

## INNOVATIVE EDUCATIONAL PATHS IN SCHOOL AGE: THE EDUCATIONAL VALUE OF MOTOR AND SPORTS ACTIVITY AND OF THE EVALUATION PROCESS

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Review paper

### Abstract

The aim of this research contribution is to frame innovative pedagogical paths for school-age students through experimental programs implemented in non-formal educational contexts, such as motor and sports activities. In this regard, an experimental project; through sports activities, it involves both the implementation of an educational growth protocol and a shared development of an evaluation grid between students and teachers. The results allow us highlighting the way in which, through motor and sports education (even if practiced in extra-curricular contexts), it is possible to make the formative growth of school-age children more efficient, and to develop in them a series of pedagogical and educational values that are indispensable for correctly and completely building the individual.

**Key words:** innovative training paths, motor and sports education, experimental pedagogy, evaluation, school age.

### Introduction

"There can surely be no training process that does not include evaluation. But can evaluation be significantly connected with the training process?". The main pedagogical literature of reference does not give a clear positive answer to this question, but offers many insights that lead us to elaborate it (Bartezzaghi, Guerci & Vinante, 2010; De Landsheere, 1994; Giannandrea, 2010).

Evaluation, in fact, is a key point of the training process. It is fundamental for the teacher, who first of all plans his/her work according to a preliminary evaluation of the subjects, monitors their progresses through intermediate evaluation phases, and then manages to have a clear and objective feedback on the final achievement of the set objectives. In the same way, it is functional for the students to always keep in mind the criteria according to which they are evaluated, but above all to develop the ability to evaluate them themselves. In fact, as Bruner (2001) stated, teaching should aim at leading the students to discover themselves.

Following this idea, the proposed experimental project places an initial emphasis on the fact that, when students are involved in the evaluation process and this is not simply imposed on them "from above", they acquire greater awareness of what is really important and of their qualities; moreover, this awareness also makes it easier for them to interpret negative evaluations as a stimulus to improve themselves, rather than seeing them as a personal failure (Bruner, 2001; Damiano, 1993).

The second emphasis that we intend to place concerns specifically the field of Motor Sciences, and is intertwined with the universal willingness of the subjects to achieve positive evaluations.

In fact, our reflection is based on the observation of a group of students who, through the constant practice of dance, have managed to obtain excellent results in terms of lifestyle optimization and management of the issues that their adolescent phase foresees, and these results are probably better than those reached by young people who are completely strangers to the world of motor activity (de Graaff & Mierson, 2005).

Therefore, we are not speaking of evaluating our subjects according to their technical skills, but we are noticing that the formative value of constant sports practice, especially of a rigorous and strongly educational discipline such as dance, can also support them in their daily life. Moreover, making these subjects aware of this through a phase of careful self-evaluation will allow them recognizing the objective value of motor activity and promoting its practice for themselves and for others (de Graaff & Mierson, 2005; Di Palma, Iovino & Ascione, 2019; Iavarone, 2013; Sibilio & Aiello, 2011).

### Structure of the Sports Education Experimental Project for School Age Students, in Non-Formal Education Contexts

For the realization of this project a group of students from a dance school, made up of ten elements aged between fourteen and sixteen years, was involved. The girls had been regularly carrying out this motor activity for about five years, always within the same course, therefore within the same group; in fact, only the students who had all shared those years together in a continuous way were taken into consideration, in order to better analyze the relational dynamics that had occurred over time. Sharing numerous hours of activity with the same group of people, in fact, contributes to the creation of a highly functional training environment.

The project took place in the dance school where the girls had been studying for some years already, as mentioned above: the choice to set up our didactic space within a familiar context helped them avoid the first "settlement" phase, and therefore to optimize the success of the work from the beginning.

In agreement with the school director, a first meeting was therefore organized, which represented on the one hand the point from which the motor and sports activities to be carried out were planned, while on the other hand it was a key moment of the project itself: the creation of the evaluation grid.

