

THE EFFECTIVENESS OF MOTOR ACTIVITIES IN SCHOOL EDUCATIONAL PROCESSES

L'EFFICACIA DELLE ATTIVITA' MOTORIE NEI PROCESSI EDUCATIVI SCOLASTICI

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ABSTRACT

The educational objectives present in the student's curriculum frequently do not equate to reality. Unfortunately, they remain aspirations that do not materialize. The explanation that can be given to this burdensome evidence can be dictated by the difficult relationship that is created between the values and the modalities that can effectively inform and guide the teaching-learning process.

Concepts such as learner-centred learning, learning by discovery, cooperative learning, learning by doing, can be framed as essential aspects of the teaching-learning process, and as such used with teachers to ensure that educational action is effective.

This article aims to highlight a curriculum design capable of enhancing the values and pedagogical principles implicit in the various educational objectives of physical education and demonstrating how they can provide a basis for teachers necessary to transform the teaching process into concrete forms of virtuous educational action.

Gli obiettivi formativi presenti nel curriculum dello studente frequentemente non equivalgono alla realtà. Essi, purtroppo, restano delle aspirazioni che non si concretizzano. La spiegazione che può essere data a questa gravosa evidenza può essere dettata dalla difficile relazione che si crea fra i valori e le modalità che possano informare e guidare efficacemente il processo di insegnamento-apprendimento.

Concetti come apprendimento centrato sul discente, apprendimento per scoperta, cooperative learning, learning by doing, possono essere inquadrati come aspetti essenziali del processo di insegnamento-apprendimento, e come tali utilizzati con di docenti per far sì che l'agire educativo sia efficace.

Questo articolo vuole evidenziare una progettazione di curriculum capace di esaltare i valori e i principi pedagogici impliciti nei vari obiettivi educativi dell'educazione fisica e dimostrare come essi possono fornire una base per gli insegnanti necessaria per trasformare il processo di insegnamento in forme concrete di azione educativa virtuosa.

KEYWORDS

Physical education, educational action, school, educational intervention

Educazione fisica, agire educativo, scuola, intervento educativo

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Introduction¹

The term educate in the educational institution can be traced back to the idea of the place where learners, in addition to developing academic skills, have their values (strengths, virtues and social and emotional aspects) and competences born, grow and expand (Seligman et al., 2009). Educational action, therefore, is intended to use interventions and teaching practices capable of stimulating the learner's well-being, understood as the ability to feel good and, therefore, "act" well (Huppert and So, 2013).

Although it is established theoretically that educational action in schools must generate a positive experience in order to be effective and efficient, large gaps exist between research and practice.

In this paper, we aim to highlight the educational importance of physical education by examining student involvement through a participatory action research perspective as a pathway towards the creation of a more effective education.

The aspects that are analysed concern how physical education can positively influence the implementation of an educational process, and how much it affects the students who use it.

In this regard, the ability of learners to interact with the educational institution to create a form of education that is appropriate is analysed, and to what extent physical education can be linked to the concept of education. In addition, possible improvements in terms of life skills are analysed.

1. The physical education's influence in educational action in schools

An educational system in which educator and educand are present generates a transmission of values (Musi, 2015). This process does not take place in a structured manner according to rigid rules, but is always an action characterised by multiple aspects of the person: communication, socialisation, cognition, emotion (Bianchini, 2022).

The term 'educate' derives from the Latin *educere*, which means 'to bring out', which, in the school context, emphasises the need to be able to foster the emergence of knowledge in the student and not the introduction of the latter in a

¹ This article is the result of a study designed and shared between the authors. The Authors intellectually contributed to the manuscript, read the manuscript, and approved the presentation in the same way.

'forced' manner. Educational action must be built over time with all the aspects that make up and form part of the student in mind (Botta, 2022). Generating an effective educational approach means developing a series of interventions and programmes supported by social and structural factors that influence the individual construction of personality. The numerous experiences that the pupil goes through enable him to become more aware of himself, his surroundings and the peculiarities that belong to him (Colella, 2016).

