



INNOVATIVE BEST EXPERIENCES IN TEACHING PHYSIOLOGY

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Annotation

One of the main tasks of the university at the present stage is to obtain not only knowledge and skills, but also the disclosure of the abilities of each student, the education of a personality that will always be ready for life in a high-tech, competitive world. The condition for reforming the labor market is the socio-economic transformations taking place in the modern world in various spheres of society. They are closely related to solving the problems of adaptation of university graduates to the modern conditions of their professional activities. These reforms affect the educational process of a modern university.

Keywords. Innovative methods, modular training, tutorials, personalized, team-individual training

Today, graduates of higher educational institutions require new professional thinking, flexibility of thinking, awareness, patience, tolerance, in-depth analysis of the information received, identification of true and false, etc. In this regard, there is a need to create conditions for the development of critical thinking of university students, which is an inseparable part of their professional competence [1,3,4].

Depending on the individual cognitive characteristics of students, teachers of a foreign higher pedagogical school use the following teaching technologies:

- Modular training,
- Personalized learning,
- Tutor training system (tutorials),
- Brigade-individual training.



Modular learning. Has a clear organization of the process of self-education and group classes. It consists in the fact that the student is given the opportunity to independently work with an individual program, including an action plan, an information bank and a methodological guide to achieve goals. The teacher performs various functions: from information-controlling to consulting-coordinating. The content of the training is presented in the form of separate training packages. A student can independently combine a set of modules depending on his individual plan [5,6].

Principles of modular training:

- Dynamism, effectiveness and efficiency of knowledge;
- Flexibility in organizing the process of educational activities;
- Awareness of the prospects in achieving goals;
- Variety of methodological advice;
- Parity of relations between teacher and student [2,3].

A learning module is an integration of various courses or learning topics in the structure of one discipline, subject to a common learning goal and step-by-step tasks to achieve it. The module formulates educational goals and objectives, options for their gradual achievement; outlines the main points of the educational material, its essence; explanations are offered for its assimilation at several levels of complexity; recommendations are given for additional deepening and expansion of the studied material; a list of references is attached to each block of material; theoretical and practical tasks are offered (some of them are at the student's choice); individualized feedback is organized. Entrance control, determining the readiness of the student to assimilate the material presented in the module, allows formulating recommendations for organizing his subsequent educational activities. Intermediate control enables self-control and correction of educational activities in the course of work on the module. Generalized control is also individualized depending on the program of study of this module and the characteristics of the student.

Personalized learning (Personal System Instruction) - independent work by a student at an individual pace on specially prepared printed materials. Self-learning is accompanied by watching movies, transparencies, listening to phonograms, performing laboratory exercises. Students, as necessary, selectively attend lectures, practical or tutor classes (in some cases, undergraduate students are tutors of their junior colleagues). The transition



to the next educational section is allowed only after studying the previous one, the assimilation of which is checked by ordinary or test tests, as well as with the help of technical means (sometimes self-assessment or group assessment of knowledge acquisition is used). Independent work is accompanied by weekly meetings of students in a group and written reports.

The essence of personalized learning is that the course material is divided into portions, each of which contains the information to be studied: examples and tasks, questions for self-testing, as well as the necessary guidelines. The student independently studies the material and, when he considers that he has mastered this portion to perfection, turns to the teacher and receives a "readiness test". Permission to proceed to the study of the next part of the educational material is possible only after receiving a high mark for the previous portion. Studying the course is usually accompanied by lectures, but attending them is optional. After passing all the program material in this subject, the student is given an overall grade.

Tutor training system (tutorials) - regular individual group lessons of a teacher-tutor with several students attached to him for the entire period of study.

A tutor should be seen primarily as a mentor. He observes the progress and formation of the student's personality in the process of his education. In the traditional structure of the tutorial, there are three distinct functions. Thus, the director of studies is responsible for the study of students as a whole, the moral tutor is responsible for their "moral character", the tutor oversees the studies of an individual student during a trimester or academic year. At Oxford, these functions are performed by the same person. In Cambridge and other universities, a tutor conducts practical classes with students and is called a supervisor. His duties also include monitoring the progress of students, their attitude to learning, the formation of independent work skills [3,7,8].

