Chapter 3
A critical consideration of the use of physical literacy in the Netherlands

Based on:
Introduction

As in many other countries, recent policies on sport and physical activity in the Netherlands put a great emphasis on health (e.g., Ministry of VWS, 2008a, 2011a, 2011b, 2012). In these policies, physical activity is explicitly linked to a healthy lifestyle and seen as part of a solution to different health problems, such as obesity and cardiovascular diseases. In order to get a proper dose of physical activity on a regular basis, stimulating sport participation is considered an important goal. For instance, in the Dutch bid plan for the Summer Olympics 2028 (NOC*NSF, 2009), one of the goals was to increase regular sport participation among the Dutch from 65% to 75% (regular participation was operationalised as at least 12 times a year participating in a sport event). Although sport participation among Dutch children is already above that target (81% for children up to 17 years of age) (Collard & Hoekman, 2012), sport stimulation projects often focus on children.

The Dutch sport federation (NOC*NSF) and different sport associations have an important role in the process of increasing the sport participation levels. With the aim of increasing the number of sport participants, they adopted the Long Term Athlete Development Model (LTAD) as a guideline for the journey of young persons in a sport. The development during the first three stages of this model (active start, FUNdamentals and Learning to train) are summarised as physical literacy (Balyi, 2004; CS4L, n.d.-b).

Physical literacy was originally defined as “the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout the life course” (Whitehead, 2010, p. 5), and is a philosophy that increasingly permeates pedagogical frameworks for physical education (PE) in different countries (Whitehead, 2010). The philosophical foundation of physical literacy lies in the existentialistic and phenomenological tradition in which the interaction between the human being and the environment is central to human existence (e.g., Merleau-Ponty, 1962). The idea behind physical literacy is that when children learn to move in a wide variety of contexts and circumstances, chances are higher that they will maintain different physical pursuits throughout their life, are more confident in doing so and are better able to realise their human potential (Whitehead, 2001, 2007). Therefore, not just the skills in itself, but a skilful interaction with a certain context is considered important in the framework of physical literacy. In other words, movement skills are a means to interact with a variety of environments at the children’s own pace and level and not as norms
on which children can be judged. Consequently, physical literacy should not be confused with *fundamental movement skills* (FMS). In FMS, the skills are at the forefront, irrelevant of the context. Whereas in physical literacy, the focus is on the interaction in a certain context by means of those skills. For instance, just throwing a ball (a fundamental movement skill) is different from throwing a ball during a game of baseball. In addition, the interaction between the skills and the environment fosters a pedagogical climate in which the purpose and effects of learning these skills can be appreciated. Learning just FMS without a reference to the way in which these become meaningful in a specific context can have a negative effect on the motivation and confidence of participants. Indeed over emphasis on FMS alone, perhaps delivered in very directed fashion, can damage motivation and confidence - preventing the development of physical literacy itself.

Within the concept of physical literacy, little emphasis is put on sport, as the physical activity engagement that is a central goal of physical literacy extends far beyond the sport context (Whitehead, 2010). In addition, sport is often associated with a competitive way of comparing between children, whereas physical literacy is aimed at personal development and realising the individual potential (Whitehead, 2010).

**How is physical literacy used in the Netherlands?**

In the Netherlands, physical literacy is not explicitly used as a framework for PE. The use of physical literacy is most noticeable in the policies of the national sport federation (NOC*NSF) and different sport associations. These sport associations (e.g., swimming, volleyball, track and field) mention physical literacy in their plans to engage children in their sport. In these plans, physical literacy is used interchangeably with fundamental movement skills (FMS) within the LTAD model. The idea behind this is that children with an extensive movement repertoire will be more skilful in their sport. It seems to be expected that this will lead to less drop-out due to the feeling of incompetence.

The Dutch sport federation endorses the use of the LTAD model. Even though it seems widely accepted that the first three stages of this model can be summarised as *physical literacy* (Balyi, 2004; CS4L, n.d.-b), the Dutch sport federation uses the derivate term ‘physical alphabet’ to describe the FUNdamentals stage (NOC*NSF, 2011). What is meant with physical alphabet are basic movement skills, such as kicking, jumping, skating, hitting, etc. In contrast to physical literacy, as it is conceptualised by Whitehead and others, the emphasis of the physical alphabet is on fundamental movement skills. The idea seems to be that a better
understanding and control of the physical alphabet will lead to less drop-out of sport and therefore a higher number of sport participants.

