

## Diagnosis of formative evaluation in the Practice and Theory discipline of the Physical Education

## Diagnóstico de la evaluación formativa en la disciplina Teoría y Práctica de la Educación Física

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### ABSTRACT

In the Cuban university context new transformations are demanded in the evaluation of the learning in their formative character. For what is pertinent the diagnosis of potentialities and necessities. The article that is presented, had the purpose of showing the results of the formative evaluation in the discipline Theory and Practice of the Physical Education. The application of methods like the observation, surveys and the analysis of documents, they demonstrated the presence of a system of incongruous evaluation to transform the modes of the professor's and student's performance; chord to the demands of the pattern of the professional of the Physical Culture.

**Keywords:** Diagnosis; Formative evaluation; Physical education; Modes of performance

### RESUMEN

En el contexto universitario cubano se exigen nuevas transformaciones en la evaluación del aprendizaje en su carácter formativo. Por lo que resulta pertinente el diagnóstico de potencialidades y necesidades. El artículo que se presenta, tiene el propósito de mostrar los resultados de la evaluación formativa en la disciplina Teoría y Práctica de la Educación Física. La aplicación de métodos como la observación, encuestas y el análisis de documentos, demostraron la presencia de un sistema de

evaluación incongruente para transformar los modos de actuación del profesor y el estudiante; acorde a las exigencias del modelo del profesional de la Cultura Física.

**Palabras clave:** Diagnóstico; Evaluación formativa; Educación física; Modos de actuación

## INTRODUCTION

The new demands in Cuban Higher Education constitute premises for the transformation of the teaching-learning process in universities. In this sense, it is about enhancing the protagonism of students in the training process and resizing the role of evaluation in its qualitative and formative nature.

The formative nature of the evaluation in Higher Education, offers an adequate pedagogical activity in a systematic, orderly way, where historical-cultural experiences are fostered. This makes it possible for the student to perfect the skills, attitudes and values that are expressed in their professional performance.

From this perspective (Álvarez, 2015; Ortiz, 2016) they agree that the task of evaluating involves integrating it permanently during learning activities, for which less traditional forms of evaluation should be used and students know what the criteria are that are used to assess their performance. So, help him to develop his capacity for self-evaluation, his critical and self-critical spirit, accompanied by the criteria of his colleagues through self-evaluation and co-evaluation.

In the specialized literature, there are various classifications and nominations related to the functions of learning assessment. Among them, the social, control and pedagogical function, the latter considered by (Garcés and Garcés, 2015; Vilá, Aneas & Rajadell, 2015; Moreno, 2016; Ravela, 2017) as a diagnosis and prognosis guide, creator of school environment, strengthening of learning, resource for the individualization of motivational feedback, and preparation of students for life. Others offer criteria on functions such as diagnostic, summative, and formative assessment. The formative function of evaluation is a term introduced in the 1960s, and it stated that students could learn most of the content delivered by the school, provided that their specific learning rhythms and modalities were considered.

In this way, the fundamental characteristics of formative assessment are: feedback and regulation of learning, by assessing the knowledge and skills that students

acquire and develop (Martínez, Moreno & Arrieta, 2016; Pérez, Enrique, Carbó & González, 2017; Segura, 2018; Bizarro, Sucari and Quispe-Coaquira, 2019).

In the field of Physical Education, some researchers (Ruiz, 2012; López, 2015; Hernández and Mola, 2016) highlight formative evaluation as an emerging issue due to the results obtained in this specialty, which reveal the traditional character of evaluative practices, due to the lack of clarity for its application, as well as the insufficient use of adequate instruments that allow the necessary regulation and feedback.

In the training of the Physical Culture professional, since its creation, research projects have been developed, with proposals for changes in the learning evaluation system of students who study the discipline Theory and Practice of Physical Education (Mola, Sánchez and González, 2018), whose object of study is directed to the particularities of the teaching-learning process, supported by the integral-physical-educational approach.

Hence, the professor must create a space for self-reflection and self-evaluation of teaching activities, which enables the systematicity of this process, and raises the student's knowledge for an objective self-assessment, which can positively or negatively influence their performance.

However, in the educational practice of the discipline Theory and Practice of Physical Education, sometimes behaviors coexist that reflect the presence of a traditional didactics. This is evidenced by the excessive use of reproductive methods, as well as an evaluation that focuses on the results, characterized by the issuance of a value judgment at the end of each teaching period.

These evaluative practices disadvantage the leading role of students, by not promoting regulation and feedback on their own learning, which is contrary to the training approach that is required. In addition, there is insufficient specific guidance for the use of different techniques and instruments that promote formative evaluation. The aforementioned insights support a problem to be solved for which the objective was determined: to diagnose the current state of formative evaluation in the discipline Theory and Practice of Physical Education.

