



The methodology of physical education Le metodologie dell'educazione motoria

Ferdinando Cereda

Department of Pedagogy, Università Cattolica del Sacro Cuore (Milan, Italy)
ferdinando.cereda@unicatt.it – <https://orcid.org/0000-0002-3120-0684>

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ABSTRACT

Physical activity's method has been analysed and placed in the current educational landscape. The importance of its educational action on the body and mind is also reported in the context of education in general and in the school environment. The primary aim of physical education is to develop all the body and mind skills. Physical education finds its *raison d'être* in methodological and didactic models that make it possible to introduce sports education and actual sport. The aims of physical education must be part of those of general education and a methodological dialogue must start from these premises: from what is to be achieved through movement and subordinate the choice of the means deemed most suitable for achieving them.

La metodologia dell'attività motoria viene presa in considerazione e collocata nel panorama educativo attuale. L'importanza della sua azione educativa sul corpo e sulla mente viene riportata inoltre nel contesto dell'educazione in generale e nell'ambito scolastico. L'educazione motoria si pone lo scopo primario di sviluppare tutte le funzioni della persona intesa in tutte le componenti che la costituiscono. L'educazione fisica trova la sua ragion d'essere in modelli metodologici e didattici che rendono possibile l'introduzione all'educazione sportiva ed allo sport vero e proprio. I fini dell'educazione motoria devono rientrare in quelli dell'educazione generale e un discorso metodologico deve partire da queste premesse, da cosa s'intende realizzare attraverso il movimento e subordinare la scelta dei mezzi ritenuti più idonei per realizzarli.

KEYWORDS

Physical education, Sport, Teaching, Method
Educazione fisica, Sport, Insegnamento, Metodo

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1. Introduction

If general education is the action aimed at developing all human faculties, physical education must be included with full rights and in its rightful place (Le Boulch, 1979; Sibilio, 2015a). Schools should fulfil this task with no less interest and attention than those devoted to other aspects of general education (Carraro, 2004). Movement education is a training discipline because it addresses the total personality of the individual and carries out its educational action on the body and psyche of the subject.

Moreover, the essence of man is not conceived as pure intellect, nor as pure will, but as a real unity that is not only psychological (of intellect, feeling and will) but psycho physical. In other words, the relationship between physical life and psychic life, or better still, between the body and the spirit, is to be considered as a constant relationship, to represent a single reality, in which only by abstraction are the two domains distinguished from each other (Novara, 1962).

Physical education can be counted among the educational sciences and is important in the definition and construction of training and educational processes (Lipoma, 2014). The principles and explanations of its didactics are of great benefit to the entire education system. A didactic that differs from all others because of that mixture of practicality, logical coherence, verifiability, and falsifiability present in it. Physical education is a language and as such possesses:

- a semantic dimension, constituted by all the factors of motricity;
- a syntactic dimension, constituted by the set of links of the factors of motricity;
- a logical dimension, constituted by the hierarchical arrangement of motricity.

The physical activity and its codes can be expanded more and more and, therefore, educated. Thus, the specific education of physical activity, as movement education is realised (Sotgiu, 1989). This, in turn, can be used to educate and expand other languages, thus realising education through movement.

Schools and especially primary schools, should play a central role in encouraging the practice of a wide variety of physical experiences, providing not only tools and opportunities for practice, but also elements of knowledge and skills, which can guide choice, motivate participation and, not least, contribute to the well-being of pupils and teachers (Carraro, 2008).

However, precisely in the context of the search for well-being, the role of the school is fundamental. The primary school, for example, represents one of the fundamental places for the growth and education of the individual, processes that cannot but be encountered with the body, with corporeity and with the numerous opportunities offered by the experience of movement. It is felt that this task cannot be attributed to other educational agencies, such as sports clubs, or to other professional figures, such as the experts who are sometimes called upon to intervene in specific projects.

