FOSTERING PHYSICAL LITERACY AT SCHOOL: A FEASIBLE PEDAGOGICAL MODEL IN PHYSICAL EUCATION

LA PROMOZIONE DELL'ALFABETIZZAZIONE MOTORIA A SCUOLA: UN POSSIBILE MODELLO PEDAGOGICO IN EDUCAZIONE FISICA

Sergio Bellantonio University of Foggia sergio.bellantonio@unifg.it

Abstract

Physical literacy is a fundamental human skill that can be educationally learned and that includes the motivation, confidence, physical competence, knowledge and understanding that determine the practice of physical activities over time. It is a fundamental human *capability* at the basis of a correct individual lifestyle and, therefore, it needs a promotion even in formal learning contexts, first and foremost the school. How can physical education promote and support this learned competence over time, in order to educate active and proactive subjects in the environment? The paper therefore intends to decline physical literacy as a factor at the basis of a contemporary capability, through possible pedagogical scenarios in support of a well-rounded human education.

L'alfabetizzazione motoria viene definita come una capacità umana fondamentale che può essere acquisita educativamente e che comprende la motivazione, la fiducia, la competenza fisica, la conoscenza e la comprensione che determinano la pratica continuativa di attività fisiche nel tempo. Si tratta di una *capability* umana fondamentale che è alla base di un corretto stile di vita individuale e, pertanto, necessita di una sua promozione anche nei contesti formali dell'apprendimento, *in primis* la scuola. Come può l'educazione fisica promuovere e sostenere nel tempo questa competenza appresa, in modo da formare soggetti attivi e proattivi nell'ambiente? Il presente contributo intende allora declinare il concetto di alfabetizzazione motoria come fattore alla base di una *capability* contemporanea, attraverso possibili scenari pedagogici a suffragio di una formazione umana a tutto tondo.

Keywords

Physical Literacy; Physical Education; Pedagogy; Capability

Alfabetizzazione Motoria; Educazione Fisica; Pedagogia; Capacitazione

1. A Basic Premise

Since the end of the Seventies, physical education, physical activities and sport meet a strong relaunch on the educational and pedagogical side, already evident in the first indications of the *International Charter of Physical Education and Sport* of UNESCO (1978), which urged the different political, sports and educational systems to strengthen the links already existing among these activities and the other areas of formal, non-formal and informal education. Motor

and sports activities begin to be considered as a fundamental and universal right, which required the introduction of new political guidelines to support a change in social strategies, even in these fundamental contexts of social life.

In compliance with the founding principles of the original document, the most recent indications (UNESCO, 2015) introduce the achievement of even more ambitious objectives, such as promotion of equal opportunities, eliminate gender differences, fight against discrimination, social inclusion and the protection of minors, in order to implement best practices to foster the universal values of global education through the different learning contexts. As is evident from the articles to follow, physical education, physical activity and sport are considered a real educational tool, in fact:

- The practice of physical education, physical activity and sport is a fundamental right for all.
- Physical education, physical activity and sport can yield a wide range of benefits to individuals, communities and society at large.
- All stakeholders must participate in creating a strategic vision, identifying policy positions and priorities.
- Physical education, physical activity and sport programs must inspire lifelong participation.
- All stakeholders must ensure that their activities are economically, socially and environmentally sustainable.
- Research, evidence and evaluation are indispensable components for the development of physical education, physical activity and sport.
- Teaching, coaching and administration of physical education, physical activity and sport must be performed by qualified personnel.
- Adequate and safe spaces, facilities and equipment are essential to quality physical education, physical activity and sport.
- Safety and the management of risk are necessary conditions of quality provision.
- Protection and promotion of the integrity and ethical values of physical education, physical activity and sport must be a constant concern for all.
- Physical education, physical activity and sport can play an important role in the realization of development, peace and post-conflict and post-disaster objectives.
- International cooperation is a prerequisite for enhancing the scope and impact of physical education, physical activity and sport.

In these twelve brief articles, the revised Charter serves as a universal reference on the ethical and quality standards of physical education, physical activity and sport. While preserving the initial intention of the 1978 Charter, this new document also represents a renewed commitment of the international sports community to actively promote sport as a catalyst for peace and development.

