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THE PLACE OF INDEPENDENT WORK IN TRAINING OF PHARMACISTS AT THE PROFESSIONAL COLLEGE

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Resume. *In training the future pharmacists at the professional college in the context of the Bologna system of education organization, the number of classroom practical classes is reduced, while an important role is given to the student's independent work. Authors consider the problem of student's independent work organization at the professional college of Bukovinian State Medical University and analyze the forms and methods of independent work of students, as well as determines the role of independent work in professional development of future specialists.*

Key words: *student's independent work, pharmacists, professional college, chemistry.*

Introduction.

The rapid economic development of modern society requires an increased level of training requirements for highly educated professionals ready for fierce competition in the labor market. The introduction of the Bologna system of educational process organization was aimed at increasing the prestige of Ukrainian higher medical and pharmaceutical education in the world educational space. Under such conditions, trends and approaches to traditional learning have changed somewhat. Direct information is gradually relegated to the background, while independent learning of students becomes important. In higher education there is a question of adaptation to the higher education conditions, where the share of independent work, self-organization, self-education increases significantly. That is why today's specialist is a person who is able to make decisions independently, achieve goals on their own, constantly improve their professional skills [1].

At present independent work can be classified according to the guiding principles. The mostly used types of student's independent work among them are:

1. Independent work according to the time and control form:

- a) short-term, completed directly in auditorium conditions or at the moment of preparation for the classes with current or intermediate control;
- b) long-term, connected with independent search, high activity level of students, requiring more continued preparation (e.g. project activity) using intermediate and final control [2].

2. IW according to the form of students' organization:

- a) individual;
- b) pair;
- c) collective (group).



Scientists notice that individual IW (however not frequently) is conducted in secondary and higher educational institutions, but its group variant is a very rare phenomenon. Although the ability to work independently in a group is very important as a person lives in the society and in some way faces the group, fulfills the joint activity and his inability for joint work would negatively affect the results of group's work as a whole [2].

Main part.

The objective of our study is to determine the optimal forms and methods of independent work of students at the Department of Medical and Pharmaceutical Chemistry of BSMU as a type of educational activity aimed at forming cognitive abilities of students, their focus on continuous self-education.

Fundamental disciplines, in particular, Chemistry, contribute to the development of creative thinking, raising the general scientific level and developing research skills. Today, the study of disciplines in this area in higher education is one of the most important elements in training of highly qualified and competitive professionals in pharmaceutical industry. Recently, however, the amount of time devoted to classroom hours for full-time and part-time students has been significantly reduced. As a result, the main amount of study load falls on the independent work of students. Therefore, the management of independent work of students, especially distance learning, is one of the means of intensifying the learning process and improving the quality of student training, especially in context of the Bologna process. Under such conditions, educational and methodical materials (manuals, methodical instructions) acquire special value, the main purpose of which is to help students in independent study of the discipline [3].

Modern teachers must take into account all the difficulties that may arise in students' preparation for the class. That is why the competent organization of independent work becomes one of the defining areas of the teacher's work in an educational institution of any level. This is done in different ways and for different purposes. In our opinion, it is necessary to plan the independent work of students so that it, together with the accumulation of knowledge, skills and abilities, provides an opportunity to develop creative skills.

To organize independent learning it is necessary to clearly set the purpose and objectives of educational work for the student, indicate the required result of independent work and forms of control obtained as a result of studying, skills, professional skills, etc., provide information about recommended educational and teaching publications.

In the course of independent work, which is planned for each discipline at the Department of Medical and Pharmaceutical Chemistry, the student can:

- master the theoretical material of the discipline being studied (this applies to the study of the lecture course, as well as the development of certain topics, issues and provisions of the discipline);
- to consolidate knowledge of theoretical material, using the necessary tools in a practical way (conducting a laboratory workshop, solving problems, performing tests, tests for self-examination);
- apply the acquired knowledge and practical skills to analyze the situation and



make the right decision (preparation for group discussion, project development, etc.);

- apply the acquired knowledge and skills to form their own position, theory, model (organization of research work of the student).

