

## Didactic problem: Teaching and methods in volleyball

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### ABSTRACT

Didactic problem for the teacher is enormous since there is not only one method, but there are methods that each teacher must adapt with his own experience to the different needs of the students and the environmental context. As part of teaching of motor skills in volleyball, when we talk about method we generally refer to a series of intentional and organized actions that are implemented to achieve the set objectives, through the choice and use of means and contents that can favour motor learning. The teaching action of the teacher will be all the more effective the more adequate the working method is adopted. The term "*method*" is often connected to the terms "*deductive*" and "*inductive*", therefore the distinction made between directive and non-directive style places the accent on the direct intervention of the teacher, while the other on the assumption by students of many aspects of the teaching function. Teaching methods find their origin in the two classic forms of deduction (managerial style) and induction (non-directive style). The teacher must know how to adopt different styles and methods according to the didactic needs, as there are no better styles and methods than others but choices suitable for achieving different objectives.

**Keywords:** Methodologies; Motor learning; Objectives; Motor skills.

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## INTRODUCTION

Didactics has as its object teaching and its method (Raiola, 2017). Through certain didactic procedures (Gaetano, 2012a) there is the transfer of educational information from the teacher to the student. Education, therefore, that is created through teaching therefore has mainly educational purposes (D'Elia et al, 2020a), rather than cognitive ones; it is no longer a question on the part of the student to acquire notions, but to create new and wider skills at the end of an overall process that involves the human being in his totality. The didactic problem (Raiola, 2011) for the teacher is enormous since there is not only one method, but there are methods that each teacher must adapt with his own experience to the different needs of the students and the environmental context. As part of teaching of motor skills in volleyball, when we talk about method we generally refer to a series of intentional and organized actions that are implemented to achieve the set objectives, through the choice and use of means and contents that can favour motor learning (D'Isanto et al, 2017); as it happens in other sports disciplines, such as basketball (D'Elia et al, 2021a), football, tennis, and also in adapted sports such as tennis (D'Elia et al, 2021b), basketball and volleyball. Motor learning is a psychological and technical procedure (D'Elia et al, 2020b; Di Domenico, 2020), including the interaction between the behaviour of the teacher and the behaviour of the student; the first suitably adapted to the contextual situation tends to positively modify the second. The teaching of movement presents particularly problematic aspects, as the teacher, through a predominantly verbal language must, involving the cognitive and affective aspects of teaching-learning, obtain a response from the student, expressed mainly through language motor and body. Moving to learn is the most shared purpose in the school environment (Gallahue & Cleland, 2003), it includes the learning of motor skills and gestural and mimic skills, knowledge regarding the activities performed; therefore physical education is conceived as a context and means to learn (Colella, 2016). Teaching has as its central goal the learning process (Altavilla et al, 2014), that is the teaching activities of the teacher must ensure that the pupils' learning follows the educational paths and realizes the contents and the established objectives. For this purpose, the teaching activities of the teacher will be the more influential, the better the working method (Raiola et al, 2016) is adopted. One of the aspects to consider in the teaching of physical education (D'Elia, 2020) concerns how to perform the functions that belong within the teacher's role. The common element of the various approaches is the decision-making aspect and the assumption of responsibility, within a range that goes from maximum directivity to non-directivity. In directive teaching, maximum importance is given to the role of the teacher (D'Elia, 2019), who is always able to control the activity he carries out and both the group of students. This can, however, lead to low student involvement and a low level of autonomy. In non-directive teaching, the teacher must always be in possession of adequate information to be transmitted to their students, but it is the latter who, with the guidance of the teacher, have adequate experiences different developmental and maturation stages reached. A non-directive mode favours the development of autonomy and stimulates spontaneity and creativity; allows the participation of each student according to their possibilities (D'Isanto & Di Tore, 2016) and determines a high cognitive and emotional involvement. Each pupil has its own needs, characteristics, aspirations and learning methods, therefore the teacher must give an answer personalize to each one to facilitate the development of the potential of all students (D'Isanto et al, 2019). The scholastic curriculum (Raiola et al, 2018) is rich in objectives related to a wide range of skills and abilities: for example, it can include the learning of specific technical skills of sports disciplines, as volleyball (Forte et al, 2019).

