



METHODOLOGY FOR ORGANIZING INDEPENDENT EDUCATION IN THE TRAINING OF THE MODULE "ANALYZERS"

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Article history:	Abstract:
Received: September 24 th 2022 Accepted: October 26 th 2022 Published: November 30 th 2022	In the National Personnel Training Program, along with in-depth theoretical and practical knowledge, one of the main tasks is to train specialists who can independently operate in their chosen field, independently improve their knowledge and qualifications, correctly identify problem situations with a creative approach to the issue and quickly adapt to the conditions. It is known that in the current conditions, when the range of information and knowledge is rapidly expanding, it is difficult to convey all information to students only during class time.

Keywords: analyzers, leader, student, mustail education, methods, stage of study , level of difficulty, human anatomy and physiology, layout ,model.

The use of interactive learning techniques in the learning process leads to an increase in student activity, the formation of skills of a creative approach to learning, helps to bring to the surface their abilities and capabilities, forms the skills of working with the team, discusses various situations in students from different points of view, forms decision-making skills, arouses responsibility and interest in, helps to form the qualification of resettlement to new situations.

Experiments show that a student can deeply master knowledge only if he is engaged independently and works tirelessly on himself. The basic knowledge, skills and abilities of students are formed only in an independent educational process, the ability to operate independently develops, and interest in creative work arises in them. Therefore, one of the main tasks of teachers of a higher educational institution is to plan, organize and create all the necessary conditions for students to receive independent education, in addition to teaching students in class classes, teaching them to study more, showing ways of obtaining knowledge, giving a ticket for Independent Education.

Student independent work is a systematic activity aimed at mastering a particular subject outside the audience and audience on the basis of the advice and recommendations of the subject teacher by the student in a certain part of the knowledge, skills and qualifications established in the curriculum. The organization of independent work of the student at the initial stages of study is associated with a number of tasks. Especially students of the first course find it difficult to get used to the requirements of the next type of Education - Higher Education. Because they practically do not know how to organize their own

independent activities in the educational process. It will be a big problem for them to find out from what source the data is, to tax them and organize them by separating the necessary ones, to express their opinion clearly and vividly, to correctly assess their mental and physical capabilities, the main thing is that they are not mentally prepared for Independent Education.

Therefore, each professor – teacher will initially need to instill in the student his abilities and confidence in mental capabilities, patiently teach them to correctly organize the gradual acquisition of independent knowledge.

The following points should be taken into account when determining the form and cost of independent work of students

- reading phase
- the specificity of a particular science and the degree of difficulty in mastering
- the ability of the student and the level of theoretical and practical training (basic knowledge)
- the degree of provision of Science with information resources
- the degree to which the student is able to work with information resources

The form and size of assignments for independent work, the level of difficulty should change and increase in accordance with the availability of skills from semester to semester. That is, it will be necessary to gradually increase the level of students' independence in the performance of assignments and teach them to take a systematic and creative approach to the performance of assignments.

In the organization of independent work of the student, the following forms can be used in the event



that the student has acquired the level and ability to master akademik:

- * Independent mastering of certain subjects of Science with the help of educational literature, work with educational resources; e
- * Preparation for practical, seminar and laboratory classes;
- * Preparation of an abstract on a specific topic;
- * Execution of coursework (projects • ;
- * Collection of materials for graduation qualification work;
- * Complete Book and graphic work;
- * Work on layout, model and artwork;
- * Finding a solution to an existing problem in practice, preparing tests, discussion questions and assignments;
- * Preparation of scientific articles, theses and lectures;
- * Solve non-standard issues of practical content and work creatively;
- perform homework and others.

Based on the nature of science, students can also be assigned tasks of other forms for independent work. What types of assignments should be given to students is determined by the Department. The assignments are carefully thought out and aimed at a specific goal, and should serve to consolidate, deepen, expand and supplement the knowledge gained by students in audience classes.

In the process of completing the assignment, students independently, using educational literature, conceptualize this topic, prepare answers to questions related to the topic, while realizing the leprosy of base phrases. In the necessary cases (when it is difficult to master, savlls appear, there is a lack of literature, a systematic statement of the topic, and hakozo) they receive consultations from the teacher.

The text prepared on an independently mastered topic is defended in the Department.

Preparation of abstract. The student is instructed to prepare an abstract on a topic whose level of difficulty is in accordance with his personal capabilities, abilities and level of knowledge. In this case, in addition to the main literature, the student collects materials using additional literature (monographs, scientific, methodological Proverbs, information from the internet, electronic library materials, etc.), evaluates, systems and tries to provide complete, extensive information on the topic at the possible level. Receives advice and instructions from the teacher in the necessary cases.

Preparation of visual aids. The student is instructed to prepare visual materials (tables, drawings, drawings, maps, layouts, models, graphs, symbols, etc.) that will help him to outline and better master a specific topic.

Tests and discussion questions on the topic, preparation of assignments. The student is instructed to draw up questions in which the level of difficulty of

the tests on a particular topic is different, and tasks are the basis of the discussion.

In the effective organization of independent work of students:

- * Systematic approach;
- * Coordination and integration of all stages;
- * Establish strict control over completion;
- * It is necessary to improve the organization and control mechanisms.

Organization of independent work on the subject of human anatomy and physiology.

In the correct Organization of independent work, increasing the effectiveness of education and upbringing to young people helps a lot in connecting the knowledge gained in theory and practice, filling in its content, in a full-fledged understanding of the relationship between society and nature from a dialectical point of view. The student also grows the students' creative abilities and increases and stabilizes their interest in the course being taught. The effectiveness of teaching depends in many ways on the use of various methods and forms in classes, as well as on the types of independent work formed and selected by subjects.