The keyword of one of the educational models that pay particular attention to movement education is «variability of practice» (Pesce, 2015). In this educa-

tional model, the main aim is, starting with the formation of the body in movement, to arrive at the formation of the citizen's life skills, riding the wave of children's natural joy of movement.

In the same direction, interventions are being implemented, still at an experimental level and mainly in the United States, which follow a new teaching technique: the 'physically active lesson'. This inserts physical education into school teaching in an innovative way. Teacher-led sessions aim to incorporate physical activity directly into the teaching of other school content and subjects (Norris et al., 2015).

2. A look at physical education

Physical education should be implemented by means of differentiated general and specific procedures and methodologies, aimed respectively at the basic training of each pupil and multi-sport education. The primary aim of physical education is to best develop all the functions of the personality defined as an extremely complex theoretical construct, which reacts unitarily to its own and external stimuli and is formed by virtue of the continuous interaction between the biological endowment and the environment in which it is located (Meinel, 1984; Rikard, 2006).

Despite the recognition of the value of physical activity and sport as promoters of personal well-being, these are not directly able to influence the uptake of sport. Surveys carried out as part of the evolution of physical education report a progressive deficit in physical efficiency in the school population (Pesce, 2015). One cause of this situation can be identified precisely in the concept of 'sport-spectacle-commerce'. The instrumentalization of the body ends up nullifying the playful dimension of movement and, instead of developing potential and encouraging overcoming one's limits through sport, it selects and marginalises. Furthermore, the synergic action of educational agencies has had significant results in introducing topics such as lifestyles, well-being, health protection into common thought, unfortunately without bringing about a real change in the population's lifestyle habits.

To tackle the social emergency of sedentariness, the derogation to fair play and the early abandonment of physical and sports practice, a new path of continuity must be outlined between the family, the school, and the world of sport. These actors together must guarantee education 'for', 'in' and 'through' physical and sport activities (Nordmann, 2007), following a model consistent with the educational pathway outlined in the National Indications provided by the Ministry of Education, Universities and Research (Cereda, 2016).

There are three essential elements for change: integrated training between the various players in the educational and sporting worlds, support for schoolteachers by graduates in Physical Education, and a new way of involving and motivating children in physical and sports activities.

On the other hand, the proposed difficult aim is to increase the population that will make active and healthy living and fair play a permanent habit, in line with the World Health Organisation's HEPA guidelines (European Commission, & World Health Organization

Regional Office for Europe, 2014) and in coherence with the transversal perspective of Education for Civil Coexistence (MIUR, 2009), an essential aim of the national education system. Furthermore, in a holistic perspective of human capital development, the fundamental contribution of physical activity and especially Physical Education for the integrated development of the individual's, physical, emotional, intellectual, social and productive capital should be emphasised (Bailey et al., 2013).

Be that as it may, the setting and solution of the methodological problem constitutes a fact of doctrine, which brings research to the scientific foundations of physical education to know motor skills in its anatomic-physiological and psycho-pedagogical aspects, abandoning any form of empiricism.

It is therefore a question of renewing methods that are no longer in keeping with the times, and of gearing teaching to the most up-to-date conceptions of man in his bio-psycho-pedagogical aspects, to implement an appropriate didactic line.

In this perspective, for example, a new methodology is emerging that is based on the visualisation of the body in kinesiology (Azzarito, 2010).

3. Status of the problem

One observes an attempt at technical revision to give movement a new, dynamic, aesthetic expression, but one that is still far from a new methodological orientation, since it is still tied to a physical education carried out according to the traditional arrangement, rather than by motivation. It is about free-body exercises, with small apparatus, on large apparatus, short and fast running, gymnastic and pre-sports games, instead of expressing motivations of a physiological, psychological, pedagogical order. That is, talking about the ends of physical education that are part of those of general education (Gamelli, 2004). A methodological discourse must start from these premises; from what is to be achieved through movement and subordinate the choice of the means considered most suitable for achieving them.

