

## **Personalized rating for evaluation of the increase in physical performance in university students**

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### **ABSTRACT**

The objective of the article is to elaborate a didactic procedure of qualification that contributes to personalizing the differentiated assessment of the physical performance increase in students at the University of Guantánamo based on dimensions and indicators to be considered in order to ensure that the awarded evaluations correspond to individual results and their actual physical possibilities. For the research development, the following methods were used historical-logical, analytical-synthetic, inductive-deductive, interview and survey, among others that allowed determining the insufficiencies that originated it, as well as determining the dimensions and indicators that make up the proposal.

**Keywords:** Didactic procedure; Physical performance; University student; Physical possibilities

### **Introduction**

The world conference "Higher Education in the 21st Century. Vision and Action", held on October 9, 1998, stated as one of the most important missions to be undertaken that

higher education must increase its contribution to the development of the education system as a whole, especially by improving teacher training, curriculum development and educational research... In order to meet the demands posed by the world of work, higher education systems and the world of work must jointly create and evaluate learning modalities, transition programs and assessment programs.

Inspired by these assumptions and demands to higher education and in the social context of a globalized and unipolar world, the need to refine the teaching-learning process and evaluation in university students arises because the accelerated development of sciences and new information and communication technologies make knowledge expire quickly, and more interdisciplinary knowledge is needed to solve the problems that arise in the context of professional performance.

The diversity of forms and procedures used by Physical Education teachers at the University of Guantánamo to qualify the increase in physical performance as one of the main indicators to be taken into account, for the qualification of the improvement of the level of physical condition in students at the end of the semester, constitutes one of the fundamental problems facing the effective application of the evaluation system in the development of the Teaching-Learning Process of the subject in this teaching center.

In the base curricular program of the discipline Physical Education conceived in the Curriculum "E" of the Ministry of Higher Education (MES) (2016), which is currently applied in higher education declares as one of the general instructional objectives to be achieved by students, the improvement of the level of physical fitness by increasing physical performance, conditioned by the development of physical abilities, therefore, the objective qualification of this indicator is an important aspect to be taken into account by teachers when issuing a comprehensive evaluation criterion of the subject.

However, the basic curricular program of the discipline does not define the procedure to be followed by teachers. In the same way, to give the qualification that the student should receive depending on the increase of the physical performance achieved in the stage being evaluated; a situation that is conditioning the different ways used by the teachers of this subject in this educational center. In order to give a solution to this important aspect of the integral evaluation of the subject, which does not always favor the fairness and equity that should characterize this important didactic component of the Teaching-Learning Process: since the grades given do not always correspond to the real results and possibilities of the students.

When analyzing the antecedents of this subject, no works have been found that refer to the object of study of the present research in the frameworks of the knowledge society and the universalization of higher education.

## **Development**

The qualification of the physical performance achieved by the students, as one of the indicators to be taken into account by the teachers for the evaluation is the improvement of the level of physical condition as part of the final evaluation that the student receives in the subject at the end of the semester, is not a novelty of the new study plan "E". This study plan is currently applied at the university level, but on the contrary, it constitutes one of the tasks of evaluation as a component of the Teaching-Learning Process of this subject. It has also gone through the constant improvement process that characterizes the curriculum of this level of education; that is why, in order to facilitate the analysis, three stages were conceived.

The first one covers the years from 1962 to 1976, which is characterized by the inclusion of Physical Education in this level of education in 1962, and the lack of a teacher programmer to guide the pedagogical process. Subsequently, due to the elaboration and application of the first teaching program, based fundamentally on the achievement of technical-sports objectives, an aspect that was a conditioning factor to grant the qualification of the student's physical performance in the subject, it is important to point out that there were no valuation criteria established to guide the teacher in this important process, predominating in general the teacher's practical appreciation.

The second stage covers from 1977 to 1989 and is characterized by the application of the improvement plans called Plan A and Plan B, which, although they were not free of limitations, due to their logical order of application, were more scientifically rigorous than the previous ones. Although the objectives to be achieved by the students continued to be markedly technical-sporting, neither did they define the valuation criteria to qualify the physical performance achieved by the students. It is important to point out that in this stage and in the previous one, the elaboration of subject programs

was centralized and mandatory, limiting the possibility for teachers to make changes and adjustments.

