

# DESIGN AND USE OF ELECTRONIC EDUCATIONAL AND METHODOLOGICAL SUPPORT IN THE SCIENCE OF "INFORMATION AND INFORMATION TECHNOLOGIES" IN SCHOOLS OF GENERAL EDUCATION

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<https://doi.org/10.5281/zenodo.10403096>

**Abstract.** *The article provides an understanding of the design and use of an electronic platform, educational methodological support. It is to further increase its effectiveness through an innovative approach to the electronic platform.*

**Keywords:** *information and educational platform, electronic educational resources, modular textbook, multimedia.*

In order to create an information-educational platform and suitable electronic educational resources for general education schools, taking "Informatics and information technologies" as a methodical support of extracurricular educational activities, the following should be followed:

1. Developing a list of contents and concepts;
2. Processing of texts in modules in accordance with electronic educational resources;
3. Support module on the procedures for using the information and education platform;
4. Implementation of hyperlinks in electronic form;
5. Development of computer support;
6. Selection of materials to bring to multimedia objects;
7. Development and implementation of sound accompaniment;
8. Preparation of material for visualization.

We conduct the textbook on the information-educational platform of extracurricular educational activities in the subject of "Informatics and information technologies" in the following stages of creation: starting process; defining goals; content creation-planning; creation of electronic educational resources; editing; placing on the platform; commissioning.

It is not necessary to use educational platforms in this sequence. However, most authors use this system.

Below we will focus on the stages of creating an information-educational platform and e-learning resources suitable for it.

1. Before creating an information-educational platform and e-learning resources suitable for it, the author must find answers to the following questions:

- to create an information-educational platform from which subject and for whom;
- familiarization with the approved educational program and determination of the allocated hours;
- taking into account the age, psychological characteristics and level of society of students;
- Getting acquainted with the "Informatics and Information Technologies" textbook and training manual;

- familiarization with available e-learning resources in other subjects, determining requirements and criteria.

2. What kind of knowledge and skills the learner will acquire after using the information-educational platform, i.e. the results expected by the learner will be defined knowledge, skills and abilities; Clarifying the source to clarify the idea and main topic together with clear concepts, terms, definitions, rules;

3. Planning the content of sections and topics. Determining the general structural structure of the information-educational platform and creating a list of sections and its parts based on it.

4. In order to determine the internal content of the topics, the initial text and the electronic version scheme are shown to other experts and their opinions are studied. First, a version of the information-educational platform is created, usually this version is tested for a certain period of time, and then the final version is created.

5. The final version is usually edited in two ways, substantive and technical.

In editing the content, a specialist - a reviewer or a specialist with deep knowledge of this field makes changes to the text content and the information-educational platform.

Depending on the educational goals, the information-educational platform for general subjects or special subjects can be divided into the following types:

- an information-educational platform for general education subjects or a special subject;
- an information-educational platform designed for teaching individual subjects in a computer classroom;
- an information-educational platform designed for studying individual modules of a subject;
- an information-educational platform designed for a specific discipline with electronic simulators, virtual stands, and multimedia in sync with the educational material;
- electronic automated systems aimed at developing students' creative abilities.

Study materials are provided in separate modules. The organization of the structural structure of the information-educational platform from general education subjects on the basis of a modular system makes it easier to achieve the goal.

The modular structure of the information-educational platform is based on the modular technology used in the traditional education system, the modular structure of textbooks and training manuals, and is intended for the formation of extracurricular educational activities. Modules are educational material of autonomous form, which is composed of content and data parts. Modules can be interconnected to form a modular textbook management system.

When creating an information-educational platform, first of all, it is necessary to develop its structural structure, the order of searching for educational material, the content of modules, and create the main content base of the created textbook.

The information-educational platform relies on the curriculum of the subject, supports traditional printed textbooks, and introduces an effective method of studying educational material.

The content of the information-educational platform refers to the system of knowledge, skills, and abilities provided in it.

