Tleudin Y.A.

EKSTU named after D. Serikbaev

The object of research of the master's work is the elements of design and robotics of the IOS AOO NIS.

To achieve the research goal and test the formulated hypothesis, you need to perform the following research tasks:
1. Describe the concept of information and educational environment of AOO NIS.
2. give an overview and analyze the existing design tools and robotics used in the preschool education system.
3. to Offer technologies for the application of software and hardware design elements and robotics in the IOS of AOO NIS.
4. build a model of the information and educational environment of AOO NIS based on the use of software and hardware design elements and robotics.
5. perform testing of the software and Hardware of the IOS with elements of design and robotics in the process of teaching preschool children and justify its effectiveness.

Topic "Software and hardware support for design elements and robotics of the information and educational environment Of the Autonomous educational organization Nazarbayev Intellectual schools»

Today the informational nature of the modern educational environment it acts as one of its most important properties. Note that the recognition of this properties are not only necessary for understanding and research the content of the educational environment, but it is also necessary for practical use, transformation, development of the educational sphere, development methodology of education and implementation of its goals in modern conditions.

Research hypothesis: an information and educational environment will be formed in AEO NIS if:
− high-quality selection of software and hardware for construction and robotics that meet the requirements and educational program of the Republic of Kazakhstan will be carried out;
− a model of the information and educational environment of AOO NIS will be built, the elements of which will be software and hardware;
− testing of the implemented model of the information and educational environment with software and hardware design elements and robotics will show positive dynamics.

Research methods: system approach; mathematical and software tools for 3D modeling; methods and algorithms for controlling robots and robotic systems.