



# Assessment system of process activity of students in practical lessons in physical culture and sport

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## Abstract

**Objective of the study** was to substantiate the system for evaluating the effectiveness of students' process activities in the framework of practical classes in physical culture and sports.

**Methods and structure of the study.** In the analytical study, methods of analysis and synthesis, generalization and modeling, and the axiomatic-inductive method were used.

**Results and conclusions.** The authors have developed criteria for the process activity of university students in mastering the disciplines of the physical culture and sports block, taking into account inclusion, not only as achievement evaluation determinants of individual semesters, but also in the dynamic development of target performance.

**Keywords:** *students, physical culture, sport, inclusion, process approach, criteria, pedagogical system.*

**Introduction.** The process approach is an interconnected and interdependent application in educational activities of a set of processes (development, education, upbringing, training), in which the student simultaneously acts as an object and subject of interactions, and the teacher can be both a responsible owner and an achievement resource for effective performance [6]. In the field of physical culture and sports activities of universities [4], the process approach is used when teaching new motor actions and educating physical qualities, thus contributing to the development of the cognitive-axiological sphere of students and their involvement in the process of physical education [1, 7].

At this stage of development of higher education, there is an urgent need for a criterion-based assessment of the formation of physical culture of the personality of future specialists on the basis of individual inclusive educational strategies [5], which concerns not only students with special educational needs, but also the entire contingent composition [4]. With this approach, it becomes necessary to evaluate the process component of mastering the disciplines of physical culture and sports, physical culture and health

improvement and health saving blocks (modules) of work programs along with the resulting one [1].

**Objective of the study** was to substantiate the system for evaluating the effectiveness of students' process activities in the framework of practical classes in physical culture and sports.

**Methods and structure of the study.** The following methods were used in the study: analysis and synthesis of scientific and methodological literature, analytical generalization and modeling of the system of criteria-based assessment of process activity, axiomatic-inductive method of structuring process activity criteria.

**Results of the study and their discussion.** The modern structure of the system of physical culture and sports activities in universities can be considered from the perspective of three components: theoretical, practical and acmeological [2]. In turn, the practical component can be represented in the form of two elements: a practical elective discipline in physical culture and sports (328 academic hours) and extra-curricular sectional work, including sports, sports-applied, health-improving and rehabilitation and adaptive areas, taking into account the characteristics and



*Indicators of the process activity of the practical component of physical culture and sports activities of students*

| Indicators                     | Criteria level of process activity  |  |  |
|--------------------------------|---|--|--|
|                                | Low   | Medium   | High   |
| Class attendance               | Less than 50% attendance at practical classes   | 50% to 75% attendance at practical classes   | More than 75% attendance of practical classes  |
| Job satisfaction (reflection)  | Negative level of reflection of the average values of the course of studies                 | Indifferent level of reflection of the average values of the course of studies                       | Positive level of reflection of the average values of the course of studies                          |
| Physiological pulsometry curve | Average heart rate values do not exceed 50% in accordance with age                          | Average heart rate values in the range of 50-70% according to age                                    | Average heart rate values in the range of 70-90% according to age                                    |
| Motor occupation density       | The average values of the individual motor density of the training course do not exceed 50% | The average values of the individual motor density of the training course are in the range of 50-70% | The average values of the individual motor density of the training course are in the range of 70-90% |

value orientations of students. To determine the effectiveness of process activity in the physical culture and sports work of the university [1], four indicators were determined: class attendance, satisfaction with the lesson, the physiological curve of pulsometry and the motor density of the lesson (see table).

To unify the assessment system, in our opinion, it is necessary to rank the criteriality of process indicators at three levels (low, medium and high). In the "class attendance" indicator, it is possible to use the classic percentage ratio based on the results of semester activities, as well as their dynamics from semester to semester. In the indicator "satisfaction with the lesson (reflection)", it is possible to use the reflection index [3], calculated according to the results of students' secret voting after each lesson. The indicator "physiological curve of pulsometry" can be calculated on the basis of data from individual heart rate monitors (fitness bracelets) according to the average values during each session based on the calculation of the classical Haskell-Fox formula for the intensity of physical activity with the corresponding percentage. The "motor density of a lesson" indicator is calculated on the basis of data from fitness bracelets or expert pedagogical observations of a teacher at each lesson based on the average value for a semester course.

In the aggregate assessment of the level of process activity of students, in our opinion, it is worth being guided by the following criteria:

- All four indicators of process activity are of equal importance in the final semester assessment of physical culture and sports activities of university students.
- When a student reaches high criterion levels for two or more indicators, it is permissible to set the highest differentiated grade for semester progress.

- When a student reaches high criteria levels for the first indicator, provided that there are no low levels of process activity, it is possible to set an average differentiated assessment of semester progress.

- When a student reaches at least the first and more average levels of indicators, in the absence of the highest levels of criteria-based assessment, it is possible to set a sufficient differentiated assessment of semester progress. In addition, a sufficient assessment of semester progress can be given to a student with achieved single criteria for high and/or low level process activities. In the absence of differentiation of the semester assessment, this criterion level will be the threshold for setting sufficient progress in the discipline.

- When a student reaches only low criterion levels of process activity, the student is given an assessment of the insufficiency of semester progress.

**Conclusions.** The proposed criteria for the process activity of students in physical culture and sports classes can be used in the practical activities of the departments of physical culture, physical education and sports to assess students' achievements.

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