



**AUGMENTED REALITY TECHNOLOGIES (VIRTUAL REALITY,  
AUGMENTED REALITY) IN THE INTELLECTUAL AND CREATIVE  
DEVELOPMENT OF CHILDREN**

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**Abstract**

This article discusses and analyzes the integration of augmented reality technologies (Virtual Reality, Augmented Reality) into the content of education aimed at developing children's skills in working with information.

**Keywords:** Virtual reality, artificial reality, media education, intellectual and creative abilities.

The integration of artificial and augmented intelligence technologies (Virtual Reality, Augmented Reality) into the content of education is one of the most modern media education technologies in the development of children's intellectual and creative abilities. Virtual Reality (VR, English Virtual Reality, SR, Artificial Reality) is a world created by technical means. Virtual reality is transmitted to a person through his senses: sight, hearing, touch, etc. Virtual reality imitates both the impact and the reaction to the impact. A computer synthesis of signs and reactions of virtual reality is carried out in real time to create a reliable complex of real sensations. Virtual reality objects usually behave close to the behavior of similar physical reality objects. The user can influence these objects according to the real laws of physics (gravity, water properties, collisions with objects, reflections, etc.). However, often for entertainment purposes, users of the virtual world are allowed more than is possible in real life (to fly, create and feel all sorts of objects).

Virtual reality should not be confused with augmented reality. Their main difference is that virtual reality builds a new artificial world, while augmented reality only introduces individual artificial elements into the perception of the real world.. Augmented reality and virtual reality are reality technologies that enhance or replace the real environment with a simulated environment. Augmented Reality (AR) augments your surroundings by adding digital elements to a live view, often with the help of a smartphone camera.

Virtual Reality (VR) is a fully immersive experience that replaces the real environment with a simulated environment.

In AR, the virtual environment is designed to co-exist with the real environment to be informative and provide additional information about the real world that the user can access without having to search. For example, industrial AR apps can offer immediate troubleshooting information when a phone is pointed at faulty hardware.

In the development of children's intellectual and creative abilities, virtual reality includes a complete ecological simulation, replacing the user's world with a completely virtual world.



While both virtual reality and augmented reality are designed to provide the user with a simulated environment, each concept is unique and includes different use cases. In addition to entertaining scenarios for kids, augmented reality is increasingly being used by businesses to create informational overlays that add useful real-world scenarios.

Along with the development of new technologies in the world, new areas and specializations are rapidly emerging in the education system. These areas and areas are more related to information technology, and as the intellectual abilities of children develop over time, their teaching methods, as well as the teaching methods of educators and teachers, change radically. This, in turn, requires separate scientific research in this direction. At the same time, the main attention is paid to the search for new methods and ways of comprehensive education of young people in the digital world.

As we mentioned above, technologies such as mobile phones, tablets, smartphones and various game consoles are developing very advanced from the basic tools that keep children occupied both mentally and physically. And we need to create new methods, methods and tools that can channel the intellectual and creative abilities of children in the right direction with the help of these technologies. These methods and tools should be technologies that reveal aspects that are different from real life, realizing their interests and aspirations through virtual reality, i.e. artificial intelligence. The integration of these scientific technologies into the existing curriculum is a significant innovation, especially in the early childhood education system. After that, it will be necessary to prepare teachers who are able to deeply master information technologies, able to give children sufficient knowledge, skills and competencies in these subjects.

By creating various didactic models that develop the intellectual and creative abilities of children on virtual educational technologies, teachers form the knowledge and skills of a new generation of personnel capable of mastering this subject in depth. The following tasks should be taken as the main goal:

- revision of the work practice of teachers-teachers in the education and upbringing of children;
- Development of a mechanism for integrating virtual educational technologies into the curricula of preschool educational organizations;
- Development of appropriate recommendations regarding the pedagogical advantages of virtual educational technologies;
- Creation of a collection of didactic materials suitable for the form of virtual learning, increasing the intellectual abilities of children;
- Enriching children's knowledge of media literacy in order to regularly develop their intellectual and creative abilities;

Thus, the development of the intellectual and creative abilities of children through artificial intelligence (Virtual Reality, Augmented Reality) is one of the most effective and efficient methods today. We used virtual 3D glasses to show educational videos during the pilot test. This process was met with great interest among children. But due to the small number of glasses in the course of the experiment, we encountered difficulties. Thus, the role and importance of didactic materials and equipment that can be used in the virtual education of children is more important than ever. Because this method not only gives children new ways

of learning, but also gives great knowledge in terms of a deeper understanding and presentation of the world around them through various media. But the role and importance of the educator-teacher, equipment and didactic materials that can be used in virtual education is more important than ever.

#### **List of Used Literature**

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