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Position Paper Physical Literacy for Educators

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Abstract

Physical literacy serves an important foundation for many sport (e.g., LTAD) and education (e.g., provincial PE curriculum) policies in Canada. This paper provides an overview of physical literacy through the lens of an educator and attempts to bridge a significant gap between sport and physical education. The working definition that is provided examines physical literacy from the perspective of a quality physical education program and the role that such programs play in the development of the whole child.

Physical Literacy for Educators

On January 18th, 2002, the United Nations (2002) General Assembly passed resolution 56/116: United Nations Literacy Decade: Education for All. The foundation of this resolution was based upon the collective conviction that:

literacy is crucial to the acquisition, by every child, youth and adult, of essential life skills that enable them to address the challenges they can face in life, and represents an essential step in basic education, which is an indispensable means for effective participation in the societies and economies of the twenty-first century.

Based upon this definition, literacy is not restricted merely to reading and writing. According to the United Nations Education, Scientific, and Cultural Organization (UNESCO; 2003), literacy is concerned with how we communicate in society and the social practices and relationships, about knowledge, language and culture. In an era where literacy programs have become a priority for provincial Ministries of Education, it is vital for our profession to be a strong advocate in helping to foster strong literacy skills for students today and into the future. The following summary provides background information on physical literacy through the lens of an educator. The paper concludes with a proposed working definition of physical literacy for consideration by educators across Canada.

Literacy is a tool that enables further inquiry and as such creates deeper and broader access to the material and ideas that students are studying. As a result, literacy is typically viewed as falling somewhere on a continuum ranging from a set of skills to a basis for rational and ethical action (Bailey, Hunsberger, & Hayden, 1998). For example, Browne and Neil (1991) define literacy as “the ability to understand and use the standard form of communication in a particular context and for a particular purpose” (p. 158). Friere and Macedo (1987) refer to literacy as the ability to not only read the word but to also read the world. As these descriptions suggest, literacy is broader than just the acquisition of knowledge and understanding of content. It requires that the student assumes both a personal and social responsibility to use the attained knowledge in ethical and just ways. Being “literate” includes the use of critical and creative thinking skills and/or processes, conveying information through various forms of communication and applying knowledge and skills to make connections within and between various contexts. In other words, the life skills that are formed through the lens of literacy provide a critical feature of what it means to be literate.

Physical Literacy

If one builds upon this holistic notion, what does it mean to be literate within the realm of physical activities, sport, and physical education (PE)? The Canadian Sport Centre’s (2006) Long Term Athlete Development Plan (LTAD) recognizes physical literacy as the foundation for developing the skills, knowledge, and attitudes needed for Canadians to lead healthy active lives. The LTAD Plan in Canada has been adopted from Balyi’s (2001) sport model which was first used by UK Sports (2002) as the foundation for their sporting system.

The definition of physical literacy provided by the Canadian Sport Centre (Higgs, Balyi, Way, Cardinal, Norris, & Bluecharadt, 2008) is: “...the development of fundamental movement skills and fundamental sport skills that permit a child to move confidently and with control, in a

wide range of physical activity, rhythmic (dance) and sport situations. Physical literacy also includes the ability to 'read' what is going on around them in an activity setting and react appropriately to those events" (p. 5). The definition that UK Sport (2002) adopted of physical literacy is the development of agility, balance, coordination, and skill across a wide range of activities. In both of these cases, the definitions of physical literacy are specific to the development of a wide variety of physical skills. Within educational settings, the role of PE is to move go beyond the physical development of students. Current curricular goals in PE are built around the "whole child" (i.e., physical, cognitive, and affective domains).

The current definitions and understanding of physical literacy within Canada have emerged primarily through the sport system. Although sport and PE are closely related, they do not always share the same goals or serve the same individuals. Hence, a definition of physical literacy that is relevant to and representative of the educational environment within Canada is warranted. Schools, and in particular the subject of PE within schools, are ideally positioned to foster students' development of physical literacy given its mandate to provide equal and equitable access to the development of the skills, knowledge, and attitudes needed to become physically literate. At the same time, it is critical to ensure that the development of physical literacy within PE mutually supports the development of physical literacy within sport. As a result, the development of physically literate individuals is a priority that both education and the sport system share.

