

Planning, Managing and Evaluating Motor Activity in School Contexts

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Abstract

The purpose of this contribution is to investigate the criteria for carrying out planning, management and above all evaluation activities in the field of motor sciences, within the school system. The role of the evaluation is increasingly important in satisfying the effectiveness of the training offer provided to students, and, in this regard, its phases and goals are analyzed in the framework of motor activity.

Keywords: *Evaluation, Didactic Programming, Motor Activity, School System, Educational Offer.*

Introduction

In the school context, the testing and evaluation process refers to the disciplinary analysis and to each phase of the educational planning and management, especially in the field of Motor Activities. They are based on some questions to which it must pay attention, in order to ensure the effectiveness of the educational offer to be proposed:

- What to test in the motor field?
- Which motor skills and abilities to test and evaluate in different age groups?
- What is a descriptive test?
- Why perform a test "in situation"?
- How to detect data and measure a result to develop an individualized educational action?

The answers to these questions depend on the identification of the factors making up the educational motor activity, and the didactic and organizational choices of every teacher. The essential objectives of motor education in the different age groups concern motor patterns, motor skills, and motor, technical-sports and facial-miming abilities. Motor skills constitute the specific lexicon, the syntactic and semantic structure through which each person expresses himself, communicates and learns. In this regard, we intend to propose an analysis of the planning, management, and especially the evaluation phase of this discipline within the school system, in order to identify a reference framework useful for the pedagogical and didactic system operators in the motor sciences sector.

Didactic Evaluation and Programming of Motor Activity

The evaluation of the didactic process is one of the most discussed pedagogical and educational problems in the school. The ongoing school innovation requires greater attention, unlike in the past, to the connections between the process and the educational-didactic product, to the choices made, to the different and differentiated paths proposed. Every school discipline has faced and developed the problem of the didactic testing and evaluation in a different way, according to the related epistemological evolution levels that have conditioned the pedagogical value of tests, grades and assessments, and has chosen the use of the methods and data for the

quality of the teaching activity. The peculiar contents of motor and sports education require an approach to the testing and evaluation issue, which is extremely complex and integrated. In fact, human motor activity is measurable both through quantitative and qualitative methods that require constant and unavoidable attention to the unity of the person. It is clear that, in this regard, a first preliminary question to ask is: "How can the evaluation be defined"? It is difficult to propose an exhaustive definition of the term, because of the multiple meanings it takes in relation to the didactic and organizational models used, in a school with an extended audience called to propose an individualized educational offer. The most current pedagogical and didactic elaboration expresses a conception that understands it as an open and continuous information processing and gathering, aimed at making the right decisions to regulate and improve the didactic and functional activity of the school in relation to set and recognized objectives. Evaluating means comparing the data gathered with a project, the observed events with the expected ones, and the initial possibilities with the final outcomes. The evaluation can be understood as a systematic process to determine the degree to which the objectives have been achieved by the students. Then the following characteristics emerge:

- The process nature of testing and evaluation, i.e. why and when to test a student.
- The reference to the predefined and individualized didactic objectives, i.e. what to test and evaluate.
- The need to use different and complementary methods, i.e. the way to test and evaluate.

The evaluation in the teaching of motor activities constitutes a significant point in the didactic-educational process; it is closely connected to every phase of the teacher's didactic planning, to the choices of the objectives, contents, activities, and teaching methods employed. The testing and evaluation of a didactic process cannot be interpreted without the constant reference to the analysis of the student's needs, and to the individualized didactic action that every teacher implements. The phases of the didactic planning provide for a systematic control of the didactic action and the outcomes achieved by the student in terms of motor skills, knowledge and behavior. The testing moments (whether initial or in entrance, intermediate or formative, final or summative) are interacting, and make up a circular process of revision and validation of the didactic practice. The redefinition of the evaluative theory, of the aims and the methods, achieved with the shift from an elite school to a mass-type one and with the advent of the programmed education, determined the necessary distinction between a *summative* and a *formative* function of the evaluation, allowing overcoming undifferentiated didactic models, and characterizing the traditional way of teaching. The distinction between the *formative* and *summative* evaluation, introduced by Scriven, proved consistent with the characteristics of an individualized didactics, thus oriented towards an extension of the educational offer. The formative evaluation is conceived as the function of the didactic process needed to orient and support the teacher's decision-making process. According to the didactic planning model, evaluation itself becomes an essential formative moment of the educational path as a whole. The translation of the student's needs analysis into operational objectives reflects the need to make the learning outcomes possible to be tested in terms of students' motor skills and knowledge achieved. The teacher who defines the intermediate and final operational objectives in every teaching unit/module, which the students must achieve with respect to their background, already defines the elements of the evaluation. In fact, the formative evaluation periodically provides the teacher with the information needed to prepare compensatory educational paths, allowing the student reaching the goals in terms of motor skills and knowledge appropriate to his own abilities, by means of diversified methodological and operational opportunities. Evaluating a didactic process, according to this perspective, does not only mean making a statistical measuring, but above all, it means verifying both the student's gradual cognitive-motor learning progress, and the methods and strategies employed by the

teacher. This allows restoring the most real educational and pedagogical meaning to the concept of evaluation.

