

A Day In The Life: Teaching Physical Literacy

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You are literate. How do we know? Because you are reading this. Being literate, at least in common speech of daily conversation, means being able to read and write. The specific language does not matter, only that someone can read and write some language captured in some script. And we usually are not very precise about degrees of literacy in that same common speech. We speak of illiterate or literate – and perhaps sometimes semi-literate – but in general, if someone can make his or her way through a magazine or newspaper or even comic book, and understand the words, and write some of her or his own words, we grant the status of “literate”. However, the way we use words in common speech does not necessarily mean we all understand them in the same way, or even the right way, nor does it mean that words will not be co-opted to mean things other than what they were originally intended. Over time, their meanings may expand, contract or change altogether what they signify.

The United Nations Education, Scientific, and Cultural Organization (UNESCO, 2005) provides a working definition of literacy that defines it as “...the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve his or her goals, develop his or her knowledge and potential and participate fully in community and wider society” (p. 21). When Browne and Neil (1991), Friere and Macedo (1997), and Fernandez- Balboa (1997),

for example, refer to literacy as being something more than just being able to read and write words on a page at some agreed-upon level, they broaden the understanding of the word. By using the word “literacy” to mean more than the ability to read and write at some baseline level, the notion of multiple literacies changes in practical terms the expectation one must meet to claim legitimately that one is literate. And it changes in practical terms the kind and degree of learning that a teacher of language would have to help students achieve for them to become literate.

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A Horse Of A Different Colour?

In the world of physical education and sport, the word “literacy” has been adapted to purposes beyond its birthplace in the world of language. The idea of physical literacy has become part of the discourse among physical educators and also those with an interest in athlete development (e.g., Morrison, 1968 as cited in Wall & Murray, 1994; Whitehead, 2010; Canadian Sport Centre, 2006). It has become an organizing principle for understanding the experience of learning and performing skilled action and the role of educators, whether coaches or teachers, in promoting and guiding those experiences. Higgs (2010) discussed why the term “literacy” was adopted for this purpose. Significantly, physical literacy has been framed in light of broader, rather than narrower, versions of literacy in the linguistic sense. In doing so, the bar over which one must



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Physical literacy serves as an important foundation for physical education. This paper takes us on a thought experiment that compares the concept of physical literacy to similar concepts of literacy in language arts, mathematics, and music. How the English teacher looks at literacy in language arts, for example, is consistent with how the physical educator looks at literacy in physical education. The paper concludes that the work by Physical and Health Education Canada on physical literacy has helped physical educators use language that is consistent with literacy across all curriculum subject areas and this in turn, has helped to refocus the importance of student learning through physical education.

jump to claim physical literacy has been set high and the expectations for the formal processes by which physical educators and coaches nurture the development of physical literacy must necessarily be more demanding. That is, literacy in the physical sense is more than knowing basic movement skills; it is more about the ability to “do movements” and know “what to do” in diverse contexts of challenge.

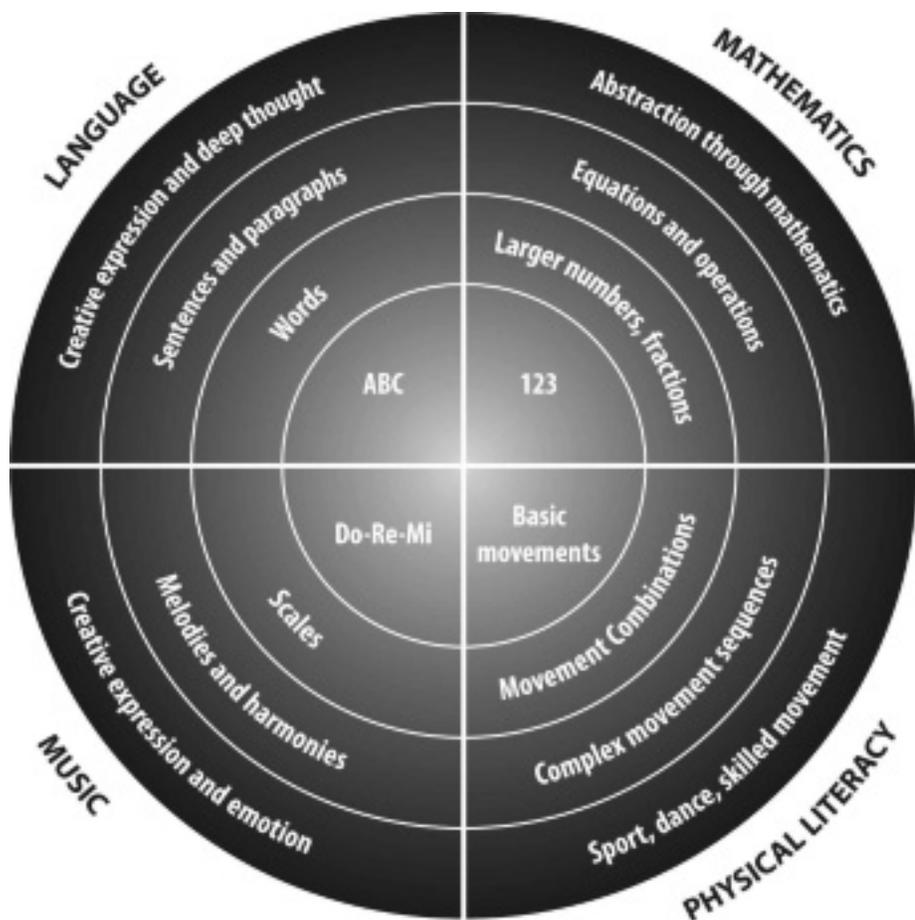
How can we explore the viability of the concept of literacy in the world of skilled human movement and its place in human development more broadly to see how well it works as a framework for understanding physical education and sport policy and practice? One way is to delve critically into various definitions and then compare their relative merits and see how well they stand up to scrutiny. There are a few around and it is worthwhile to include them here. Mandigo, Lodewyk, Francis, and Lopez (2009) on behalf of Physical and Health Education Canada have offered one possible definition. They have suggested, as a working draft version, that physical literacy reflects the idea that ... “Individuals who are physically literate move with competence in a wide variety of physical activities that benefit the development of the whole person” (p. 28). Higgs, Balyi, Way, Cardinal, Norris, and Bluecharde (2008) defined it as: “...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). And, Tremblay and Lloyd (2010) thought that physical literacy could be best defined as: “... a construct which captures the essence of what a quality physical education or a quality community sport/activity program aims to achieve. It is the foundation of characteristics, attributes, behaviours, awareness, knowledge and understanding related to healthy active living and the promotion of physical recreation opportunities” (p. 28). All these pay some degree of homage to Whitehead (2010) whose own definition included components of knowledge, confidence, self-competence, motivation to use movement potential, reading and responding to various physical environments, all with some sense of self and linkage to local culture and personal ability.

