

**Ken Hardman**

*University of Worcester, UK*

**Review**

## **PHYSICAL EDUCATION, MOVEMENT AND PHYSICAL LITERACY IN THE 21<sup>ST</sup> CENTURY: PUPILS' COMPETENCIES, ATTITUDES AND BEHAVIOURS**

### **INTRODUCTION**

The European Union Bologna Declaration (June 1999) set in motion an agenda of policy reforms. The subsequent Council of Europe's Stockholm Meeting in March 2001 set three strategic goals including the quality and effectiveness of the educational system. In the improvement of the quality and effectiveness of education and professional preparation, it was envisaged that curricula would need to focus on key competences, appropriate to the context for lifelong learning. Arguably, this was a European Parliament and Council of Europe political response to align Education in Europe with emerging and established practices in other sectors, which had variously formulated competence frameworks embracing the provision of skills enabling learners to cope with increasing complexity in work tasks and linked with the notion of 'employability'. Employability is associated with work-compatible values and attitudes, including a desire to learn, to apply that learning, to adapt and to respond proactively to change; basic skills (literacy and numeracy); work needs' key skills (communication, application of number, information technology, improving one's own learning and performance, working with others and problem solving); other generic skills that are becoming 'key', such as modern language and customer service skills; relevant up-to-date knowledge and understanding; up-to-date job specific skills; and the ability to manage one's own career (CBI, 1998, cited in Hoffman, 1999). A European Union (EU) survey in 2002 of 'Key Competencies' found that all the then Member States included either explicit or implicit reference to the development of competencies, that identification was as much a matter of conceptualisation as terminology and that two motives fostered focus on key competencies: (i) quality in education, emanating from school to school variation in educational attainment; and (ii) internationalisation, scientific and technological progress and increasingly complex career paths (Scottish Qualifications Authority, 2003). This focus has been reflected in a marked shift in language and programme ethos and content of school subject curricula both in schools and in teacher training provider institutions. Syllabus and curricular aims are linked through subject content and pedagogical/didactical processes with ascribed and expected learning outcomes and competencies. Indeed,

during this period, research into the issue of „professional competence”, as defined by sets of competencies, has become a prolific enterprise across the world. This shift is well illustrated in the domain of Physical Education.

### **PHYSICAL EDUCATION: PERCEIVED ROLE**

Physical education is often advocated as a source of a range of positive developmental characteristics from early childhood to late teen-age and now, when it is perceived to be a lifelong process, throughout adulthood, epitomised in the notion of the ‘physically educated person’<sup>1</sup>. Its perceived role has expanded over the years. Ostensibly as a school subject, physical education’s broad brush scope and potential place it in a relatively unique and indispensable position with some responsibility in addressing many contemporary issues through characteristics not offered by any other learning or school experience. Indeed, the European Parliament (2007) has taken the view that physical education has the propensity to make significant and distinctive contributions to children’s physical, mental, social, moral etc., development to include respect for the body, integrated development of mind and body, understanding of physical activity in health promotion, psycho-social development (self-esteem and self-confidence), social and cognitive development and academic achievement, socialisation and social (tolerance and respect for others, co-operation and cohesion, leadership, team spirit, antidote to anti-social behaviour) skills and aesthetic, spiritual, emotional and moral (fair play, character building) development, a panacea for resolution of the obesity epidemic, inactivity crisis and sedentary lifestyles, enhancement of quality of life etc. Fundamental questions arise here: a) where and what is the evidence to confirm the claims made on behalf of physical education?; and b) if the claims are legitimate, how can physical education deliver all that is claimed in its name when in some schools only 30 minutes per week are scheduled for physical education classes? But these questions are bases for discussion in another conference on another day.

