



THE ROLE OF MODERN ELECTRONIC LITERATURE IN EDUCATION

Submission Date: August 05, 2023, **Accepted Date:** August 10, 2023,

Published Date: August 15, 2023

Crossref doi: <https://doi.org/10.37547/pedagogics-crjp-04-08-08>

Tadjieva Feruza Mukhtarovna

Department Of "Technical Disciplines" Candidate Of Pedagogical Sciences, Senior Lecturer, Joint Belarusian-Uzbek Intersectoral Institute Applied Technical Qualifications In The City Of Tashkent, Uzbekistan

Journal Website:
<https://masterjournals.com/index.php/crjp>

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

ABSTRACT

This article describes the design of electronic literature and electronic educational program in education, creation of interactive content, management and facilitation of educational activities, methods of creating electronic educational literature for continuous education system, their forms and types, requirements for creating literature, stages and technology of creating electronic textbooks. , is devoted to issues such as the preparation of high-quality modern electronic textbooks only when these requirements are met.

KEYWORDS

Multimedia, content, electronic, digest, virtual, interactive, verbal, graphic, animation, tactile, real, media-object, adaptation, individual, didactic, aesthetic, experiment, abstract, synthesis, model, navigation, hypertext, visual , illustration.

INTRODUCTION

The fulfillment of the tasks assigned by the government of the Republic of Uzbekistan in the field of higher education largely depends on the personality of the teacher [Mirziyoev, 2017: 47]. Teaching is an honorable but very difficult profession. In the conditions of the transition to the market economy, it is the responsibility of the teacher to achieve the intended goal of education, to organize various

activities of students, to raise them to be educated, polite, faithful, hardworking, business-minded, well-rounded people. The future of our people, the prospects of Uzbekistan depend to a large extent on the teacher, his level, training, selflessness, and his attitude to the work of teaching and educating the young generation. To become a good teacher, it is not enough to master pedagogical theory. Because in the pedagogical theory, the general rules, principles,



generalized methodical ideas about the education and upbringing of children are described, it is emphasized to take into account the age and individual characteristics of students [Mirziyoev, 2017: 485].

A person who chooses the profession of pedagogy must first be healthy, be able to pronounce words correctly and well, be calm and composed, and be able to maintain self-control in dealing with others. Also, it is necessary for the teacher to have personal qualities such as liking students, willingness to work with them, politeness, observation, ability to think broadly, organization, demanding towards himself and others.

Pedagogy is a widely used teaching method and practice as a subject or theoretical concept. Great description! But what does this definition mean? What does this have to do with you and us? Let's dig deeper! This concept is aimed at developing pedagogical activity as a teacher and developing innovative pedagogical skills. In developed countries, attention is paid to instructional design as the practice of organizing "educational qualifications that make the acquisition of knowledge and skills more effective, applicable and attractive".

In our country, based on the demand of the time, special attention is being paid to the introduction of modern technologies in all areas. In order to implement the Digital Uzbekistan - 2030 program, many higher education institutions are tasked with automating the educational process.

Gone are the days of traditional lecture-based classes. At a time when the pace of information flow is accelerating, it is difficult to attract the student's attention to knowledge if every lesson is not colorful. For this, the teacher needs to be constantly searching and creative. Modern teaching methods are active ways of forming competences based on interaction while involving students in the lesson. In multimedia

electronic textbooks, it is necessary to organize visual virtual stands, digests, graphics, and practical and laboratory exercises through video, audio, and animation tools.

Of course, e-learning in this process means the use of electronic devices and the Internet in order to develop and facilitate learning. Many organizations and institutions are increasing their use of technology for education. One of the benefits of using e-learning for them is a good return on investment. When presenting educational materials in electronic form, it is necessary to pay special attention to the level of their understanding by students. Developing e-learning programs is more expensive than organizing classroom materials or training trainers because multimedia and high-level interactive methods are required. However, the cost of delivering e-learning (including web servers and technical support costs) is much lower than traditional learning due to the fact that materials are not printed on paper, saving teachers' time, and saving travel and work time for the learning participants. Also, while we can train limited individuals through traditional methods, e-learning can reach thousands of people across the globe, thus e-learning is a cost-effective method in the long run.