The student's independent study includes basic and additional independent work. Basic independent work provides student preparation for current classes and various forms of knowledge control in the disciplines studied. The conclusion on the effectiveness of this training can be made from the assessment of students' activity in the classroom, the quality of tests performed, test tasks, reports made at meetings of the student scientific group and student conferences.

Basic independent work of students may include the following types of work:

- work with lecture material, which involves the study of lecture notes and educational literature;
- search and review of literature, electronic sources of information on an individual problem of the course;
- homework, which involves solving situational problems, solving test tasks, etc., issued in practical classes;
- study of the material submitted for self-study;
- preparation for laboratory work and for practical and seminar classes;
- preparation for control work;
- preparation for a modular lesson;
- writing an abstract on a given problem.

Additional independent work is aimed at deepening and consolidating the student's knowledge, development of analytical skills on the subject of the discipline. Additional independent work may include the following types of work:

- preparation for the module, test, exam;
- project implementation;
- research work in the student scientific circle, participation in scientific student conferences, "round tables" and competitions;
- analysis of a scientific publication on a topic predetermined by the teacher;

Development of independent work of students should include:

- target installation;
- the minimum necessary content of independent work;
- instructions on the form of presentation of the work performed (abstract, report, results of the experiment, tables, developed and designed layout, etc.);
- information on the form and time of reporting (presentation of the report in class, presentation of the project at the time set at the department, writing a test on schedule, submission of the task to the teacher or test by the teacher during the lesson, presentation at a meeting of the scientific group, participation in scientific student conferences, etc.);
- a method of assessing the performance of the task within the credit-module system.

Independent work of students is provided by a complex of educational and methodical literature - textbooks, manuals, workshops, methodical recommendations;



curricula in each discipline, texts of lectures, materials and tasks for independent work of students, topics of abstracts and research tasks, tasks for practice, tests to control the level of student achievement. Provision of students with educational and methodical literature is an important component and a necessary condition for effective and high-quality training in modern socio-economic conditions. For the successful organization of the educational process, students must be provided with educational publications for classroom and independent extracurricular activities. Educational and methodical publications regulate the content of education and are aimed at the formation of skills and qualities that are necessary in the professional activities of future professionals. Monitoring the level of academic achievement helps students to critically evaluate their academic success and mistakes, to properly organize further work, to ensure its systematic and regularity. External control over independent work by the teacher is combined with self-control of educational activity. In this case, the teacher focuses on providing assistance to those who need it especially and on what requires truly qualified teacher intervention. ISW control stimulates the motivational basis of activities, helps to increase the level of knowledge and learning skills of students, providing them with educational information of various types and didactic materials, providing operational advice. Among the methods of ISW control, preference is given to express-survey, interview, test control, control of practical skills, control of competence formation level, module control.

Activation of independent students' work is characterized not by search in general, but by search for ways to solve problems, not only mastering the results of scientific knowledge, knowledge system, but also the way of obtaining these results, formation of cognitive independent activity of students, development of their creative abilities. As a result of practicing independent work, the student learns to skillfully organize the acquisition of knowledge, their mental activity, which provides perception, awareness, memorization, generalization, readiness to find the necessary solution. They develop self-awareness, self-discipline, personal responsibility, gets self-improvement, self-recognition, self-realization [4].

Interactive technologies play an important role in the organization of independent work at the Department of Medical and Pharmaceutical Chemistry of BSMU. Such processing of educational material can be both collective (group work) and individual and consists in preparation of projects in the form of presentations. Students can also study on the distance learning server BSMU "MOODLE".

The use of Internet allows to conduct on-line consultations and chats, which makes remote resolution of discussion issues in the on-line mode possible.

Conclusions.

The main task of organizing independent work of students is to use traditional and innovative forms and methods of teaching, which would, complementing each other, be a single system that can be adapted to the specifics of the educational process in a particular higher education institution to optimize learning and training highly qualified professionals.



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