Physical Literacy for Physical Educators

The concept of literacy within an educational setting goes well beyond the acquisition of knowledge and understanding. It is the application of foundational knowledge and understanding in ethical and productive ways across a wide range of environments, tasks, and situations that makes an individual truly literate. Imagine if we only taught children the alphabet from A to M and stopped there! Narrowing the aim of PE to the development of skill while ignoring other significant dimensions would be similarly unreasonable. Consequently, physical literacy is based upon a solid foundation where children and youth develop the skills, knowledge and attitudes across a wide variety of activities so that they might engage with poise and confidence (Whitehead, 2007). In other words, physically literate youngsters "should be creative, imaginative, and clear in expressive movement, competent and efficient in utilitarian movement and inventive, versatile, and skillful in objective movement" (Morrison as cited in Wall & Murray, 1994, p. 5).

Margaret Whitehead (2007) has been credited as being one of the leading education experts in physical literacy. Her most recent definition of physical literacy is: the motivation, confidence, physical competence, understanding and knowledge to maintain physical activity at an individually appropriate level, throughout life. This definition of physical literacy is based upon several characteristics that are summarized in Table 1 and is consistent with other scholars who stress the importance of the interaction of an individual's physical abilities within the social and cultural contexts of movement (Wright & Burrows, 2006). For example, Penny and Chandler (2000) suggest that:

there are important psychological and sociological dimensions to physical development and that social and psychological skills and abilities required for this development, and for participation and performance in physical activities, need to be more explicit in curriculum design and teaching than may currently be the case (pp. 80-81).

In an international survey, Hayden-Davies (2008) asked 12 experts from around the world: "What is physical literacy?" Based on the responses, the core principle of physical literacy is "the ability to capitalize on the interaction between physical competence and affective characteristics" (p. 19). Thus, what is critical is the ability to respond effectively across a wide variety of situations which embrace both lifelong participation and the development of life skills. Hayden-Davies (2008) suggests that the development of these characteristics is "developed through an interaction and interplay between an individual, environments and others" and that "any expression of physical literacy will be linked to the individual's unique capacities and the individual's culture" (p. 19).

Hayden-Davies (2008) concludes that Whitehead's (2007) definition of physical literacy resonates with educators because:

Physical Literacy is more than just being proficient in one, or a small number of physical activities. It encompasses principles of both lifelong and life-wide learning. It is developed through a complex interplay between the individual, their peers and their community, society and world. Most importantly, it is encapsulated by the complex link between physical competence and the affective domain. (p. 23)

It is clear, therefore, that physically literate individuals not only move efficiently, but they also move creatively, competently, ethically, enthusiastically, and in socially responsible ways (Penny & Chandler, 2000). Hence, individuals who are physically literate have the knowledge, skills, and attitudes to lead healthy lifestyles for themselves, and also assist others in acquiring these skills as well.

A Definition of Physical Literacy for Canadian Physical Educators

For Canadian Physical Educators, the definition proposed by the LTAD tends to focus primarily upon the development of fundamental skills. Although effective for many sport environments, for physical educators, the definition does not address many of the processes, or pedagogical characteristics, of how physical literacy is developed. If we simply developed highly skilled individuals and ignored the processes by which they achieved their high levels of proficiency, we would be neglecting the educational component. In addition, the definition of physical literacy that has emerged from the sport literature has tended to focus more upon the 'physical' as opposed to the 'literacy' component; an educational concept.

As indicated by Whitehead (2007), one of the features of physical literacy is its specific expression within the particular culture in which the individual lives. It is important, therefore, to create a definition that does not house itself simply within one 'silo' but rather recognizes the realities of various perspectives and priorities across the country. The following is a proposed working definition of physical literacy that is intended to resonate with physical educators from across Canada in order to bridge a significant gap that exists between sport and PE:

Individuals who are physically literate move with competence in a wide variety of physical activities that benefit the development of the whole person.

Physically literate individuals consistently develop the motivation and ability to understand, communicate, apply, and analyze different forms of movement. They are able to demonstrate a variety of movements confidently, competently, creatively and strategically across a wide range of health-related physical activities. These skills enable individuals to make healthy, active choices throughout their life span that are both beneficial to and respectful of themselves, others, and their environment.

