

## Methodology of Developing Students' Attention in Chemistry Lessons with The Help of ICT

**Fayzulloyeva Sadoqat Furqat kizi**

Teacher at the Asia International University

Email: [sadoqatfayzulloyeva67@gmail.com](mailto:sadoqatfayzulloyeva67@gmail.com)

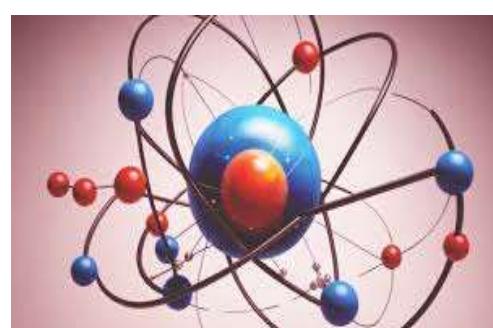
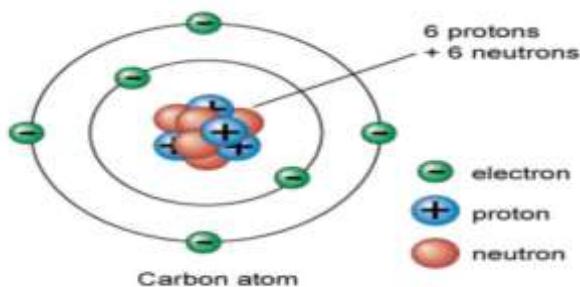
**Abstract:** This article studies the attention and interests of schoolchildren. Their interest in information and communication technologies is determined. In order to enrich the imagination of students and increase their interest in science, methods of visually presenting concepts such as atoms, molecules, nuclei, protons, neutrons, and electrons, which are the basis of chemistry, are described. It is described how concepts such as atoms, which are difficult to imagine, can be created using modern pedagogical technologies. This article describes the methods of passing through various problem situations, interactive methods such as knowledge wheels, who is agile, and the use of effective information and communication technologies. The results of the study show that visually presented information increases the ability to understand processes that are difficult to imagine.

**Keywords:** Atom, Molecule, Nucleus, Electron, Neutron, Proton, Cluster, Brainstorming, Eureka

### Introduction

Teachers also play a significant role in radically reforming the education system, changing the mindset and worldview of our students and youth, and increasing their confidence in their future [1]. Another factor that plays an important role in the successful solution of these tasks is the awareness of the essence of modern educational technologies by employees of the continuing education system, teachers, and educators, as well as their ability to effectively use them in the educational process, as well as the development of a creative approach to organizing the educational process.

The ability of teachers to organize the process of classes aimed at teaching the basics of specific subjects in non-traditional forms, to design the educational process based on perfect templates, and to rationally use these projects can guarantee the thorough and deep assimilation of theoretical knowledge by students and the formation of practical skills and competencies in them. Main part. Information and communication technologies are a scientific pedagogical research aimed at studying the effectiveness of the educational process. This process is a necessary factor in the assimilation of deep knowledge by students. Nowadays, modern pedagogical technology has become an important tool in the development of students' consciousness and has taken a leading place in our social life. It is widely used in the development of the consciousness and worldview of schoolchildren, in the independent implementation of chemical processes, in solving problems, in the classification of inorganic and organic substances.



In the lesson, before explaining a new topic, the teacher asks students questions about chemistry on the topic covered. Students participate in the question-answer session based on their knowledge. The project method is widely used to reinforce the task given to the class, because the teacher assigned the children to collect information about the body, simple and complex substances themselves. The main advantage of the design method is that students are required to search for the knowledge and skills they are learning from various sources, study it independently, and present their analysis and conclusions. The process of deepening the knowledge of chemistry among schoolchildren using innovative

pedagogical technologies and information and communication technologies was examined. The knowledge acquired by students during the lesson was monitored. Their results showed that the lesson was highly effective. It was found that the visual visualization of the structure of substances, comparative analogies, and, first of all, the effectiveness of the lesson can be increased only when students' education on the subject is carried out at the required level, otherwise, due to the large amount of time spent, the lesson plan cannot be fully implemented.

This process creates a basis for the formation of scientific knowledge. This method increases the possibility of introducing an approach to the field of education. The approach of such technologies to the educational process leads to the effective organization of practical classes, the ability of young people to find solutions to shortcomings, and to be interested in pedagogical innovations. Using modern pedagogical technologies, the concepts of atom, molecule, were explained to schoolchildren. The smallest particle that retains the properties of chemical elements is called an atom. The smallest particle that exists, consisting of several atoms, and retaining the properties of atoms, is called a molecule. Molecules are made up of atoms in their place.

An atom is a collection of protons and neutrons, with negatively charged electrons orbiting a positively charged nucleus. Atoms are generally stable and remain in their original state for a long time. However, some atoms decay over time into other atoms as a result of processes occurring within the nucleus. Such atoms are called radioactive atoms. The structure of atoms, molecules, ions, and nuclei was shown in 3D format using information and communication technologies. Scientific and methodological research and experiments related to them were shown. The students were given the following comparative explanations about atoms and molecules. (Similarities were mentioned such as the fact that there are as many atoms and molecules in an apple as there are apples on the globe).

## Conclusion

The study shows that the effectiveness of ICT integration depends mainly on adequate teacher training, reliable technological infrastructure and addressing accessibility issues. Overcoming these challenges is important for maximizing learning. Advantages of ICT tools.

## References

- [1] D. L. Nelson and M. M. Cox, *Principles of Biochemistry*, 5th ed. New York, NY, USA: W.H. Freeman and Company, 2008, p. 377.
- [2] J. H. Golbeck, "Structure, function and organization of the Photosystem I reaction center complex," *Biochimica et Biophysica Acta*, vol. 895, no. 3, pp. 201–215, 1987, doi: 10.1016/0005 2728(87)90147- 8.
- [3] S. Fayzulloyeva, "Results aimed at improving the efficiency of information and communication technologies in the process of teaching chemistry," *Intelektualitas Jurnal Penelitian Lintas Keilmuan*, vol. 2, no. 1, pp. 7–7, 2025.