

Technical and Ergonomic Requirements in Creation of Pedagogical Software

Nurulloyev Firuz Numonjonovich

Basic doctoral student of Information Technology department Bukhara State University

Annotation: This article provides students with information on the popularity, continuity, volume and effective use of computer technology of pedagogical software.

Keywords: Smarter Content, Pedagogical Software, Artificial Intelligence, Education Management Systems (LMS).

I. Introduction

The purpose of the study of pedagogical software is to form and develop the knowledge and skills of a computer science teacher to apply in practice. It requires the activity of every professional contains basic theoretical and practical information.

II. Main part

Technical requirements. Pedagogical Software Tools must meet certain technical requirements when designed for a particular type of computer. Let's look at the content of the following requirements:

1. The universality of the program. Of course, programmers who create pedagogical software work on high-capacity computers and create programs on such a computer. However, not all schools have such computers. Therefore, when designing a program, it is important to make sure that it works independently of the computer. After all, a program created on a fast computer will not run at the expected speed on a low-capacity computer. Ultimately, it leads to a decline in the outcome of the learning process, rather than an increase in efficiency.

2. Continuity of program work. When the student finds himself in an unfamiliar situation, he presses any optional keys and waits for what will change on the screen. Therefore, the information entered by the student should be processed immediately and reported to him. If a student makes a mistake, it is important to explain exactly what he or she did wrong (keep in mind that too long and small explanations can also make the student tired). It is necessary to completely eliminate the cases when the program crashes as a result of an error, the operating system message about the error is displayed. Also, if you make a mistake when entering a long text, you should be able to correct it without having to re-enter the text. Such cases should be eliminated in order to save student time. pedagogical software Tools should include responses to all error options that the user may allow. This will ensure full continuity of the program.

3. Limited program size. Each view or process on the screen can be created in different ways. In this sense, text, image, and audio files differ in size. For example, images in different formats have different quality and size: BMP images have a larger size than high quality images. JPEG image quality is close to BMP image quality and takes up twice as much space. GIF images have a much smaller size due to lower image quality. This is because a GIF image can use up to 8 bits, a JPEG image can use up to 24 bits, and a BMP image can use up to 32 bits of color.

4. Effective use of computer capabilities. One of the major benefits of computer-assisted learning is the wide range of interactive environments available.

ISSN 2792-1883 (online), Published in Vol: 2 No: 2 for the month of February-2022

Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>

Television educational programs do not have an interactive environment. The use of modern information technologies, including multimedia, allows you to create an interactive environment. The hypertext system allows the user to combine different information, create text annotations, create page or other types of excerpts that direct the reader to a bibliography or source of information. The hypermedia system expands the possibilities of hypertext in essence. It can create text, static and dynamic images, sound, melody, and whole pieces of information. All such opportunities can be used to create pedagogical software.

III. Conclusion

The role of pedagogical software in modern education is invaluable. That is why I recommend future computer science teachers to make effective use of software tools. Prospective computer science teachers control programs, training programs, didactic capabilities of software, expert-training systems, automated learning systems, principles of creating pedagogical-software tools, pedagogical-software have a theoretical knowledge of technology to create a scenario of tools, management of educational activities in pedagogical software, integration of information resources for teaching, be able to apply this theoretical knowledge in practice, be able to use the practical capabilities of science in their professional fields.

References:

1. M.Aripov, M.Fayziyeva, S.Dottayev Web technologies. Study guide. Tashkent, - "Society of Philosophers". 2013.
2. U.Yuldashev, M.Mamarajabov, S.Tursunov. Pedagogical Web design. Study guide. Tashkent, - "Voris", 2013.
3. Evaluation of Evidence - Based Practices in Online Learning: A MetaAnalysis and Review of Online Learning Studies. U.S. Department of Education Office of Planning, Evaluation, and Policy Development Policy and Program Studies Service, 2010.
4. Numonjonovich N. F. Opportunities to Take Education Management to a New Level in Secondary Schools //" ONLINE-CONFERENCES" PLATFORM. – 2021. – C. 147-150.
5. Nurulloyev F.N. Zamonaviy o‘qitish usullari: an’anaviy va zamonaviy ta’limning afzalliklari// Pedagogik mahorat. -Buxoro, 2021,- №5.-51-56.
6. Nurulloyev F.N. O‘rta ta’lim maktablarida ta’lim boshqaruvini yangi bosqichga olib chiqish. //Pedagogik mahorat. -Buxoro, 2021 (maxsus son).-211-214.
7. Nurulloyev F.N.Axborot-kommunikatsiya texnologiyalari vositalaridan ta’lim jarayonida foydalanish// Pedagogik mahorat. -Buxoro, 2020 (maxsus son).-267-270.