Even if we could take all these definitions and distill them into a single universally accepted statement (and even a cursory examination suggests that they are not all saying the same thing), the danger is that the details of the chosen definition can become the focus of analysis excluding any discussion of its usefulness. That kind of discourse is a perfectly legitimate process to go through but, especially to the community of practice, often feels much like debate about how many angels can dance on the head of a pin. It is hard to escape asking, who cares? On the other hand, without a clear definition, how is it possible to have the necessary conversation at all about the practice of teaching for physical literacy? There will no doubt

Le savoir-faire physique constitue un solide fondement à l'appui de l'éducation physique. Cet article nous entraîne dans une démarche de réflexion qui compare et apparente la notion du savoir-faire physique à des notions de savoir-faire langagier, mathématique et musical similaires. À titre d'exemple, les auteurs ont constaté que la notion de savoir-faire langagier des profs d'anglais s'accorde avec la notion de savoir-faire physique des profs d'éducation physique. Ils en sont venus à la conclusion que les travaux sur le savoir-faire physique menés par Education physique et santé Canada ont aidé les enseignantes et enseignants d'éducation physique à adopter un langage congruent avec les notions de savoir-faire associées aux autres matières scolaires. Ceci, en retour, a confirmé l'importance de l'apprentissage de l'élève par l'entremise de l'éducation physique.

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numbers, and music. Second, and related, we learn to do at least some aspects of all of these without formal education. Pinker (1994), among others, has argued effectively that language cannot help but emerge. Movement begins at birth (even blind children smile though they have never seen anyone else do it) and improves quickly through infancy. The idea of “how much” or “how many” seems innate by virtue of living in a world of time and space. And we can all hum a tune or tap a rhythm, even if badly. They are, each in its own way, a form of distinct intelligence (Gardner, 2006) and each is part of the standard issue human tool kit that is captured in a very specific way in school curricular design. Third, they all exist without the need for socially constructed outcomes or purposes. Learning language does not happen because of the need to write books or plays. Learning mathematics does not happen because of the need to manage accounts or model the cosmos. Learning music does not happen because of the need to play Carnegie Hall. And, learning to move does not happen because it is required to compete and win games of physical skill. In each of these cases, any form of literacy that might be associated with our physical, linguistic, mathematical, or musical lives does not exist a priori to become the servant of some greater purpose. Fourth, all have multiple genres in which they can be displayed. One can speak Chinese and not English. Mathematics can be expressed as arithmetic, geometry, trigonometry, and calculus. Music can be created as jazz, classical orchestral composition, or Inuit throat singing. And, skilled movements can kick a ball, create a performance, paint a picture, or wash the dishes. These many individual manifestations are not all requirements to lay at least some claim to what we might ultimately deem to be a form of literacy. Simply because one comes across a word in a book that is not understood does not render one illiterate, nor does the inability to hit a particular high or low note while singing render one unmusical. But much of the remaining discussion to be had

be ongoing discussion about the formal definition of physical literacy and this will be valuable if it helps to refine our thinking. However, while we are having it, measurement of physical literacy will continue and programs built upon it will be designed and implemented. Ideas have great power, sometimes even if they are not fully fleshed out and supported by empirical research. For our purposes here, however, we will work with as little reference as possible to formal definition and instead work with metaphor and analogy to the idea of linguistic literacy and two other related constructs. We hope to follow this pathway to some conclusions that we hope will help to strengthen the case for the tangible and

pragmatic reality of physical literacy. To do so, we are going to explore a day in the life of a teacher of physical education and compare that day with that of a teacher of language, a teacher of mathematics, and a teacher of music to see how coherently the basic concept of literacy functions across disciplinary boundaries.