Moreover, these policies are not only aimed at increasing the number of children engaged in sports. Physical literacy is also seen as a prerequisite of becoming an elite level athlete and is being used for talent detection. This idea is illustrated by the fact that in the research agenda of the Dutch sport federation, the concept of physical literacy is mentioned under the heading ‘elite sports’ (NOC*NSF, 2012a). It is expected that by testing whether a child mastered certain ‘letters’ of the physical alphabet, his or her chances of becoming an elite athlete (or at least be qualified as a talent) can be estimated.

**Discussing the use of physical literacy**

The use of physical literacy in the Netherlands can be questioned for three reasons. First, based on the philosophical foundations of physical literacy, it can be argued that de-contextualised movements (FMS) are different and differently learned than movements in a sports context (Standal & Moe, 2011). Second, the idea that learning the alphabet of movement will lead to sport participation is sociologically problematic. And third, the focus on elite athleticism does not seem to be in line with the basic principles of physical literacy. These three discussion points will be addressed in this paragraph.

**Intentionality of movement actions**

Central to the phenomenological basis of physical literacy is the concept of *intentionality* (Martínková & Parry, 2011). Motor intentionality can be described as “an embodied and concrete way of understanding or being meaningfully directed at ‘things’ in the surroundings.” (Standal & Moe, 2011, p. 267). This means that the context in which an action is performed influences the meaning of that action, which has major consequences for learning and understanding motor actions. For instance, throwing a brick with the aim of damaging a window is a different action from throwing a ball in a game of handball, although the biomechanics may be similar (Standal & Moe, 2011). It can therefore be argued that learning fundamental movement skills, such as throwing, kicking, running and jumping is meaningless, unless it is related to a certain (sport or physical activity) context. Because of the absence of meaningful interaction with the environment, FMS may be of limited value when discussing sport participation. In addition, this de-contextualised way of considering movement is not in line with the philosophical base of physical
literacy. In the concept of physical literacy, the relation between the mover and the context is clearly documented, although there is some discussion about the possible incongruence between the philosophical foundation and the application of physical literacy (e.g., Lloyd, 2011). It can therefore be concluded that physical literacy and FMS are not the same and should not be used interchangeably, as is done by several sport associations in the Netherlands. In addition, drawing on the phenomenological tradition, it can be argued that learning these fundamental movements with a different intentionality than in a sport context, limits the usefulness of these movements for sport participation and talent detection. For example, being able to throw a ball in a basket does not mean that you will be able to throw a ball in the heat of a basketball game.

**Building blocks of sports**

One of the assumptions behind the sport policies aimed at increasing sport participation, is that learning the building blocks of movement (referred to as physical literacy or FMS) will lead to sport participation. Likening the concept of physical literacy to literacy as more generally understood in relation to the spoken and written word, it is assumed that learning the letters and words (FMS) will lead to autonomous reading and writing (effective participation in a range of physical activities, including sports). This assumption is illustrated by the fact that the Dutch sport federation not only uses physical literacy to conceptualise the foundation of sport participation, but also the term ‘physical alphabet’ to describe the skills learned in the FUNdamentals stage of the LTAD. From a sociological perspective, this assumption is naïve, as it has been demonstrated that the social context of parents and peers have a strong influence on actual sport participation (e.g., Birchwood, et al., 2008; Kraaykamp, et al., 2013; Wheeler, 2012). For example, underprivileged children from a country without mountains may be introduced to the basic movements of snowboarding, by means of a virtual reality simulation offered during PE (this is actually done in the Netherlands). Through this instruction, they will learn the ‘alphabet’ or even the ‘words’ of snowboarding. According to the logic of the Dutch sport federation and associations, chances are that they will start participating in snowboarding frequently, as they became literate in that sport. However, the reality is that the country in which they live does not have natural mountains to practice snowboarding. In addition, many parents do not have the money or time to go on winter holidays. Therefore, the social circumstances do not afford them to use the ‘movement vocabulary’ that is being learned in an educational context. Although this example may be quite extreme, sociological research clearly indicated that sport participation, but also the type of
Sport that is participated in, is strongly influenced by the social background (e.g., Bourdieu, 1978; Bourdieu, 1984). It is therefore not expected that just becoming physical literate will lead to sport participation, although being physical literate is of importance when the social circumstances afford to put that literacy to practice.