During this meeting, in fact, the girls were encouraged to reflect on what aspects of their daily life were most influenced by dance, or rather on what occasions it was more evident that this discipline could lead those who practice it to a positive change in behavior and lifestyle.

Through brainstorming, their ideas and insights were collected, up to the identification of the key points shared by the majority of the group and then to the development of the actual evaluation grid, which was employed during the project.

#### *Shared definition process of the Evaluation Grid*

By definition, the evaluation grids reduce the degree of the teacher's subjectivity in the evaluation, and provide the learner with more detailed feedback; moreover, they aim at monitoring and adjusting their progress rather than simply evaluating their final results (Bartezzaghi, Guerci & Vinante, 2010; De Landsheere, 1994; Gentili, 2016; Giannandrea, 2010).

In particular, when students contribute to the development of the grid, they have to actively focus on distinguishing the characterizing aspects from the less important ones, and on differentiating the behaviors that can lead them to a positive evaluation from those that are not functional to the objective set. The development of the evaluation criteria by the learners makes them autonomous, and consequently, their learning process becomes more target-oriented.

In the specific case of this project, the students identified education to well-being, relational skills and sense of responsibility as fundamental aspects to be included in the grid. They recognized, in fact, that dance represents for them a support in relation to these three aspects of life, and that over the years, it has effectively helped them develop and manage them.

The first evaluation criterion considered, i.e. the education to well-being, mainly concerns two points: the care for nutrition and the smoking prevention. A state of well-being, in fact, certainly includes (among other things) a proper diet; it concerns not only the definition of a correct daily caloric intake, but also sufficient hydration and

attention to micronutrients, i.e. vitamins and minerals, which are very often overlooked and are very important especially for those who practice sport. Particularly interesting was the recognition of smoking as a health risk, but above all as a factor that can be prevented through exercise: the habit of smoking, in fact, affects young athletes in terms of breathlessness and endurance, which induces them to avoid it, once becoming aware of it.

The second criterion analyzed does not concern the subject in his/her individuality, but focuses on the concept of group: in fact, the relational skills of the subject are evaluated, i.e. the way he/she faces being together with others, the respect and attention he/she has for the space (understood both in a real and metaphorical sense) shared with his/her companions, and the degree of integration he/she is able to achieve within the group. Developing relational skills also means being able to relate to the various figures not only within the group, but also at school, like with teachers or school staff.

The third criterion, concerning relationships as well, considers the development of a sense of responsibility by the subjects. In the specific case of dance, the activity is carried out in a school environment made up not only of one's own group but also of others, with students of different ages; in relating to the lower classes, in particular, the older girls learn to take care of them, to collaborate and sometimes even to solve the small problems that may occur during exams or performances at the end of the year, without the help of the teacher.

Therefore, this type of interaction encourages the development of the students' sense of responsibility, and encourages them to always behave in a balanced and conscientious way.

#### *Formative and Educational Process: Phases, Objectives and Results*

Following the development of the grid and on the basis of it, the sports-training protocol that the girls carried out during the project was defined, which lasted for a total of about two months: lessons were held three times a week for seven weeks, for a total of twenty-one meetings.

Each lesson lasted two hours; of each meeting, in particular, one hour was dedicated to the regular technical program, adapted to the students' previous age and years of study, while the other hour included a workshop specifically designed for the project.

The "standard" activity, carried out during the first hour, consisted of a basic training for the dance courses: a first warm-up phase, preparatory gymnastics and coordination exercises; a second section consisting of barre exercises and a last part that provided alternately exercises at the center (jumps, turns, diagonals) or the use of the pointe shoes.

Table 1. Evaluation Grid.