In the teaching process, the possibility of freely experiencing the moment of learning takes on great importance, so that any decisions can be made and new knowledge can be experienced independently (Kaput, 2018).

The teacher's educational action assumes a function of orientation towards the learner, and it is for this reason that it must be student-centred learning, so as to enable the latter to interpret his or her surroundings and then act, generating a continuous process of personal voluntary self-transformation of his or her actions. Educational action is an auxologically, socially and politically oriented action that enables the learner to correctly interpret reality and subsequently direct his or her action according to certain principles or values (Palmieri, 2016).

In the school context, the educational action implemented by the teacher presupposes a knowledge of the objectives to be pursued, the methods and means to be employed to satisfy them by both the latter and the learner. In this way, the educational action finds a well-defined role, intended as an orientation-guide in the personal and social growth of the student (Pellerey, 2014). From this perspective, physical education, a discipline capable of promoting the learner's well-being and health (Herbert et al., 2020), can become an educational tool for optimising the teaching-learning process.

Physical education builds its educational action on a form of learning based on experience (Kirk, 2005), characterised, therefore, by learning by doing, cooperative learning, tutoring, and many other processes that favour the development of a form of critical learning. It, therefore, becomes an exercise in rationality that aims to break the processes associated with the reproduction and transformation of the institutionalised order legitimised by the teacher, in favour of the centrality of the learner. In this way, a 'linear' educational system is abandoned in favour of a more complex one whose aim is to develop the student's critical, self-reflective and emancipative capacities.

Physical education, in a totalitarian view of the student, observes the latter according to the concept of corporeity in which the mind does not exclude the body (Lipoma, 2016). In the educational institution, it represents a fundamental component for the totalitarian development of the student (Donati, 2004).

Therefore, it goes beyond the purely playful aspect to achieve educational purposes by fostering the full knowledge and transmission of all the basic rules for school and social life.

2. The physical education's effectiveness in the educational process

For an educational intervention to be valid, it requires certain considerations that inevitably influence its success. First of all, school curricula must be accessible to each student, so as to motivate them and make them aware of their goals (Fiorentino, 2020). The ability to involve students is a way to generate educational action whose effects are positive, as they have unique and useful knowledge and perspectives (Levin, 2000) which, when used in conjunction with the teachers' background data and knowledge, can help to define useful actions for each student. This aspect highlights how the school context must also be considered in order for the educational intervention to be effective (Marelli, Orso, 2009).

Involving pupils in their identity-building process means allowing the recipients of the educational action to accept and be the true owners of the desired teaching-learning path (Jensen, Simovska, 2005; Leadbeater, Marshall, Banister, 2007; D'Amore, Fandiño Pinilla, 2016). Students become, therefore, aware of their choices and are put by the school (and those who represent it) in the best possible conditions to acquire the necessary skills for everyday life (Boffo, 2017). In doing so, educational action abandons the conception of a teaching-learning process whose dissemination of knowledge is teacher-centred in favour of student-led methods of enquiry (Shute et al., 2016).

The didactic action implemented by teachers, as well as the educational and social role derived from it, is constantly evolving, as it must be able to respond to the changing needs of pupils. There emerges, therefore, the need to integrate the teacher's own professional skills with the didactic-disciplinary knowledge represented by transversal competences, which make students able users of the available educational knowledge (Bagni, Fiorentini, 2018).

In the school context, particular consideration should be given to physical education, which should be able to emphasise the practical-operational dimension of intellectual processes and to recognise in the body-motor experience meanings linked to the relationships between movement and cognitive, relational, emotional and social development (Di Marco, 2018). In this way, value is given to didactics of physical education capable of valorising personal and relational skills that regulate and orient relationships with the surrounding environment (Lipoma, 2014).

In order to be effective, educational action requires an institutional, scientific and cultural definition of the school's didactic-organisational models, so as to accommodate a scenario in which physical education acts as a network linking other disciplines, enhancing the educational and training aspects, with a view to interdisciplinarity and transversality (Valdés et al., 2016).

