



METHOD OF TEACHING COMPUTER GRAPHICS USING MOBILE TECHNOLOGIES IN STUDENTS' EXTRACURRICULAR ACTIVITIES

Makhsetova Mukhabbat Makhsetovna

Basic doctoral student of Nukus State Pedagogical Institute

Abstract. *This article presents the problems of organizing students' extracurricular learning activities and the structure of teaching computer graphics using mobile technologies in students' extracurricular learning activities.*

Keywords: *mobile technology, computer graphics, structure, extracurricular activities, Google Classroom.*

Today, most of the population of our country has phones, smartphones, and tablets, from which students spend their time for various purposes, that is, watching videos, playing online games, following social networks, and exchanging information with peers through Telegram networks. As a result, this leads to a decrease in students' interest in subjects, superficial completion of tasks given by the teacher, or obtaining ready-made answers from the global network. Therefore, at present, increasing the culture of effective use of mobile technologies by students is one of the urgent problems of education [1, 2, 3]. One of the solutions to such problems is the development of a methodology for teaching students subjects, including computer graphics, using mobile technologies.

The use of mobile technologies in the study of computer graphics provides schoolchildren with the opportunity to avoid unnecessary information on the global network to a certain extent. Mobile devices provide interaction of participants with different levels of interactivity and management of the educational process. At the same time, the following is achieved: online interactive communication of students with peers and teachers; convenience of using various educational resources at any time and in any place; the possibility of exchanging tasks and working together; a certain degree of freedom from students' attachment to various entertainment games[4,5,6].

Thus, taking into account the aforementioned capabilities of mobile technologies, it is advisable to use them in teaching computer graphics in students' independent learning activities. Therefore, within the framework of the study, a structure for teaching students computer graphics outside of class time was developed (see Fig. 1).

