

TOWARDS SUSTAINABLE DIDACTICS

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Abstract

The concept of sustainability is usually linked with environmental issues. Accepting the idea of the body as an inner environment, it is possible to outline a more sustainable approach to sport didactics that doesn't jeopardise the youth's later willingness for sports. The red thread running through the theoretical references and didactic examples is a way of teaching that privileges communicative to functional/thermo dynamical aspects. The sustainable didactics is the synthesis of several methodological approaches developed in the in the field of Sport for All.

Keywords: sustainability, didactics, sports for all

Introduction

In the last 30 years, in Italy, the almost total lack of official research activities on P.E., essentially due to the absence of a Faculty of Sport Sciences, has been counterbalanced by studies and research (often home-made ones), carried out individually by teachers and researchers. Many of these free-lance researchers have been active leaders in the development of didactic studies regarding Sport-for-All. As new Courses or Faculties of Sport Sciences have been established (2000), several of these researchers have been invited to carry on their work at the Faculty of Sport Sciences of the University of Cassino, with the aim of systematizing the relevant knowledge they were bearers of.

As a recognised Faculty, we have welcomed these individual studies and developed a new approach in P.E., which is that of sustainability in sport practices. Our Faculty is experimenting this theoretical-applicative approach in the training of its students and this method is being adopted also in the training of schoolteachers and sports operators in collaboration with UISP, the largest Sport for All association in Italy. The concept of sustainability applied to P. E. and sport didactics leads us to define as sustainable those didactics that do not jeopardise the youth's later willingness for sports. (Borgogni, Geri, & Lenzerini, 2004)

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The approach has its theoretical references in:

- Merleau Ponty's (2002) study on phenomenology, in particular his analysis on the relation between body and perception and on the deep communicative sense of the meaning of gestures: "the communication or comprehension of gestures comes about through the reciprocity of my intentions and the gestures of others, of my gestures and intentions discernible in the conduct of other people. It is as if the other person's intention inhabited my body and mine his". (p. 215). As sports experts, we can find in this text the qualitative explanation of almost every sport tactic related to sociomotricity;
- institutional pedagogy, paying particular attention to the idea of cooperative learning and of "active classroom", developed by Freinet (1990), who emphasized the concept of active learning in a democratic setting. Freinet theorised the respect for the child's integrity, thus bringing real life into the curriculum and reaching both motivation through meaningful work and freedom from coercion. The didactics of Freinet connect us with the idea of cooperative games as a basis of every disciplinary learning;
- relational psychomotricity, particularly the approach of Lapierre and Aucouturier (1973). They draw their educational attention on the relation between mother and child, between teacher and child and amongst children: this relation is as much important as what is taught. The non-directive approach, the relevance of the act of listening, and the body language are other peculiarities which strictly link their approaches to body practices and sports;
- the latest studies on neurophysiology concerning the role of emotions in learning processes, to mention but a few names Damasio (1994), Edelman (1987), Goleman (1995), Le Doux (1996); they have highlighted how emotions can change a neural map, thus demonstrating the relevance of an optimal learning environment, also referring to Vygotsky's zone of proximal development, which strictly depends on the possibility to cope with emotions. Our field of knowledge is more than others connected with emotions; any performance at any level depends on the emotional condition of the pupil, often exposed to the gaze of the teacher and of the other students.

Sustainable didactics

The world of sports is often unable to read the consequences of its behaviour on external environment (for example in relation to the environmental impact of a sport event or to eco-sustainable practice), with perhaps the only exception being that of some very big events. Nevertheless, in this article our intention is to draw the attention to the incapacity of sports world to grasp the consequences of its politics on the body, meant as an inner environment. This limited perception is true from a physiological and psychological point of view and also from the perspective of sustainable didactics, which will be the centre of my analysis up to the end of this article.

From a physiological point of view, doping is only the most evident expression of the lack of sustainability of a performance in time. From a psychological side, also referring to Hardman (2008), we can trace the absence of sustainability in the result-oriented pressures made on children and youngsters, in the exclusion and in the unwillingness to recognise real responsibilities in the drop and burn-out phenomena of the less able students from sports. In the perspective of ecological didactics, it is interesting to underline the features of sustainability discernible in some didactic approaches.

