

INTERNATIONAL EXPERIENCE IN TEACHING SCIENCESBU UZING INTERACTIVE WHITEBOARDS

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Abstract: In this thesis written about some interactive methods for enhancing the lesson process. Also highlighted many theory task and ways to improve their skills for future teachers and coaches. Furthermore, we discussed some useful ways of teaching students in different subjects via white boards.

Keywords: modern devices, interactive methods, whiteboards, distance learning

In recent decades, digital technologies have become an integral part of the educational process. In teaching, especially in the field of science, special attention is paid to the use of interactive whiteboards. So, it is possible to imagine the experience of using interactive whiteboards in education, their advantages and development prospects. Interactive whiteboards are modern devices that combine the functions of a projector and a computer. They allow the teacher not only to project images onto the board, but also to interact with them using a touch screen or a special pen. It is no secret that interactive whiteboards are widely used to increase the efficiency of learning subjects. During the lesson, teachers use interactive whiteboards to demonstrate live examples and visualize concepts of political, cultural processes taking place in the world and realities that attract language learners based on their age and interests. Thanks to this, students get a clearer idea of the material and learn new knowledge more easily. In this process, language or science learners achieve the following results:

- ☐ they take lessons aimed at developing new knowledge,
- ☐ They take lessons aimed at teaching skills and competencies.,
- ☐ they test knowledge repetition and generalization lessons in practice,
- lessons aimed at reinforcing skills, assessing and evaluating knowledge — expedition (field trip)
- lessons — are also conducted in the form of practical activities. Competition-based lessons, such as
- test trials, contests, and other interactive methods, help strengthen and consolidate the material
- learned.

It is considered appropriate for future educators to apply the following aspects that help students retain theoretical concepts and new terminology of the subject in their memory. Visualization: using interactive whiteboards allows you to visualize abstract concepts and processes within the subject, which makes them more accessible and understandable for students. With the help of interactive

whiteboards, the teacher can create interactive lessons that include tasks, tests and games, which will help students actively participate in the learning process. Interactive whiteboards allow you to use various multimedia resources, such as animations, videos and interactive simulations, for more visual and interesting learning. The use of interactive whiteboards creates a modern learning environment that meets the requirements of the modern world and prepares students to use modern technologies in their future professional activities. In addition to the existing benefits, interactive whiteboards have the potential for further development and improvement. Their use in scientific education can be expanded by developing new software products and applications specifically tailored for a particular field of knowledge. Also, an important direction of development is the integration of interactive whiteboards with other modern technologies, such as virtual and augmented reality, which allows you to create a more interesting and effective learning environment. In the modern world, education is becoming increasingly digital and technologically oriented. One of the most innovative technologies introduced into the educational process is interactive whiteboards. They are becoming an integral part of language learning, in particular. When using interactive whiteboards in education, they are modern analogues of traditional magnetic marker boards, enriched with touch screen functionality and the ability to interact with digital materials. They allow the teacher to create interactive lessons that include various multimedia elements, such as images, videos, animations, and interactive applications.

The use of interactive whiteboards in various disciplines is of particular importance. They allow you to visualize complex concepts and processes, which makes them more accessible and understandable for students. For example, in natural science lessons, they can be used to demonstrate cell structures or biological processes, and in chemistry, to model chemical reactions. Interactive whiteboards also help to activate students. Thanks to the ability to interact with the whiteboard, they can participate in the lesson, solve problems, conduct experiments and create their own projects. This helps to develop students' critical thinking, independence and creative potential. The prospects for using interactive whiteboards in science education are very encouraging. With the development of technology and the emergence of new software and hardware solutions, the functionality of interactive whiteboards will continue to expand. The possibilities for visualizing and interacting with digital materials are becoming more diverse and easy to use. The further development of interactive whiteboards is also associated with integration with other technologies, such as virtual and augmented reality. This allows for a more immersive and interactive learning environment, where students can immerse themselves in virtual laboratories, conduct experiments, and study various phenomena and processes. In addition, the use of interactive whiteboards helps to move to more flexible and personalized teaching methods. Teachers can create personalized teaching materials tailored to the individual needs and abilities of each student. This helps to increase the effectiveness of the learning process and improve learning outcomes. Interactive whiteboards play an important role in modern science education. They allow you to visualize complex concepts, activate students, and create an interactive learning environment. The prospects for the use of interactive whiteboards in this area are very encouraging, and with the development of technology, they will continue to play an important role in improving the quality of education and developing teaching techniques. Against the background of the rapid development of technology in the modern world, education cannot be left behind. The introduction of new technologies into the educational process in the field of natural sciences is especially important, where

it is important to ensure not only the transfer of information, but also the practical development of the material. In this regard, interactive whiteboards (IW) occupy a special place, which provide unique opportunities for teaching and assimilation of knowledge. In this article, we will consider the experience of using interactive whiteboards in scientific education, as well as the prospects for their application. Interactive whiteboards are multimedia devices that allow teachers and students to interact with the content of the lesson. With their help, you can display graphs, tables, animations, videos, etc. The experience of using interactive whiteboards in scientific education shows that they are effective in attracting students' attention, making the learning process more interesting and engaging. Interactive whiteboards are a powerful tool for modern scientific education. Their use promotes active and interactive participation of students in the learning process, provides access to various educational resources and helps to develop skills in working with modern technologies. The prospects for the use of interactive whiteboards in science education are very broad and include the development of new technologies, integration with artificial intelligence and the creation of a unique learning environment.

Thus, the use of interactive whiteboards in science education opens up new opportunities for improving the quality of education and increasing students' interest in the subjects being studied. Experience shows that this is an effective tool that helps to develop students' skills in science. The prospects for the development of this technology indicate its importance and relevance for the modern educational environment.

List of used literature

1. Yakovleva, N. B. Information Technologies in Education. Informatization of Education, no. 4 (2009): 70–73.
2. Chernova, E. M. Information and Interactive Technologies as a Resource in Teaching Mathematics. In Methodology of Teaching Mathematical and Natural Sciences: Modern Problems and Development Trends, 2015.
3. Vasilyeva, N. G., A. L. Kozlova-Kozyrevskaya, and V. G. Ogeyko. Practice-Oriented Approach in Teaching Natural Sciences. In Priorities in Modern Science Education: Problems and Prospects, 2021.
4. Ananin, D. P., et al. PowerPoint and Interactive Whiteboards — What's Next: Digital Educational Platforms in the Practice of Russian Teachers. World of Science, Culture, and Education, no. 6 (97) (2022): 251–255.
5. Abdurakhmonov, Sh. Didactic Methods and Tools Used in Designing and Implementing Interactive Learning Strategies. Scientific and Methodological Work. Namangan: Namangan State Pedagogical Institute, 2012, p. 50.
6. Azizkhodjaeva, N. N. Pedagogical Technology and Pedagogical Mastery. Tashkent: Tashkent State Pedagogical University, 2003.