So, in recent years, the formative value of sport in education has seen a consolidated scientific dignity. Thanks to a renewed pedagogical perspective, sports, physical education and physical activities have finally fully returned to the educational sciences, offering a new cultural point of view. From this perspective, these human activities carry an extraordinary educational potential, if moved by a true sport pedagogy culture (Isidori, 2017). It can be said that sports, physical education and physical activities represents the "third educational agency" after family and school. In a historical period in which there is a particularly delicate phase experienced by traditional educational agencies, the sports movement cannot be to the

advantage of a few, because the aggregative moments that it manages to express often become a real lifeline for many young people.

In fact, studies show how the skills acquired in sports can be effectively transferred to other life contexts since early adolescence (Bellantonio, 2014). Sport and play, in addition to being able to spread the values of solidarity, loyalty, respect for the person and for the rules, can be extraordinary tools for building skills that can be transferred to other life contexts. It all lies in understanding the directions of meaning that sport has; however, sport (like education), is not a positive phenomenon in itself, but it becomes that way in relation to the aims and values that one wants to promote from an educational point of view.

More generally, sport can be an opportunity to privilege creativity and emotional investment, because the educational point of view is to support the processes that lead to personal and social emancipation, self-esteem, the capacity for initiative, and self-awareness on different levels, both physical and emotional.

2. Fostering Capabilities Through Education

The sudden contemporary changes require an attitude of care from institutions capable of developing social, cultural and human capital, through the promotion of meaningful and transformative learning that cross the different stages of lifecycle and the different spheres of existence (Nussbaum, 1997). It is desirable that a holistic education allows subjects to become active citizens of the world. It concerns an education *of* the body, *for* the body and *with* the body that does not focus only on aesthetic or technical components but which, rather, is oriented towards an all-round human training.

Starting from these assumptions, it is necessary that physical education, physical activities and sport become the spokesperson for a process of moving away from the logic of profit, in order to shift from the criterion of economic development to that of human development. All this presupposes that the subject is given the opportunity to adequately experiment in all spheres of social life. It becomes necessary to trace a continuum between the ability to act and the freedom, which also directly calls into question the processes of construction and consolidation of the bodily self.

Development as freedom (Sen, 1999) refer to the different areas of formal training, as fundamental component of authentic human change. From this perspective, educational contexts are entrusted with the task of promoting *capabilities*, namely as the resources that a person has (or potentially could have), as well as the ability to be able to use them and act to plan one's existence with a view to achieving ever more adequate levels of well-being. Amartya Sen summarizes in the same word two basic conditions for a person to be and do: capacity and usability. The capabilities are a piece for building an alternative measure of well-being to the Gross Domestic Product approach, because freedom, quality of life and justice are added to this economic indicator (Ibidem).

To promote individual and social development, attention is thus shifted from material goods and resources to skills and freedoms. This shift is also relevant in relation to other issues such as the choice of criteria for establishing the existence of states of deprivation or poverty, that is, whether to consider poverty in terms of low income (a shortage of resources) or in terms of insufficient freedom to lead adequate lives (a lack of capability). Therefore, the growth of goods and the improvement of services are not the ends, but rather the medium that support people in the realization of their life-projects and in the pursuit of their values.

In order to be effective, interventions to combat educational poverty and social exclusion should consider both people's abilities (their possibilities of achieving an objective), and usability (the existence of the conditions to make them concrete): it is not enough to be potentially able to do something, if the conditions for achieving them do not exist. In short, capacity and usability must go together. Any social policy measure, whether it is a monetary payment or an organized service, should promote people and not limit itself to satisfying a need.

3. Physical Literacy as Educational Perspective on Capabilities

Declining this concept in the development of the ability to choose and act in the motor and sports context, Margaret Whitehead (2013) has recently proposed a broader concept of physical literacy than the traditional one (Morrison, 1969). From this perspective, physical literacy is defined as the subjective degree of motivation, confidence, physical competence, knowledge and understanding useful to support the ongoing commitment in the practice of motor and sports activities throughout the life span. Although many have been the authors who, in recent years, have tried to describe this capability – while some have considered almost exclusively its physical and motor components (Caput-Jogunica, Lončariž, De Privitellio, 2009; Liebenson, 2009), others fundamental movement skills (Almond, 2013) and other psycho-pedagogical correlates (Edwards *et al.*, 2017) – the most recent interpretation of Margaret Whitehead (2010) seems to be rather shared in the literature: she inserts physical literacy within phenomenological, existentialist and monist perspectives, which highlight its necessary an inter-systemic perspective.

From this point of view, on the one hand, highlights the complexity of its study, on the other, it also requires a critical reflection on the philosophical horizons of placed at its base. On the other hand, this capability, in order to be measured, evaluated and promoted, also requires a necessary deepening on the empirical side (Dudley *et al.*, 2017), in order to ensure that the actions implemented in the training contexts rise best educational practices supported by evidence in the motor and sports fields.