Physical competence is a key aim of physical education and it is the acquisition of physical skills that most of us associate with the subject. Gallahue and Ozmun (2006) suggest there is a range of fundamental movement skills, which children are capable of acquiring by the age of around seven and many physical education programmes focus on providing the instruction, encouragement, opportunity and

---

<sup>1</sup> *Physically educated* persons might be described as being physically literate, having acquired culturally normative skills enabling engagement in a variety of physical activities, which can help to maintain healthy well-being throughout the full life-span; they participate regularly in physical activity because it is enjoyable; and they understand and value physical activity and its contribution to a healthy lifestyle.

context to develop these skills during the primary school years and beyond. However, attributes such as motivation, confidence, knowledge and understanding are as important as physical competence. It could be argued that they are more important than physical competence, if it is considered that children and young people are being helped to build a platform, which is the springboard to becoming lifelong participants in physical activity. Motivation is the attribute that will take them from the potato couch into regular exercise, or will take them from cyberspace into physical activity. Confidence is vital if competences are to be put to good use, because once they have the skills, they need to feel they are able to join in. Every child should leave a physical education lesson thinking ‘I can do it!’ (Rimmer, 2008). Knowledge and understanding are essential in helping to maintain an active lifestyle - if they know why physical activity is good for them; and if they appreciate it is helping them to be healthy, they are more likely to be motivated. These attributes need to be nurtured, taught, developed, practised and consolidated during compulsory schooling years. We need children and young people to move from year to year, through the age phases, with these attributes becoming increasingly embedded. This is the role of physical education.

### **PHYSICAL EDUCATION AND MOVEMENT**

The very essence of physical education involves **movement**. In turn, movement education in the form of physical education makes, or can make a unique contribution to the education of **all** and is key in sowing the seeds in the formation of the **physically educated person**. As assumed in the European Parliament 2007 *Resolution*, the knowledge, skills and understanding acquired through school physical education prepare people for life. Whilst research evidence is not wholly conclusive, meta-analysis does suggest that when properly taught, arguably physical education can stimulate physical and mental development and through the physical education process young people can learn about the world and themselves, learn how to play and to respect others, how to cooperate and compete, and the differences between success and failure, what is fair and unfair, ethical and dishonest. The same knowledge and skills are necessary to perform a variety of physical activities, maintain physical fitness, and to value, as well as enjoy, physical activity, which, in itself, is an essential pre-requisite for enhancement of quality of life and good health over the full lifespan. Motor activity in physical education, sport and physical activity is an important irreplaceable phenomenon in physical, cognitive, functional, sensory-motor, psychosocial development, in wellness development of all age groups and especially of children and youth. It is a springboard for involvement in sport and physical activities throughout life. It is also a source of inter-personal communication and, in addition, can involve an appreciation of the natural environment as well contribute to moral

and aesthetic education and development. Physical movement education is the **only** educational experience where the focus is on the body, its movement and physical development. An over-riding aim of physical education is to develop physical competence so that all children are able to move efficiently, effectively and safely and understand what they are doing and why they are doing it as they begin the journey to becoming independent, confident and responsible citizens (Talbot, 2009). In summary, its outcomes embrace commitment, confidence, willing participation, knowledge and understanding and acquisition of generic and specific skills, positive attitudes, active lifestyle and activity enjoyment etc. Movement is the very core of physical literacy.

### **PHYSICAL EDUCATION AND PHYSICAL LITERACY**

Physical literacy is a significantly important goal of physical education. An understanding of physical literacy helps to appreciate the special nature of physical education. It is not specifically about teaching children and young people to play sport (although there will be opportunities to do so); nor is it purely about finding those with the potential to become elite performers (although these individuals need help on their journeys as much as children and young people, who have difficulty catching a ball, or putting their head underwater, need help). Physical education is about encouraging every child and young person to become a lifelong participant in physical activity and supporting every child and young person on their physical literacy journey.

