

## Didactic Requirements for a Modern Lesson

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### ABSTRACT

In this article, the didactic requirements for a modern lesson are scientifically and methodologically sound. Also, the factors that create conditions for free, creative work of students in biology classes. its design, interpretation of the teaching material in accordance with the level of mastery of students.

**KEYWORDS:** *lesson, process, education, training, methodology, knowledge, skill, qualification, competence, technology, principle, integration, problem, intellect, optimal, effective, information*

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### INTRODUCTION

At a time when the "interests of the individual and the priority of education" are recognized in Uzbekistan today, the science of pedagogy teaches the content, form and methods and principles of the formation of a free personality. The solution of complex tasks of education and upbringing of young people depends on the ideological beliefs, professional skills, talents and culture of the teacher, the use of modern pedagogical and innovative technologies, the activation of students [1, 2].

An important requirement for a modern lesson is to bring innovative technologies into the teaching process, to scientifically substantiate each subject, to determine the content and volume of material, taking into account the capabilities of students, to determine its complexity; linking with previously studied materials; substantiate the integration with one or more subjects, develop a system of assignments for students and their independent work; identify the material and technical basis of the lesson and enrich it with additional visual aids; the use of additional information (computer) tools and improving the content and quality of education, creating a problematic situation in the classroom. [6]

One of the important requirements for the course is to increase the effectiveness of teaching methods and techniques, innovative technologies, interdisciplinary connections, their strong interconnection.

### ANALYSIS OF THE LITERATURE ON THE SUBJECT

All didactic tools (maps, tables, pictures, colors, texts, visual aids) should be solved in the lesson, homework should be a logical continuation of the knowledge acquired by students in the lesson. It is effective to analyze each lesson. Has the goal of the lesson analysis been achieved, how much knowledge have the students gained, what shortcomings have been addressed? A number of questions such as Such an analysis will help make the lesson more meaningful in the future.

When it comes to the importance of modern educational technologies in educating students, the introduction of modern pedagogical and information technologies in the educational process, raising the education system to a qualitatively new level is an urgent task [2].

Today, in secondary schools, academic lyceums, vocational and higher education, the subject "Biology" is developed on the basis of innovative technologies, each of which has information materials on the conditions of training, pedagogical goals, objectives and outcomes, the curriculum, teaching methods and tools are integrated. Also, the biology teacher should create a technological map of the lesson, ie a step-by-step description of the joint activities of the teacher and the student on the educational goals achieved in this lesson before the lesson. During the lessons, various innovative technologies were introduced into the learning process in order to develop students' activity, free and independent thinking. Today, it is known from world experience that new, modern teaching methods are entering the educational process and are being used effectively [6, 7].

### RESEARCH METHODOLOGY

The main content of the current pedagogical process is the further development of science, the development of complex measures to attract talented and gifted youth to scientific activities, to create conditions for them to realize their creative and intellectual potential.

### ANALYSIS AND RESULTS

Of course, education is a product of consciousness. But at the same time it is an important factor that determines the level of consciousness and its development, that is, the formation and enrichment of the people's spirituality. Consequently, it is impossible to develop spirituality without changing the consciousness of the educational system on this basis. We must not forget that the foundation of our future is laid in educational institutions, in other words, what the future of our people will be like, how our children will be educated today.

It is known that the main link of secondary special, vocational education is the system of continuing education. In providing continuing education with the State educational standards and relevant educational programs, first of all, it is necessary to pay special attention to the fact that their meeting the level of world requirements is built on the basis of high spirituality. Raising a harmoniously developed generation has always been a noble dream of mankind. People with such a dream have always been considered the sages, the most respected intellectuals, the rulers of the lands of enlightenment and spirituality.

Secondary special, vocational education provides the necessary amount of knowledge, develops independent thinking, organizational skills and practical experience skills, helps to direct to the

profession and to choose the next stage of education. Modern specialists, regardless of their field of activity, have a wide range of knowledge in physics and computer science, sufficient skills and competencies in modern computer technology, information and communication systems, office equipment and their use, the basics of new information technology and its future. day, must have incorporated knowledge of the course.

Experimental research in the field of natural sciences, in contrast to previous experimental processes, in academic lyceums and vocational schools in all areas of science, ie natural sciences (physics, geography, chemistry, biology), exact sciences (mathematics, computer science). ), social sciences (history, law, basics of economics, sciences belonging to the category of national ideas), humanities (native language, literature, Uzbek, foreign languages) [1, 7]. Another aspect is that these educational institutions are not called experimental sites, but experimental research sites.

It is well known that research encompasses a wide range of meanings. The topics in the optimized curriculum are carefully reviewed by the researcher-teacher of each subject working in the experimental research area, and the topics that are more complex are selected from them. The Republican Center for Education also provides lesson plans on such topics for practical use.

