areas of competence are described briefly and characterized in their value for PE.

Physical skills, motoric and technical competencies ...

On this side of the continuum according to Green—with a decreasing tendency towards the center—knowing-how and behavior is trained and conditioned. The improvement of the physical disposition, however, cannot be “taught”—in a school context—without reflection and cognition. An isolated endurance training certainly leads to an increase in mitochondria in one’s muscle fibers, even

if before, during and after the training thinking processes are excluded. That is exactly where the “border” divides workouts in sport clubs from PE and exercise from problem-based tasks (Messmer, 2012, p. 205). In order to enable learning processes, also in classes referring to this polarity a cognitive activation is needed. Training of physical disposition and learning of motor skills should not take place in exclusion of participatory (cognitive) processes of the pupils. Finally, the training theory shows that motoric learning can be improved through cognitive activation (Blatz, 2015).

According to Weinert (2001), the standard “physical abilities” could also be described as disposition, as a *necessary requirement* to learn the “following” competencies. The distinction of competencies and disposition seems possible in a curriculum structured according to age groups but it is not compulsory for the differentiation of the subject itself.

... reflexive-cognitive competencies, ability to judge

On this side of the continuum (also in a decreasing tendency towards the center), knowledge is conveyed and understanding is promoted. In the context of exercise, play and sports the improvement of the reflexive-cognitive⁴ competencies and the ability to judge can hardly be understood without an underlying experience of, for example, the condition factors or motor skills. Referring to the above-named example: Perception of endurance training is not possible without the experience of fatigue, which can also be soothing and nourishing for some people. The learning process, oriented to this polarity is comparable to the cognitive activation of the physical disposition, interdependent of the competencies based on knowing-how and behavior. On the one hand, movement plays an anticipatory role in learning processes because reflection on movement without previous experience is only possible with difficulty. On the other hand, movement

³ [Original citation] “Der Körper wird als Unterlegenes, Versklavtes noch einmal verhöhnt und gestoßen und zugleich als das Verbotene, Verdinglichte, Entfremdete begehrt” (Adorno & Horkheimer, 1988, p. 247).

⁴ Cognitive competencies are understood as a deliberate mental process. That is how the term is especially used in pedagogy.

Fig. 3 ◀ The interdependence of Principles and Content Standards

also for cognitive subjects (Messmer & Brea, 2014)—redundantly called for by the project “moving school”⁵—helps to methodically support learning processes. However, in PE there is always a “motor activation” as well.

According to Ehni (2000, p. 11), the ability to judge is understood as discussing meaning. Therefore, this pole must not be described as a standard, but rather as a superordinate idea. The power of judgment or the ability to judge is hardly measurable, but relevant as an educational aim—even if it is often avoided in the current educational discourse.

Competencies of playing games and tactical competencies—*aesthetic-aisthetic competencies*

The idea of creative intelligence culminates with these two standards, without denying this aspect to other standards or areas of competence. The excellent footballer dribbles for example through the formation of the opponent’s defenders, and needs a “knowledge” that is at the same time quickly retrievable and creative in the sense of surprising. The dancer twirls her pirouettes with an in-

tense concentration that is redolent of “self-forgetfulness”. At the same time, her sensory perception (*aisthesis*) is on such a high level that she is able to respond to every change of position of her partner in less than a split second.

The examples are intended to show that the “center” of the subject is a combination of cognitive and motor activity or of a mental and physical agility. While game competence or game intelligence is characterized by a cognitive aspect of tactics, the cognitive side of this standard is formed by the competence of perception and of presentation of body and movement. Therefore, the latter can also be called “*Aisthesis*” of sport (Barck, 1990; Shusterman, 2000b, p. 264). *Aisthesis* is understood as “the experience and use of one’s body as a locus of sensory-aesthetic appreciation (*aesthesis*) and creative self-fashioning” (Shusterman, 2010, p. 80).

Thereby, the performance standards of PE lessons are differentiated. But there is still a lack of concrete Content Standards to describe specific competencies. Because these standards always have to be interpreted in a cultural and social dependency, the following example is intended to illustrate the interdependence of Principles and Content Standards without claiming to be complete.