A correct application could enhance educational contents and methods, following the logic of the relationship, integration and fruitful and continuous exchange between the various disciplines, thus favouring a true educational organisation characterised by different knowledge, whose common objective is to guarantee the quality of each pupil's learning. Therefore, teachers must necessarily collaborate and promote meaningful activities characterised by innovative tools and methodologies that intertwine with each other, whose topics are as close as possible to real experience, favouring transversality and broader interconnections and ensuring the unity of their teaching.

The present work has used physical education as a discipline-guided approach to involve students in the educational process. By doing so, it will be possible to combine and enhance the strengths of physical education with the lived experience of the students.

Pupils can benefit through their active participation, highlighting the potential to transform and strengthen youth development outcomes (Ozer, Douglas, 2013). It has been observed that physical education produces benefits in life skills, intra- and interpersonal relationships, thereby improving psycho-social well-being (Ryan et al., 2000) and academic success (Mitra, 2004).

An additional aspect of PE is the improvement of communication skills, problem solving, critical thinking, sense of self-efficacy and thus confidence, improving the overall well-being of students (Lansdown, Jimerson, Shahroozi, 2014; Samdal, Rowling, 2015). These aspects contribute to increased feelings of being heard and feeling useful, empowerment and collective efficacy (Berg, Coman, Schensul 2009). Furthermore, through physical education, social networks and interactions can be improved, fostering attachment with the school (Ozer, Wright 2012).

3. Description of the research work

The present work lasted four months. It examines the usefulness of involving students in the initial stages of implementing an educational strategy using physical education and its interdisciplinary and transversal potential. A secondary school in the region of Apulia was selected, specifically all second classes (Table 1). An

experimental and control group was recruited to monitor any school-wide effects. The latter completed shorter measures than the experimental group and did not receive any incentives from the teachers.

Experimental Group			Control Group		
Class	N. students	Age	Class	N. students	Age
A	23	11 – 12 years	A1	24	11 – 12 years
B	27	11 – 12 years	B1	25	11 – 12 years
C	21	11 – 12 years	C1	23	11 – 12 years
D	19	11 – 12 years	D1	20	11 – 12 years
E	26	11 – 12 years	E1	25	11 – 12 years

Table 1: Student’s data of experimental and control group

Thirty-eight teachers were involved, whose task was to find out how physical education influenced the following aspects: positive emotions, commitment, relationships, meaning and fulfilment. In this regard, they participated in a training seminar on educational action.

The classes and research activities of the experimental group were planned in coordination with all school staff and were constrained by the time the school had available.

In order to assess the influence that physical education generates on the teaching-learning process, the degree of learner participation is analysed, ranging from a grade 1, which is equivalent to non-participation, to a grade 8, which represents full participation in the educational process on the part of the learners (Table 2).

It should be noted that from the observations made, the lessons were considered grade 6 because they were initiated by the teachers but the decision-making process is shared with the students.

Grade 8	Decisions made by students in collaboration with teachers	Student’s participation
Grade 7	Decisions made by students with little input from teachers	
Grade 6	Decisions made by teachers in collaboration with students	

Grade 5	Decisions made by teachers, students are consulted and informed	No student's participation
Grade 4	Students are directed and guided by teachers	
Grade 3	Low student participation in the educational process	
Grade 2	Low student participation in the educational process	
Grade 1	Full teacher control of the educational process by, absence of participation on the part of the learners	

Table 2: Identifying of student participation's degree

Physical education acted as a glue with the other disciplines and as a means of inclusion among the pupils. Furthermore, it was observed that through it learners were able to express their emotions in a simpler way than in other disciplines. In this regard, it was observed that the teachers' view is not always the same as that of the students, and thus the decisions that are made by the teachers often ignore the reality of the learners.