In light of the importance of the development of physical literacy in contemporary education, there have been many experiences that have tried to integrate it into educational and sports intervention programs (Keegan *et al.*, 2013), which it is to be considered a direct consequence of the suggestions of the 2004 UNESCO Position Paper, which provided precisely to give a shared theoretical horizon to the broader concept of literacy. In this sense, this is understood more than just reading, writing and arithmetic, in the sense that in order to develop an adequate literacy it is also necessary to take into account the set of relational modalities through which the subject learns and communicates, which also calls into question the theme of sport, physical education and physical activities.

For this reason, the development of physical literacy assumes a particular educational value both in the field of physical education (Lundwall, 2015) and in that of physical activity and sport (Pot, van Hilvoorde, 2013), where however an appropriate sharing of teaching methodologies, methods, techniques and strategies represents the conditions in order to pursue an effective educational change in these contexts (Nicolosi, 2015), formal, non-formal or informal. Physical literacy has become a key objective of physical activity and, as such, is probably an antecedent of the physical activity itself that each individual develops, according to a circular process, through numerous and various opportunities for habitual and structured physical-motor activities (Colella, 2018). It is, then, a learning process that allows individuals

to acquire a linguistic-motor repertoire, starting from the motor patterns, according to individual maturation and growth rhythms, as well as the opportunities offered by the environment.

The motor alphabet is related to other alphabets (reading, writing, mathematics, drawing, etc.) and the related development stages are interdependent. The physically literate individual has his own motor repertoire, consisting of motor patterns and learned executive variants, which is structured since school age and increases over time through the integration of the opportunities received, both quantitative and qualitative. Through the motor alphabet, the child has the ability to communicate, elaborate and solve problem situations, in order to interact with the environment, systematically integrating his own motor repertoire with new responses and adaptations (Whitehead, 2010, 2013).

Concerning school, the significant role assumed by physical education in increasing physical activity levels has now been established on the scientific side (Stone, McKranti, Welk, Booth, 1998), as well as their influence in the development of motor skills and learning of new skills (Lonsdale *et al.*, 2013). However, it should not be forgotten that these activities still represent the only real possibility of movement for many subjects and, for this reason, it is essential that the school continues to leverage the teachers' training to achieve what is expressly declared by programmatic documents and intervention strategies regarding the development of physical literacy, also reviewing the nature and quality of the learning-teaching processes put in place (Colella, 2018).

This need is also supported by some evidence that has internationally emerged (Hardman, Murphy, Routen, Tones, 2014), which have highlighted a deep gap between the programmatic indications on physical education at school and what happens, instead, in daily teaching. In this sense, if, on the one hand, these activities are fully recognized within the curriculum, on the other hand, there is still no tendency to consider them of equal dignity with respect to the other disciplines (Cunti, 2016; Bellantonio, 2016).

4. Fostering Physical Literacy at School

Fostering physical literacy at school seems to be essential for some fundamental reasons that we will briefly summarize here:

- the need to improve society through the contribution of physical education, physical activity and sport, a need recognized, however, already in 1978 in the UNESCO program documents, revisited most recently in 2015.
- the taking into account of a negative card between European indications and their effective implementation in the countries of the Union, as evidenced by the decrease in the curricular hours of physical education in the school, a delay/lack of entry into the role of teachers with specific motor-sports training, the absence of adequate structures and equipment for carrying out the activities, the removal of architectural barriers for carrying out sports activities with disabled people.
- the need to use in curricular teaching methodologies, methods, techniques and strategies that refer to embodied theories, through playful-motor activities useful for the development of ever more conscious corporeality.

The promotion of physical literacy at school so can be pursued through *enjoyment* (Carraro, 2012), which calls into question the understanding of the motivations underlying the subject's involvement in physical, motor and sports activities, with the intent to overcome a prescriptive

vision of learning-teaching practices to favor a purely educational one. There is a close link between the pleasure of practice and intrinsic motivation (Deci, Ryan, 1985), a relationship that makes us think that the pleasure of learning with and through the body and movement is able to involve subjects for longer.

The environment represents, in fact, one of the main determinants of health and well-being (Barton & Grant, 2006). Some researches, in fact, have precisely highlighted that learning to make choices that are in line with an education of this type is able to favor the persistence of such behaviors even in adulthood (Telama *et al.*, 2014), which means that it can play a decisive role not only in improving physical activity levels but, first of all, in supporting its commitment and continuation over time. It is therefore necessary to intervene in a systemic way, even at school, starting from the early stages of the education cycle (Beets *et al.*, 2016), through the use of evidence-based practices that involve the different systems that revolve around the subject (Messing *et al.*, 2019).