Physical literacy entails a commitment to the holistic nature of the individual with interaction of capabilities. As defined by Whitehead (2010) „As appropriate to each individual’s endowment, physical literacy can be described as the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout the life course” (p.5), each attribute of which is as important as the other. It is the nurturing of a blend of the attributes that enables individuals to develop their physical literacy. Key to understanding physical literacy is to appreciate that movement is a fundamental part of being human and movement is essential for good health and making most of our lives. Being physically active facilitates maintenance and development of capacity to move and is, therefore, important from cradle to grave, i.e. physical literacy involves a life-long process: it is not just something that we ‘do’ in school physical education lessons. Physical education plays a vital part in the process, because this is the only time we can guarantee all children will be given the opportunity to receive guidance and encouragement to learn and practise, thereby developing their physical literacy. Every person is on a personal physical literacy journey and no two journeys are identical because of genetic make-up, socio-economic, socio-cultural and environmental factors, opportunity and a whole host of

other factors. Promoting physical literacy is not about finding individuals with the best skills, giving them extra tuition and ignoring the rest. Physical literacy as the goal of all physical activity recognises each individual will be travelling in different contexts, at different speeds and often in different directions. The role of the teacher, and/or significant others, is to guide the child or young person to make progress on his/her journey, giving support and direction where needed.

In schools, physical education curricula need to be based on the vision that the knowledge, skills and understanding acquired should benefit students throughout their lives and help them thrive in an ever-changing world by enabling them to attain physical and health literacy, as well as the comprehension, capacity and commitment needed to lead healthy, active lives and to promote the benefits of healthy active living. Physical literacy (the ability to move with competence in a variety of physical activities) and health literacy (the skills needed to obtain, understand and use the information to make good decisions for health) are key in curriculum development, which should be about helping students develop the necessary skills to make healthy choices! In essence this is a recipe which comprises competence(s) and positive attitudes and behaviours!

An important element of physical literacy is breadth of experience. Individuals who reach a high level of performance in one activity with no experience whatsoever of other spheres of activity and on say retirement thereafter drop out of any physical activity will not have travelled a particularly holistically challenging or satisfying journey. It is important that children and young people are provided with as wide a range of experiences as possible whilst they are at school. The wider the platform, the more stable it is, not forgetting that sufficient time is devoted to each experience to allow competence to develop. Good teachers want the best for the children and young people in their care. They want the children and young people to learn, to make progress and to fulfil their potential. This being the case, then the same teachers will want to play a significant role in helping the children and young people to develop their physical literacy. Everyone has the capacity to develop their physical literacy and hence, all school pupils have the potential to develop their physical literacy and being the best they can be.

‘Significant others’ play an essential part in the physical literacy journey in which **movement competence** enables individuals to participate effectively in multiple contexts or social fields, which contribute to an overall successful life for individuals and to a well-functioning society. It is a part of health care and disease prevention. It is connected not only with sport and recreation but also with everyday life activities and only secondarily with specific sports skills. Physical literacy development is unlikely to occur naturally as part of normal growth and movement education should be properly coordinated in order that everyone becomes both able to accommodate

and capable of accommodating changing human and ecological environments and managing active lifestyles and risks. It needs to be recognised that the development of physical literacy is not confined to one particular setting or indeed the responsibility of one particular provider. A range of individuals and organisations are required to:

- Encourage children to participate in all of these different opportunities in order for them to achieve their full potential; and
- Create and sustain a range of different opportunities for developing physical literacy.

Hence, movement competence can be learned, taught and developed (both indirectly and directly) in a range of institutions and other settings (educational, social and cultural public, private, commercial and voluntary systems and sub-systems). In the development of physical literacy, movement programmes, comprising physical and health education, are most effective when students' learning, values and healthy habits are shared and supported by school staff, families (parents and siblings), peers and communities. They should be characterised by (i) high quality teaching and relevant programmes' content; (ii) a healthy physical environment; (iii) a supportive social environment; and (iv) community partnerships.



**Diagram 1.** Opportunities for developing physical literacy (adapted from Sport Northern Ireland, 2009).

## THE LEARNING TEACHING ENVIRONMENT

Physical activity is the key vehicle for student learning, a principle that students should learn about healthy activities by doing them. In this way, not only will they discover the joy of movement but they will develop skills that will lead to a lifetime of healthy active living. They will also come to understand how to apply the skills and principles they have learned to other things. The idea of teaching transferable skills and strategies is important to accommodate the growing number and range of activities available and accessible and where and when appropriate preserve traditional/cultural activities.