The approach we are proposing can render practicing sport sustainable for four reasons: not compromising the possibility of future sport activities from an anatomical-physiological viewpoint; highlighting the ethical aspects of sports while facilitating a reflection on sport practice; inducing a balanced relationship with the inner environment - the body, thus facilitating advancing to other sports or recreational sports practices; maintaining the motivation to practising different kind of sports since the activities are conceived as non-excluding.

The approach, explained in several books published by various researchers of our group, is based on three interwoven pillars: oblique methodology, the concept of “subjectively difficult”, situational methodology.

Oblique methodology is based on the teacher’s ability to create situations which every student can manage to get through. Obliquity is an approach that allows every athlete/student to work at their own level, therefore with a higher possibility of success of their actions. Every student possesses different abilities: a teacher facing this situation can choose to introduce only one level of difficulty which few students can overcome or a case with several levels of obstacles which everybody can get over in accordance with their personal skills.

In practice: a situation is oblique when every one in the group can do exercises at different/personal levels but feeling involved in the same activity; a situation is not oblique if one or more students, on the basis of their various grades of capability, practice different activities. The concept of obliquity recalls that of the individualization of teaching and derives from that branch of pedagogy which aims to the integration of the disabled in physical activities. Every situation can be “oblique”, it only depends on the teacher’s ability of observing and programming in this direction.

The concept of obliquity is strictly connected with the background of the savoir-faire and success of all group members apart from their personal abilities. This background is linked to the possibility of properly answering to the teacher’s requests; there is obliquity, if the request is one for the whole group but there are several different yet successful ways to answer it. The obliquity is fostered if there is attention to the experience of every student, if the current idea of mistake can be revised, if the didactics allow the possibility of a multiple choice (Canevaro & Rossini, 1983).

Obliquity means, here, suggesting situations of exercise in which all students can practice according to their own level of difficulty. The “difficulty” represents and defines the frame of the educational work. Every act of learning is difficult, and stands in that area which is still unknown to the pupil; the “oblique” teacher undertakes the responsibility of making this new step perceived as achievable. Everyone can easily agree up to this point: a correct didactic progression should imply and allow a gradual improvement of the learning process from a lower to a higher level, from easy to difficult. This approach corresponds to the learning progression structured in levels, which is widely used in taxonomic planning. According to Figure 1, a pupil going from level “A” to level “B” should follow a linear process made of fixed steps.