The research was characterized by its qualitative approach, dealing with the processes and experiences manifested by the participants (professors and students),

who were interested in their perceptions, attitudes and modes of performance. For this, several methods were used such as: document analysis, observation and surveys that served to identify the shortcomings in the evaluative process of the discipline Theory and Practice of Physical Education.

## **METHODS**

To lay the foundations that allowed an adequate starting level and inquire about the formative evaluation, the discipline Theory and Practice of Physical Education was selected, as it constitutes one of the spheres of action of the Physical Culture professional and covers a longer time in the curriculum map of the race. In addition to being one of the areas with the highest level of dissatisfaction on the part of the students. Which indicated the need to transform the direction of the teaching-learning process, particularly in the evaluation system.

The research was carried out at the "Manuel Fajardo" University of Physical Culture and Sports Sciences from the 2016-2017 academic year. This presented a predominantly qualitative approach, because it focused on the study of formative evaluation from the complexity and subjectivity expressed by the participants in this process.

In the initial verification, data was collected from three fundamental sources: professors, students and the curricular design of the discipline. In this sense, 27 professors were selected intentionally, under the criterion of having more than ten years as a specialist in Physical Education. 133 second-year students were also selected, for having taken the subjects (Basic Gymnastics, Athletics, Basketball, Soccer, and Physical Education Theory and Methodology) that served to analyze the curriculum design.

In confirming the current state of the formative evaluation developed, a pedagogical diagnosis was carried out that allowed defining weaknesses in the discipline Theory and Practice of Physical Education in three phases: the first one aimed at the preparation, organization and planning of the diagnosis. The second to development, and its application. The third to the culmination of the diagnostic process.

## **RESULTS**

In the preparation, organization and planning phase of the diagnosis, its essential objective was planning for the description of the representations that professors and

students had. From the definition of the objectives, the determination of the contents and the elaboration of the instruments.

The development phase and the application of the diagnosis, its essentiality was in the application of the research instruments selected to obtain the necessary information from the different sources.

The culmination phase of the diagnosis process had as objective: to carry out an analysis of the information collected for the identification of what the professional of the discipline Theory and Practice of Physical Education lacks to perform effectively in the process of formative evaluation.

From the application of the surveys to the professors, to verify the methodological didactic preparation they had with respect to the formative evaluation, weaknesses were identified such as: the scarce planning, organization, regulation and control for self-evaluation and co-evaluation. 52% considered that their preparation was regular on the subject. As well as 59% of the professionals stated that the planning, organization and control of the formative evaluation was insufficient in the methodological work of the discipline. 44% agreed that there are few theoretical-practical guidelines for the use of adequate instruments that allow them to carry out the formative evaluation. All this reinforces the criterion that professors had good preparation when carrying out evaluative practices aimed at the student's learning results, that is, a summative evaluation.

In the review and analysis of the documents, the evaluation system for the undergraduate degree in Physical Culture is proposed that it must have a formative nature. Which implies from this perspective, that self-evaluation is becoming an urgent need in the formative process of the student's personality. However, there are inconsistencies in the derivation of the objectives of the subjects related to the self-evaluation declared in the professional model.

The fulfillment of these conditions requires an evaluation system duly structured by fundamental components such as: criteria, techniques, instruments and responsible subjects that allow planning, ordering and executing an evaluation according to the new requirements of the formation model.

In the research, the analysis of the programs of the subjects of the discipline (Basic Gymnastics, Athletics, Basketball, Soccer and Theory and Methodology of Physical

Education) was pertinent, in them the objectives and how the evaluation system was oriented student learning.

The conception of evaluation that was had in these subjects, demonstrated the absence of a formative approach; by working with a fragmented methodological output, devoid of the continuous and regulatory nature to achieve transformations in the teaching-learning process. For this reason, it is revealed as a weakness in the analysis of the documents: Inconsistencies in the derivation of declared objectives in the professional model that will lead from the discipline and subjects to carry out the formative evaluation.

In the document analysis, it was also found that professors designed teaching tasks to evaluate learning in which other disciplines of the career are integrated; In this regard, it is necessary to propose new activities that facilitate a better development of this integration.

Similarly, it was shown that on occasions they favor self-evaluation and peer-evaluation processes and emphasized feedback to correct errors in time. However, despite dispensing with feedback, they in no way readjust the teaching process, based on the results obtained in student learning.

In the use of various novel didactic resources for formative evaluation, it was always observed in the subject of Theory and Methodology of Physical Education, the use of concept maps and participatory techniques to evaluate conceptual content.