**Active lifestyle for all vs. elite sports**
The third discussion point about the use of physical literacy in the Netherlands is the fact that in the Netherlands, physical literacy is often used in relation to elite level sports. Also in this context, physical literacy is used as a framework for FMS, as it is conceived that a broad range of movement skills at a young age is a good basis for elite performance. In addition, it is believed that possessing certain FMS (or letters of the physical alphabet) can predict talent for a sport (NOC*NSF, 2012b). However, one of the reasons for introducing physical literacy was to broaden the movement education of children and not confine them too early to a specific sport. This even might be helpful in becoming an elite athlete, as some studies found a relation between elite performance and late specialisation in certain sports (e.g., Moesch, Elbe, Hauge, & Wikman, 2011). However, it seems to go against one of the key characteristics of physical literacy. This key feature would be that physical literacy is aimed at participation for all in different kinds of physical activity pursuits, in which everybody can reach his or her own potential, regardless of their level compared to others. When the focus is too early on elite performance, physical literacy loses its potential to involve a large group of children in physical pursuits. Physical literacy is not developed as a talent selection tool, nor does it seem appropriate to develop tests for physical literacy, like the test Tremblay and Lloyd (2010) suggest. Using physical literacy as a means to select, develop or test for elite sports is not in line with the aim of physical literacy to develop “a lifelong habit of taking up options in one or more areas of physical activity” (Whitehead, 2007, p. 295) for a large group of children. Being active does not necessarily have to mean being competitive. Moreover, being too focussed on norms, testing and comparing, might have detrimental effects on the pleasure and motivation for physical activity.

**Conclusion**
In the Netherlands, physical literacy is not explicitly used as a pedagogical concept in PE. However, physical literacy and the derivate concept ‘physical alphabet’ are being used by the Dutch sport federation and several sport associations, as part of the LTAD and mostly as a synonym for FMS. In contrast to the philosophical
framework of physical literacy, FMS are not formulated in relation to the environment in which they are performed, which limits the relevance of these FMS for learning sport skills and for actual sport participation. In addition, from a sociological perspective, it is naive to ignore social influences when discussing sport participation. Learning the building blocks of sports or movements will not automatically lead to sport participation. Third, one of the key goals of physical literacy, to involve a large group of children in life-long physical activity pursuits, is not in line with the use of physical literacy in the context of elite sports, which is characterised by selection and exclusion.

We can only speculate about the reasons for the different approach to physical literacy in the Netherlands. These might be twofold. First, there seems to be a pressure to substantiate sport policy with scientific evidence in the Netherlands (Pot & Hilvoorde, 2013). The term ‘literacy’ is therefore used as a ‘scientific framework’ for the importance of FMS, since it is associated with ‘important’ cognitive functions in many other educational areas (Higgs, 2010). A second reason for the way physical literacy is used in the Netherlands, might be the rather abstract formulation of the concept of physical literacy. Although this is recognised by the scholars developing the concept (e.g., Whitehead, 2010), hitherto there is a dearth of practical guidelines of how to use physical literacy as a framework without falling in the trap of reducing it to FMS.

The aim of the Dutch government is to increase health by endorsing an active lifestyle. Sport is seen as an important way of getting the right ‘dose’ of movement, and physical literacy is considered as an important basis for sport participation. Although possessing certain fundamental skills is definitely a component of sport participation, these skills have to be related to a meaningful (sport or physical activity) context. Why people participate in sports and physical activity is influenced by multiple factors (Green, et al., 2013) and cannot simply be reduced to possessing the right movement skills.

As argued in this paper, physical literacy is used in the context of sport participation in the Netherlands. Although physical literacy may be an aspect of sport participation, it does appear to be more useful to describe an active and healthy lifestyle in general without a specific reference to sports (Whitehead, 2010). Therefore, the context of PE would be more suitable to introduce physical literacy. Although PE policies in the Netherlands do not refer to physical literacy directly, PE is often mentioned by sport organisations to have an important job in learning basic movements and introducing children to the movement culture.
Ironically, until now, physical literacy is in the Netherlands being used for exactly what it was trying to avoid in the first place: describing movements of the objective (elite) body, irrespective of the context and the meaning or pleasure of performing those movements.