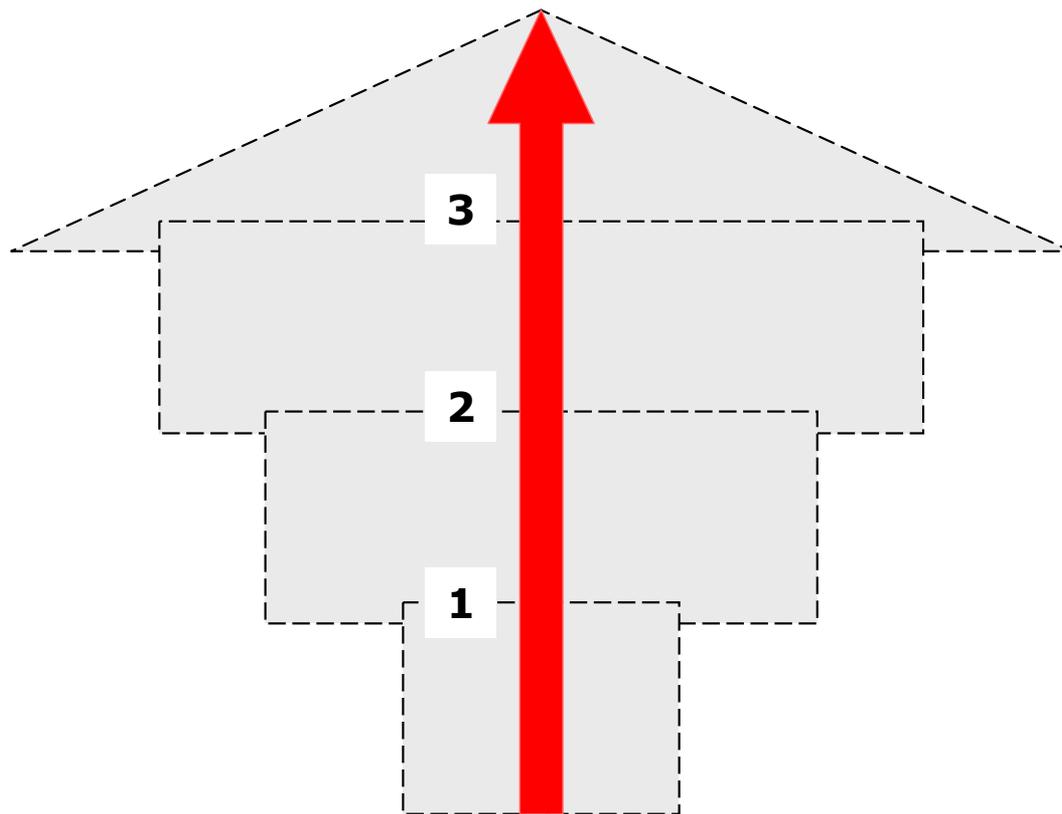


Figure 1. Learning path structured in levels.

This kind of approach can work only until we physically meet the pupils and their different abilities either in classrooms or in sport clubs. A possible solution to this extreme diversification could be that of finding an “average difficulty” for everybody, but it would probably be too difficult for someone and too easy for someone else. From a didactical viewpoint, we can solve the problem in three different ways: suggesting individual learning processes or processes restricted to groups of the same level; applying the oblique methodology; using the “help relation” whereby a more able student facilitates his classmates’ learning. We affirm that suggesting situations in which everyone can confront and eventually overcome his personal difficulties is the appropriate educational approach in the majority of the situations.

In Figure 2 we can observe the representation of a learning path structured-by frames or as a net.

In this case, in order to reach progression, the pupil needs to choose between several alternatives. The net here represents the “problem situation” which allows everybody to stay in the same educational situation but exercising at his/her own level of difficulty. A question for the auto-assessment of teachers could be “Have I been able to suggest situations and exercises which have valorised the differences and abilities of everybody?”

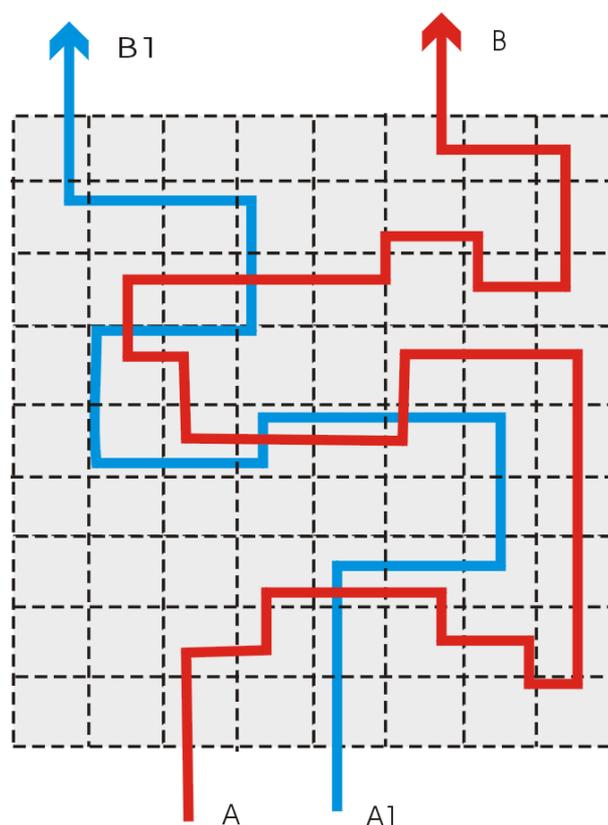


Figure 2. Learning path structured by frames or as a net.