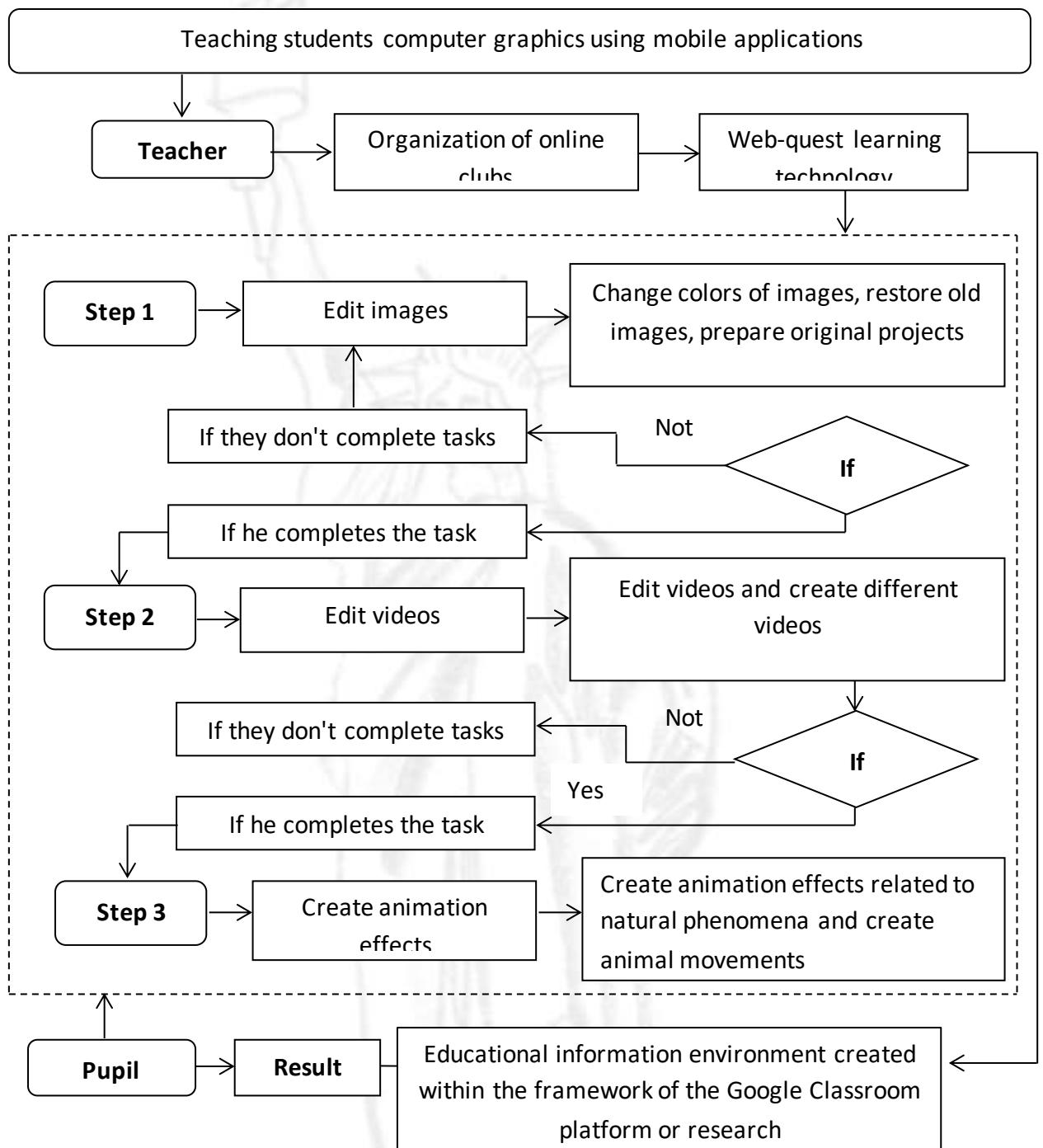


Figure 1. Structure of teaching computer graphics to students using mobile applications

The structure promotes the idea of organizing online computer graphics clubs for students, which involves the use of mobile applications. It is proposed to use three-stage assignments for online computer graphics clubs using mobile applications. In the first stage, students are given the task of editing photographs using mobile applications. If students complete the tasks of the first stage, they are allowed to proceed to the second stage. Otherwise, recommendations will be given for completing the tasks related to the first stage.



Based on this sequence, three-stage tasks are performed. The Google Classroom platform is used to implement the proposed three-stage clubs.

Thus, general secondary school students are recommended to use mobile applications in the formation of computer graphics competencies. As a result, the following is achieved:

- serves to a certain extent to prevent students from indulging in various entertainment programs and online games;
- effective organization of students' free time;
- increases students' interest in computer graphics;
- improvement of creative abilities in editing various images, creating author's videos, and creating animation effects.

Thanks to such opportunities, the effective organization of the educational process of students of general education schools of our country and the effective use of computer graphics in their future professional activities will be achieved. Therefore, when forming students' competence in computer graphics, it is advisable to use the structure and mobile applications proposed within the framework of the study.

REFERENCES

1. Mirsanov U. M. Uzluksiz ta'lim tizimida dasturlash texnologiyalarini o'qitish metodikasini takomillashtirish // Pedagogika fanlari doktori (DSc) ilmiy darajasini olish uchun tayyorlangan DISSERTATSIYA. – Navoiy, 2023. – 332 b.
2. Mirsanov U.M.Umumiy o'rta ta'lim maktablarida matematikani amaliy dasturlar yordamida o'qitish samaradorligini oshirish metodikasi (5–6-sinlar misolida)// Pedagogika fanlari bo'yicha falsafa doktori (PhD) dissertatsiyasi. – Toshkent, 2019. – 190 b.
3. Исроилова Л.С. Умумий ўрта таълим мактаби ўқувчиларининг «Информатика ва ахборот технологиялари» фанидан компетенцияларини шакллантириш муаммолари // Муғаллим ҳам узлуksиз билимлендириу илмий-методикалык.
4. Otaqulova D.R. "Pedagogical conditions of teaching "computer graphics and visualization" NOVATEUR PUBLICATIONS JournalNX- A Multidisciplinary Peer Reviewed Journal ISSN No: 2581 - 4230 Scientific Impact Factor: 8.075 VOLUME 9, ISSUE 7, July -2023 P. 109-114 <https://journalnx.com/>
5. Otaqulova D.R. "Didactic possibilities of educational environments in developing students' graphic competence" 16 th -ICARHSE International Conference on Advance Research in Humanities, Applied Sciences and Education Hosted from New York, USA July, 28 th 2023 P. 69-71 <https://conferencea.org>
6. Parvina Nuraliyeva,Elvira Tursunnazorova, Durdona Otakulova "Methods of developing professional competence in students through the use of digital technologies"AIP Conf. Proc. 3244, 030040 (2024) <https://doi.org/10.1063/5.0241982>

