

Formation of Distance Elective Classes in Mathematics for Secondary School Students

Kodirov Komiljon Raximovich¹, Mamatkodirov Mahammadali Mamatisakovich²

Anatatsiya: The article is devoted to the organization of distance elective classes in order to improve students mathematical thinking and creative abilities, develop interest in the subject of Mathematics, form a stable motivation for regular classes, and also provides recommendations on the use of information and communication technologies and the choice of distance learning systems for conducting distance elective classes.

Kalit so'zlar: Olympiad problems, distance learning, elementary mathematics, Moodle system.

Elective classes play a special role in the fact that students of secondary schools who have an interest and ability in any subjects, including mathematics, can communicate independently, solve the task and solve it. The purpose of organizing elective classes is to broaden the horizons of students, form their logical and comprehensive thinking, increase their interest in the subject, develop their worldview and a number of personal qualities through in-depth study of subject areas. Back in the XIX-XX centuries, some teachers noted that in schools, along with teaching a subject according to a mandatory program, it is much more successful if extracurricular classes in extracurricular subjects are held for willing students. At such lessons, the teacher forms a certain group of students in the classroom, taking into account their knowledge and interest in the subject, and with the provision of information on essential aspects of the subject that are not provided for by the mandatory program, their interest in the subject increases.

In the era of rapid development of information and communication technologies, distance learning, using its enormous capabilities, has become widely used in everyday life. In particular, it is used in general education schools, higher educational institutions, in postgraduate education and in advanced training courses.

In this article, we will consider ways to increase interest in the subject, increase mathematical thinking and creative abilities, as well as the formation of sustainable motivation for continuous learning by solving non-standard problems of elementary mathematics during distance elective classes for students of secondary schools specializing in mathematics. To begin with, let's consider some options for conducting distance optional training:

Distance study groups for students of the Academic Lyceum and specialized state secondary school in mathematics. In this circle, assignments and questions for students are sent by e-mail every two weeks. After several classes, students take control papers and receive appropriate recommendations.

Through distance learning programs, distance learning to solve non-standard problems of elementary mathematics and Olympiad problems. These classes can be conducted using the ZOOM program or video tutorials. When forming distance elective classes, attention should be paid to the choice of information and communication technologies, the formation of a work program that fully covers the goals and objectives of the course. In addition, it is advisable to use the Moodle system of distance learning as a basic control system for distance optional education, since its capabilities are great and convenient for users who do not have special training in the field of computer science. Tasks are processed by the submit button, which sends documents in advance and later for evaluation. With the help of the Moodle e-learning system, you can remotely train and test students from all over the world, and not just from a close distance. It has been translated into more than 100 languages and is also used by major universities around the world. Also, through the management system, it will be possible to view the attendance log, completed tasks, received task scores and various news.

In addition, Google Classroom allows schools and teachers to create virtual classrooms for sharing and communicating with class members in a secure environment. Depending on the admin settings, teachers can create classes or have public classes created for them. Teachers can then share assignments and materials separately or in this limited group, and interfaces allow students to track individual activities. This is the standard for LMS. Since it uses Google Apps, tasks and materials are located in the Google Drive folder. Users will receive email notifications about new actions, such as comments or changes to tasks. In it, schools can allow parents or teachers to use conclusions about students' activities. This means that instead of having full access to them as students, Parents enter the classroom to check the progress of students. Parents may receive e-mail messages containing gaps in the assignments performed by their children and their future work, as well as in the assignment or message received by the teacher. Distance elective classes organized in this form are not organized en masse, but in small groups, that is, for students with a desire and desire. This will help these students to delve deeper into mathematics and study all its aspects.

¹ Candidate of Physical and Mathematical Sciences, Docent

² Teacher of the department of information technologies, Fergana State University

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