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Methodology of Organization and Conduct of Quizs in Physics Classes in Higher Educational Institutions

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A B S T R A C T

Today, much attention has been paid to the development of creative activity and interest among students in subjects. Various competitions and Olympiads are held. The article analyzes the current state of physics in higher education, considers approaches to improving the quality of physical education on the example of using modern pedagogical technologies on the example of a quiz.

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Introduction

Today, much attention has been paid to the development of creative activity and interest among students in physics. The principle of the student's activity in the learning process has been and remains one of the main ones in didactics. This concept means such a quality of activity, which is characterized by a high level of motivation, a conscious need for the assimilation of knowledge and skills, and performance. This kind of activity in itself occurs infrequently, it is the result of targeted managerial pedagogical influences and the organization of the pedagogical environment, i.e. applied pedagogical technology. Any technology has means that activate and intensify the activity of students; in some technologies, these tools form the main idea and the basis for the effectiveness of the results. Such technologies include quizzing technologies. This is what lecturers can use in physics class.[5-8]

Main part. The formation of the creative style of mental activity, the properties and qualities of professional thinking necessary in the forthcoming work, is determined by the entire system of acquiring knowledge, by those forms and methods that are used for this purpose. Teaching practice shows that the implementation of a competency-based approach in the preparation of a master requires a change in the educational process, the use of innovative pedagogical technologies. Quiz methods form students with meaningful knowledge and skills, the assimilation of which develops reflective, analyzing thinking in them, which allows them to correctly approach new and non-standard situations and effectively solve them. For the creative development of the personality of each student and the formation of professional competencies, it is necessary to provide him with real opportunities for the manifestation of intellectual initiative in training, the right to activity equal with the teacher, the opportunity not only to set goals, but also to set goals, achieve goals, move from the position of a consumer of educational information to the position of the creator of their knowledge and himself.[9-13]

The quiz, along with work and learning, is one of the main types of human activity. The quiz, being entertainment, recreation, can develop into learning, into creativity. The quiz, as a method of teaching,

transferring the experience of older generations to younger people, has been used since antiquity. In a modernuniversitythatreliesontheactivationandintensificationoftheeducationalprocess, quizzes a reused in the following cases:

- as independent technologies for mastering a concept, topic, and even a section of a subject;
- as elements (sometimes quite essential) of a larger technology;
- as a lesson (class) or part of it (introduction, explanation, consolidation, exercise, control);
- as technology for extracurricular activities.

There are certain requirements for organizing a quiz.

1. A quiz is a form of student activity in which the world around is realized, and space is opened for personal activity and creativity.

2. The quiz should be fun based and the participants should enjoy the quiz.

3. An element of competition between the participants of the quiz is required.

The requirements for the selection of the quiz are as follows:

1. Quizzes must comply with certain educational tasks, program requirements for knowledge, skills, and standard requirements.

2. Quizzes should correspond to the material being studied and be built taking into account the preparedness of students and their psychological characteristics.

3. Quizzes should be based on certain didactic material and methods of its application.

In the practice of a teacher, one can apply quiz-illustrations, situations-assessments, situations-exercises, the ways of presenting which can be very different. For example, a quiz method is proposed: for successful work, a physics teacher must be familiar with professional periodicals, among which are journals. The teacher must master the methodology of using quizzes, know the forms of working with them, be able to carry out a critical analysis of texts, offer their own solutions to the problems studied, and be able to generalize pedagogical experience.The lesson can be held in the form of a round table. For example, the problem of introducing modular technology into the educational process of universities is being studied, which is considered as a means of implementing student-centered learning.Students can be offered reflecting the experience of introducing modular learning into the educational process; find out the possibilities of using this technology, the positive aspects, the conditions under which this technology can be applied, the difficulties that teachers and students may encounter during modular training. It is desirable that the participants of the round table prepare quizzes of their messages [11-15].

In addition, each participant of the round table must compose answers on this issue and propose for analysis their own version of the module program on one topic of the physics course of a specialized university. The quiz method allows you to include all students in active work, establish feedback, and establish control over the quality of education. In the process of using this technology, the teacher prepares options for discussion in advance, and you can also indicate the main directions for finding a solution to the problem. When performing a quiz on the methodology of teaching physics, the method of collective creative solutions is used. Students are given a general task and the methods of its implementation for individual elements are specified.