From this perspective, some evidences (Mosston & Ashworth, 2002) have precisely found that the health promotion process requires prevention activities but, even more, the educational construction of communities of practice that support of the development of a certain level of learned competence, therefore of the empowerment of the subjects. After all, knowledge is no longer to be considered as a set of theoretical notions, but the fruit of situated learning, a consequence of the active participation of the subject within the environment and with the other members (Lave & Wenger, 1999). It is in relation to one's own knowledge and that of others, then, that the subject attributes personal and psychological meaning to learning.

References

- Almond L. (2013). Physical Literacy and Fundamental Movement Skills: An Introductory Critique. *Journal of Sport Science and Physical Education*, 65: 80-88. DOI: http://dx.doi.org/10.1123/jtpe.2014-0209.
- Barton, H., & Grant, M. (2006). A Health Map for the Local Human Habitat. *Journal of the Royal Society for the Promotion of Public Health*, 126(6), 252-261. DOI: http://dx.doi.org/10.1177/1466424006070466.
- Beets, M.W., Okely A., Weaver, R.G., Webster, C., Lubans, D., Brusseau, T., Carson, R., & Cliff, D.P. (2016). The Theory of Expanded, Extended, and Enhanced Opportunities for Youth Physical Activity Promotion. *International Journal of Behavioral Nutrition and Physical Activity*, 13(120). DOI: https://doi.org/10.1186/s12966-016-0442-2.
- Bellantonio S. (2014). Sport e adolescenza. L'educazione come promozione delle risorse. Milano: FrancoAngeli.
- Bellantonio S. (2016). Embodiment e pedagogia. Lo sport come dispositivo di educazione corporea. In A. Cunti (ed.), *Sfide dei corpi. Identità Corporeità Educazione* (pp. 171-183). Milano: FrancoAngeli.
- Caput-Jogunica R., Lončariž D., De Privitellio S. (2009). Extracurricular Sports Activities in Preschool Children: Impact on Motor Achievements and Physical Literacy. *Croatian Sports Medicine Journal*, 24(2): 82-88.
- Carraro A. (2012). Valutare il piacere nelle attività motorie: il PACES-it. *Giornale Italiano della Ricerca Educativa*, 5: 259-265. DOI: https://ojs.pensamultimedia.it/index.php/sird/article/view/254.
- Colella D. (2018). Physical Literacy e Stili d'insegnamento. Ri-orientare l'educazione fisica a scuola. *Formazione & Insegnamento*, 16(1): 33-41. DOI: https://ojs.pensamultimedia.it/index.php/siref/article/view/2759.
- Cunti A. (2016). Sfide dei corpi. Identità Corporeità Educazione. Milano: Franco-Angeli.
- Deci E., Ryan R. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press.