In addition, four workshops were conducted for the students every four weeks during class time. The first one focused on the concept of well-being and basic information concerning educational action. The second workshop focused on the characteristics of physical education and its potential. In this regard, the students considered the entire discipline process and made decisions on data collection. Workshop three involved the students in examining the barriers and enablers to well-being arising from physical education. In workshop four, students considered strategies that can be implemented to make the educational act of the teaching-learning process interface with physical education.

The workshops were followed by students observing some members of the school staff. Teachers were instructed to consider their role in learning and recording observations, and as possible moderators, taking care not to regress to power relations. Subsequently, the students conducted a series of research activities that built on the knowledge gained during the initial workshops.

During the four months, the teacher's role, during PE lessons, was only to provide the basic concepts of the lesson and the pupils, in cooperation with each other, had to implement what had been previously established in the next lesson. Obviously, the topics covered did not exclusively concern the discipline of physical education, but inter- and trans-disciplinary links were made. The above was only implemented for the students in the experimental group, while the teachers in the control group continued to conduct the lesson as normal.

The teachers were provided with a table to assess the degree achieved by the students in certain parameters (Table 3). This evaluation was done for both groups and on a bi-weekly basis.

Aspects observed by teachers	Evaluation				
	1	2	3	4	5
School Improvement	1	2	3	4	5
Involvement	1	2	3	4	5
Resilience	1	2	3	4	5
Emotions	1	2	3	4	5
Improving personal relationships	1	2	3	4	5

Table 3: Parameters observed by the teachers

The data collected from the research showed how physical education can help to adapt appropriate educational content.

Aspects observed by teachers	Evaluation				
	Month 0	Month 1	Month 2	Month 3	Month 4
<i>experimental group (n. students tot: 116)</i>	23 students = 1	20 students = 1	17 students = 1	14 students = 1	10 students = 1
	26 students = 2	27 students = 2	25 students = 2	23 students = 2	23 students = 2
	33 students = 3	35 students = 3	38 students = 3	38 students = 3	39 students = 3
	17 students = 4	16 students = 4	18 students = 4	20 students = 4	21 students = 4
	17 students = 5	18 students = 5	18 students = 5	21 students = 5	23 students = 5
<i>control group (n. students tot: 117)</i>	25 students = 1	25 students = 1	22 students = 1	19 students = 1	18 students = 1
	23 students = 2	24 students = 2	24 students = 2	25 students = 2	26 students = 2
	30 students = 3	31 students = 3	32 students = 3	32 students = 3	30 students = 3
	19 students = 4	19 students = 4	19 students = 4	20 students = 4	21 students = 4
	20 students = 5	20 students = 5	20 students = 5	21 students = 5	22 students = 5

Table 4: Improvements of the parameters observed by teachers in the 4 months of observation

Observations suggest that physical education helped facilitate students' understanding of learning content, as it served as an educational vehicle. Furthermore, the students in the experimental group expressed a greater feeling of well-being and education to the whole school community, highlighting how physical education is able to engage students more. A further consideration must be made with regard to the degree of student participation, which was set at grade 6 for the experimental group, while the control group was assigned grade 5. This consideration highlights how the students in the experimental group were explicitly involved in the educational process, and their ideas and opinions were carefully considered by the teachers, which generated personal growth of the student as a citizen of the school and social community.

Conclusions

This study highlighted the value of involving students in an educational action in which physical education is used as a discipline with interdisciplinary and cross-curricular value. The results suggested that the students involved in the experimental group enjoyed learning about well-being and had the ability to support well-being in their school understood as school improvement, meaningful relationships, involvement, recognition of emotions and improved intra- and interpersonal relationships. Involving students through their participation is a necessary approach to implement educational action based on student well-being. Students are considered key players in the teaching-learning process, which favours the creation, relevance and appropriateness of an educational curriculum adapted to each student. It is in this direction that the school institution must operate, it must use the appropriate methodologies to meet the needs and requirements of the pupils, so as to put them in the best possible conditions to achieve educational and training success. The school's task is, therefore, to propose didactic-educational interventions that are in line with what is required by both learners and society, so as to be able to contribute to the construction of the life skills necessary for the correct formation of the identity of the student-citizen.

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