Performing part of the task proposed to all, the student must be able to assess the role of this task in the overall plan of work, to subordinate its implementation to a common goal. The quiz method is used in teaching the methodology of physics classroom equipment, using a physical experiment in the classroom, thematic and lesson planning, working with lagging behind, etc.Quiz games are of great importance for the development of initiative and creativity of students in the process of forming professional competencies. We most often use games that simulate the educational process at the university. Students are divided into two groups. Some prepare fragments of lessons of various types, which are then carried out in the classroom.[5-12].

When choosing and preparing fragments of the lesson, students are given the freedom of creativity. At the

same time, fragments are prepared for teaching by students using both traditional and innovative teaching technologies. Forexample, fragmentsoflessonsusingsuchteachingmethodsarousedgreatinterestamongstudents.

The use of a quiz in physics lessons expands the possibilities of a demonstration experiment through the use of virtual images, allows you to create a single information space, implement continuous learning through a distance education system, implement individual-personal learning, develop the skills of independent search for the necessary information and its critical selection, and also show how computer technologies are practically used in physical science.

Effective work with the quiz is aimed at both individual independent work of students with the quiz materials, and work in small groups to discuss the problem and agree on its possible solutions. The traditional scheme of working with a quiz consists of the following 4 stages:

Stage 1. Introduction to a specific issue. Focused on understanding the problem.

Stage 2. Search. Includes an assessment of information obtained from the engagement materials and self-drawn. It is aimed at developing the ability to find the information necessary to find a solution and evaluate it.

Stage 3. Discussion. Discussing the possibilities of alternative solutions allows you to develop alternative thinking.

Stage 4. Dispute. Separate groups of students defend their decision. At this stage, there is a comparison and evaluation of solutions.

Stage 5 Comparison of results. Comparison of decisions made in different groups of students. This stage involves a reasoned defense of decisions.

Stage 6 Resolution, that is, finding a solution in groups. At this stage, the final results are summed up and the interrelated interests of individual decisions are evaluated.

Results. Quizzes occupy an important place in the educational process, as they not only contribute to the education of cognitive interests and the activation of students' activities, but also perform a number of other functions:

1. A properly organized game, taking into account the specifics of the material, trains memory, helps students develop speech skills and abilities;

2. the game stimulates the mental activity of students, develops attention and cognitive interest in the subject;

3. quiz - oneofthemethodsofovercomingthepassivityofstudents;

4. As part of a team, each student is responsible for the entire team, each is interested in the best result of his team, each strives to complete the task as quickly and successfully as possible. Thus, thecompetitioncontributestotheenhancementoftheperformanceofallstudents.

Conclusion. In conclusion, I would like to note that the use of a quiz for the study of physics serves to activate the process of thinking and increase interest in the subject, develops the ability for independent learning and the application of theoretical knowledge in physics in life. Thus, the modern system of teaching aids allows you to engage in the learning process individually, in creative groups, classes or classrooms. The quiz allows both the student and the teacher to search and collect new information, develop and create modern teaching aids.

REFERENCES:

1. Dergacheva, A.F. One of the opportunities to improve the training of physics teachers at the Pedagogical University. - M.: Moscow State University of Lomonosov. - 2000. -pp.30-31.2.
2. Pinskaya, M.A. Assessment for learning. Practical guide. - M.: "ChistyePrudy", 2009. - Issue. 28. - 32 p.
3. Potemkin, S.N. Extracurricular independent work of students in the study of the discipline "Physics"

and the form of its organization// Vector of Science TSU. - 2015. - No. 4 (23). –pp. 154–157.