The Purposes of the Formative Evaluation for Motor Education at School

The formative evaluation allows controlling the educational process in its founding elements (such as the definition of objectives, and the choice of contents and methods), the verification of the validity of the process itself and the re-modulation of its subsequent development.

The goals of the formative evaluation in motor and sports education can be identified as follows:

- With reference to the teacher:

- Knowing the degree of the student's motor, coordination and conditional development, that is, "his background knowledge", in order to appropriately program the operational objectives by modulating the contents (entrance formative evaluation moment); this means testing the student's background motor skills and the functional requisites;
- Analyzing the inter-individual differences, within the group-class, relating to the motor skills and the conditional development levels, in order to establish the sub-groups, or homogeneous brackets, based on motor learning levels, and to prepare the corresponding individualized didactic-methodological strategies (entry evaluation and intermediate-formative moment);
- Motivating students to acquire motor skills and making a self-assessment by defining and communicating appropriate didactic objectives (entrance evaluation and intermediate-formative moment);
- Appreciating the teaching outcomes in terms of abilities, knowledge and motor skills, comparing the entry level data with the intermediate and final ones (intermediate-formative and summative evaluation moment);
- Comparing learning levels and subjective motor evolutions in different periods of the school year/education cycle, systematically collecting all previous useful data that are contextual and subsequent to the teaching action, in order to compare and analyze them (intermediate-formative evaluation moment);
- Checking the validity of the pedagogical-didactic options performed, and the effectiveness of the periodic and annual planning as a whole, through the students' motor learning and socio-affective behaviors (intermediate-formative and summative evaluation).

- With reference to the student:

- Motivating the student to reach more difficult/complex goals;
- Making the student carry out a self-assessment of the motor learning process completed (defining learning, mutual observation and data-recording levels, etc.);
- Defining individualized learning situations;
- Setting up sub-groups of homogeneous students, according to motor skills and abilities levels.

During the didactic process, the formative evaluation aims to provide continuous and detailed information on the student's learning methods, and allows the teacher systematically knowing the student's degree of progress and the difficulties found within each stage of the path to approach the pre-established learning objectives (while observing the difference between what is expected and what is actually expressed); moreover, it allows adapting, reducing or expanding the objectives themselves, in the light of the activity carried out and the data collected and interpreted. The evaluation, understood in these terms, becomes a continuous feedback and regulation procedure of the didactic-educational intervention for the teacher; in

this way, there will be a systematic, intentional and oriented control of the methodological effectiveness, in order to be able to promptly prepare the necessary changes. Below an educational project in the motor field, with the related definition of the evaluation scheme, is proposed.

Table 1: Example of Motor Education Didactic Project with related Evaluation Plan

Project	Example
Defining motor skills;	Bouncing the ball while running; passing and catching the ball while running; shooting the ball while running;
Choosing who to observe: the student – the sub-group;	Tom, Dick and Harry;
Setting the duration;	Two hours / week - registration of events;
Organizing the lesson/trainings;	Group games: two vs two using a ball;
Recording data on pre-arranged cards;	Double-entry cards;
Measuring and interpreting data;	Quantitative-qualitative measuring;
Archiving data to make documentations and comparisons	Longitudinal and transversal data processing.

Source: Our Elaboration

Conclusions

The current school scenario is increasingly differentiated under the students' perspective and that of the teachers, and the role of the didactic planning and management (and the related evaluation) is becoming increasingly important to guarantee an effective educational offer. More specifically, the motor sciences field was taken into consideration and analyzed, which sees the presence of the practical and active component to be necessarily matched with a traditional theoretical one. In this regard, it emerged how the role of the evaluation has taken on a "training qualification", and represents a fundamental component of the didactic proposal. It was highlighted how an effective planning of the evaluation phase in the school context is able to condition both the teacher's modus operandi and the student's activity. This contribution, by analyzing and describing such an important phase for the student's school, educational and pedagogical development, offers the potential to develop future research works aimed at investigating, from an empirical point of view, the effectiveness of educational programs and the related motor education evaluation schemes at school.

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