CRITERIA	DESCRIPTION	EVALUATION
<p><b>EDUCATION TO WELL-BEING</b></p> <p><b>-Smoking prevention</b></p> <p><b>-Correct diet</b></p>	<p>Every time cigarette smoke is inhaled during combustion, about 4000 chemical substances are released in addition to nicotine; among the most dangerous ones there is tar. The objective of smoking prevention is to prevent smoking by identifying the risk factors which could generate the onset of a disease.</p> <p>A correct diet means a correct intake of macro and micro nutrients that define the right daily caloric intake. Not to be underestimated is the intake of at least 2 liters of water per day.</p>	<p><b>1-3</b> The subject does not pay attention to diet, and the daily caloric intake is higher than the daily energy expenditure. There is also a smoking habit, with an average of 10 cigarettes per day.</p> <p><b>4-7</b> More or less superficial care for diet. The subject also smokes between 5 and 6 cigarettes per day, although not constantly.</p> <p><b>8-10</b> The subject shows deep and safe knowledge about correct diet, applying autonomously behaviors that protect health. In the same way, he/she acts consistently with regard to smoking, avoiding it completely.</p>
<p><b>RELATIONAL SKILLS</b></p>	<p>Relational skills play a key role within organizations. Knowing how to communicate effectively and understand each other's needs are among the most useful skills in professional and personal life.</p>	<p><b>1-3</b> The subject avoids any relational and social relationship, having no integrative skills within the group and towards the teachers.</p> <p><b>4-7</b> The subject feels an integral part of the group thanks, above all, to the others' ability to include him/her. However, he/she is able to take initiatives aimed at personal and social well-being.</p> <p><b>8-10</b> The subject is the main bond of the group. He/she takes initiatives, is concerned about cohesion and manages to create a climate of collaboration. He/she often acts as a "link" between students and teachers.</p>
<p><b>SENSE OF RESPONSIBILITY</b></p>	<p>A sense of responsibility implies thoughtful and balanced behavior. Responsibility translates into a correct, conscientious attitude and into a high sense of duty. Taking responsibility is an important and mature action that requires a particularly active personality.</p>	<p><b>1-3</b> The subject avoids any situation in which he/she should take on responsibilities and problems. He/she is passive, does not take decisions or opens himself/herself up in discussions.</p> <p><b>4-7</b> The subject acts actively in the group dynamics, but seeks support and "protection" from other stronger and more influential members.</p> <p><b>8-10</b> The subject is a good leader, is always personally involved in situations; he/she is disciplined, fair to others and ready to take charge of collective problems in order to optimize their resolution.</p>

On the other hand, the laboratory phase was diversified on each weekly meeting: each of the three types of exercise focused on one of the three points of the grid that the girls had developed.

For the first of the three meetings of the week the experimental activity consisted in working in pairs, applying a particular technique of contemporary dance called contact improvisation. This technique, born in the United States, involves a series of spontaneous movements by the dancer which originate from a point of physical contact that the partner establishes with him/her, in a completely random way.

In fact, he/she can choose to touch any part of the other dancer's body with any part of his/her own body: it will then be up to the other dancer to respond to this contact by improvising, and lastly, to seek a touch so that the partner can start his/her improvisation. This generates a real choreography, during which the predominant element is precisely the physical contact with the other.

This type of exercise, which takes shape through corporeity, inevitably leads to make the subjects understand, at psychological level too, the others with which they are cooperating. Moreover, the most fascinating aspect of this type of work is that this harmony, generated by physical contact, does not depend on it: it does not disappear at the end of the exercise, but involves the subjects to such an extent that they feel somehow connected to each other even afterwards (Ascione, Di Palma & Rosa, 2019).

Contact improvisation is therefore a very important tool to accustom students to collaboration and cohesion, but in order to optimize the results it must be adapted appropriately to situations and contexts, keeping in mind the objectives to be reached. Given the purpose of this technique within the project, i.e. the establishment of a bond involving as many students as possible and not the formation of small subgroups, it was therefore essential to always train different couples, week by week, and especially to encourage the collaboration of those less close to each other. Moreover, after some meetings, the teachers were also involved in the exercises, in order to expand as much as possible this relational experience to the teacher-student relationship.