Brigade-individual training

★ Individualized teaching in small groups, when a significant number of lagging behind does not allow teaching material to the entire academic group at the same time. This learning technology is characterized by a rigid target orientation.



Principles of brigade-individual training:

★ Excellence in learning - the mastery of each student with educational material to perfection, regardless of abilities, and thus achieving the goal.

More general requirements arising from the published principle:

- ★ Students' awareness of the goal of learning;
- ★ Providing students with methodological recommendations for organizing independent learning activities;
- ★ Organization of the student's involvement in the educational process;
- ★ Providing students with a lower initial level, additional opportunities;
- ★ Continuous progress in learning (Continuous Progress) - the flexibility and dynamism of the learning process.

Students are divided into groups of 4-5 people. The teacher selects groups so that their composition is as diverse as possible in all respects: the group includes boys and girls, good, average and poor performers, as well as (under appropriate conditions) students of different ethnic origins. The training material is divided into programmed portions-sections, members of the subgroup work on various sections. Each student works through the material of the section at their own pace in the following sequence:

1. Familiarization with the teacher's guide to mastering a particular skill;
2. Development of a series of work plans, each of which is devoted to mastering individual skills - components of this skill;
3. Self-assessment of this skill;
4. Final test (placement test).

Team members work in pairs, checking each other's performance of control tasks on a 100-point scale. If a student achieves a score of 80 percent or better in the self-assessment and peer-review mode, the student passes the final test for that skill. It is conducted by a well-performing student appointed by the teacher (student monitor). By the end of each week, based on the results of the final verification work (test indicators of each participant and the number of tests they passed in a week), the results of the work of the teams are summed up, team indicators are compiled.

At our university, at the Department of Physiology, innovative pedagogical technologies are used in teaching students, such as modular training, case-study, design method, problem-modular learning. These methods form students' critical thinking. Critical thinking is the type of thinking that helps,



is critical of any statements, does not take anything for granted without evidence, but at the same time be open to new ideas and methods. Critical thinking is a necessary condition for freedom of choice, quality of forecast, responsibility for one's own decisions. Thus, in the university, the technology of teaching pedagogical procedures, the sequence of operations and actions that together make up the pedagogical system, the implementation of which in pedagogical practice leads to the achievement of specific goals of training and education.

Literature

- [1] Мороченкова И. А. Формирование критического мышления студентов в вузе. Дис. ... канд. пед. наук. — Оренбург, 2004.
- [2] Соколова Л.Б. Становление культуры педагогической деятельности учителя: моногр./ Л.Б. Соколова. – Оренбург: изд-во ОГПУ, 2001—318с.
- [3] Шакирова Д.М. Формирование критического мышления учащихся и студентов в условиях модернизации образования: отчет по теме НИОКР № 02-2.3-98/2004 Ф(02) / исп.: Д.М. Шакирова, М.И. Махмутов, Н.Ф. Плотникова.-Казань, 2004.-С.58
- [4] Holubová, R.(2008). Effective teaching methods – Project-based learning in Physics. US-China Education Review, Vol. 5, No.12. p. 27.
- [5] Jayawickramrajah, P.T. (1993). Impact of problem-based, integrated medical curriculum on students approaches to learning. Baharin Medical Bulletin, 15: 116-121
- [6] Schmidt, H.G. (1993). Foundations of problem-based learning: some explanatory notes. Medical Education. Vol. 27, Issue 5, p. 422–432.
- [7] Su, W.L. (2021) How to Use Modern Teaching Methods to Cultivate Students' Autonomous Learning Ability. Open Access Library Journal, 8, 1-5.
- [8] Cliff WH, Wright AW. Directed case study method for teaching human anatomy and physiology. Adv Phys Educ. 1996;15(1):S19–S28.