Movement is a means, as much as tools are, to realise what the individual of our time demands, as his real need, and what general education proposes him to acquire in order not to be overwhelmed by conditions of life created by himself, which today oppress, determine and condition him (Cereda, 2013).

For this reason, any methodology, to be valid, must wear the clothes of the man of his time, understand, satisfy, correct, and direct him. It is therefore fair to say that the aim of physical education is not so much the possession of health, strength, speed, power, etc., ends in themselves, as the sense of full balance and well-being that comes from their possession.

In the methodology of the 'visualisation' of the body (Azzarito, 2010), new methods of analysis are researched and even proposed, with the support of images chosen according to specific criteria to be submitted to young people; also, with the use of interviews conducted with them, again on the basis of viewing images. New methods are thus adopted to enable young people to 'talk' in a meaningful way about their experiences and their perception of the body in the context of physical activity.

While the study of the body as a 'machine' has dominated the research and production of knowledge by sports scholars (e.g., biomechanics, motor learning, sports pedagogy), investigating the physical dimensions of the body in kinesiology, of the 'body in culture', allows researchers to explore the interdependent relationships between power, cultural meanings assigned to the body and issues of inequality in physical activity environments.

In short, it is suggested that researchers' adoption of qualitative research in its various forms can lead to sociological insights into the 'body in motion' precisely in the field of kinesiology.

Therefore, the contemporary problem of how visual 'narratives' of the body are constructed is also considered. Western societies are increasingly characterised by global trends through which popular media culture fabricates endless images of the active body in fitness, health, and sports contexts (TV, magazines, internet...). The way young people see themselves and others in sport are inextricably linked to the way they perceive and understand body images produced precisely by the media (Azzarito & Harrison, 2008). Scholars need to recognise that young people's learning of values, attitudes, and beliefs about their appropriate or inappropriate behaviour and body appearance (e.g., shape, size, muscularity) upon which their sense of self and physicality is constructed does not only or primarily take place in school. Rather, it takes place outside school through their connection with images and visualisations produced by TV, magazines, the Internet, and other media.

Furthermore, the adoption by researchers of innovative methodologies that mix two ways of thinking such as the critical analysis of visual culture and the investigation of the body as a social, historical, and visual text could generate new ways of understanding the contemporary cultural condition of young people's bodies. In short, new methodological approaches are needed to enable young people to participate in research, to 'talk' meaningfully about their bodily experiences and to communicate their knowledge and identities. Through the research process, participants can be enabled by visual methodologies to creatively make sense of themselves and to reflect on the ways in which they create their identities and bodies not only verbally, but also visually (Gauntlett & Holzwarth, 2006). In order to understand how body hierarchies, inform young people's subjective bodily experiences, are created and sustained, it is crucial to proceed with the research of visual body culture in kinesiology. Given the inextricable link between visual culture and the body in contemporary Western culture, considering that «method is inseparable from theory and analysis» (Banks, 2001, p. 178), a critical visual study of the body provides innovative methodologies that can lead us to a meaningful understanding of the body.

4. Physical and sports education

Physical education consists of a set of coordinated activities aimed at the physical and psycho-pedagogical development of the individual. Physical training, as a complex of regulated movements with various aims,

falls within the scope of physical education, but can also be related to the preparatory practice of a sporting discipline.

Physical and sports education can coexist when the common traits of the two educational moments are understood, thus making them operate on a uniform basis of principle and method. If the former does not want to possess the attribute of sport, it must make a concept of sport its own: training. There are no divergences in the bio-psychic goals to be achieved, only differentiations in degree and techniques (Cilia, 1996). Physical education is not the expression of basic gymnastics preparing for sport or an activity complementary to sport itself. It must be the physical activity that sees in sports education nothing other than its logical continuation, both because of the utilitarian and more complete nature of the sporting gesture, and because of the interest it arouses in the young individual. Any movement should have a purpose of obvious utility, which can be transferred outside the gymnasium and the purely scholastic moment, to natural or sporting activities to be performed outdoors (Faigenbaum et al., 2007).