Physical and emotional safety is a pre-condition for effective learning in physical education and, therefore, there is a need for a supportive social environment. The physical and emotional development of pupils varies widely. Hence, the curriculum needs to shift from a content-focused approach to a more skill-based approach, which allows for differentiation of teaching methods/approaches with modification of lessons according to a student's readiness, interest and learning preference, ultimately, helping them to reach their full potential, i.e. learning should be student-centred and skill-based. This shift is intended to help students acquire and practise the skills needed to develop physical and health literacy, and to lead healthy active lives.

Learning in this physical education and health curriculum is balanced (addresses physical, cognitive and psycho-social needs *inter alia*), integrated (connections between all strands of the curriculum, Healthy Living, Active Living and Movement Competence: Skills, Concepts and Strategies, and between the content of the strands and the Living Skills are made whenever possible), and connected to real life (topics covered are meant to reflect the situations students face and the choices they have to make in today's world). Physical educators should aspire to create 'a culture of lifelong enjoyment and participation in physical activity including sport and recreation. Being physically active throughout life depends on an individual's ability to feel competent and confident in an activity setting. This competence and confidence normally comes from having developed physical literacy skills as a child. Physically literate children will be able to perform a range of fundamental movement skills appropriate to their capabilities. A child's movement confidence will develop as he/she becomes more competent in performing these skills.

In the pursuit of critical thinking skills, i.e. thinking reflectively (Ennis, 1993) physical literacy and healthy well-being need to be developed and applied in situation (Daniel & Bergman-Drewe, 1998), leading to a decision to be made on to what to believe or do and may develop. By no means is this an all encompassing view of what critical thinking is, but rather a starting point in understanding the effect it can have. Certainly in a physical education context, having critical thinking skills is advantageous given the direct link between the quality of the decision made by the

learner and the action outcome. At a more philosophical level, the assumptions held by an individual are guided by the values and beliefs this individual holds, which in turn shape the way the individual acts. In other words, how and what we think is a consequence of our values and beliefs; our values and beliefs determine how and what we think. Thinking is enhanced through decision-making, problem solving, interpreting information, creativity and reflection. These are activities, which develop awareness of how to think, to practise strategies for effective thinking and to develop intelligent behaviour for lifelong learning (Jones & Cope, 2011).

### **THE ILLUSORY AND ACTUAL PHYSICAL EDUCATION TEACHER**

So in the pursuit of competencies development and attitudes and behaviours shaping, as a newly qualified, enthusiastic, committed young professional PE teacher do I turn up at school on my first day, dressed in my all-weather track-suit, worn over my swimming trunks, games kit, driving my go-kart with a trailer containing clothing and equipment for American rules football, badminton, basketball, cricket, handball, hockey, netball, petanque, rugby, squash, soccer, tennis, volleyball and multifarious other games, for dance, gymnastics and track and field activities, martial arts, combat sports as well as my mountain bike, inline skates and roller blades, cross-country and downhill skis, snow and sail boards, sand yacht, kayak, sailing dinghy, snorkel and deep-sea diving equipment, parachute, micro-light craft and ICT facilitation, carrying my manuals on old and new teaching and learning methods, legislation and litigation with guidance on risk assessments, empowerment of children, communication and interpersonal communication skills, especially on negotiation with students about what they are to do that day etc., texts on research and its application and armed with information to raise awareness of out-of-school and beyond school opportunities and providers? No! Of course this is both unrealistic and impossible. What I need to be armed with is a range of generic and specific competencies and strategies to optimise the holistic (including physical, personal and social) development of all pupils and enable them to make informed decisions on the need for, and relevance of, continuing physical activity engagement and choices as to when and where this can be continued in the wider community of which they are destined to be part. In essence, these competences and strategies relate to development of subject knowledge and application of teaching interventions, which are typical of an analytically reflective and professionally effective teacher.