Rapid application of information-communication and innovative technologies to the educational system is causing huge changes in the form and content of the organization of the quality improvement of the educational system. The adoption of a number of decisions in this regard is of great importance in equipping educational institutions with information technologies and in the education of students through the most modern means. Today, in addition to traditional printed textbooks, modern electronic educational literature of the new generation: multimedia, virtual, electronic textbooks, training manuals, lecture texts, electronic programs, digests,



data banks, etc., play an important role in increasing the effectiveness of teaching. Electronic educational literature is designed to expand the imagination of learners, develop and deepen their initial knowledge, provide additional information, and is created on subjects that are taught more in-depth. With the development of science and technology in the continuing education system, the need for the preparation of small numbers of electronic educational literature on general professional and special subjects with rapidly changing content, in-depth teaching, is increasing.

Forms and types of electronic educational literature are as follows:

Electronic educational literature is a resource that has the ability to collect, describe, update, store, present knowledge in an interactive way, and control it based on modern information technologies.

The electronic textbook is intended for the application of the educational method based on computer technology, independent education and effective assimilation of educational materials and scientific information related to science: - educational and scientific materials are only in verbal (text) form; - educational materials in verbal (text) and two-dimensional graphic form; - multimedia (multimedia - multi-information) manuals, that is, information in three-dimensional graphic form, sound, video, animation and partially verbal (text) form; - tactile (felt, perceptible) characteristic, expressed in a form that allows the reader to enter the real world depicted by a stereo copy in the "screen world" and creates an imagination of movement in relation to the objects in it.

Electronic dictionary is an electronic information source that is compatible with the traditional "paper" dictionary. In the computer version, a word or group of

words can be extracted from any program with an instruction specifically allocated to it. Unlike traditional dictionaries, an electronic dictionary can contain a whole spectrum of media objects, including text and graphic images, as well as videos and animations, sound, music, etc.

Electronic methodological manual is a form of generalization and transfer of pedagogical experience, formation and dissemination of new models of educational activity. In the electronic methodical guide, pedagogical experience is shown in the form of digitized videos of classes, student works created in electronic or converted form in the form planned for lessons.

Electronic study guide - partially or fully covers the study volume of the subject and includes an adaptation block of information, designed for distance learning and independent learning.

An electronic lecture is a multimedia system that displays the lecture material of an academic subject using interactive elements and hyperlinks.

The main requirements for the electronic textbook are didactic, methodological, psychological-pedagogical, technical-technological, aesthetic and ergonomic requirements in the process of creating the electronic textbook. The general requirements for an e-textbook are as follows:

- The structure and content of the e-textbook should correspond to the curriculum of the studied subject while aiming for in-depth study of the educational material.
- Ensures scientificity in teaching, sufficient depth and reliability of the content of the educational material, taking into account the latest achievements of science, technology and technology. The process of mastering the educational material using an electronic textbook



should be built in accordance with modern methods of teaching. For example: experience, experimentation, comparison, observation, abstraction, generalization, integration, analogy, analysis and synthesis, modeling method, as well as mathematical modeling and systematic analysis method.

- Requirements of accessibility of teaching - are carried out by means of electronic textbooks and indicate the need to determine the level of complexity and depth of learning educational material specific to the age and individual characteristics of learners. It is impossible to overcomplicate and overload the educational material, then the learner will not be able to master this material. Completion rates with e-textbooks are significantly higher than traditional textbooks and manuals.
- The requirements to ensure visibility of teaching indicate the need to take into account the intuitive perception and personal observation of objects, their layouts or models being studied by learners.
- Awareness of teaching, requirements for ensuring the independence and activity of the learner - provides electronic textbooks and tools for the independent and creative work of learners to attract educational information to achieve the final goals and tasks of educational activities.
- Requirements for the systematicity and sequence of teaching in the use of electronic textbooks mean that a certain system of knowledge and skills in the field of study is ensured by the students' mastery sequence. Knowledge, skills and skills must be formed in a logical order in the educational system and find their place in life.
- Requirement of solidity of knowledge assimilation in the use of electronic textbooks - it is very important to develop the skills of deep thinking

and memorization of learners for solid mastery of educational material.