Physical education would lose its meaning if it did not have methodological and didactic reasons for introducing sports education and, for the gifted, actual sport. For this to happen, it is necessary that the methodology of physical education does not stop its interests at the bio-psychic aspects of the individual alone, but expands them to assess the individual's living conditions, his needs and tendencies, in order to direct him towards solutions that are beneficial to him. It is necessary to propose recreational, emulative, moral and aesthetic motivations in order to combat the damage of sedentariness and lack of exercise (Lloyd et al., 2014).

For example, 'physically active lessons', i.e., those that incorporate physical activity into the teaching of other subjects, are precisely intended to increase children's physical activity during lesson time.

There is a clear effectiveness of physical activity interventions in schools. In fact, the school environment provides a unique opportunity to ensure physical activity for as many children as possible over long periods of time, considering, however, that although teachers support such interventions, there is often insufficient time to implement them, preferring more strictly academic tasks. The range of possible interventions derived from the experience of 'physically active lessons' provides a variety of ideas for researchers and teachers to adapt and replicate (Norris et al., 2015).

However, there is a need for further, broader, and more rigorous investigations that can firmly assure the effects of physically active lessons. Future interventions in this area will necessarily have to be developed with teachers and the school environment as an indispensable basis, with the aim of reducing sedentary school time while maintaining educational value.

5. Conclusions

It is reductive to delineate a methodology based exclusively on strictly scientific, biological, and psychological premises, as much as it is indispensable to evaluate the historical time in which the individual

lives, the environment and its requirements, since it is these elements that determine the various deficiencies and needs. Man must be able to satisfy his needs through the rational motion activities that are proposed to him. This rationality is identified not only in proposing mechanically or functionally valid movements, but in knowing, intuiting, and identifying the needs specific to each one, linked to the somato-organic and psychic profile typical to each individual, in the different ages of life, depending on gender, education and social environment. What is needed, therefore, are methodologies and didactics that consider not only bio-psychic facts, but also time and environment factors.

Whatever purpose and orientation a lesson may take, regardless of the dominant formative, rhythmic, sporting, recreational characteristic, it should remain bound to the general principles that determine the character of physical education (Calidoni, 2000; Sibilio, 2015b). This means that the educational goal is still the preeminent one and that any other factor should be understood as a means. The acquisition, therefore, of the correct technical gesture cannot constitute the end of the lesson. It should be understood as a part of the general physical education that one wants to teach, the component of a whole in which it must be inserted, linked to what has already been acquired in the other moments of the lesson and in function of what will be done later.

If educational physical activities were to be limited to the physical sphere alone, they would be reduced to either a simple transposition of lines of thought or didactic solutions, or to a purely kinesiological evaluation of movement (Cereda, 2015).

'Educational physical activities' are a discipline for the formation of the individual identified as body and spirit in a global sense. In this sense, Educational Gymnastics (movement, play, sports education) and sport require an overall commitment of the one, a collaboration of the physical and psychic faculties, until arriving at a perfect harmonic synthesis (Cilia, 1996).

The body is the physical condition of myself, and if I treat it through systematic education, an education of the personality will also be achieved. It will foster the evolutionary process from birth to death through continuous mutations. Systematic education of the individual body-spirit is not limited to physiology, sport, but extends to the psychological, sociological, pedagogical field and enriches educational gymnastics with a vast humanistic context (Cereda, 2015).

The language of the body is to the individual as language is to a culture; just as the cultural, biological, social experiences of that people are stratified in that language, for the individual his body contains all his personal history, that is, his subjective and relational experiences and their meanings. His subjectivity is embodied in the body even if in a way unknown to him (Biccardi, 2001).