Justification for the Definition

Overall, the definition is intended to bridge the sport and educational sectors and situates physical literacy as a conduit between these two key stakeholders for physical activity opportunities for Canadians. This definition is harmonious with current educational notions of literacy which is critical for those in the educational sector. The first sentence provides an opportunity for a short, concise definition of physical literacy. The term 'competence' should be interpreted as inclusive, implying that it is unique to each individual rather than being based upon norms for skills acquisition. In other words, competence is defined on an individual-by-individual basis based upon various skills and is not based on population norms. It is also intended to incorporate the application of a variety of skills at a proficient level (i.e., competence) across numerous different physical activities (e.g., games, dance, fitness, and gymnastics, outdoor). The first sentence provides the rationale regarding 'why' it is important to be physically literate; in that, it benefits the whole person (physical, cognitive, affective, etc). Thus, the working definition is intended to highlight the importance of physical activity to benefit physical (e.g., fitness and motor skills), cognitive (e.g., thinking, understanding, problem solving skills), social (e.g., positive peer interactions, communication, teamwork, cooperation) and affective (e.g., emotional, spiritual, and motivational) development. Finally, the term, *wide variety of physical activities* is consistent with Sport Canada's vision of physical literacy and is also consistent with current definitions of physical literacy. The reader is encouraged to think very broadly with regard to 'wide variety'; far broader than just popular sports but also to lifelong physical activities.

The definition then describes in more detail the specific characteristics related to the process of becoming and being physically literate.

- *Motivation* is often used to highlight the importance of the affective domain and to reinforce ongoing development.
- *Understanding, communication, application and analysis* are commonly used frameworks for educational rubrics and are consistently embedded within the literacy literature. As a result, educators will gain a richer understanding and perspective of the role of PE to foster student learning.
- *Diverse forms of movement* encourages variety across different forms of movement such as dance, fitness, games, gymnastics, individual activities, outdoor pursuits, etc. This helps to reinforce that students should develop competence across a number of different activities.
- *Confidence and competence* denote both the role of self-esteem on the development of skills at proficient levels (e.g., mature form of a skill). It is also important to note that it is not simply the acquisition of skills that is important, but rather the application of skills within and across various contexts that is essential for the development of physical literacy. The performance of a fundamental skill with a mature pattern does

not necessarily guarantee successful transfer of knowledge. For example, performing the overhand throw at a mature level does not ensure that that same individual will be able to transfer his/her knowledge and understanding of this skill into a game context when faced with pressure from a defender. Hence, the terms 'confidence' and 'competence' assume that true skill is applied and within authentic movement contexts.

- *Creativity* denotes the ability to apply skills in new and novel ways and also provides a link to expressive forms of movement (e.g., dance, gymnastics, fitness). Being able to apply skills (i.e., physical, cognitive, and affective skills) creatively is critical in the development of physical literacy because it demonstrates versatility and promotes the development of new and innovative solutions to movement challenges.
- *Strategically* is used to link the concept of strategic thinking and the ability to read various situations within different types of physical activities. This is consistent with the LTAD's definition of physical literacy. Strategic thinking is critical not only in games but in all movement forms. For example, knowing when to adjust the amount of force in a creative dance can demonstrate different forms of expressive movement. Knowing how to conserve energy in activities such as cross country skiing or distance swimming is an important strategy in order to have a strong finish. Strategic thinking enables individuals to make decisions about when and how to apply their skills.
- *Health-related* precedes physical activities to ensure that fitness is an outcome and to reinforce that physical activities do in fact help to improve health as outlined in Canada's Fitness Guides. Health-related fitness refers to the development of flexibility, strength, and endurance. These health-related components are critical in order to assist individuals to apply their skills as proficiently as possible.
- *Healthy active choices* is a common phrase in most Canadian PE curricula and is consistent with Health Promoting School initiatives. It also provides an important link to differentiated learning by outlining the importance of individual choice.
- *Lifespan* reminds individuals that the role of educators is to educate individuals to make healthy active choices for a lifetime, and that physical activity is not confined to a school subject or merely when students attend school.
- *Beneficial to and Respectful of themselves, others, and their environment* is a link to health concepts and highlights that the benefits reaped through physical activity should be considered through the lens of personal and social responsibility. For example, even though someone possesses a high level of skill and fitness and is able to respond strategically, confidently, and competently in various movement situations, it does not guarantee that he/she will do so ethically, justly, or holistically. This final part of the description of physical literacy stresses that the way in which we communicate and apply our skills, knowledge and understandings is equally important. It also highlights our need to acknowledge and care for each dimension of human well-being (mind, body, spirit). For example, Lodewyk, Lu, and Kentel (in press) define spirituality as a 'journey of the heart' or 'way of being' that enables one to become more enlightened, aware, and harmoniously intimate (holistic) or united (monistic) with body, psyche, nature, and others. They note that individuals with "active spirits" tend to enjoy more balanced, healthy, satisfying, enlightened, loving, and joyful existence.