The role of a teacher has changed/is changing. A physical education teacher should concentrate on the overall holistic development of motor (motor development), cognitive (moral, social and intellectual development) and behavioural patterns (attitudes and habits). In the teaching/learning process, a choice of content, use of a range of resources, variety of activities and teaching approaches needs to be employed

more effectively and extensively than hitherto. However, it should be remembered that too many changes can make pupils (who are used to 'traditional' teaching) feel uncomfortable and incapable of accomplishing the task. This may influence the progression of acquiring a skill or skills and eventually break down the structure of a process. A structured framework gives the pupil a sense of security and guidance, which provides physical and mental support. However, this does not challenge monotonous routines, which, when coupled with poor quality (i.e. unattractive content delivered in a command teaching style), results in children dropping out of after-school physical activity.

### **THE PLACE OF PHYSICAL EDUCATION**

Modern physical education needs to be placed in a wider, holistic educational perspective. It should be 'flexible' in combining the best practices of the past with the best practice and initiatives of the present (though, created on firm foundations) and, it needs to prepare students for the life's challenges ahead in dynamically changing social and cultural conditions. Such education should be placed within a proper socio-educational context allowing for specific historical conditions and should play a crucial role in promoting one's independence in gaining knowledge and skills and ensuring a proper context for attaining values of social co-existence and co-operation.

For both the present and the future, there is a need to consider what education is and what it is for and the place of PE in it in a world that is „confusing, complicated and rapidly changing” (Claxton, 2002, p.46). There is also a need to encourage thinking about physical education in new ways, for which there are a number of fundamental questions, for example:

- How can physical education better serve the needs of pupils and society in a dynamic, ever changing world?
- What should we be teaching in physical education?
- How can teachers structure class experiences in a more effective format?
- What changes need to be made in schools and wider community settings and professional preparation programmes?
- What new challenges might we face in the future?

In the future, civilization, technology and employment opportunities will require skills as well as qualifications that today some may not even think of. Preparation for this must come through education. The educated person is the one „who has learned how to learn; ...how to adapt to change; ...has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security”

(Rogers, 1983, p.120). Education is about developing values and character within learners (Claxton, 2002). It is not limited to the acquisition of measurable behaviours, understanding and knowledge reduced to implied components of competences and educators being turned into technicians (Pring, 1995). We should want young people to become „successful learners, confident individuals and responsible citizens” and enter adulthood as „confident and capable individuals” (QCA, 2007); „...pupils who are effective learners have the skills to learn on their own ...and work independently” (DfES, 2004, p.i.); they actively engage „in their learning (and) so make their own meaning” (DfES, 2004, p.ii). A good learner is about the whole person embracing skills and strategies as well as attitudes, values, self-image and relationships.

Therefore, the way in which pupils are taught in schools now needs to change with the times as many young people currently are lacking in positive attitude and social skills (flexibility, adaptability, inter-changeability of skills, punctuality, responsibility, own initiative, creativity as well as citizenship, self-management or communication skills) required in modern society. To respond to the changing environment, children need to learn elementary universal skills rather than detailed knowledge and they need to develop aptitudes enabling them to create those skills throughout their whole life span. Transferable skills are required to address different problems in different contexts at different times in their lives. Simultaneously, it is also important that all children should be able to take part in physical activity organized in school and out of school-based settings that foster fun and enjoyment, without promoting embarrassment, eroding confidence and self-esteem etc. related to their lack of technical ability. Thus, links between school and wider community are important in preparing young people for the challenges of the ‘knowledge economy’ and for coping with a world of growing complexity and rapid change.

### **CONCLUDING COMMENTS**

Essentially, competencies are ‘can do’ statements. The world is full of people with sets of competencies, but how many of them are actually competent? What is useful sometimes obscures what is valuable. Intrinsic values are often overlooked. In our domain, i.e. Education, emphasis should perhaps be more on shaping attitudes and encouraging positive active healthy lifestyle behaviours. Changes in attitudes and behaviours should of course emanate from development of knowledge, skills and understanding in the form of accumulatively acquired competencies. These competencies, which are appropriately adjustable and over time adjusted, are derived from experiences provided by high quality teaching, defined by informed reflective practice attuned to ideals and values fostering true learning experiences in a dynamically changing world, and high quality physical education programmes in which learning is incremental.