From this point of view, only by recognising authentic awareness in body language, we can build an educational model that can contribute to the integral formation of the human being, and the teaching of the body and movement in schools recognises in the body and in movement the basis of a process that starting from sensoriality induces, precisely, awareness.

In the field of experience of the body and movement in the nursery school, we read that

«children become aware of their bodies, using them from birth as a tool for self-knowledge in the world [...] because movement is the first factor in a child's learning and it is through movement that the child searches, discovers, plays, jumps and runs and the action of the body makes them experience emotions and pleasant sensations, relaxation and tension» (MIUR, 2012).

Becomes indispensable to stimulate the expressive and communicative potential of the body in education to refine its perceptive abilities and knowledge

of objects, its ability to orient itself in space, to move and communicate according to imagination and creativity (Palumbo et al., 2017).

All the physical and sports activities planned in the Physical Education curriculum contribute to the promotion of cognitive, social, cultural, and affective experiences and the conquest of motor skills, as well as the possibility of experiencing the success of one's actions as a source of gratification that stimulate the pupil's self-esteem and the progressive broadening of his or her experience, enriching it with ever new stimuli.

References

- Azzarito, L., & Harrison, L. Jr, (2008). "White men can't jump": Race, gender and natural athleticism. *International Review for the Sociology of Sport*, 43(4), 347–364. <https://doi.org/10.1177/1012690208099871>
- Azzarito, L. (2010). Ways of Seeing the Body in Kinesiology: A Case for Visual Methodologies. *Quest*, 62(2), 155–170. <https://doi.org/10.1080/00336297.2010.10483639>
- Bailey, R., Hillman, C., Arent, S., & Petitpas, A. (2013). Physical activity: an underestimated investment in human capital?. *Journal of physical activity & health*, 10(3), 289–308. <https://doi.org/10.1123/jpah.10.3.289>
- Banks, M. (2001). *Visual Methods in social research*. London: Sage.
- Biccardi, T. (2001). *La comunicazione corporea*. In M. Sibilio (Ed.), *Il laboratorio come percorso formativo*. Napoli: Esselibri.
- Calidoni, P. (2000). *Didattica come sapere professionale*. Brescia: La Scuola.
- Carraro, A. (2008). *Educare al movimento*. Lecce: Pensa MultiMedia.
- Carraro, A., & Lanza, M. (2004). *Insegnare/Apprendere in Educazione Fisica: problemi e prospettive*. Roma: Armando.
- Cereda, F. (2013). *Teoria, tecnica e didattica del fitness*. Milano: Vita e Pensiero.
- Cereda, F. (2015). Attività motoria, sport e processi educativi. Tra implicazioni didattiche e aspetti pedagogici. *Pedagogia e Vita*, 73, 260–272.
- Cereda, F. (2016). Attività Fisica e Sportiva: tra l'educazione della persona e le necessità per la salute. *Formazione & insegnamento*, 14(2S), 25–32. Retrieved January 31, 2023, from <https://ojs.pensamultimedia.it/index.php/siref/article/view/2006>
- Cilia, G., Cecilian, A., Dugnani, S., & Monti, V. (1996). *L'educazione fisica*. Padova: Piccin.
- European Commission, & World Health Organization Regional Office for Europe. (2014). *First Meeting of the European Union Physical Activity Focal Points Network, Italy 21-22 October 2014: Meeting Report*. Copenhagen: WHO Regional Office for Europe. Retrieved January 31, 2023, from https://www.euro.who.int/__data/assets/pdf_file/0003/272676/FirstMeeting-EUphysicalActivityFocalPointsNetwork.pdf