In conclusion, in the organization of extracurricular educational activities of students in "Informatics and information technologies" in general secondary schools, by creating electronic educational resources for the Internet and placing them on the network should be distributed to

secondary school students. As a result, students will be able to use these e-learning resources wherever they want.

| № | Naming                       | Content  |
|---|------------------------------|--|
|   | Science teaching methodology | The necessary prerequisites for the teacher in teaching the subject are the organization of conditions, setting educational goals, teaching principles, teaching time for each section, providing the necessary computer tools, and the participation of the teacher in the educational process. and methodical recommendations are given for continuous analysis of students' learning of science, assessment of students' knowledge, skills and qualifications |
|   | Control questions and tests  | It should be possible to divide into control questions and written tasks for each section, to which the student can independently write the answer and present it to the teacher in the form printed from the printer. By answering the test questions, the student checks his knowledge of each section   |
|   | Practical training           | For each section, there are separate tasks and practical exercises and methodical instructions for their implementation  |
|   | Virtual booths and videos    | In this, special views of the mechanisms, their movements, animation, and video footage of technological processes performed on the machines are provided.   |
|   | Explanatory dictionary       | Complete information and understanding of industry technical terms, terms, nomenclature and industry standards   |
|   | Information                  | Instructions, useful programs and information are provided for the user of the information-educational platform  |
|   | Curriculum                   | A curriculum is provided based on the state educational standard and fully covers the structural content of this subject. The purpose of studying the subject in the program, its interrelationship with other subjects, its content and volume, the duration of the student's mastery of the subject, the name of sections and topics) the knowledge, skills and abilities that can be obtained from mastering the subject, and a list of literature is given   |

### REFERENCES

1. Тайлаков У. Н. Таълим муассасаларининг ягона электрон ахборот-таълим муҳитини яратиш ва жорий этиш технологиялари//Педагогика фанлари бўйича фалсафа доктори (PhD) илмий даражасини олиш учун тайёрланган диссертация. – Тошкент, 2020. – 143 б.
2. Тайлаков У.К. Электронные пособия-интегрированные средства, выступающие как компонент поддержки учебного процесса//Innovations and modern pedagogical technologies in the education system Materials of the IX international scientific conference on February 20-21, Prague-2019. – В. 116-118

3. Юлдошев И.А. Тармоқ технологияси асосида “информатика ва ахборот технологиялари” фанини ўқитиш самарадорлигини ошириш методикасини такомиллаштириш//Педагогика фанлари бўйича фалсафа доктори (PhD) илмий даражасини олиш учун ёзилган диссертаци. – Қарши , 2018. 147 б.
4. Ibragimovich Kh.I. Peculiarities of using credit-module technologies in the higher education system of Uzbekistan //Integration of science, education and practice. Scientific-methodical journal. - 2021. - P. 209-214.
5. Ibraimov Kh. "Theoretical and methodological basis of quality control and evaluation of education in higher education system." International journal of discourse on innovation, integration and education 1 (2020): 6-15.
6. Ibragimov, X., Abdullayeva Sh. "Pedagogika nazariyasi (darslik)." T.: Fan va texnologiya 288 (2008).
7. Ibraimov X.I., M.Quronov. Umumiy pedagogika (darslik). –T., “Shaffof”, 2023, 416-bet.
8. Ibragimovich I. K. et al. PEDAGOGICAL ABILITIES OF A TEACHER, STRUCTURE AND DEVELOPMENT //湖南大学学报 (自然科学版). – 2021. – Т. 48. – №. 12.
9. Ибрагимов Х. И. ПЕДАГОГИКА И ВОСПИТАНИЕ //Экономика и социум. – 2021. – №. 1-1 (80). – С. 608-611.
10. Ibragimovich, Ibraimov Kholboy. "Intensive methods of teaching foreign languages at university." Вопросы науки и образования 27 (39) (2018): 78-80.
11. Ибраимов Х. И. Педагогические и психологические особенности обучения взрослых //Academy. – 2019. – №. 10 (49). – С. 39-41.
12. Ибрагимов Х. И. Организация самостоятельной работы студентов в условиях цифровизации вузовского образования //Наука и образование сегодня. – 2020. – №. 7 (54). – С. 74-75.