- Giornale Italiano di Educazione alla Salute, Sport e Didattica Inclusiva / Italian Journal of Health Education, Sports and Inclusive Didactics Anno 6 n. 1 supplemento ISSN 2532-3296 ISBN 978-88-6022-410-1 gennaio marzo 2022 CC BY-NC-ND 3.0 IT- https://doi.org/10.32043/gsd.v6i1%20supp.473
- Dudley D., Cairney J., Wainwright N., Kriellaars D., Mitchell D. (2017). Critical Considerations for Physical Literacy Policy in Public Health, Recreation, Sport, and Education Agencies. *Quest*, 69(4): 436-452. DOI: https://doi.org/10.1080/00336297.2016.1268967.
- Edwards L.C., Bryant A.S., Keegan R.J., Morgan K., Jones A.M. (2017). Definitions, Foundations and Associations of Physical Literacy: A Systematic Re- view. *Sports Medicine*, *47*(1): 113-126. DOI: https://doi.org/10.1007/s40279-016-0560-7.
- European Commission, EACEA, Eurydice (2013). *Educazione fisica e sport a scuola in Europa. Rapporto Eurydice*. Lussemburgo: Ufficio delle Pubblicazioni del- l'Unione Europea. http://eacea.ec.europa.eu/education/eurydice/documents/thematic reports/150IT.pdf.
- Hardman K., Murphy C., Routen A., Tones S. (2014). *World-Wide Survey of School Physical Education. Final Report 2013*. Paris: UNESCO http://unesdoc.unesco.org/images/0022/002293/229335e.pdf.
- Isidori E. (2017). *Pedagogia e sport. La dimensione epistemologica ed etico-sociale*. Milano: FrancoAngeli.
- Keegan R.J., Keegan S.L., Daley S., Ordway C., Edwards A. (2013). *Getting Au-stralia Moving: Establishing a Physically Literate & Active Nation (Game Plan)*. Canberra: University of Canberra.
- Lave, J., Wenger, E. (1990). *Situated Learning: Legitimate Periperal Participation*. Cambridge: Cambridge University Press.
- Liebenson C. (2009). *Training for Speed. Journal of Bodywork and Movement Therapies*, *13*(4): 362-363. DOI: https://doi.org/10.1016/j.jbmt.2009.07.001.
- Lonsdale C., Richard R., Rosencranz L.R., Peralta A.B., Fahey P., Lubans D.R. (2013). A Systematic Review and Meta-Analysis of Interventions Designed to Increase Moderate-to-Vigorous Physical Activity in School Physical Education Lessons. *Preventive Medicine*, *56*(2): 152-161. DOI: http://www.sciencedirect.com/science/article/pii/S0091743512006068.
- Lundvall S. (2015). Physical Literacy in the Field of Physical Education. A Challenge and a Possibility. *Journal of Sport and Health Science*, 4(2): 113-118. DOI: https://doi.org/10.1016/j.jshs.2015.02.001.
- Messing, S., Rütten, A., Abu-Omar, K., Ungerer-Röhrich, U., Goodwin, L., Burlacu, I, & Gediga, G. (2019). How Can Physical Activity Be Promoted Among Children and Adolescents? A Systematic Review of Reviews Across Settings. *Frontieres in Public Health*, 7(55), 1-15. DOI: https://doi.org/10.3389/fpubh.2019.00055.
- Morrison R. (1969). A Movement Approach to Educational Gymnastics. London: J.M. Dent & Sons.
- Mosston, M., & Ashworth, S. (2002). *Teaching Physical Education (5th Ed.)*. San Francisco: Benjamin Cummings.
- Nicolosi S. (2015). Strategie didattiche per l'educazione motoria. Milano: FrancoAngeli.
- Nussbaum M.C. (1997). *Cultivating Humanity: A Classical Defence of Reform in Liberal Education*. Cambridge: Harvard University Press.
- Pot N. & van Hilvoorde I. (2013). A Critical Consideration of the use of Physical Literacy in the Netherlands. *Journal of Sport Science and Physical Education*, 65: 312-319. file:///Pot N. & van Hilvoorde I. (2013). A Critical Consideration of the use of Physical Literacy in the Netherlands. Journal of Sport Science and Physical Education, 65/312-319.
- Sen A. (1999). Development as Freedom. New York: Knopf.
- Stone E.J., McKanzie T.L., Welk G.J., &Booth M.L., Effects of Physical Activity Interventions in Youth. Review and Synthesis. *American Journal of Preventive Medicine*, 15(4): 298-315. DOI: https://psycnet.apa.org/doi/10.1016/S0749-3797(98)00082-8.
- Telama, R., Yang, X., Leskinen, E., Kankaanpää, A., Hirvensalo, M., Tammelin, T., Viikari, J.S., Raitakari, O.T. (2014). Tracking of Physical Activity from Early Childhood through Youth into Adulthood. *Medicine and Science in Sports and Ex-ercise*, 46(5), 955-962. DOI: http://dx.doi.org/10.1249/MSS.0000000000000181.
- UNESCO (1978). International Charter of Physical Education and Sport (Adopted by the General Conference at its Twentieth session, Paris, 21 November 1978). Paris. http://www.unesco.org/education/pdf/SPORT_E.PDF.
- UNESCO (2004). *The Plurality of Literacy and its Implications for Policies and Programmes (Position Paper)*. Paris https://unesdoc.unesco.org/ark:/48223/pf-0000135164.

UNESCO (2015). *Carta Internazionale per l'educazione fisica, l'attività fisica e lo sport.* Paris http://unesdoc.unesco.org/images/0023/002354/235409ITA.pdf.

Whitehead M. (2010). Physical Literacy: Throughout the Lifecourse. Oxon: Routledge.

Whitehead M. (2013). Definition of Physical Literacy and Clarification of Related. *Journal of Sport Science and Physical Education*, 65: 29-34. https://www.icsspe.org/sites/default/files/bulletin65_0.pdf.