## TEACHING AND METHODS

One of the main points of the teaching-learning process of the volleyball is represented by the methodological problem (Raiola, 2014), that is how to organize and implement all the proposals that will serve to achieve the proposed objective, what attitude to adopt, when and how to intervene in corrections. The current teaching

methods of physical education have their origin in the two classical forms of deduction and induction. There are deductive methods (directive style) such as the prescriptive (directive method), the mixed method (synthetic-analytical-synthetic) and the method of assigning tasks. These methods give importance to the role of the teacher who not only proposes but indicates the solution of the motor task to be solved. The advantages are represented by the easy control of the development of the learning time program, making corrections more targeted to the single actions and / or to the single gesture. However, they also have disadvantages such as excessive prescriptiveness and directivity that limits and often inhibits pupils' creativity. There are then inductive methods (non-directive style) such as the method of solving tasks, the method of guided discovery and the method of free exploration. These methods are characterized by the freedom left to students or athletes in the solution to the motor task, albeit with a guide that the teacher can provide, but not inhibiting the creative intellectual commitment. An obvious advantage is that they enhance the pupils' creativity, while they have the disadvantage of not efficiently controlling the progress of the program and the learning times are quite long.

## DISCUSSION

The role of the teacher is very important in the prescriptive-directive method and is centred on the hypothesis that he possesses knowledge and experience to be transmitted to his students or athletes and generally involves four phases: explanation, demonstration, implementation and correction. The teacher-coach, through the mixed-method, offers students an overview of the game or exercise, then analyses the individual parts and then puts it all back together. This allows you to acquire sports techniques in a short time and facilitates the individualization and correction of errors. The method of assigning specific motor tasks it involves an explanation of what will have to be done, a demonstration of the activity to be carried out and the execution by the athletes, independently, of the assigned tasks. There are risks of executive approximation if left very free, of low spontaneity of the athletes and excessive repetitiveness. The method of problem-solving would consist in the teacher's solution, motor situations and not well defined that could be faced by pupils (Gaetano, 2012b). It may happen that they will find different solutions to the problematic situation; furthermore, the teacher will not have to provide any executive model; his speech will be aimed at an intense and meaningful verbal interaction with the students-athletes. In a problem-solving context, the game embodies the cognitive aspects in sensory-motor action; they integrate body-mind into situated actions, that is real, non-standardized, in which they participate with personalized contribution, each according to their own means and their own possibility (Ceciliani, 2018). With the method of free exploration, students-athletes are the main protagonists of this inductive method, which essentially consists in the free search for motor experiences. The teacher-coach runs the risk of playing an almost irrelevant role; its task is to direct the attention and interest of the pupils to a specific motor situation from time to time. There is a serious risk of activating motor and behavioural anarchy. The method of guided discovery has notable similarities with the method of solving problems from which it differs in the "*delimitation*" of the solution hypotheses of the motor situations posed. The problems posed will therefore be determined by the objectives to be achieved; on the other hand, the execution of the actions useful for achieving the objectives set will be left to the creativity, imagination and elaboration of the pupils. If it is true that there are no absolute answers in the choice of methods, as the discourse is linked to different situations and contexts, objectives, contents and means, it is equally true that no absolute method is to be preferred; perhaps this is true, unique, and correct methodological choice. In primary school, for example, the differences between pupils in the various classes are considerable and require careful reflections and choices (D'Isanto, 2019); in fact, in addition to the evident differences in age, growth and development, different needs emerge on a playful and motor, emotional and relational level (Altavilla & Di Tore, 2016).

### Operative proposals

The teacher-coach must look for in his teaching activities, for the purposes of learning and development of specific motor skills in the volleyball (Ferrara et al, 2019), such as the serve or the bagher, the versatility and the multilateralism. Versatility (linked to methodological aspects), i.e. in the use of different methodologies, always trying to enhance the potential of each method and multilateralism (linked to teaching), i.e. planning and implementation of development activities for all motor skills and learning of the maximum. An example of a didactic exercise using a prescriptive teaching of the beaten from above in volleyball:

- Hold the ball in your hands, placing your right hand over the ball (Figure 1)
- Throw the ball upwards, placing the left foot slightly forward (if the hand that lifts the ball is the left)
- Bring the right limb back (loading)
- Hitting the ball, with the open hand, in front of the body
- Shift the weight of the body, from the right foot, forward onto the left foot, extending the right arm completely, forward, almost accompanying the ball in its trajectory.

