Use of ICT in Primary School Classes

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A B S T R A C T

Traditionally, it is believed that children acquire literacy in elementary school, where they are taught to write, read, and count. This is undoubtedly true. However, modern society requires new ways of activity, which require the development of a whole range of skills and abilities in humans—searching for necessary information, processing it, sharing it with others, modeling new objects and processes, and independently planning and organizing their actions. Along with teaching reading, writing, and counting skills, it is important to teach children how to use digital technology as a working tool in their studies and everyday life, starting in first grade.

A R T I C L E I N F O

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Introduction

Modern people are surrounded by so much information that they are unable to process and use for social development without the help of new information technologies [1].

Every year, computers, and with them, information technology, are becoming an increasingly important part of our lives. Based on the premise that "information and communication technologies are a set of methods, devices, and production processes used by society to collect, store, process, and disseminate information," understanding the role of ICT in educational activities is crucial to a teacher's practical work. The success of Russian education reform depends largely on the human factor: the teacher and their professionalism [2].

Methodology

The level of qualifications of teaching staff and their willingness to use modern technologies in their professional work will be crucial in the complex process of bringing education up to the standards of modern society's needs. Information technology provides a unique opportunity for the development of not only students but also teachers. The development and expansion of the information space of children and adolescents encourages teachers to work together with students, exploring new, previously unexplored territories. I emphasize that the simple use of computer technology in the classroom does not automatically lead to an increase in the level of teacher professionalism or an improvement in the quality of education. The decisive role is played, above all, by the teacher's personality and motivation. Therefore, schools must create working conditions that encourage teachers to continually apply and expand their existing knowledge of ICT. The introduction of modern technologies into teaching should not simply be a necessity, but rather a conscious process of continuous teacher education and self-education in this area.

Educational modernization should be determined not so much by the availability of computer equipment and software in schools, but by the readiness of primary school teachers to adapt to changes in line with the needs and challenges of society.

Results

According to statistics, 18% of teachers in grades 1-4 have a negative attitude toward the use of computer technology in their lessons, show no interest in computers, and avoid computer literacy courses, preferring to seek the help of their "advanced" colleagues. This group of teachers has over 20 years of teaching experience [3]. More than half of primary school teachers (54%) have a positive attitude toward computers, express interest in new ICTs, and use them in their teaching. These include both young teachers (with up to five years of experience) and experienced teachers. About a third of primary school teachers (28%) have a positive attitude toward IT, are interested in it, but do not use it in their lessons. This group also includes teachers with varying degrees of experience. Among primary school teachers who are proficient in computer technology, 18% do not use it in their lessons, 27% use it but rarely, 36% use it 2-3 times a week, and 19% use it constantly, in almost every lesson. Table 1 presents the data in descending order of importance of ICT use [4].

This list shows that teachers are more focused on consuming a finished product, using a computer for convenience. They see virtually no value in its use for self-education, professional communication, remote exchange of experience, and distance learning [5].

Now everyone understands that a computer cannot replace a live teacher. However, it can help make their work easier, engage children, and provide a more visual, completely new perception of the material [6].

Therefore, I chose the self-education topic "Using ICT in Primary School Lessons as a Means of Improving the Quality of Learning." I completed training courses, studied literature on this topic, and began using ICT in my lessons.

The use of ICT in the educational process allows for:

- enhancing educational effects;
- improving the quality of material acquisition;
- developing individualized educational trajectories for students;
- implementing a differentiated approach to students with different levels of readiness for learning;
- accommodating children with different abilities and capabilities. One of the most successful forms of preparing and presenting educational material for lessons in elementary school is the creation of multimedia presentations [7].

Moreover, a presentation allows the teacher to independently assemble educational material based on the specific characteristics of a particular class, topic, or subject, allowing for a lesson to be structured to achieve the maximum learning effect [8].

The use of interactive technologies is becoming commonplace in education.

Interactive equipment, such as interactive whiteboards, creates a strong motivation for students to acquire knowledge and helps them creatively solve learning problems, thereby developing students' imaginative thinking [9]. Using an interactive whiteboard, you can show presentations, create models, actively engage students in the learning process, and improve the pace and flow of the lesson. An electronic whiteboard helps children overcome fear and shyness in front of the board and easily engage them in the learning process. No one in the classroom remains indifferent. Due to its high visibility, using an interactive whiteboard helps draw children's attention to the learning process and increases motivation [10].

Everything on the computer can be displayed on the interactive whiteboard. You can move objects and text, add comments to texts, drawings, and diagrams, highlight key areas, and add color. Teachers can now model their lesson with students using brainstorming, demonstrate learning materials, make written comments over the screen, record students' ideas, and thus create a shared lesson plan with the students. What's written on the interactive whiteboard can be shared with students, saved on magnetic media, printed, or sent by email [11].

Internet access is also available during lessons, allowing students to independently access new information. Working on interactive whiteboards improves student concentration, facilitates faster learning, and ultimately improves student performance, thus significantly improving the quality of modern education. Using an interactive whiteboard, teachers can not only demonstrate and comment on paintings and graphics, but also create their own drawings [12].

Despite all the challenges that teachers can overcome, new technologies offer teachers greater creative opportunities.

The limited experience we've already had has shown that working with an interactive whiteboard improves students' comprehension of the material, especially in elementary grades. Students find working with an interactive whiteboard much more engaging than with a traditional whiteboard or printed handouts. They acknowledge that the interactive approach helps them actively participate in the lesson [13].

The main challenge teachers face when preparing lessons is finding materials. Commercially available multimedia discs can serve as sources of demonstration materials. Among multimedia discs, the one most noteworthy is the "Children's Encyclopedia of Cyril and Methodius." It is a fascinating journey into the world of knowledge. Lively, engaging presentation, bright, colorful design, and ease of use make DECM an indispensable aid in helping little "why-knows" explore the world [14].

EFFICIENCY OF THE EXPERIENCE.

The following can be attributed to the effectiveness of this experiment:

- Increased positive motivation in lessons using ICT;

- Increased use of visual aids in the classroom;
- Increased productivity of the educational process;
- Qualitative changes in the relationships between participants in the educational process;
- Improved quality of knowledge [15].

Conclusion

The encyclopedia contains a wealth of useful information about the world around us, existing and extinct civilizations, great and distant eras, outstanding figures of the past and present, unusual natural phenomena, animals, and plants. A variety of illustrated information in a playful format will help awaken a child's thirst for discovery, clearly explain and introduce them to serious encyclopedic knowledge, and help them master school subjects. The "Children's Encyclopedia of Cyril and Methodius" contains over 10,000 amazing facts and phenomena, a rich treasury of knowledge about everything.

Another excellent disc for elementary school is "Nature and Man. Natural Science for Elementary School." The Internet is a new information phenomenon, facing which we, teachers, find ourselves like the fairytale hero at a crossroads: many roads, a wide range of choices, and we haven't yet understood what it is and why we need it. The global computer network is a powerful tool for the educational process, which should seamlessly integrate into the subjects of various educational areas.

Working with the Internet builds confidence, allows students to feel part of the larger real world, stimulates curiosity, develops communication skills, creates an element of competition, and allows for a variety of activities in the classroom.

Often, images from the Internet become the only source for children to see

portraits of writers, photographs, Russian folk costumes, and masterpieces of Russian art. This becomes a vivid visual aid and a source of inspiration in lessons on fine arts, the world around us, literary reading, and creative writing.

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