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Effectiveness Of Using Electronic Educational Resources in Primary Grades

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Abstract. This article analyzes the pedagogical significance of the use of electronic educational resources in primary grades, their impact on the learning process and their role in improving the quality of education. The possibilities of electronic textbooks, multimedia tools, interactive platforms and digital educational resources in developing students' cognitive activity, independent thinking and learning motivation are highlighted. Methodological recommendations for increasing the effectiveness of the use of electronic educational resources are also developed.
Keywords: Electronic educational resources, primary education, digital technologies, multimedia, interactive education, educational effectiveness, learning motivation.

Introduction. Today, the digitalization of the education system and the widespread introduction of modern information and communication technologies into the educational process are one of the priority areas of state policy. Especially at the primary education stage, the effective use of electronic educational resources allows students to organize the learning process more interesting and effective. [1].

In our country, there are some experiences in using computers in the process of primary education, and educational institutions are operating aimed at developing computer literacy. In them, children are taught computer literacy starting from the first grade. However, issues such as adapting a junior school-age student to the subject of computer science, taking into account the age characteristics of students, need to be resolved. The student's ability to think figuratively helps to intensively master educational materials using a computer in the form of schemes, pictures, tables and diagrams. Computer literacy requires the formation of the necessary knowledge, skills and qualifications in the student regarding its use. This includes knowledge related to understanding a computer as a technical device, in particular, understanding the components of a computer, a monitor, a printer, a keyboard, a "mouse", and the functions they perform. Basic skills in their application: creating various geometric shapes (rectangles, triangles, circles, straight lines) in the Power Point program, drawing and coloring fairy-tale characters, writing numbers from 1 to 100, performing operations on units and decimals, and acquiring the skills to use multimedia programs [2].

Electronic learning resources provide students with information in various forms - text, audio, video, animation, and interactive tasks. As a result, students' interest in the lesson increases, the level of mastery of the topics improves, and independent learning skills are formed [3]. The issue of using electronic educational resources in primary education is important not only as a technological but also as a pedagogical problem. Therefore, this study analyzes the effectiveness of electronic educational resources and methodological aspects of their use.

Research methodology. During the research, pedagogical observation, analysis of scientific literature, comparative analysis, generalization and systematic approach methods were used. Also, existing scientific research on the impact of electronic educational resources on the activities of primary school students was studied.

The essence and types of electronic educational resources are presented below. Electronic educational resources are a set of educational materials created on the basis of information and communication technologies and intended for use in the educational process [4].

The main types of e-learning resources include:

- electronic textbooks;
- electronic study guides;
- multimedia presentations;
- video lessons;
- virtual laboratories;

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• test programs;
• interactive games;
• distance learning platforms.

These tools, along with enriching the educational content, involve students in active learning activities. Visual and interactive materials are especially important for primary school students, as they help them master the subject faster and more deeply [5].

It is necessary to widely use the pedagogical possibilities of using electronic resources in primary education. The pedagogical potential of electronic educational resources is very wide. They increase visuality and clarity. Animation and visual materials help to easily understand the topic. This is especially important for primary school students. For example, through electronic presentations, the topic “comes to life” and is easily mastered. Through tests, games, and exercises, the student becomes active, not a “passive listener”, but an active participant. Each student learns at his own pace, difficult topics can be reviewed. The student searches for himself, the ability to acquire independent knowledge is formed. This develops critical and creative thinking. The combination of audio + video + text gives good results. The level of information memorization is high [6].

According to S.D. Karakozov, informatization of education is the process of creating a single information and educational space on the basis of mass communications and computer networks, the basic category of which is information and educational systems, and the principles of its creation have an integrative and humanistic basis. Within the framework of the information society, on the one hand, the main forms and methods of a specialist's activity are changing, which inevitably leads to a change in the content of his professional training. On the other hand, the socio-economic and educational environment surrounding him is changing, which, together with the requirements for changing the content of education, leads to a change in the forms, means and methods of training a specialist. All this requires specialists, including primary school teachers, to search for a new development model for the professional training system [7].

The use of electronic educational resources creates the following pedagogical opportunities: Increases learning motivation - primary school students are more interested in visual and interactive activities. Animations, educational games and video materials increase students' interest in the lesson [8]. Provides an individual approach - electronic resources allow each student to complete tasks that are appropriate to their abilities and level of knowledge. This serves to effectively organize differentiated learning. Develops independent learning skills - in the process of working on electronic platforms, students acquire the skills of independently searching for information, completing tasks, and evaluating their results [9]. Improves the quality of education - through multimedia tools, complex concepts can be explained in a simple and understandable way. As a result, knowledge is consolidated.

Digital educational resources open up new opportunities for the teacher in the formation of basic general educational activities in younger students. High-quality electronic textbooks, as a rule, are designed to achieve the formation of all the necessary knowledge in schoolchildren without involving other educational materials. Tasks on each topic studied are diverse, interactive, allowing you to work both individually and in pairs and in groups. Younger schoolchildren get used to different forms of work, learn to evaluate themselves after completing all the tasks, and receive targeted feedback. And all this is done without additional efforts from the teacher. High-quality RTR for primary grades combines two main advantages: on the one hand, it is a methodologically proven educational resource that reflects all the latest approaches to the educational process; on the other hand, it is a thoughtful and high-tech digital product. On the other hand, RTR can significantly save the teacher's time in preparing for the lesson [10]. The impact of electronic learning resources on students - the results of scientific studies show that in classes where electronic learning tools are used, students' knowledge indicators are higher than in classes taught using traditional methods [11].

The use of electronic resources provides the following results:
• student activity increases;
• participation in the lesson process increases;
• the level of knowledge retention increases;
• creative thinking develops;
• communication and collaboration skills are formed.

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Especially for primary school students, the impact of audio-visual information is high, which stimulates their cognitive activity.

There are also problems in the use of electronic educational resources. Along with the advantages of electronic resources, there are also some problems:

• lack of technical equipment;
• poor quality of the Internet;
• insufficient digital competence of some teachers;
• methodologically imperfect development of electronic resources;
• negative factors associated with students' long stay in front of the screen.

To overcome these problems, it is important to improve the ICT competence of educators and create quality electronic resources [12].

Ways to increase the efficiency of using electronic educational resources can also be used more widely. To increase the efficiency of using electronic resources in primary education, it is advisable to implement the following recommendations:

1. Continuously develop teachers' digital competence.
2. Widely use interactive and multimedia materials.
3. Develop electronic resources in accordance with state educational standards.
4. Improve educational platforms.
5. Involve parents in the digital educational process.
6. Create electronic resources appropriate to the age characteristics of students.
7. Expand the use of educational tools based on artificial intelligence elements.

In conclusion, the use of electronic educational resources in primary grades is one of the important factors in increasing the effectiveness of education. Electronic textbooks, multimedia tools and interactive platforms activate the learning process of students, develop independent thinking and creative approach. At the same time, improving the methodology for using electronic educational resources, increasing the digital competence of teachers and creating high-quality electronic resources are among the urgent tasks of modern education.

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