The list of different fields of movement can never be concluding or restric-

tive, as it is possible with *Performance Standards*. Accordingly, further regional forms of sport, such as e.g. “Moving on Snow”, “Sliding on Water” can be added. The designations of these forms of sport show that this is not a categorial system, but rather a content system which must be selected and negotiated pragmatically on the basis of opportunity-to-learn standards (cf. Fig. 3).

Specific competencies are formulated by linking Content and Performance Standards, but no competence levels. In a classical combination of content (forms of sport) and aims (principles), competencies arise, which must be differentiated on a scale in order to meet the requirements of operationability. This is quite useful for the four areas of competence in the middle of the model and should be part of the political discourse on curricula. An operationalization of the conditional skills seems very obvious, but is rather superfluous for a school subject with an explicit educational claim. For the ability to judge, the aspect of measurability seems too challenging.

The delineated combination of performance and content standards indicates a necessary further development of the subject of PE. Because traditional concepts of the discipline focused on the educational values of sport, the extension to performance standards offers the

⁵ German project title: “Bewegte Schule”.

opportunity to better establish the PE subject as a subject of education. At the same time, the content standards show that a subject can never be thought of without content.

Therefore, the contents—to which the subject has traditionally been oriented—are not arbitrary. They are dependent on regional traditions or social changes, while the performance standards give the subject a stability that will last for both time and space.

Looking at teachers—also from a pragmatic perspective—as “curriculum makers” (Craig, 2017), the model provides helpful guidance to decide on and guidance to select sportive contents that do not just focus for example on motor skills. At the same time, the model offers physical education teachers the opportunity to select their own content as professionals.

Conclusion

It is ambitious to determine the center of the school subject and its margins with reference to the differentiated social practices of sport. A possibility to deal with this claim was shown with the theoretical reference to the model of Green (1971) and the concept of “Situating Creativity” (Joas, 2015). This claim is exclusively based on an original educational requirement of the school subject PE and excludes overriding and transversal aims. I do not want to exclude these, but such pedagogical-oriented goals require a separate analysis, especially because they have to be pursued by other subjects. The teaching of PE in Switzerland with its historical roots—both in the military and in politics (cf. Messmer, 2017)—is always confronted with the danger of exploitation, which makes the guideline function more difficult than in the cognitive disciplines. However, in the context of a more and more competence-oriented education logic, it seems to be important to focus on the original goals of the school subject. The regulating function of competencies, which is found in the cognitive subjects (cf. Weinert, 2001), does not meet the requirements of PE lessons. A relation to the current discourse could be established with the differentiation of—and the historical re-

course to—the concept of competence according to Ravitch (1995).

The approach to determine the center of the subject beyond its boundaries follows a pragmatic logic (Messmer, 2011). According to this, school subjects cannot determine their educational requirements in a transcendental manner, but only ontologically from one's own discipline. Since the academic side of sport offers a mixture of different “sports sciences”, only the social phenomenon that could be described somewhat obscurely as what is shown on sports channels. Thus, the complementary curricular model follows the claim to designate PE from the subject itself rather than from any arbitrary or overall goals, as it was typical in the past.

This curricular model also consistently follows the claim that PE lessons should not be unilaterally reduced to the phenomenon of the “body”, as both the public and the administration like to do.

It is necessary to use this narrative of body and mind for the school subject, as the discussion of the Cartesian divide and its impact on PE teaching has shown. In the spirit of Johnson who therefore rightly demand: “If mind and body are not two separate and distinct ontological kinds, then thought must emerge via recruitment of various sensomotor capacities that do not involve internal representations” (2007, p. xii).

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Acknowledgment. Many thanks for the help with the translation: Jolanda Vogler, Carolin Bischlager and Mirjam Oberholzer.

Compliance with ethical guidelines

Conflict of interest. R. Messmer declares that he has no competing interests.

This article does not contain any studies with human participants or animals performed by any of the authors.

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