4. Chickering, A.W. Seven Principles for Good Practice in Undergraduate Education [Text] // A.W. Chickering, Z.F. Gamson // AAHE Bulletin. – Mar. 1987. – P. 3–7.
5. 5. Файзиев Ш. Ш., Саидов К. С., Низомова Ш. К. К. Электронная структура основного мультиплета иона диспрозия в ортоалюминате //Academy. – 2020. – №. 11 (62). – С. 4-6.
6. Шарипов М. З., Файзиев Ш. Ш., Низомова Ш. К. К. ОСОБЕННОСТИ МАГНИТООПТИЧЕСКИХ СВОЙСТВ МОНОКРИСТАЛЛА БОРАТА ЖЕЛЕЗА //Наука, техника и образование. – 2021. – №. 2-2 (77). – С. 5-9.
7. Ismatovna A. Y. Using the Moodle Platform in Extreme Cases //Central asian journal of mathematical theory and computer sciences. – 2021. – Т. 2. – №. 6. – С. 13-19.
8. Ismatovna A. Y. Passing the Traditional Lesson with the Help of Open Moodle Platforms. – 2021.
9. Асадова Ю. The use of Moodle platform in the traditional transition of Information Technology Science in medicine to foreign students accepted on the basis of MBBS program at Bukhara State Medical Institute //Общество и инновации. – 2021. – Т. 2. – №. 7/S. – С. 35-43.
10. Ismatovna A. Y. The Method of Using the Moodle Platform for the Organization of Teaching in Education (The Introduction of Distance Learning Technologies in the Educational Process) //International Journal of Innovative Analyses and Emerging Technology. – 2021. – Т. 1. – №. 4. – С. 30-46.
11. Юлдуз А. ИСПОЛЬЗОВАНИЕ СОВРЕМЕННОЙ ПЛАТФОРМЫ MOODLE ДЛЯ САМОСТОЯТЕЛЬНОГО ОБУЧЕНИЯ СТУДЕНТОВ НА ТРАДИЦИОННЫХ УЧЕБНЫХ ЗАНЯТИЯХ //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 4. – №. 4.
12. Ismatovna A. Y. TODAY'S ROLE OF ELECTRON EDUCATION IN TEACHING THE SCIENCE OF INFORMATION TECHNOLOGY IN MEDICINE //Gospodarka i Innowacje. – 2022. – Т. 22. – С. 518-522.
13. Ismatovna A. Y. The method of organizing the pedagogical process of application of Information Technology in the Independent Education of students in the science of Information Technology in medicine using information technologies //Texas Journal of Engineering and Technology. – 2022. – Т. 7. – С. 70-73.
14. Ismatovna A. Y. Using the Moodle Platform for Organizing Training in Education //" ONLINE-CONFERENCES" PLATFORM. – 2021. – С. 15-18.
15. Sobirovich T. B. National and universal principles of democracy //Asian Journal of Research in Social Sciences and Humanities. – 2022. – Т. 12. – №. 1. – С. 334-338.
16. Sobirovich T. B. The implementation of human indicator reforms in Uzbekistan //Asian Journal of Multidimensional Research. – 2021. – Т. 10. – №. 9. – С. 197-202.
17. Sobirovich T. B. Issues of gender equality in uzbekistan: Strategy of reforms //Asian Journal of Multidimensional Research. – 2021. – Т. 10. – №. 9. – С. 203-207.
18. Sobirovich T. B. National Principles of Democracy in Uzbekistan //Mediterranean Journal of Basic and Applied Sciences (MJBAS). – 2021. – Т. 5. – №. 3. – С. 131-135.
19. Sobirovich T. B. Philosophical Dialectics of National and Universal Cultural Development //Irish Interdisciplinary Journal of Science & Research (IIJSR). – 2021.
20. Turdiyev B. S. The role of national harmony in the strategy of spiritual renewal //Scientific Bulletin of Namangan State University. – 2019. – Т. 1. – №. 6. – С. 229-233.
21. Sobirovich T. B. Strategy of Renewal of National Spirituality of Uzbekistan //International Journal on Integrated Education. – 2020. – Т. 3. – №. 8. – С. 122-126.
22. Sobirovich T. B., Murodogli I. S. The strategy for the implementation of the modern governance system in Uzbekistan //ACADEMICIA: An International Multidisciplinary Research Journal. – 2020. – Т. 10. – №. 5. – С. 741-748.
23. Sobirovich T. B. Strategy of spiritual renewal in Uzbekistan //International Journal of Psychosocial Rehabilitation. – 2020. – Т. 24. – №. 06.