- Faigenbaum, A. D., McFarland, J. E., Johnson, L., Kang, J., Bloom, J., Ratamess, N. A., & Hoffman, J. R. (2007). Preliminary evaluation of an after-school resistance training program for improving physical fitness in middle school-age boys. *Perceptual and motor skills*, 104(2), 407–415. <https://doi.org/10.2466/pms.104.2.407-415>
- Gamelli, I. (2004). *Pedagogia ed educazione motoria*. Milano: Guerini Reprint.
- Gauntlett, D., & Holzwarth, P. (2006). Creative and visual methods for exploring identities. *Visual Studies*, 21(1), 82–91. <https://doi.org/10.1080/14725860600613261>
- Le Boulch, J. (1979). *Verso una scienza del movimento umano*. Roma: Armando.
- Lipoma, M. (Ed.). (2014). *Le ontologie pedagogiche dell'educazione motoria*. Lecce: Pensa MultiMedia.
- Lloyd, R. S., Faigenbaum, A. D., Stone, M. H., Oliver, J. L., Jeffreys, I., Moody, J. A., Brewer, C., Pierce, K. C., McCambridge, T. M., Howard, R., Herrington, L., Hainline, B., Micheli, L. J., Jaques, R., Kraemer, W. J., McBride, M. G., Best, T. M., Chu, D. A., Alvar, B. A., & Myer, G. D. (2014). Position statement on youth resistance training: the 2014 International Consensus. *British journal of sports medicine*, 48(7), 498–505. <https://doi.org/10.1136/bjsports-2013-092952>
- Meinel, K. (1984). *Teoria del movimento*. Roma: Società Stampa Sportiva.
- MIUR. (2009). "Cittadinanza e Costituzione" al via la sperimentazione nelle scuole italiane. *Comunicato Stampa del 4 marzo 2009*. Retrieved March 5, 2009, from <https://www.istruzione.it/archivio/web/ministero/cs040309.html>
- MIUR. (2012). *Indicazioni nazionali per il curricolo delle scuole dell'infanzia e del primo ciclo di istruzione: Regolamento e testo definitivo*. MIURAOODGOS/7734. Retrieved January 31, 2023, from https://www.istruzione.it/archivio/web/istruzione/prot7734_12.html
- Nordmann, L. (2007). Bildung im Sport - Bildung für Sport - Bildung durch Sport: Neue Wege einer modernen Trainerausbildung. *Leistungssport*, 36(5), 19–24. Retrieved January 31, 2023, from <https://www.iat.uni-leipzig.de/datenbanken/iks/ls/Record/2000057>
- Norris, E., Shelton, N., Dunsmuir, S., Duke-Williams, O., & Stamatakis, E. (2015). Physically active lessons as physical activity and educational interventions: a systematic review of methods and results. *Preventive medicine*, 72, 116–125. <https://doi.org/10.1016/j.ypmed.2014.12.027>
- Novara, G. (1962). *Teoria e Metodologia delle attività motorie educative*. Trapani: Chirone.
- Palumbo, C., Franco, S., & Cereda, F. (2017). Motor technique and didactics: a possible alliance from an educational point of view. *Education Sciences & Society*, 7(2), 91–105. <https://journals.francoangeli.it/index.php/ess/article/view/3948>
- Pesce, C., Marchetti, R., Motta, A., & Bellucci, M., (2015). *Joy of moving. Movimenti e Immaginazione. Giocare con la variabilità per promuovere lo sviluppo motorio, cognitivo e del cittadino*. Torgiano (PG): Calzetti e Mariucci.
- Rikard, L. G., & Banville, D. (2006). High school student attitudes about physical education. *Sport, Education and Society*, 11(4), 385–400. <https://doi.org/10.1080/13573320600924882>
- Sibilio, M. (2015a). *Il corpo educativo*. In M. Sibilio (Ed.), *L'agire educativo* (pp. 108–119). Brescia: La Scuola.
- Sibilio, M. (2015b). La funzione orientativa della didattica semplice. *Pedagogia Oggi*, 2015(1), 327–334.
- Sotgiu, P., & Pellegrini, F. (1989). *Attività motorie e processo educativo*. Roma: Società Stampa Sportiva.