Why choose these three comparators to physical education as a way to evaluate whether the idea of literacy is appropriate in the physical education domain? First, excepting abnormal circumstances of human development, we can all do these at some level. Relatively few people do not demonstrate at least some of the skills associated with movement, language,

about physical literacy needs to be about identifying what is both necessary and sufficient for literacy to be achieved. Fifth, and finally for our purposes here, all are forms of communication, each with its own kind of message and each with its own mode(s) of delivery.

With all these commonalities, our key question is whether the idea of literacy applies to movement, mathematics, and music in the way that its original and narrow meaning has always applied to language. As noted earlier, a “weak” version of literacy is typically understood in common speech. But our task is more demanding than that if we are to establish the concept of physical literacy in a way that would make its meaning and its status strong and purposeful.

A Thought Experiment

Imagine a school and imagine, too, four teachers in that school. One is the physical education teacher, one is the language teacher (English for our purposes here), one is the math teacher, and one is the music teacher. Each has been assigned by the school principal (a former language arts teacher and, therefore, most comfortable with the descriptors of that discipline) the task of ensuring that all of the grade six students in the school will be what the principal has called “literate” in each teacher’s specific area. To accomplish this goal, the teachers know they will have to guide their students through a series of learning experiences. They all seem to have some sense of what the principal meant even though only the language arts teacher has any first hand experience with building literacy given

the historical placement of literacy within language development (UNESCO, 2006). But what are the right experiences and what is the right way to demonstrate literacy as it might pertain to these four areas of study?

As an aside before continuing: why choose the grade six level here in our thought experiment as the developmental level by which the principal wants literacy to be assessed? In grade six, pupils are about 11 years old, perhaps a year older, perhaps a year younger. And it is at that age range that children are typically expected to have passed through the Physical Literacy phases of Canada’s Long Term Athlete Development (LTAD); that is, the Active Start, FUNdamentals, and Learn To Train phases (Canadian Sport Centre, 2006).

These three phases are also consistent with the developmental progression of fundamental skills and tactics identified in many elementary physical education curricula across Canada . Beyond these phases, the game changes so to speak, and there are more pathways that learning can take in the realm of physical development. So by confining our discussion here to an age concomitant with the completion of the physical literacy phase of the LTAD we are, we know, engaging in a convenience designed to focus the discussion to a learning period that is not likely to highlight differences between physical education and sport development but rather to emphasize similarities in purpose .

The language arts teacher has the easiest task: it is this teacher for whom the word “literacy” has the most obvious meaning, the word “literacy” having its roots in the letters that form the basis of written and read language. What, then, is the language arts teacher’s pathway, or curriculum, to helping students achieve a state of literacy? Using the Ontario Ministry of Education’s (2005) Guide to Effective Instruction in Writing as a

backdrop, children begin with a building block phase. They learn the ABCs. Then they begin to make words from combinations of letters. These combinations of symbols become more advanced and complex, leading to the formation of phrases, sentences, and paragraphs. At some point, armed with words and the combinations that can be made from them, creative expression becomes possible and written stories and poems emerge. And from what can be written and read, they reach a level where abstraction is possible, leading to ideas, metaphors, similes, and perhaps they experience the feelings that come from the power of complex language. And finally, armed with all of this, language becomes a medium for deep thought and intellectual structure and they imbue us with the grander framework of life’s ethics, metaphysics, epistemology, and aesthetics though at the grade six level these words are likely replaced by right and wrong, real and unreal, true and false, and pretty and ugly. At some point during the grade six year, we can test all of these different developmental phases to see what level of function each child has achieved. Designing such tests is

neither simple nor easy, but it is well established what they look like and how to interpret them though testing is always a work in progress. With the most straightforward subject organized to the principal’s satisfaction, let’s continue the thought experiment and see how this pattern of development might play out in the classrooms of our other teachers.

Next we turn our attention to the mathematics teacher. Like language development, students “...proceed through developmental stages in their understanding of mathematics concepts” (Ontario Ministry of Education, 2003, p., 69) Children begin with a building block phase here, too. They learn the 1-2-3s. Then they begin to make larger numbers from combinations of single digits. These numbers become more complex, even to the point of being sub-divided into parts before and after a decimal point, for example. Along the way, armed with an arsenal of numbers, generative relationships among them form and children learn to act on those numbers using basic operations like addition, subtraction, multiplication, and division. They learn to play with