The third stage began in 1990, with the application of Plan C, and Plan E is currently being applied; these have as a common and novel element that they decentralize the elaboration of subject programs, facilitating the teacher the opportunity to readjust it to the objective teaching situation of the center. However, they have as a limitation that, although it declares the physical performance as one of the indicators to be taken into account to evaluate the improvement of the physical condition of the students, it does not define the criteria for evaluating the physical condition of the students. It does not define the evaluation criteria to be taken into account to grant the different qualification categories.

The authors consider that this limitation constitutes one of the fundamental causes that conditions the problem posed, and one of the basic foundations that motivated this research. In order to define a single didactic qualification procedure that will serve as a guide for teachers to ensure that the evaluations given to students in this indicator as a sample of the improvement of their physical condition, correspond to the individual results and their real physical possibilities.

In order to facilitate the understanding of the subject under investigation, it was considered necessary to assume the following conceptual definitions:

### **Physical condition.**

In the study conducted, it was possible to verify that the definition of this term is dealt with by different authors consulted; among which the following stand out: Valdés (2009); Martínez (2020).

From the studies conducted by the authors referenced above and taking into consideration the most relevant elements, the authors agree with the following definition: "the ability to perform tasks of daily life with vigor and effectiveness, and with enough energy to enjoy free time and recreation, without falling into excessive fatigue and preventing the occurrence of injuries" (Apud. in Procedure to apply the physical condition diagnosis for the discipline Physical Education Plan (E) in Higher Education, (2016).

### **Physical performance**

Vladimir I. Lenin, expressed: "It is absurd to expect that in society there is an equality of forces and capacities in people". (Quoted by Collazo, 2002); therefore, the qualifying assessment of its increase must be personalized.

These arguments corroborate the need for the proposal made in this article, which is based on Vygotsky's historical-cultural paradigm, from the psycho-pedagogical point of view. This support is taken to consider the increase in physical performance as the result of the interaction of these students with the teaching context in which the Teaching and Learning Process of Physical Education is developed, which requires the establishment of zones of proximal development based on the results of the diagnosis and individual physical possibilities, which serve as reference to the process of planning and qualification of the physical performance achieved by the students.

The essential didactic foundations are revealed from the basic ideas developed in the significant learning thesis of López (2003), when considering that learning has a meaning for students, to the extent that they establish relationships between what they learn and their lives, needs, motives and interests. This means that the increase required of students in each subgroup should be in correspondence with their real physical potential and possibilities, so that they feel increasingly motivated by challenges that they consider attainable, encouraging their active and protagonist transit towards higher goals, in this case the potential or average norm of the group in correspondence with their age and sex.

The physiological underpinnings are addressed by Collazo (2002) when expressing:

The development of physical capacities does not take place in the same way in people with the same age, sex, level of training, life regime, etc., since each individual develops independently of the others, and even his organism responds differently to the same stimulus. (Collazo, 2002).

The main elements that characterize the proposal for the evaluation of physical performance in university students and that correspond to the criteria of Gutiérrez (2005) are the following:

It is differentiating: since it personalizes the analysis of the valuation criteria of qualification to award the grade to the student by performance subgroup, based on the individual results started and real physical possibilities; without losing sight of the group result, as a potential referential point.

**It is integral:** it conceives the physical performance in its totality condition, since it not only allows qualifying the increase in each of the physical capacities, but also offers the

possibility of granting a general and integral qualification of the physical performance achieved in the stage being evaluated.

**It is concrete:** it defines the individual score based on specific indicators for each performance subgroup, without neglecting the group's average state of development.

**Contextualized:** it takes into account the conditions and characteristics in which the process of increasing physical performance takes place, so that the performance indicators are conditioned to the actual state shown by the students according to their real physical possibilities, the results of the initial diagnosis and the amount of physical capacities.

**Bidirectional:** it not only allows the qualification of the increase in physical performance achieved by students, but also allows the teacher to redesign the process in order to achieve better results, taking as a reference the group averages.

The diagnosis of the current state of the qualification process of the physical increase of the students of the University of Guantánamo in Physical Education was carried out with the application of the following instruments:

The inadequacies that gave rise to the research were determined, the compilation of bibliographical data that constitute theoretical referents that support the proposal a documentary study was carried out where the parts of the investigated problem were logically analyzed and synthetic conclusions were arrived at that favored its better understanding and comprehension.

Another of the scientific research methods applied was the interview with physical education teachers to learn about the didactic procedure they currently use for the qualification of this indicator, which allowed determining the existing insufficiencies in this process that corroborate the need for this proposal.

