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VISUAL ORGANIZATION OF GEOMETRY LESSONS WITH COMPUTER SOFTWARE

Submission Date: May 07, 2022, **Accepted Date:** May 17, 2022,

Published Date: May 28, 2022

Crossref doi: <https://doi.org/10.37547/ijp/Volume02Issue05-04>

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ABSTRACT

Improving the effectiveness of lessons, which are the main organizational part of the educational process, the organization of lessons in the form of demonstrations is one of the most pressing issues of education today. We now live in the 21st century - the age of information technology. Today, the use of information technology in the introduction of pedagogical technologies in the educational process serves to dramatically increase the effectiveness of education. There are several ways in which teaching and learning can be organized. Classes can be organized in the process of organizing with the use of new advanced pedagogical technologies and modern information technologies. In today's world, there is a growing interest in the use of computer graphics in the educational process. The organization of lessons using computer graphics and computer programs in the process of lesson organization creates several conveniences for both the teacher and the student. Geometry lessons by a teacher are given in the article GeoGebra 3D, MS PowerPoint, When created using computer programs such as Macromedia Flash MX, 3D Maxstudio, Matlab, it is easier for students to understand and master the topic, and in this regard, the teacher can achieve very good results in the meaningful organization of the lesson.

KEYWORDS

GeoGebra 3D, MS PowerPoint, Macromedia flash MX, 3D Maxstudio, Matlab.

INTRODUCTION

Nowadays, when science and technology are developing rapidly, it is necessary to organize classes using modern information technologies. We all know that today the information and communication system is developing at a high level in the world, and this, among other things, is entering the educational process and contributing to its better organization. In such conditions, it is natural that the theoretical and practical aspects of human activity are constantly updated. Pedagogical activity is also no exception as a separate and complex type of work. The various changes taking place in our society place important tasks on teachers. These tasks are to nurture well-rounded, independent-minded, creative, intelligent and sensitive young people and require a modern teacher to constantly innovate in creative research, reading and teaching. Recognition of the XXI century as the age of information technology by our scientists, the development of pedagogical and information technologies in all areas, including in education, and the widespread use of new information technologies lead to more effective and high results than traditional teaching methods. Therefore, the use of information technology in the introduction of pedagogical technologies in the educational process, and the constant search for increasing the effectiveness of education have become a necessity today. There is a growing interest and demand for the use of computer graphics in education.

Improving the effectiveness of lessons, which are the main organizational part of the educational process, the formation of world-class knowledge, skills and abilities of students through the use of advanced pedagogical technology and modern information technology in teaching, providing the educational process with material, technical and information base, high The training of qualified personnel is of high quality, educational, methodological, scientific and creation of didactic materials, the interrelationship between the education system, science and industry is a pressing issue. The formation of the student's mind in the organization of the educational process helps to deepen the understanding of the subject. The importance of using a variety of visual aids is to encourage the student to emotionally understand what is being studied and the events being observed, to observe them, to make sure of the unity of logical and theoretical elements, and finally to apply theoretical knowledge in practice. The main part. In this article, we will look at how many programs can be used to create visual aids in the process of organizing geometry lessons. For example GeoGebra 3D - the advantage of this program is that we can describe the topic more clearly to the reader. With the help of this program, it is possible to draw all the drawings on the science of geometry.

THE MAIN PART

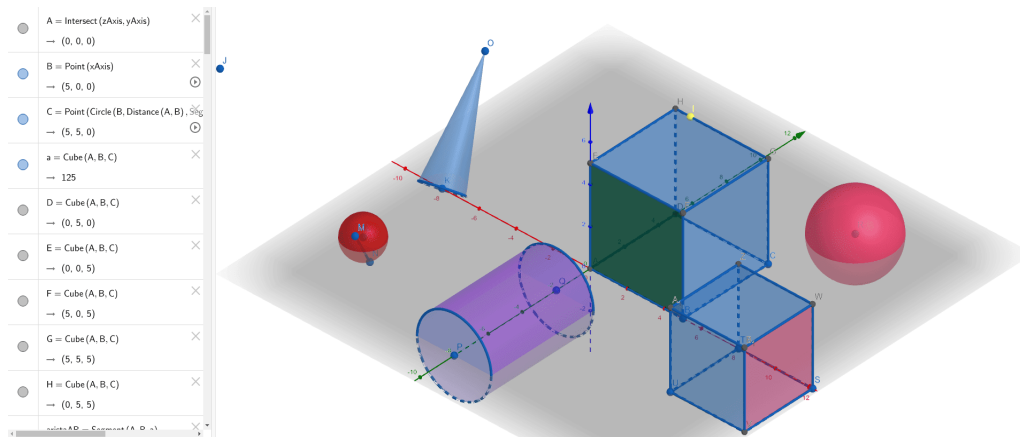


Figure 1. Geometric figures are drawn in GeoGebra.

