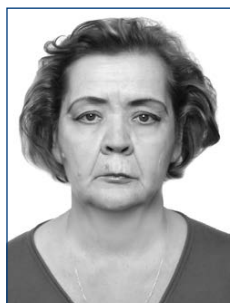




Diagnostics of the quality of vocational education in the field of physical culture and sport using tasks developed with requirements of the national qualification system

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Dr. Med. **N.A. Zadorozhnaya**¹
 PhD, Associate Professor **N.V. Dubkova**¹
I.A. Bolotova¹
 PhD, Associate Professor **A.A. Domozhilova**¹
¹Lesgaft National State University of Physical Education,
 Sports and Health, St. Petersburg

Corresponding author: zadorozhnaya_10@mail.ru

Abstract

Objective of the study was to develop and evaluate the effectiveness of applying a bank of test tasks in the discipline "Hygienic bases of physical culture and sports activities" for diagnosing the quality of vocational education.

Methods and structure of the study. A bank of test tasks has been developed and tested for conducting knowledge control in the discipline "Hygienic foundations of physical culture and sports activities" taking into account the requirements for three main professional qualifications in the 2nd year of the bachelor's degree program at the Lesgaft National State University of Physical Education, Sports and Health.

Results and conclusions. It is shown that the proposed diagnostic criteria for assessing the quality of vocational education make it possible to take into account the modern requirements of the development of society and contribute to improving the level of training in the field of physical culture and sports in accordance with the requirements of the national qualifications system.

Keywords: *quality of education, bank of test items, ranking test, qualification.*

Introduction. Improving the quality of higher education in our country is very relevant in the light of the ever-increasing requirements for the professional competencies of future specialists. Undoubtedly, considering the sphere of physical culture and sports, this is especially noticeable, since in the conditions of high competition among athletes, coaches and specialists who provide training are currently required not only to possess the most advanced knowledge from various scientific fields, but also the ability to integrate them in the process of developing and timely correction of training programs [1, 2].

Thus, it is obvious that the coach of the "present" and, moreover, of the "future" in the course of his professional training must master a wide range of knowledge, skills and labor actions in order to successfully solve the identified tasks.

Objective of the study was to evaluate the effectiveness of the application of test tasks for diagnosing the quality of vocational education in the discipline "Hygienic foundations of physical culture and

sports activities" for students of the training direction 49.03.01 "Physical culture".

Methods and structure of the study. The work was carried out at the Department of Preventive Medicine and Fundamentals of Health Lesgaft National State University, St. Petersburg with the participation of 2nd-year undergraduate students (n=120), who are enrolled in the full-time department in the profile (direction) of training 03.49.01 - "Physical Education".

For a long time in our country, the main form of knowledge control was the oral response of students to questions. However, the transition to a point-rating system [3] and the need for remote assessment of knowledge in the current epidemiological conditions caused by the coronavirus infection pandemic actualizes knowledge control in the form of performing various types of test tasks.

In view of the foregoing, a team of authors developed a bank of test tasks for conducting knowledge control in the discipline "Hygienic foundations of physical culture and sports activities" taking into ac-



count the requirements for the three main professional qualifications, which are presented in Table 1.

The final layout reflects labor functions, labor actions, test and practical tasks for the 6th and 7th levels of qualifications with reference to regulatory documentation and educational and methodological literature (Sanitary rules and norms (SanRN), Order of the Ministry of Sports of the Russian Federation dated October 30, 2015 No. 999, textbooks on the discipline).

Questions of choice, ranking, and conformity were included in the test trials (Table 2). In practical tasks, situational tasks were presented, in solving which students were asked to analyze a specific situation in the practice of physical culture and sports related to hygienic provision, a comprehensive assessment of the health and development of children and adolescents, nutrition, etc.

In each option, all blocks of questions were presented. The scoring of tasks was carried out and the final result was translated into an assessment - "excellent", "good", "satisfactory" and "unsatisfactory". Then a comparison was made with the oral answer in the exam.

Results of the study and their discussion. According to the results of the testing, it was revealed that the best results were observed when answering such types of questions as the "choice test" and "match test", in which 86% and 84% of students, respectively, gave the correct answers. In turn, tasks of the "open question" type caused difficulties for 23% of the tested, "ranking test" - for 25% of students, and when solving practice-oriented tasks, errors were noted in 33% of students. Obviously, this was due to the

fact that students are worse oriented in tasks related to labor activities.

In general, 47% of students scored a total score corresponding to the mark "excellent"; 16% of students demonstrated a level of knowledge rated as "good", and the rest of the students (27%) received a "satisfactory" rating. The sum of points according to the results of testing in the group of students averaged 26.60 ± 2.11 points, however, it should be emphasized that 10% of students did not pass the certification. Mostly they did not cope with practical tasks, which indicates that these students at the time of testing were not ready to address issues related to practical activities.

Comparison of the results of performing test tasks with oral answers in the exam indicates that the scores for the two types of control coincide by 75%. However, the exam scores were slightly higher compared to the data obtained during the testing. The sum of points for the exam in the form of an oral answer varied from 24 to 30 points and averaged 27.02 ± 1.09 points for the group.

It is also important that when comparing the results of approbation of a bank of test items that take into account indicators of achieving a professional standard and corresponding to general professional competencies (first stage, 2018-2019 academic year), which were prepared earlier [4] and approbation of a set of tasks developed taking into account labor actions, knowledge and skills for three professional qualifications (second stage, 2019-2020 academic year), it was found that, according to the test results, the best results were shown by bachelors in the second stage (Table 3). Thus, according to the results of the first stage, the average score was 23.60 ± 2.25 , and accord-

Table 1. Professional qualifications

Name of qualification	Qualification level
Trainer	6 skill level
Specialist in instructor and methodological work in the field of physical culture and sports	6, 7 skill level
Head of an organization (subdivision of an organization) carrying out activities in the field of physical culture and sports	6, 7 skill level

Table 2. Test tests

Labor action	Knowledge	Skill
1. One practice-oriented task/case is formed	1. Choice test (4 possible answers, one correct)	1. Ranking test (establishing the order of options)
	2. Open question (the answer is entered by the certified person)	2. Conformity test (matching options)



Table 3. Summary table of a comprehensive assessment of knowledge based on the results of the 1st and 2nd stages of testing and intermediate control (exam), $M \pm m$

Stages	Test scores	Points based on the results of intermediate control (exam)
1st stage of testing, 2018-2019 academic year, (n=100)	23,60±2,25	27,50±1,39
2nd stage of testing, 2019-2020 academic year, (n=120)	26,60±2,11	27,02±1,09

ing to the results of the second stage - 26.60 ± 2.11 . At the same time, it should be noted that when comparing the results of oral answers in the exam, comparable values of marks of bachelors of different years were noted.

In conclusion, it should be emphasized that the bank of tasks, developed taking into account the requirements of the national qualifications system, was integrated into the discipline course on the Moodle platform in order to be used when conducting boundary control in a remote format (2020-2021 academic year) during a difficult epidemic situation due to the spread of coronavirus infection, and has shown its effectiveness to control students' knowledge.

At the same time, conducting an exam remotely in the form of answering exam questions in essay format, in our opinion, does not allow obtaining an objective assessment of students' knowledge and oral answer to exam questions remains the preferred form of intermediate control.

Conclusions. Thus, the proposed diagnostic criteria for assessing the quality of vocational education make it possible to take into account the modern requirements of the development of society and help improve the level of training in the field of physical culture and sports, taking into account the requirements of the national qualifications system.

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