24. Sobirovich T. B. The criterion of human indicators in development and renewals in Uzbekistan //EPRA International Journal of Multidisciplinary Research (IJMR). – 2020. – Т. 6. – №. 8. – С. 509-511.
25. Sobirovich T. B. O‟ zbekiston demokratik jamiyat taraqqiyoti rivojida ma‟ naviy yangilanishlar strategiyasining roli //Imom Buxoriy saboqlari. – 2020. – №. 2. – С. 118-121.
26. Turdiev B. S., Yuldashev B. T. THE ISSUE OF AVOIDING CRIMES AMONG YOUNGSTERS IN UZBEKISTAN //Экономика и социум. – 2019. – №. 1-1. – С. 119-122.
27. Turdiyev B. S. SPIRITUAL RENEWAL AND INTERETHNIC RELATIONS IN THE STRATEGY OF ACTIONS //Теория и практика современной науки. – 2018. – №. 3. – С. 85-89.
28. Sobirovich T. B. The development of democratic society and spiritual renewal in the views of Eastern and Western thinkers //INTERNATIONAL JOURNAL OF ADVANCED RESEARCH AND REVIEW. – 2020. – Т. 5. – №. 10. – С. 60-65.
29. Turdiyev Б. The development of democratic society and spiritual renewal in the views of eastern and western thinkers //Общество и инновации. – 2020. – Т. 1. – №. 1/s. – С. 710-717.
30. Sobirovich T. B. The development of democratic society and spiritual renewal in the views of Eastern and Western thinkers //INTERNATIONAL JOURNAL OF ADVANCED RESEARCH AND REVIEW. – 2020. – Т. 5. – №. 10. – С. 60-65.
31. Sobirovich T. B. The Strategy of Cultural Development in Central Asia During Amir Temur and the Temurids Dynasty //Int. J. Sci. Res. in Multidisciplinary Studies. – 2021. – Т. 2021.
32. Sobirovich T. B. The Strategy of Cultural Development in Central Asia during Amir Temur and Temurids Dynasty Reign //Irish Interdisciplinary Journal of Science & Research (IIJSR). – 2021. – Т. 5. – №. 1. – С. 18-22.
33. Sobirovich T. B. Strategy of development of pilgrimage tourism in Uzbekistan //MODERNIZATION OF ISLAMIC CULTURE IN BUKHARA AND PROSPECTS FOR THE DEVELOPMENT OF SUSTAINABLE TOURISM" International Scientific and Practical Conference, Bukhara. – 2020. – Т. 2. – С. 24.
34. Sobirovich T. B. O ‘zbekistonning ma’naviy yangilanish strategiyasi //Buxoro:"Sadriddin Salim Buxoriy" Durdona nashriyoti. – 2020. – С. 48.
35. Sobirovich T. B. Evolution of ideas and views on the development of democratic society and spiritual renewals //Scientific Bulletin of Namangan State University. – №. 10. – С. 243-250.
36. Sobirovich T. B. Tourism in Central Asian context //ВЕСТНИК ИНСТИТУТА/СОКРОВИЩНИЦА НАУКИ. – 2019. – №. 2. – С. 732-733.
37. Sobirovich T. B. The national and universal principles of democracy in the Central Asian context //INTERNATIONAL JOURNAL OF ADVANCED RESEARCH AND REVIEW. – 2021. – Т. 6. – №. 1. – С. 30-34.
38. Turdiyev B. S. CULTURAL AND EDUCATIONAL DEVELOPMENT OF SOCIETY IN THE SCIENTIFIC HERITAGE OF WORLD PHILOSOPHERS //Academic research in educational sciences. – 2021. – Т. 2. – №. 4. – С. 443-451.
39. Sobirovich T. B., Sharipovna A. F. NEW UZBEKISTAN–NEW STRATEGY OF ADMINISTRATIVE REFORMS //researchgate. net.
40. Sobirovich T. B. Ma’naviy yangilanishlar strategiyasining hayotbaxsh islohotlari: nazariya va amaliyot, O’zbekiston Milliy axborot agentligi–O’zA Ilm-fan bo’limi (elektron jurnal) //Tashkent, UzA. – С. 1-12.