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TYPES OF COMPUTER GRAPHICS AND SOFTWARE TOOLS

Kholmatova Shahnoza Ismailjon kizi

KSPI "Mathematics and Informatics" course

4th grade student

ABSTRACT:

A person receives most of the information about the outside world with the help of his eyes. The vision system receives images of various objects. With their help, a person has an idea about the external environment and the objects in it. Creating images of objects, storing them, processing them and describing them in imaging devices is one of the most difficult and basic problems of the computer. When the computer is not assigned any tasks, that is, even when it is idle, it reproduces the image that should be displayed on its screen dozens of times per second.

KEY WORDS: Video process, Computer screen, body, computer animation, computer graphics.

The images that appear on the computer screen are created and displayed using a device called a video card. Special video processors are produced for video cards. Video processors have surpassed the main processor of the computer in terms of complexity and speed of calculation.

Let's get acquainted with how an image is created on a computer screen. The computer's device for displaying data in electronic form is called a monitor (monitor - monitoring, control). Processes on the computer can be monitored through the monitor. The part of the monitor where images are displayed, that is, the screen, is called a display (display - to depict). Currently, imaging devices



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assembled in a separate body are called computer monitors, and imaging devices placed together with computers (for example, in laptops, tablets, and phones) are called displays. Computer graphics have been around for many years, and full-fledged graphics systems existed even in the 1960s. Nowadays, the terms computer graphics (CG) and computer animation (CA) are used. The concept of computer graphics includes all forms of working with static images, while computer animation works with dynamically changing images.

Computer graphics is the input, output, representation, change and editing of graphic objects in EHM management.

Computer animation is the "animation" of images on the screen, the synthesis of dynamic images on the computer.

Computer graphics is a special part of informatics, which studies the methods and means of creating and processing images with the help of software-hardware computing complexes.

Summary

During the pedagogical practice of the 34th school of Beshariq district, we directly participated in the Informatics classes and got acquainted with the state of teaching computer graphics to students in educational activities. In particular, we were convinced that the innovative methods used in the teaching of various relevant departments of computer graphics in the course of training in this school can be developed based on the above recommendations and suggestions.



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LIST OF REFERENCES

1. Mansurjonovich, Juraev Muzaffarjon, and Muzaffar Mansurovich Botirov. "Characteristics Of Teaching Programming Based On Different Principles." Eurasian Journal of Engineering and Technology 17 (2023): 85-90.
2. Mansurjonovich, Jo'Rayev Muzaffarjon. "BO 'LAJAK O 'QITUVCHILARNING KASBIY TAYYORGARLIGINI RIVOJLANTIRISH JARAYONIDA "INVERTED" O 'QUV RESURSLARIDAN FOYDALANISHNING AFZALLIKLARI." Science and innovation 2.Special Issue 10 (2023): 161-165.
3. Mansurjonovich, Jo'Rayev Muzaffarjon. "RAQAMLI TA'LIM MUHITIDA PICRAT MODELİ ASOSIDA BO 'LAJAK O 'QITUVCHILARNI KASBIY FAOLIYATGA TAYYORLASH TEXNOLOGIYALARI." Science and innovation 2.Special Issue 14 (2023): 238-242.
4. Mansurjonovich, Joraev Muzaffarjon, and Nishonov Akmal Obidovich. "The Importance Of Smart Technologies In The Modern Integrated Digital Learning Environment." CEMJP 31.4 (2023): 667-670.
5. Mansurjonovich, Jurayev Muzaffarjon. "THE ROLE OF INTERACTIVE METHODS IN INCREASING THE EFFECTIVENESS OF MATHEMATICS LEARNING." Academia Repository 4.12 (2023): 25-31.
6. Mansurjonovich, Jurayev Muzaffarjon, and Turdaliyeva Dilshodaxon Erkinjon-qizi. "AS AN IMPORTANT COMPONENT PART OF COMPETENT APPROACH EDUCATION." Academia Repository 4.12 (2023): 49-53.
7. Mansurjonovich, Jurayev Muzaffarjon, and Uzoqova Xurshidaxon Abdullajonovna. "ELECTRONIC INFORMATION-EDUCATION



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RESOURCES FOR THE DEVELOPMENT OF TEACHERS'MEDIA COMPETENCE." *Academia Repository* 4.12 (2023): 223-227.

8. Juraev, Muzaffarjon Mansurjonovich. "Experience of Cambridge Curricula in Ensuring the Continuity." *The American Journal of Interdisciplinary Innovations and Research* (2021).

9. Mansurjonovich, Juraev Muzaffarjon. "DESIGNING THE STRATEGY OF STUDENT INDIVIDUALITY IN INDEPENDENT RESEARCH ACTIVITY." *Galaxy International Interdisciplinary Research Journal* 11.4 (2023): 1048-1055.

10. Juraev, Muzaffarjon Mansurjonovich. "Pedagogical conditions for the development of vocational education through interdisciplinary integration into the vocational education system." *НАУКА, ОБРАЗОВАНИЕ, ОБЩЕСТВО: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ*. 2021.