The subjects Basic Gymnastics, Athletics, Basketball and Soccer frequently used oral and written questions, observation guides for the theoretical-practical exam and extra-class assignments.

In summary, the results of the instruments applied to assess the teaching and methodological preparation of the professor, demonstrated the existence of an evaluative practice of results, in which the role of the student is not enhanced to achieve autonomy and independence, and that it is regulated and provide feedback on the teaching-learning process.

Consequently, when evaluating the criteria of the students in relation to the formative evaluation, an estimation of their performance in the cognitive, procedural and attitudinal contents was made through a structured observation.

The obtained results in cognitive performance were interesting, since none made a fair assessment of learning, because they focused their interests on obtaining the highest grade, aspects that are not decisive in the formative evaluation. In the same way, the lack of evaluations and reflections that served to provide feedback to the teaching-learning process was appreciated, as well as the insufficient formulation of questions that invited debate and reflection within the classes.

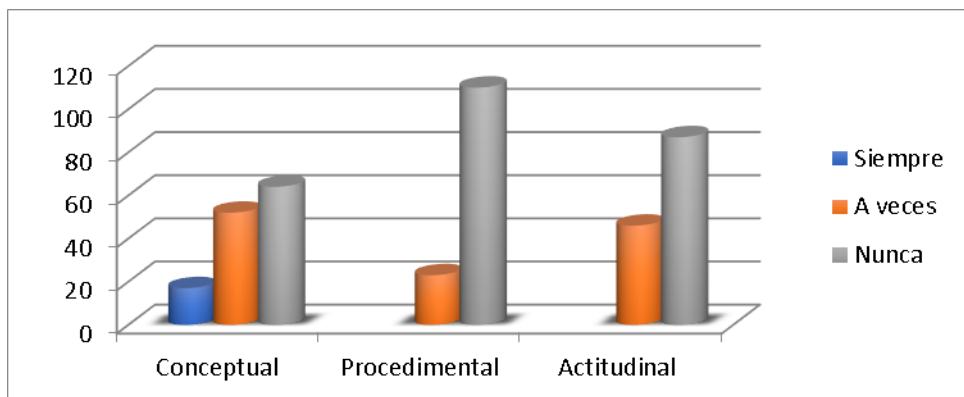
In the observation of the modes of performance from the procedural indicator, a better performance of the student was exhibited when solving simple tasks in the practical order, which demanded a higher level of reproductive assimilation.

On the other hand, it was shown that they sometimes manage to solve more complex tasks, which did not require a higher level of application and creativity. It was revealed that they did not have the skills to self-regulate learning through their own management and group interaction.

In attitudinal performance, it was evidenced that they almost always show respect and responsibility when making a value judgment about the learning of their peers; But the critical analysis of errors that would allow the regulation of how he learns and what should be improved to provide feedback to the teaching process was not taken into account. See the following figure.

**Fig. 1**

### Observation of students



**Source:** Own elaboration

**Note:** The figure shows that regulation and feedback is an indicator of greater difficulty in procedural and attitudinal content.

The results obtained are oriented towards the reformulation of new objectives in order to transform conceptions, modes of performance and motivations of students

towards formative evaluation. So, they learn to self-evaluate their performance and evaluate their peers to offer adequate feedback to the teaching-learning process.

## **DISCUSSION**

Based on the indications of the Base Document (2016) for the design of the “E” study plans, one of the challenges to overcome is to have relevant curricular designs that lay the foundations to promote a continuous increase in quality and efficiency in the comprehensive training of professionals. The contrasting of the results in the investigations carried out by Moreno (2016), reveal an approach to determine criteria regarding the regulatory actions and feedback of the teaching-learning process.

Thus, it was shown that the proposals from the evaluation system of the subject programs (partial and final exam projects) were focused on a traditional evaluation. Therefore, the transformations in the evaluation of learning and the achievement that it is more qualitative and formative, constitute premises for professors of the discipline Theory and Practice of Physical Education in order to improve their modes of performance.

In the student's performance, there were few abilities to make a fair assessment of their learning, with disinterest and lack of motivation for giving feedback to the teaching process; demonstrating limited skills for the construction of their knowledge, as well as the development of their attitudes and mastery of procedures for self-learning.

As a way of conclusion, the analysis of the theoretical and empirical inquiries applied in the research made possible the real and contextualized diagnosis of the characteristics of the professor and the students of the discipline Theory and Practice of Physical Education for formative evaluation, identifying the main existing problems. The deficiencies found during the diagnosis made, show that despite the efforts of the professors to teach and develop skills on evaluation in students, it is necessary to increase efforts to guarantee quality in the training process of the degree in Physical Culture.

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