In higher education institutions, which are an important part of the system of continuing education, the educational process is based on the fundamental knowledge acquired at a lower level. In particular, interdisciplinary connection, application of previous knowledge in new situations and enrichment of mutual logical thinking are important factors in the training of biology teachers in pedagogical higher education institutions. In particular, the role of cytology, histology and embryological knowledge in this regard is invaluable. This is because a student cannot fully understand biological processes without knowing cytology. Without the acquisition of histological knowledge, one cannot accurately imagine the structure of tissues, the structure of organs, and ultimately the structure of an organism.

The concepts and knowledge in the field of embryology make it possible to compare the similarities and differences in the development of individuals, species and organisms belonging to different systematic groups. Without knowing embryonic development, it is impossible to educate a modern biology teacher. In short, the science of "Developmental Biology", consisting of three modules of science, is one of the most important

disciplines of biologists who conduct fundamental research and pedagogical activities [4]. We consider it more expedient to organize the teaching of developmental biology on the basis of new approaches

The researcher-teacher first of all creates a clear technological map of each lesson. At this point, he can recommend new methods, techniques and technologies to the lesson. But the proposed method, technique or tools may not always be effective. Because if some modern pedagogical technology requires a lot of time and additional resources from the teacher, but the effectiveness of mastering is not accordingly, then, of course, such technology is abandoned. This means that the researcher-teacher must know which method, method or technology is suitable for a particular science, and have the ability to recommend it.

In our research, we aimed to organize teaching by ensuring the horizontal and vertical connection of developmental biology with other disciplines. In the acquisition of concepts and knowledge in the field of developmental biology, not only biological knowledge is sufficient, but also the concepts and knowledge of chemistry, physics, mathematics. We can conditionally call this a vertical (asynchronous) relationship. However, in developmental biology, disciplines such as botany, zoology, human anatomy and physiology, genetics and evolutionary theory, biotechnology, and genetic engineering are addressed over a specific course, which can be seen as a horizontal (synchronous) relationship with the sciences. This information serves to enrich the logical thinking, broadening the worldview of the emerging specialist biologist and biology teacher, as well as to expand his understanding of living nature [1, 7].

It should be noted that the provision of methodological services and the necessary recommendations should serve to enrich the information base of the student, who is the main consumer in the educational process, to expand their worldview, to facilitate the acquisition of information on a particular subject. They should provide practical and methodological assistance to the responsible methodologists of the research sites and strengthen cooperation in what areas they need knowledge, innovations and additional materials in order to enter the educational process without any problems. Then there is an opportunity to provide targeted methodological services necessary to ensure the effectiveness of work on experimental sites. Most importantly, our researchers-teachers of the experimental research platform, who are confident in the improvement of the education system, should

never forget that their conclusions today are important for the quality and effectiveness of tomorrow's education.

The use of pedagogical technology in the teaching of developmental biology shows that by designing the learning process, a teacher can achieve significant results even if he does not have extensive pedagogical experience. Therefore, it is important to define learning objectives in the organization of the educational process. Setting clear goals simplifies the monitoring and evaluation process and clarifies the process.

It is necessary to create conditions for free, creative work of students in the classroom. To do this, it is more useful to clearly design each part of the lesson, to adapt the teaching material to the level of mastery of knowledge, to explain a concept or knowledge not only on the same subject, but also from several scientific perspectives. The use of interactive methods along with traditional teaching methods is one of the important conditions to increase the effectiveness of the lesson. The main emphasis when using interactive methods is to allow students to work collaboratively. Interactive methods serve to form in the student free thinking, creative ability [3].

Today, the use of active teaching methods is the basis of pedagogical technology. Pedagogical technology is a systematic method of creating, applying and defining the process of teaching and learning, taking into account the interaction of technical and personal resources, with the task of alternative forms of education. The interdisciplinary teaching of Developmental Biology, which we want to recommend, serves to master the same science at a systematic, consistent and creative level.

## CONCLUSIONS AND RECOMMENDATIONS

The Republic of Uzbekistan is building a democratic state governed by the rule of law and an open civil society, ensuring the observance of human rights and freedoms, the spiritual renewal of society, the formation of a socially oriented market economy, integration into the world community. The main goal and driving force of the ongoing reforms in our country is the creation of conditions and effective mechanisms for the realization of the interests of the individual, his full development and well-being of man, outdated thinking and social behavior [5].

Monitoring and evaluating the quality of teaching processes, their analysis and correction will help to master the science at the required level.

In the process of introduction and implementation of teaching technology, it is necessary to take into

account all the components of the pedagogical system, their interconnectedness and interdependence, the psychological characteristics of the participants in the learning process.

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