There are many forms of organization, Control and evaluation of work independent of human anatomy and physiology. In the work of this project, we draw attention from our experience to the feedback on the organization and selection of independent work from the module "Anatomy and physiology of analyzers".

In the organization of independent work, the content of the order of the Ministry of Higher and secondary special education of the Republic of Uzbekistan "on the organization of independent work of the student" and the application of this order "on the procedure for organizing, controlling and evaluating independent work of the student" are taken as the basis. According to the charter, the subject of independent work is selected, the sources used, methodological instructions, the content, form of work, rating development of assessment, control time, calendar plans are drawn up and included in the working program complex.

The goals and objectives of independent work are clearly explained to students directly with the participation of the teacher. The main goal is the formation and improvement of skills, skills and knowledge on a particular topic in the student. In the implementation of this goal, that is, in the organization of independent work, it is of great importance that the teacher is not an "actor", but is directly aware of the activity in the role of a "director", knowledge of complete information about the content of an educational methodological manual, instructions and the use of new methods of pedagogical technology. In the course "human anatomy and physiology" we



consider it expedient that the following types of independent work are given in order to enrich the content of the knowledge acquired by students during the period of theoretical and practical classes, improve their worldly views, activate independent thinking skills and carry out their effective work.

- to collect resources and get acquainted with their content in order to fully master the content of theoretical and practical topics. Drawing up a postcard by sources, writing annotations in short and clear content;
- sufficient coverage of the content of some lectures and experiments using additional information and recording them in home notebooks;
- preparation of creative work on a given topic, writing a lecture text, preparing an abstract, drawing up test tasks, creating the development of various biological games, etc;
- keeping a dictionary notebook on biological terms and expressions and filling it out;
- collection and storage of scientific, public publications, radio broadcasting and TV show information related to each section of the course in folders.
- calculation based on the content of the topics, graphic and map scheme of the picture - scheme, tables with information, working thematic stands;
- to prepare for an independent lesson on some set of topics, to conduct an educational process, etc;

Independent types of work and the provision of clear instructions under the supervision of a teacher for its implementation will have an effect on the full assimilation of the content of the topic. The control and evaluation of work is carried out according to the calendar plan approved by the department in the score rating system. The types of independent work to be performed and the days of control over them, as well as the assessment criteria that are communicated to students at the beginning of the semester of the school year, effectively help to prepare for independent work, fully assimilate and cover the content of topics.

The effectiveness of independent work is determined by the work experience of the teacher, the student's

ability, sensitivity and activity of responsibility, the wealth of the material and technical base in the educational institution, as well as the efficient use of time.

INSTRUCTIONS FOR INDEPENDENT WORK

1-independent work.

"Analysis of articles and information about the issue and exercises that are published in scientific, scientific and methodological journals and are used in the educational process given via the internet, establishing ways to use them in their pedagogical activities.

1. Analysis of articles and information in the journal Biology, determination of ways of its use in pedagogical activities.
2. Analysis of articles and information in the journal Biology at school, determination of ways of its use in pedagogical activities."Plan topics in the form of a system of lessons.
3. Analysis of articles and information published in the Journal of public education, establishing ways to use them in their pedagogical activities
4. analysis of articles and information about the issue and exercises used in the educational and educational process given via the internet, establishing ways to use them in their pedagogical activities
5. The didactic goal of laboratory and practical classes, determine the work that students carry out analysis of information, determining ways to use it in their pedagogical activities.
6. Highlight the methodology for conducting observations and experiments on solving problems and exercises.

Criteria for assessing students ' independent work on the structure and physiology of analyzers

1-independent work.

"Analysis of articles and information about the issue and exercises that are published in scientific, scientific and methodological journals and are used in the educational process given via the internet, establishing ways to use them in their pedagogical activities

Knowledge, skills on topics of Independent Education	Full	Partial	Many of the disadvantages	Folse
1. Analysis of articles and information in the journal Biology, determination of ways of its use in pedagogical activities.	0,5	0,4	0,3	0,2
2. Analysis of articles and information in the journal Biology at school, determination of ways of its use in pedagogical activities.	0,5	0,4	0,3	0,2
3. Analysis of articles and information published in the Journal of public education, establishing ways to use them				



in their pedagogical activities	0,5	0,4	0,3	0,2
4.analysis of articles and information about the issue and exercises used in the educational and educational process given via the internet, establishing ways to use them in their pedagogical activities	0,5	0,4	0,3	0,2
1. The didactic goal of laboratory and practical classes, determine the work that students carry out analysis of information, determining ways to use it in their pedagogical activities.	0,5	0,4	0,3	0,2
2. Highlight the methodology for conducting observations and experiments on solving problems and exercises.	0,5	0,4	0,3	0,2
Total:	3	2,4	1,8	1,2
Incentive points				
1. . These chapters develop ways to implement DS and control students ' knowledge.	1	0,8	0,6	0,4
2. The articles and internet information published on the teaching of this chapter are analyzed.	1	0,8	0,6	0,4
Total :	5	4	3	2
Recommendations to students				
Ball	5	4	3	2
Incentive	Clear leader, help your comrades, take on the task of a small consultation.	You will be able to do this, there is only one step left for a small consultation	End your distrust of your own strength. You can do it	Loqaydl ik va erincho qlikni enging. Topshir iqni bajara olasiz

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