11. Mansurjonovich, Juraev Muzaffarjon. "Methodological foundations for improving the content of training future ict teachers in the conditions of digital transformation of education." *Актуальные вопросы современной науки и образования* 9 (2022).

12. Mansurjonovich, Juraev Muzaffarjon. "Description of the Methodological Basis for Ensuring Interdisciplinary Continuity of the Subject" *Computer Science and Information TECHNOLOGY* in Vocational Education." *JournalNX* 7.10: 223-225.

13. Xudayberdiyev, Zayniddin Yavkachevich, and Muzaffarjon Mansurjonovich Juraev. "Theoretical analysis of the continuity model of computer science and information technology in the system of professional education." *European Scholar Journal* 2.10 (2021): 61-64.



E Conference World

International Conference on Interdisciplinary Studies and Scientific Research

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30th January, 2024

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14. Juraev, M. M. "OA Qo 'ysinov Description of the methodological basis for ensuring interdisciplinary continuity of the subject "Computer Science and Information Technology" in vocational education." *JournalNX-A Multidisciplinary Peer Reviewed* 7.6 (2021).

15. Juraev, Muzaffarjon Mansurjonovich. "Theoretical and practical principles of improving the content of the pedagogical activity of ICT teachers of professional educational institutions in the conditions of information of education." (2022).

16. Mansurjonovich, Juraev Muzaffarjon. "Designing an electronic didactic environment to ensure interdisciplinary integration in the teaching of" Informatics and information technologies" during professional education." *Confrencea* 3.03 (2023): 78-82.

17. Jo'rayev, Muzaffarjon. "Professional ta'lim jarayonida fanlararo uzvilik va uzliksizlikni ta'minlash o 'quvchilari kasbiy tayyorgarligining muhim omili sifatida." *Прикладные науки в современном мире: проблемы и решения* 1.29 (2022): 43-46.

18. Mansurjonovich, Juraev Muzaffarjon. "CURRENT STATUS OF THE SCIENCE OF INFORMATICS AND INFORMATION TECHNOLOGIES IN THE PROFESSIONAL EDUCATION SYSTEM, EXISTING PROBLEMS AND SOLUTIONS, PRINCIPLES AND CONTENT OF THE SCIENCE ORGANIZATION." *Galaxy International Interdisciplinary Research Journal* 10.12 (2022): 327-331.

19. Mansurjonovich, Juraev Muzaffarjon, and Aroyev Dilshod Davronovich. "INTERDISCIPLINARY INTEGRATION IS AN IMPORTANT PART OF DEVELOPING THE PROFESSIONAL TRAINING OF STUDENTS." *Open Access Repository* 9.1 (2023): 93-101.



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20. Juraev, Muzaffarjon Mansurjonovich. "The value of open mass competitions in the process of digitalization of extracurricular activities of schoolchildren."

Web of Scientist: International Scientific Research Journal 3.10 (2022): 338-344.

21. Mansurjonovich, Juraev Muzaffarjon. "Professional Educational Institutions Theoretical and Practical Basis of Development of the Content of Pedagogical Activity of Teachers of" Information and Information Technologies"." *Open Access Repository* 9.12 (2022): 85-89.

22. Mansurjonovich, Juraev Muzaffarjon. "Experience Of Cambridge Curricula In Ensuring The Continuity Of Curricula In The Field Of "Computer Science And Information Technology" In The System Of Professional Education." *The American Journal of Interdisciplinary Innovations and Research* 3.11 (2021): 26-32.

23. Juraev, Muzaffarjon Mansurjonovich. "Prospects for the development of professional training of students of professional educational institutions using electronic educational resources in the environment of digital transformation." *Academicia Globe: Inderscience Research* 3.10 (2022): 158-162.

24. Davronovich, Aroyev Dilshod, and Juraev Muzaffarjon Mansurjonovich. "Important Advantages Of Organizing The Educational Process In A Digital Technology Environment." *Galaxy International Interdisciplinary Research Journal* 11.2 (2023): 149-154.

25. Mansurjonovich, J. M., and Y. S. Sattorovich. "MAXSUS IZLAMALARDAN FOYDALANISH TA'LIM JARAYONINI TASHKIL ETISHNING MUHIM AVTOZYATLARI." *Ochiq kirish ombori* 4.3 (2023): 126-133.



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Website: <https://econferenceworld.org>

26. Mansurjonovich, Juraev Muzaffarjon, and Yuldashev Sherzod Sattorovich.

"IMPORTANT ADVANTAGES OF ORGANIZING THE EDUCATIONAL PROCESS USING SPECIAL APPLICATIONS." Open Access Repository 4.3 (2023): 126-133.

27. Melikyzievich, Siddikov Ilkhom, et al. "THE METHOD OF REFERENCE TESTS FOR THE DIAGNOSIS OF DIGITAL DEVICES." International Journal of Early Childhood Special Education 14.7 (2022).

28. Muhammedali, Nuritdinova Umida. "UNDERSTANDING GEOMETRIC PROGRESSIONS: A BASIC MATHEMATICAL CONCEPT JURAYEV MUZAFFARJON MANSURJONOVICH." Galaxy International Interdisciplinary Research Journal 11.12 (2023): 768-772.