Being Physical Educated and Physically Literate

This definition captures both the National Association for Sport and PE's (NASPE, 2004) six standards for what it means to be a physically educated person and PHE Canada's (n.d) criteria for a Quality Daily Physical Education program (see Table 2). Through a Quality (and hopefully daily) PE program, individuals become physically educated which in turn enables them to demonstrate physical literacy throughout their lifespan. The concept of physical literacy is that *through* quality PE, individuals become physically literate which they can not only apply in physical activities, but also in other aspects of life.

Conclusion

Physical Literacy is now a reality for educators across Canada. Many provincial PE curricula in Canada (i.e., British Columbia, Saskatchewan, Ontario, Newfoundland and Labrador) currently stress that students should become physically literate as a result of achieving grade specific standards, expectations, or outcomes. As an example, the Ontario Ministry of Education is set to launch a new Health and PE Curriculum in 2009 that envisions a generation of physically literate students. Many other provincial curricula also have strong characteristics consistent with physical literacy.

The working definition of physical literacy presented in this paper is intended to assist teachers to implement quality PE programs linked to provincial curricular outcomes designed to foster the development of physically literate students. It is also intended to bridge a significant gap that often exists between sport and PE. The working definition attempts to do this by considering the role that a quality PE program can play not only in the development of physically literate participants in sport programs, but also physically literate individuals for life. By fostering physical literacy through quality PE programs, the students of today not only are better prepared to lead healthy active lives, but they are better prepared to do so in a way that assist others, are respectful of the environment, and which are creative in ways that have the potential to generate new and innovative ideas.

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Table 1

Whitehead's (2007) characteristics of physical literacy.

1. Physical literacy can be described as the ability and motivation to capitalise on our movement potential to make a significant contribution to the quality of life.
2. As humans we all exhibit this potential, however its specific expression will be particular to the culture in which we live and the movement capacities with which we are endowed.
3. An individual who is physically literate moves with poise, economy and confidence in a wide variety of physically challenging situations.
4. The individual is perceptive in 'reading' all aspects of the physical environment, anticipating movement needs or possibilities and responding appropriately to these, with intelligence and imagination.
5. A physically literate individual has a well established sense of self as embodied in the world. This together with an articulate interaction with the environment engenders positive self esteem and self confidence.
6. Sensitivity to and awareness of our embodied capacities leads to fluent self expression through non-verbal communication and to perceptive and empathetic interaction with others.
7. In addition the individual has the ability to identify and articulate the essential qualities that influence the effectiveness of his/her own movement performance, and has an understanding of the principles of embodied health, with respect to basic aspects such as exercise, sleep and nutrition.

Table 2

National Association for Sport and PE's (2004) characteristics of being physically educated & PHE Canada's (n.d.) characteristics of a Quality Daily Physical Education (QDPE) program.

NASPE Characteristics	Characteristics of a QDPE Program
1. Demonstrates competency in motor skills and movement patterns to perform a variety of physical activities	1. Daily curricular instruction for all students (K-12) for a minimum of 30 minutes.
2. Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities	2. Well planned lessons incorporating a wide range of activities.
3. Participates regularly in physical activity	3. A high level of participation by all students in each class.
4. Achieves and maintains a health-enhancing level of physical fitness	4. An emphasis on fun, enjoyment, success, fair play, self-fulfillment and personal health.
5. Exhibits responsible personal and social behaviour that respects self and others in physical activity settings	5. Appropriate activities for the age and stage of each student.
6. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.	6. Activities which enhance cardiovascular systems, muscular strength, endurance and flexibility.
	7. A participation based intramural program.
	8. Qualified, enthusiastic teachers.
	9. Creative and safe use of facilities and equipment.