It should be noted that the importance of such computer programs is incomparable. Such programs are as follows: MS PowerPoint, You can also add programs such as Macromedia Flash MX, 3d max studio, (Figure 3) Matlab. (Figure 2)

There are also mobile applications mentioned above, to which Adobe Flash can be added. The advantage of this program is that it has a high level of visualization,

it is possible to create a variety of animations with the help of MS Powerpoint. various multimedia, it is possible to create tests related to any topic. Computer graphics can be widely used not only in computer science classes but also in many other disciplines, including geometry.

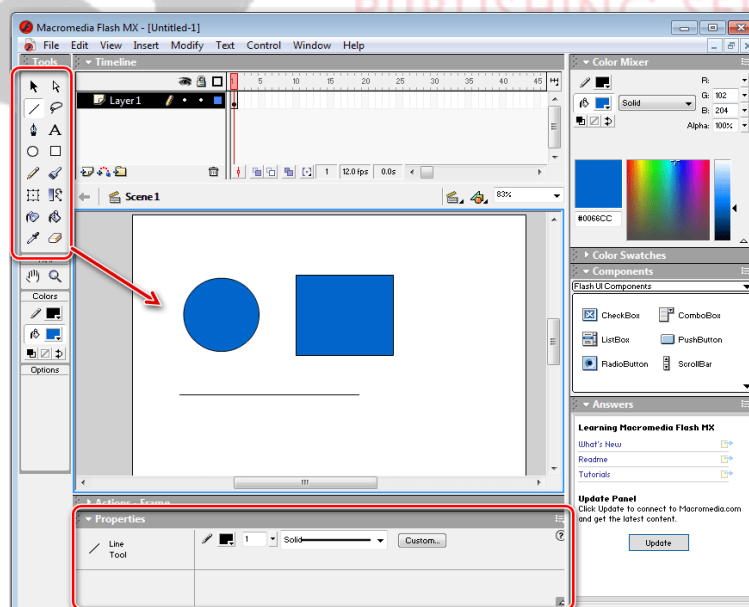


Figure 2. Figures created in Macromedia Flash MX.

Creating spatial objects in the imagination of students and using them to make sections with planes gives positive results. (Figure 1)

We have already mentioned the geometric shapes in the pictures in our article.

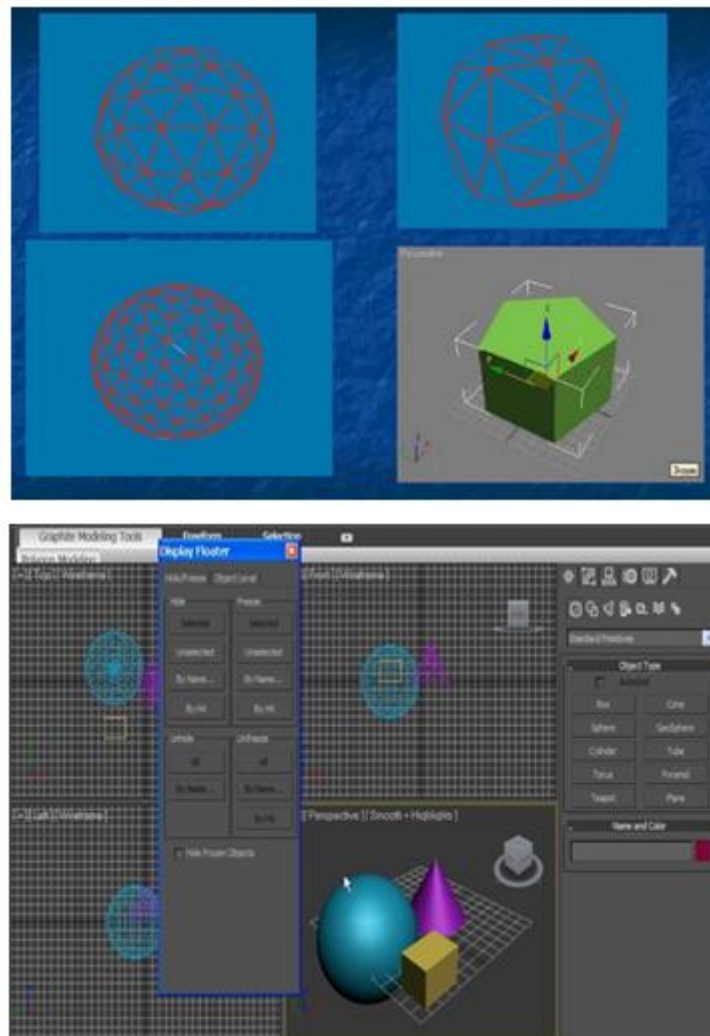


Figure 3. Spatial objects created using 3dsMax software

All levels of education should be organized in such a way as to provide young people with in-depth and sound knowledge as well as comprehensive thinking. The essence of pedagogical technology is to engage students in learning and to achieve full mastery of knowledge.

CONCLUSION

The use of computer graphics and computer programs also provides several benefits for the teacher. for example, it saves time, allows it to be used more efficiently, and increases the accuracy of the drawing



than the drawing on the board. If the teacher organizes the geometry lessons using the computer programs mentioned above, it will be easier for the students to understand and master the topic. I think that the teaching process will be more meaningful and interesting, and the teacher will achieve a lot.

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