A sustainable didactics is one that allows pupils to choose amongst possibilities they can adapt to their own skill levels. The didactics of the “difficult” implies the ability to propose exercises that will allow each student to find the corresponding optimal area of learning. This second illustration refers also to Gregory Bateson’s theory of Complexity (1972, 1979) and suggests a change of perspective not only in sport didactics but at a more widespread level. The didactics of the difficult can also be connected with the definition of the intelligence theorized by Howard Gardner (1983) as not only the ability to solve problems but as the capacity of discovering problems and finding the appropriate solutions. The described approach can answer to this definition offering learning situations in which everyone can elaborate subjective strategies of solving, but also seeking and discovering problems.

The teacher’s capability to observe and listen to the group, as well as her/his ability to plan and suggest not only exercises but also emotionally relevant situations, are fundamental in situational methodology. This methodology of situations is conceived as the teacher’s ability to “read” the level of instruction and adapt his/her proposals to the experience and emotions of the class. Here, the repetition of learning situations is more important than repeating the action itself.

It goes without saying that in this kind of approach what is crucial is a training of teachers that can develop their personal and relational skills (Borgogni & Davi, 1993). The sustainability of didactics must be evaluated both individually, as a possibility to continue practising in the future, and on a group level; in this case the didactics shall be sustainable when the highest number of youths shall continue practising sport.

This cultural and applicative foundation has thus far already been used as the basis for a textbook for high schools, plus a collection of publications aimed at university training.

The textbook, entitled “Strade Maestre”¹, (Borgogni, Rossi, Piccioni, Cei, & Bizzaglia, 2002) is intended as a guide for the teacher and is the first example in Italy of a book that has been specifically designed for teaching Physical Education in the Secondary School and that promotes the Sport for All approach.

The book highlights the close links existing between pedagogy and the didactics of sport. It describes planning methods, methodologies, evaluations, relations with other subjects and the role of the discipline in the state exam. The text also covers many applicative aspects of how to propose sports using the concept of Sport for All: consideration of diversity, different abilities, motivation, inclusion and the possibility of providing learning opportunities for all, regardless of ability.

Conclusion

We would like to conclude this article with some examples. Do note that the difference between a proposal based on the above mentioned three pillars and the “traditional” way of teaching is very thin:

- 1) putting the cross bar at the same level for everybody is a “horizontal” proposal, whilst different bars at different levels or the same bar put obliquely is a proposal which allows everybody to challenge themselves and not to be excluded or feel humiliated while watching the more capable jumping.
- 2) Proposing endurance running, often disliked by pupils, drawing their attention on what they feel by making them fill in simple forms with information such as the heart rate the running time and the sensations felt, increases the quality of the performance, even if practiced only once a week. We believe that this result is due to the improvement of the awareness of the sensations of their body under effort. The teacher intentionally suggests to pay attention primarily to the sensations felt, rather than to the running time or speed.
- 3) Whilst two students playing volleyball set the ball, the educator can choose to pay his didactic attention to the technical features of the movements, such as the position of the body and of the hands or the way they hit the ball (on time or not), etc. On the other hand, he can intentionally focus on the relational aspects of the gesture, for example by asking one student to create difficulties for the other (relation with the environment/other person) or to concentrate on his/her own personal difficulties and mistakes (connection with internal environment/body).

According to Le Camus (1984) we can distinguish two main trends of this didactical attention: one, more technical, concentrates on the functional/thermo dynamical aspects, the other, more relational, focuses on the communicative/cybernetic aspects. The functional one is more attentive to the technical way of production of a gesture and to the performance achieved. The communicative sense of that gesture remains in the background. The communicative trend looks intentionally both towards the outer environment (focusing above all on the relation with other people, e.g. the one setting the ball) and the inner environment (focusing on proprioceptive sensations). What I would like to stress here is that while the second approach can include the first, the opposite is not possible.

¹ The English translation is difficult: “Strade” means “Roads”, “Maestre” means “Main” but also “Teachers”.

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