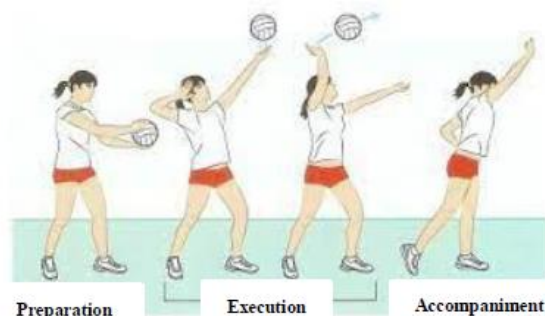


Figure 1. Serve from above.

An example of a didactic exercise using heuristic learning for the acquisition of the bagher in variable situations:

- In pairs: one pupil throws the ball while the other sends it back, making it bounce on an elastic panel, in different directions (Figure 2).
- We are always looking for different forms of throwing and receiving.
- The pupil who returns the ball constantly changes direction and height of the ball, forcing the partner to adapt to adapt his position and his reception.
- The pupils stabilize when to rotate into positions.
- Each couple comes up with their own ideas on how to modify the exercise.

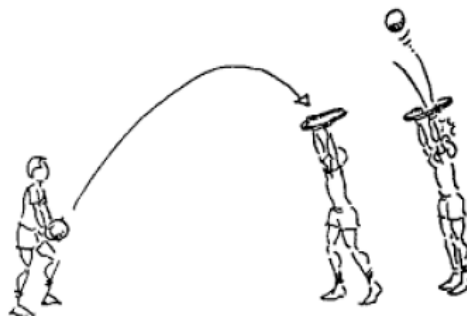


Figure 2. Variable bagher.

The didactic strategies to stimulate spontaneous solutions to motor problems, that is to enhance heuristic learning, are based on a single principle: doing executive variability (Newell & Slifkin, 1998), or putting in place a process of searching for motor solutions that passes through the continuous variation of motor gestures. Exploiting variability means continuously modifying the constraints imposed by the organism, by the motor task and by the environmental context (Renshaw & Chow, 2019). Differences between the cognitive approach and the ecological-dynamic approach are represented by the fact that the cognitive approach is structural, central hypotheses of motor control structured hierarchically that regulate movement in a programmed way; while the ecological-dynamic approach is phenomenological (Hastie & Siedentop, 1999) that is, it describes laws and principles on which the motor control system is based, which is heterarchic and endowed with self-organizing properties (Raiola, 2014). Finally, the characteristics and paradigms of the two approaches, while highlighting two divergent paths for motor learning, hypothesize for both a formal and informal educational context, calibrating them according to the general objective and envisages more educational / didactic paths based on the specific needs of the individual (D'Isanto, 2016), in order to finalize physical and sporting activity for all and without conceptual barriers.

## CONCLUSIONS

Physical education and sports teaching concerns how to perform the functions that fall within the role of the teacher-coach, and more precisely defined as teaching styles. The methodological approaches analysed present antithetical aspects, in directivity and non-directivity, different styles graduated in reference to the number of decisions and responsibilities assumed by both the teacher and the pupils, based on the planning of the process, the execution of the activities and the evaluation. There are no ideal styles and methods but choices suitable for achieving different objectives, in relation to the skills of the pupils and contextual situations. Summarizing, it is possible to add some other elements of analysis and reflection. In fact, it is possible to distinguish a teaching mediated by the teacher and a teaching mediated by the student, the former seems to correspond to the directive teaching, with the teacher organizing the activities for a group of students, explaining and demonstrating when necessary, and intervening to correct and encourage the learning of all. Pupil-mediated teaching seems to correspond to non-directive teaching, with the pupil taking on different functions of the teacher: it differs in teaching and tutoring among peers, small group and self-learning.

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