- Developmental and educational functions of teaching in the electronic textbook should be fulfilled.
- The content and content of the electronic textbook must meet the requirements of the educational standard.
- Automation of aspects of electronic textbook educational activities such as search, collection, storage, analysis, processing; should include calculations, design and construction, experiment, processing of experiment results, control tasks, automation of information processing.
- The electronic textbook should include simulation of the work of complex objects (machines, equipment, hardware, devices, etc.), various processes in a real, accelerated or slowed down time scale.
- The training tools of the electronic textbook should prepare the learner in a virtual environment depending on his future professional activity.

An electronic textbook (study guide) is a product of modern information technology that serves to improve the quality of education. Electronic textbooks form the main educational and methodological core of a new form of education - distance education. The use of modern informational-pedagogical technologies, including electronic textbooks, occupies a special place in increasing the effectiveness of teaching. In order to organize the educational process at a high level in higher education institutions, the issue of providing educational literature that fully meets state educational standards and international educational standards is considered urgent. In practice, outdated concepts lead to the creation of electronic products, texts and educational materials, etc., that are available in electronic form, which are tried to be interpreted as



electronic textbooks. But in reality, these are less effective tools because they are not e-textbooks. Therefore, it is appropriate to clarify the concepts related to the electronic textbook. A textbook is an essential tool for a student, because without textbooks he cannot acquire solid and comprehensive knowledge and skills in the subject. In the history of mankind, such a convenient tool for successively conveying knowledge to the younger generation as a textbook has not been created. Despite the development of computer, audio-visual and other new teaching tools in our time, textbooks have not lost their importance, because it has been and remains the most effective and widespread pedagogical model and learning tool. E-textbook, even if it is considered the best, cannot replace traditional (printed) educational literature. The presence of an electronic textbook should not only replace reading a regular textbook, but should also arouse interest in reading books among students. Therefore, it is not enough to have well-written textbooks to create an electronic textbook. It should be equipped with hypertext navigations and enriched with illustrative materials with the addition of multimedia tools, and it should be displayed on the computer screen in an attractive way. An electronic textbook should not become a text with pictures and a reference book. An electronic textbook should make it easier to understand and remember the most important concepts, ideas, and presented examples. Compared to a regular textbook, it should penetrate into the learning process using all the capabilities of the human brain, such as hearing, vision, emotional memory, and computer explanations.

An electronic textbook (study guide) should cover all the main questions, content and essence of a specific educational program, like a textbook in a regular paper form. At the same time, it is necessary to take into account the scope of accumulated knowledge of the

student in a specific scientific content. Compared to a regular textbook, electronic textbooks have a number of additional requirements: the text must be divided into pages, cover a complete content section, ensure that any page can be displayed on the screen in the desired order, the text must be decorated, have basic laws, formulas, graphs, images, etc. For the purpose of self-control, according to the desire of the learner, the answers, graphs and diagrams of the questions can be displayed on the computer screen. The content of the textbook includes several blocks of theory, questions for self-examination and their answers, test questions and problems for calculation. One of the main differences between an electronic textbook and a traditional textbook is the existence of a collective and collective approach to its production. In fact, if a traditional textbook can be created by a single author, an e-textbook is not created by one or several authors, but by a separate creative team consisting of a number of specialists.

Steps for creating an e-textbook - the following steps are recommended for creating e-textbooks:

- selection of scientific resources;
- concluding agreements on the right to use and process resources;
- developing a list of contents and concepts;
- creating a text processing and support section in sections (modules);
- implementation of hypertext in electronic form;
- development of computer support;
- choosing to bring materials to multimedia objects
- get;
- development and implementation of implementation with sound accompaniment;
- preparation of material for visualization;
- preparing to use the electronic textbook;
- development of teaching methodology.



It is recommended that the development of electronic textbooks be carried out in stages.

The electronic textbook should have the following main features:

- that training sessions are held at a high quality level of education provide;
- to enable independent education and independent self-control;
- bringing lectures and practical trainings closer to each other;
- to have a harmonious description of the development of informational and educational resources;
- should have textual and other materials, navigations (hypertext) and illustrations, multimedia tools, maps, pictures, tables, diagrams, etc.

An e-textbook should not become a picture text or a reference book. By applying computer effects to the learning process, an e-textbook should make it as easy as possible to understand and remember the existing concepts.

