

APPLICATION AS AN INTERACTIVE METHOD IN TEACHING CHEMISTRY

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Abstract: *In this article, the theoretical importance of using interactive media and interactive educational technologies as a method in improving chemistry and its teaching methodology in higher education is highlighted. The use of interactive media and interactive educational technologies as a method in improving chemistry and its teaching methods in higher education not only expands students' worldview, but also encourages independent thinking, creative research, and increases their initiative.*

Key words: *Interactive media, method, modern pedagogical technology, smart technology, discussion.*

Introduction: Today, the use of interactive methods in the teaching of chemistry is closely related to the ideas of the basic methodology. The use of interactive forms and methods of teaching helps to activate the cognitive activity of students, to independently understand the educational material. Interactive methods allow you to work on yourself, practice and develop knowledge, skills, new skills, that is, the main competencies of the student: learning, searching, thinking, cooperation. It is interactive education that helps the teacher to organize cognitive activities, so that almost all students participate in the process of research and learning. When studying the concept of interactive in teaching chemistry, the term "interactive, interactive" was first used in pedagogy in 1975 by the German researcher Hans Fritz. Currently, the concepts of "interactive education, interactive method, interactive media" are being formed and improved in the field of pedagogy. Scientists N. Suvorova, S. Zair-Bek understand interactive education as interactive communication, in which students learn to think critically, make decisions, participate in discussions and communicate with other people. M.V. Clarin emphasizes the need to stimulate students' cognitive activity in every way, using various types of interactive methods, relying on imagination, analogies and metaphors, working with conceptual models, etc. Speaking about the use of interactive educational technologies and media in education, O. Pometun believes that it means solving problems related to chemistry based on the modeling of life situations, the use of role-playing games, and the analysis of situations and situations. Research methods Analyzing the use of interactive media and interactive educational technologies as a method in teaching chemistry, interactive media in chemistry are mass media with the ability to directly reflect on chemistry and communicate with the audience. Their implementation is carried out with the help of mobile phone, video, satellite and

Internet connection, computer and video games. Also, interactive educational technologies include:

- Business game
- Case technology
- Smart technology
- Lecture with errors
- Brainstorming

This is a joint study and discussion of a certain topic, task and event among all participants of the educational process. Conducting debate exercises stimulates students' cognitive activity, helps them acquire new knowledge more meaningfully by preparing arguments on the discussed topic and defending their position. Computer simulations are also one of the types of interactive educational technologies. They represent the students' work with a computer-aided virtual model of the object being studied. The use of computer simulation technology allows students to learn to work with software complexes necessary for their professional activities in conditions where real objects and events do not exist for various reasons, theoretical knowledge, Business game modeling of a problematic professional situation, the role of participants in a certain situation in solving a problem in the process of interaction, it is achieved by establishing rules, developing a plot, forming teams of players and "groups of experts", and the final decision, i.e. the solution of the problem, is evaluated. Conducting a business game helps students acquire professional knowledge and skills, solve non-standard professional tasks, and organize independent education in the process of joint preparation of team decisions. Case technology is the solution of a problem by students in the form of a description of a problem situation. The implementation of case technology allows students to develop the ability to use a complex approach to solving professional, practical problems, stimulates the development of critical, analytical, creative thinking and soft skills in students. In smart technology, knowledge is provided simply, simply, purposefully, motivationally, meaningfully, as well as closely related to other fields of science, accurate information based on realistic facts, correctly distributed time. The lecture with errors implies an analytical activity aimed at identifying the mistakes of the students planned by the teacher during the lecture. Finding mistakes in the lecture, then analyzing and correcting them, helps to strengthen the knowledge of students, to master the educational material, its most difficult aspects. Brainstorming increases students' creative activity, expands their existing knowledge on a specific topic, develops critical and analytical thinking. Video conference, video communication - develops the ability to constructively, logically and concisely describe communication skills, the ability to present the results of the work performed. A webinar, or webinar, is organized through a virtual classroom that provides online feedback from participants using computers connected to the Internet and special software. The webinar is used for classes for study groups of 12-15 people. The recommended duration of the webinar does not exceed 1.5

astronomical hours (2 academic hours). The training is used in classrooms for study groups of up to 25 people. Conditions should be created for the free movement of students in the classroom, the possibility of arranging seats in the "practice circle" should be provided. The project method is used for study groups of up to 30 people. It can be done individually, in pairs or by dividing students into groups (5-6 people each). Pedagogical scientists M.A. Danilov and B.P. Esipov divides teaching methods into the following groups according to the goals of organizing the educational process and the stages of its implementation: acquisition of knowledge; formation of qualifications and skills. Practical application of the acquired knowledge; creative activity; strengthening of acquired knowledge, methods of testing knowledge, skills and abilities. Results and Discussion The political, economic, social changes and reforms currently taking place in our country lead not only to changing educational standards, introducing new science courses and subjects, but also to changing the methods used in classes, interactive media that make students interested in classes and actively participate in them. caused the need to use various interactive educational technologies as a method. That's why in foreign pedagogy, the main attention was focused on the formation of these qualities in students. Experience has shown that the use of interactive media and interactive educational technologies as a method for the formation of these qualities and skills in students gives positive results. These methods are aimed at implementing the lesson in a different way, especially at ensuring students' active participation in the lesson.

Conclusion: Interactive media and educational technologies, which serve to form the creative thinking of teachers and students, are an important tool in the development of students' creative activities. The use of interactive media and interactive educational technologies in the teaching of chemistry in higher education saves time, makes the lessons interesting and relevant to the times, and increases the activity of students in learning, teaches independent creative thinking.

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