

## USE OF INNOVATIVE TECHNOLOGIES IN TEACHING INFORMATICS AND INFORMATION TECHNOLOGIES

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### Abstract

This article presents the importance of innovative technologies and recommendations for their use in teaching "Informatics and Information Technologies" in general secondary schools.

**Keywords:** pedagogue, informatics, innovative teaching, methodological skills, educational content, interactive methods.

If we analyze the educational process, it consists of such parts as the purpose, content, form, method, means and control of education, and the teacher is required to be an active subject in this process.

Sh. Amanashvili in his research - "Pedagogical process is a joint binary (two-way) activity of the teacher and students, in which the teacher closely helps students to overcome and overcome the difficulties of learning science" - he says. The pedagogue helps the student in the educational process: explaining, reminding, giving advice, gaining confidence in the student, motivating, inspiring, inspiring, contributes to the formation and development of the student's personality.

The introduction of innovative teaching technologies into the teaching process directs teachers to creative research. For this purpose, the informatics teacher **must determine the purpose of teaching** for each lesson - why, for what purpose of teaching, **determine the content of teaching - what to teach, determine the form** of teaching - theoretical, practical, laboratory, how to organize independent education, **clarifying the tool** - what to use to organize the lesson, **determining the achieved result** - in which method (test, oral survey, written work, creating projects, etc.) performs activities such as organizing evaluation.

As we know, at present, the specific goals of the lesson are divided into three types, which include educational, educational and developmental goals.

The goal of education performs an innovative methodical function if:

- ✓ there is innovation in setting the goal, and it is ensured that its successful achievement is as open and understandable for the teacher as it is for the student and parents (a clear and understandable statement);
- ✓ appropriate use of sufficient auxiliary words in goal setting and planning. For example, words such as "... being able to perform", "... learning", "... applying", "... having innovative knowledge", "... being able to express innovative features" if the use of z structures, the concepts to be mastered as the basis of the goal, the actions to be performed and the communication and affirmations between them are used;

✓ if the setting of the goal represents the requirement of the state educational standards. that is, if the teacher's methodical skill is based on the requirements of the state educational standards, the goal is clear, thorough, maturely expressed, in the process of achieving the set goal, the student shows new aspects and rises to the level of innovation. In traditional methods, in most cases, both methodologists and teachers pay attention to the amount of materials, not the exact setting of the goal and its achievement, in modern education, the main focus is on setting the goal and using innovations to achieve it. shows that it is necessary;

✓ when setting the goal, attention is paid to the provision of its diagnosis. Assessment (assessment) provides a mechanism to successfully achieve the educational goal. Both the goal set in the educational process and the expected result are considered as a whole process that educates, educates and develops a person, consisting of educational, educational and developmental parts.

✓ if a strict sequence is followed in setting the goal.

In recent times, the content of education has changed radically, due to changes in the field of information technology in two directions. The first is the rapid development of the Internet and telecommunications, the ability to quickly learn about scientific changes and news in any part of the world, the ability to increase knowledge, and at the same time software, PDV, information resources from the Internet, web technology, mobile technology, cloud technologies and the ease of mastering the Internet interface, secondly, the development and use of CD-ROM (Compact Disk Read Only Memory) CD-ROM (Compact Disk Read Only Memory) and external memory devices (flash drives) of large (hundreds of gigabytes) storage devices. With their help, it is possible to carry optional hypertext, multimedia PDV, use of electronic educational resources, as well as the fact that ICT is constantly developing, every workplace in the education system is automated, and information communication tools are used.

**Innovations aimed at ensuring the integrity and continuity of computer sciences .** The main task of the education system today is to make students who love our Motherland, rely on their knowledge and talent, and who can independently acquire thorough knowledge using modern ICT, contribute to making Uzbekistan a powerful country. It consists in raising a healthy, well-rounded person in all respects.

In our country, the types of education in informatics are continuous, including pre-school education, general secondary education, professional education, higher education, post-graduate education, personnel qualification improvement and consists of their retraining and out-of-school education.

We recommend the following to the teacher of "Informatics and information technologies" in order to increase the student's interest in becoming a professional in the educational process at school:

➤ to organize the daily lesson using interesting, innovative pedagogical and information technologies, to be able to convey the secrets of science, to be able to instill in the heart of the student, explaining with live examples that informatics is entering into all spheres of society today;

➤ based on the metasubject approach to science, explaining the inextricable connection between specific sciences, especially physics and mathematics, chemistry, music, foreign language and other sciences, instilling knowledge of informatics in the minds of students in class and extracurricular circles, in "Zakovat" competitions to go

➤ by organizing each lesson using pedagogical and information technologies, interactive methods, to increase students' motivation, to think independently, to create small programs and get

results, to see the results of tasks given on the computer, to make independent decisions, to create creative activities to achieve, etc

interests and acquired knowledge during school, students apply for higher education courses in the field of informatics and become a student. Now their interest in acquiring a specialty is realized due to the expansion of a conscious, thoughtful, worldview.

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