The second weekly meeting, instead, required the girls to give lessons to the little ones in turn. In addition to having to face the technical difficulty of preparing the various exercises for the girls, this reversed teaching methodology made them face different responsibilities: managing the class group, accepting all kinds of questions from the little ones and answering them appropriately, making sure that none of them performed the exercises incorrectly, and therefore risked getting hurt; in other words, all those minor and major problems that a teacher has to face every day. At the end of

each class held by the students, which the other girls attended together with the teachers, there was then a moment of confrontation: those who had managed the class expressed their feelings and, all together, reflected on them, on the moments that were more difficult, on how to handle them differently and, in general, on the meaning of assuming all responsibility - for better or worse - of what had just been done.

Finally, the third meeting consisted of moments with a more theoretical aspect than the first two; the issue of education to well-being, in fact, was dealt with through two different methodologies that alternated during the course of the project.

First of all, small informative lessons were held, in which the risks related to incorrect diet, smoking habits and the association of these two factors were described. The students were presented mainly with slides and images, related not only to the general aspect of these factors, but above all to the negative impact that they can have in the life of everyone, and especially of sportsman/sportswoman.

Furthermore, meetings were organized with people (athletes and not) who shared their life experiences related to this topic with the girls. Some described the way they had to fight one of the many serious diseases related to smoking, others talked about how much their sports performance changed when they started really taking care of their diet and habits, and finally others shared the feelings of freedom and pride they felt when their life was no longer managed by food, but by them themselves.

Obviously we are speaking of borderline cases, i.e. people who have faced eating disorders and real difficulties of addiction, and not simply problems of "a few extra pounds" or a cigarette smoked every three days. This clarification, which was also submitted several times to the girls during the lessons, was necessary to avoid any kind of misunderstanding: generally speaking, in adolescence, but even more so in the context of a dance school, a discussion about diet is always a risk and should not be approached with lightness.

This work organization, on the whole, led to a general improvement of the class; in some cases there was a simple consolidation of a level which was already positive from the beginning, while in others, there was a strong change in some aspects in particular.

Below are the tables with the evaluations assigned to the students ex-ante and ex-post the implementation of the experimental project. First of all, it was worth noting the result of Student 2 and Student 4: both sixteen years old, they initially had the habit of smoking an average pack of 10 cigarettes per day. Besides being harmful in itself, this did not encourage the establishment of deeper bonds with the other companions, as the girls spent every break or moment before class smoking

together and were therefore very close to each other, but not very much with the rest of the group. During the lessons of the project, it became apparent that neither of them was really aware of the damage that smoking would cause them in the long term; the informative meetings, and especially the comparisons with people who had largely suffered the effects of that damage, were a wake-up call for the students, which made them reflect more deeply on what they were doing and on their habits. At the end of the two months they spent

together, Student 2 completely stopped smoking, while Student 4 gradually reduced the amount of cigarettes to an average of four/five smoked per day. As a result, both of them also experienced a noticeable improvement in their relationship: spending more time together with their classmates and doing the laboratory exercises in pairs, no longer just with each other but with all the others, helped them integrate better into the class-group and contributed to the development of new friendships.

Table 2. Ex-Ante Evaluation.

STUDENT	AGE	EVALUATION		
		EDUCATION TO WELL-BEING	RELATIONAL SKILLS	SENSE OF RESPONSIBILITY
STUDENT 1	15	5/10	9/10	8/10
STUDENT 2	16	3/10	6/10	7/10
STUDENT 3	14	6/10	7/10	6/10
STUDENT 4	16	3/10	5/10	7/10
STUDENT 5	15	8/10	6/10	6/10
STUDENT 6	16	9/10	10/10	10/10
STUDENT 7	14	8/10	4/10	6/10
STUDENT 8	15	7/10	7/10	7/10
STUDENT 9	15	9/10	7/10	6/10
STUDENT 10	14	6/10	6/10	5/10

Table 2. Ex-Post Evaluation.