If physical education is to sustain its presence both in formal and informal educational and socio-cultural settings, and continue to have a positive role as an instrument of socialisation, then practitioners should respond to the needs of optimally developing individuals' capabilities and provide opportunities for personal fulfilment and social interactions, essential in human co-existence. With the knowledge that educational experiences have a propensity to facilitate and help enhancement of life-span welfare and well-being, physical education should be focally involved with the process of personal fulfilment in the future. It is worth remembering, however, that it is not the activity, but the reason for taking part that sustains participation. Echoing the words of the Conference of Ministers for Culture (KMK) (1966) and the then German Sport Confederation (DSB, 1966), physical education's role in fostering such 'partaking' should be regarded „as an essential element of education” and as „indispensable for the upbringing and education of people”. I would add that its role embraces the often overlooked intrinsic value of the 'sheer joy of participation in physical/sporting activity', a significant shaping influence on positive attitudes and behaviours!

## REFERENCES

1. Claxton, G., (2002). *Building Learning Power*. Bristol, TLO Ltd.
2. Daniel, M. F., & Bergman- Drewe, S. (1998). Higher-order thinking, philosophy, and teacher education in physical education. *Quest*, 50, pp. 33-58.
3. DfES (2004). *Key Stage 3 National Strategies*. London, DfES.
4. Deutscher Sportbund (1966). *Charta des Deutschen Sports*. Frankfurt, DSB.
5. Ennis, R., (1993). Critical thinking assessment. *Theory into Practice*, 32, pp.179-186.
6. European Commission (2007). European Parliament Resolution on the Role of Sport in Education. Strasbourg, 13 November.
7. Gallahue, D. And Ozmun,). (2006). *Understanding Motor Development*. International, McGraw Hill.
8. Hoffmann, T., (1999). The Meanings of Competency. *Journal of European Industrial Training*. 23 (6/7). pp.275-285.
9. Jones, R., & Cope, E., (2011). Teaching Games for Understanding: an Inclusive Teaching Model. In, K. Hardman & K. Green, *Contemporary Issues in Physical Education: International Perspectives*. Maidenhead, Meyer and Meyer Sport (UK). pp. 122-141.
10. KMK (1966). *Rahmenrichtlinien für die Leibeserziehung an den Schulen der BRD*. Bonn, KMK.

11. Pring, R.A., (1995). *Closing the Gap; Liberal Education and Voccal Preparation*. London, Hodder & Stoughton Educational.
12. QCA (2007). [www.curriculum.qca.org.uk](http://www.curriculum.qca.org.uk)
13. Rimmer, V. (2008). Recognising our Cultural Myths. *Physical Education Matters*. Association for Physical Education (afPE), Vol 3 (2).
14. Rogers, C.R., (1983). *Freedom to Learn for the 80s*. Ohio, Charles E Merrill.
15. Scottish Qualifications Authority (2003). Key competencies – some international comparisons. *Policy and Research Bulletin*, no.2. Glasgow, Scottish Qualifications Authority
16. Sherborne, V. (2001). *Developmental Movement for Children*. London, Worth Publishing.
17. Sport Northern Ireland (2009). *Report. A Baseline Survey of Timetabled PE in Primary Schools in Northern Ireland*. Belfast, Sport Northern Ireland.
18. Talbot, M., (2009). Valedictory reflections on politicians, bureaucrats and experts. *PE Matters*, Association for Physical Education (afPE), 4 (4). p. 8.
19. Taplin, L., (2011). Physical Literacy. An introduction to the concept. *Physical Education Matters*, 6 (1), Spring. pp. 28-29.
20. Whitehead, M. (2010). *Physical literacy throughout the lifecourse*. Oxford, Routledge.