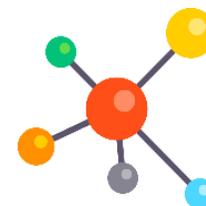
CONCLUSION

In conclusion, the use of modern electronic literature in education and a number of advanced methods mentioned above to improve the quality of education, as well as the application of some of these experiences to the activities of national higher education institutions, can have a good effect. In order for students to study independently in higher education institutions, separate electronic content should be created for each subject. It can be in the form of video, PDF, audio, text. This, in turn, creates opportunities for students to further research. E-learning can be a great solution when students do not have enough time to study another area of interest. It will also be effective for students studying part-time. The reason is that in

blended learning, e-learning and traditional part-time students will have a preconceived idea of the content to be taught at the higher education institution if they participate in an e-class before coming to the institution of higher education. Today's modern higher education institutions are all offering e-learning courses worldwide. If we want our higher education institutions to develop in line with the times, we must start introducing electronic education. Experiments show that modern science and technology development allows the teacher to be creative, to teach his subject based on an innovative approach, to effectively use interactive methods and tools, to be able to think freely about the important problems of science, to be able to convey the achievements of science to students, and finally to teach students to think creatively, research requires that he be able to teach his work. Therefore, the teacher must first acquire the skills of information technology.

REFERENCES

1. Mirziyoev Sh.M. Qonun ustuvorligi va inson manfaatlarini ta'minlash yurt taraqqiyoti va xalq farovonligining garovi. "O'zbekiston" NMIU, 2017. – 47 b.
2. Mirziyoev Sh.M. Buyuk kelajagimizni mard va olijanob xalqimiz bilan birga quramiz. "O'zbekiston" NMIU, 2017. – 485 bet.
3. Ш.Расулов. Э.Мойлиев. Олий таълимни ривожлантиришда электрон таълимнинг роли. Методик қўлланма – Тошкент: "Сано-Стандарт", 2023.
4. Д.С.Тўхтасинова, В.С.Хамидов. Электрон ўқув адабиётларини яратиш ва расмийлаштириш. Тиббий таълим муассасалари педагоглари учун услубий қўлланма.
5. Xolmuratovich, M. X. (2020). Tasviriy san'at fanidan mustaqil ta'limni tashkil etish va boshqarishda "ispring" dasturiy ta'minotining ahamiyati.



Педагогика ва психологияда инновациялар,
10(3).

6. Muratov, X. X. (2021). Elektron ta'lim resurslari va multimediali elektron o'qitish vositalari orqali ta'lim muhitining rivojlanishi. *Academic research in educational sciences*, 2(1), 1130-1136.
7. Muratov, K. K., & Tadjieva, F. M. (2021). Issues of Improving the Technology of Organization and Management of Independent Learning Activities of Students in the Fine Arts. *International Journal of Multicultural and Multireligious Understanding*, 8(11), 521-525.
8. Махкамова, С., & Жаббаров, Р. (2022). Аxborot–kommunikatsion texnologiyalaridan foydalanib tasviriy san 'at ta 'limi samaradorligini oshirish metodikasi. Современные инновационные исследования актуальные проблемы и развитие тенденции: решения и перспективы, 1(1), 27-29.
9. Shuhratovich, I. U. (2020). Application of innovation in teaching process. *European Journal of Research and Reflection in Educational Sciences*, 8(5), 4-8.
10. Султанов, Х. Э., Анкабаев, Р. Т., Хасанова, Н. С., & Чориева, Н. Ш. (2017). Инновационные методы обучения на занятиях по изобразительному искусству. In *Актуальные вопросы современной педагогики* (pp. 103-105).
11. S.Dottoyev (2022). AXBOROT TA'LIM MUHITI O'QUV-ILMIY RESURSLARINI YARATISH MAZMUNI. *Science and innovation*, 1 (B8), 473-477. doi: 10.5281/zenodo.7358491.
12. D. Kamalova (2022). AutoPlay DASTURIDAN FOYDALANIB ELEKTRON O'QUV USLUBIY MAJMUA YARATISH VA UNDAN TA'LIM SAMARADORLIGINI OSHIRISHDA FOYDALANISH. *Science and innovation*, 1 (B8), 1978-1981. doi: 10.5281/zenodo.7443503.