The triangulation of the information obtained from the interview with the head of the department and consulting teachers was carried out. This allowed confirming the existing correspondence between the criteria issued by these and the teachers surveyed, regarding the difficulties in the procedures used to qualify this indicator of the final evaluation in the subject, since they also consider that the scores given to the students are not always the fairest and most equitable. Therefore, they consider necessary the elaboration of a didactic procedure that allows grading everyone in the same way and with equal opportunities in correspondence with their individualities.

A review of the initial or diagnostic, systematic and final controls of the semester was carried out to verify the insufficiencies shown in the interview to the teachers of the department in the process of qualification of the physical increase of the students of the University of Guantánamo in Physical Education.

The results of the research instruments applied, together with the lack of motivation in the performance shown by the students to achieve a better result in their physical performance, both in class participation and in the evaluation controls, constitute the fundamental arguments that motivated the authors for the development of this research, in order to elaborate a proposal that allows personalizing the process of grading physical performance, taking into account the increase or decrease achieved by the students in the school period being evaluated.

**Didactic grading procedure to personalize the differentiated evaluation of the increase of physical performance in the students of the University of Guantánamo.**

1. Record the figures of the individual results of the initial diagnosis of the students.

When performing the initial diagnosis of the physical condition, record individually and as a group (by age and sex), the figures achieved by the students in each of the physical abilities that will be graded as part of the final evaluation of the subject in this indicator, as an initial reference point.

2. Processing of the data by age groups and sex to obtain the average results.

From obtaining the average results, group the students by performance group taking into account the following criteria: (students who are below average, students who are at average, students who are above average).

3. Elaborate the grading key for each defined performance group, with the valuation criteria and score to be awarded in each of them.

The subgroups were integrated as follows:

**Subgroup I-** Students who are below average.

**Subgroup II-** Students who are in the average.

**Subgroup III-** Students who are above average.

- a) Qualification key by subgroup.
- b) **Subgroup # I.** (students who are below average).
- c) a) 2 POINTS: Decreases the individual score in relation to the initial diagnosis.
- d) b) 3 POINTS: Increases the individual result in relation to the initial diagnosis, but does not reach the group average.

- e) c) 4 POINTS: Increases the individual result in relation to the initial diagnosis, reaching the group average.
- f) d) 5 POINTS: Increases the individual result in relation to the initial diagnosis, surpassing the group average.
- g) **Subgroup # II** (Students who are in the average).
- h) a) 2 POINTS: Decreases the individual score in relation to the initial diagnosis, falling below the highest figure recorded in criterion a) of subgroup #1.
- i) b) 3 POINTS: Decreases the individual result in relation to the initial diagnosis, but does not fall below the highest figure recorded in criterion a) of subgroup #1.
- j) c) 4 POINTS: Maintains the individual result at the level of the average of the initial diagnosis of the group.
- k) d) 5 POINTS: Increases the individual score in relation to the initial diagnosis, surpassing the group average.
- l) **Subgroup # III.** (Students who are above the mean).
- m) a) 2 POINTS: Decreases individual score relative to initial diagnosis, falling below the group mean.
- n) b) 3 points: Decreases individual score relative to initial diagnosis, but does not fall from the group mean.
- o) c) 4 points: Maintains the individual score relative to the initial diagnosis.
- p) d) 5 points: Increases the individual result in relation to the initial diagnosis.

The general qualification of the indicator will be awarded according to the average results of the number of batteries evaluated.

1. Analysis and discussion with the students of the didactic procedure for the qualification.

After defining the different subgroups, the proposed grading procedure must be analyzed with them, in order to make the pertinent adjustments, the approval of the students and the establishment of the individual goals.

2. Qualification of the increase in the physical performance of the students according to the didactic procedure.

Compare the initial figures with the final figures in each subgroup and award the score or value category according to the performance criteria established in the didactic procedure.



In order to enrich and improve the proposal, the didactic procedure was submitted to the evaluation criteria of the Physical Education teachers of the University of Guantánamo, considering them as specialists, taking into account the years of experience, the teaching category and the academic level of each one of them. The criteria collected were very useful for the research.

## **Conclusions**

The results of the initial general diagnosis show the urgent need to transform the egalitarian assessment procedure used by Physical Education teachers at the University of Guantánamo, to grade the increase in physical performance achieved by students; for another didactic procedure that contributes to personalize the differentiated assessment, so that the grades awarded correspond to the individual results achieved and their real physical possibilities.