STUDENT	AGE	EVALUATION		
		EDUCATION TO WELL-BEING	RELATIONAL SKILLS	SENSE OF RESPONSIBILITY
STUDENT 1	15	7/10	9/10	8/10
STUDENT 2	16	8/10	8/10	7/10
STUDENT 3	14	9/10	7/10	6/10
STUDENT 4	16	6/10	8/10	7/10
STUDENT 5	15	9/10	7/10	9/10
STUDENT 6	16	9/10	10/10	10/10
STUDENT 7	14	10/10	8/10	9/10
STUDENT 8	15	8/10	7/10	7/10
STUDENT 9	15	9/10	7/10	7/10
STUDENT 10	14	8/10	6/10	7/10

For Student 7, aged fourteen, the project also had an important relevance. She started this path by immediately showing a tendency to self-exclusion, due indeed to a natural shyness and introverted character. It was therefore relatively easy, by encouraging her to work with the more extrovert and sociable subjects, to make her feel more integrated into the group, and therefore more self-confident. This confidence also allowed her to take responsibility and collaborate more actively both during lessons and when meeting younger students. If at the beginning, in fact, the girl tried to avoid the centre of attention in every possible way and always redirected requests for help to other companions, not because she could not find

the solution by herself but for fear of making mistakes, at the end of the project she almost completely lost this habit and faced the more or less critical moments with more personality.

Finally, Student 3, aged fourteen too, also reported a very good improvement with respect to the education to well-being, in particular with regard to diet. It was not because she initially followed an over-regulated diet, but rather because she was eating too little food. Her mother, by preferring mainly organic products and trying to make her meals as healthy as possible, did not actually provide her with the right amount of calories to carry out her daily activities, and especially to

perform the physical exercise that dance requires on a daily basis. Through the informative lessons, in the course of the interviews and in the discussions among the students about their habits, this problem gradually emerged: her mother was suddenly invited to be informed about the situation, and it was suggested to her that she should consult a nutritionist. Before the end of the course, Student 3 started the diet she had been indicated by the doctor a few weeks before, and it was expected that, within four months, she would have gained the necessary weight for her ideal fitness, which would have also allowed her to perform motor activity with the right energy.

## Conclusion

Following the analysis of the results obtained at the end of this project, it can certainly be assumed that the positive value of these results partly depended on the type of activity that took place, but also on the direct involvement of the girls in the choice of the evaluation criteria. This approach, in fact, allowed them to reflect more deeply on certain aspects of their daily life, and to have a broader overview of what is positive for their growth/training and what is not. The importance of well-being as a general condition, as well as of smoking prevention or values such as loyalty, cohesion and reliability, can sometimes be underestimated in adolescence: the girls who took part in this project, on the other hand, had the opportunity to ask themselves what these factors

mean in their lives and to "work on them", through motor and sports activity, so that they could improve all these aspects.

The activity through which they obtained these improvements also played a decisive role. Both the laboratory hours and the classes were fundamental to steer the girls towards an attitude consistent with the spirit of the project, therefore towards a collaborative, attentive and responsible spirit (Iavarone & Lo Presti, 2015; Kanizsa & Tramma, 2011). In fact, just like motor and sports education in general, the educational value of dance cannot be denied or underestimated: it is also and sometimes above all through motor activity that young people's personalities are shaped and grow according to healthy principles (Di Palma & Ascione, 2020; Iavarone, 2013).

It is therefore the union between the effectiveness of the evaluation and that of sport itself that allowed students achieving positive results: any educator, whether in a formal context such as school or in a non-formal training context such as sport, should always keep in mind that the work done makes sense and value first of all if done with passion and personal involvement, but especially if it is well thought-out, structured and finally properly evaluated according to the skills acquired during the years spent studying and training. It is only in this way, in fact, that they can best contribute to the training of other people, i.e. by making the most of the training they received.

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