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Ideas on Designing Educational Content in an Informational Environment

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Abstract. *this article reveals the ways, methods of organizing primary education in the context of informatization of education and the principles of designing a modern lesson in primary education. Their relationship and method of implementation are determined, the importance of the concept of the theory of educational activity in the design of a modern lesson in elementary education is based. Following these principles, the relevance of the design of a modern lesson in primary education and the requirements for it are listed.*

Key words: *informatization, principle, primary class, electronic medium, lohying, educational activities, concept, educational content.*

If we consider primary education as a building, the builder who lays its foundation is the primary school teacher. The use of computers and computer-based technologies by the majority of teachers in the primary education process can facilitate pedagogical work. The study of practical experience has shown that the use of information technologies in primary education is not yet a widespread phenomenon. At the same time, innovative teachers have gained experience in successfully implementing certain areas of information technology use in their professional activities. The content and technology for preparing primary school teachers to use information technologies in their professional work have been developed. The use of information technologies at the primary education stage leads to a qualitatively new level of technological preparation of young learners. Reorganizing teachers' activities under the influence of "electronic tools" is carried out alongside integration processes. Combining information technology tools with traditional teaching methods makes it possible to integrate information into the labor (practical) activities of primary school students.

In preparing future primary school teachers, there are specific features in using modern teaching methods as well as pedagogical and information-communication technologies in the process of teaching subjects. In mastering a subject, the use of textbooks, учеб and methodological manuals, handouts, electronic materials, virtual stands, and industrial samples and models of operating machines is important. It is also essential to watch and study television and radio programs related to information technology, perform learned work methods, analyze information published in journals and newspapers, use media tools to identify terminology related to information technology, and complete didactic tasks. The ability to use information sources (television, radio, audio-video recordings, telephone) and to observe media culture when opening files is of great significance.

Informatization of the education system is a process of searching for new methods inspired by real life. Informatization of education means organizing the entire educational process effectively. Based mainly on the latest achievements of science, this process determines the learning outcomes of each student and the collective as a whole, as well as the level of effective integration of information technologies into the educational process. Informatization of the education system involves the use of computer technology and information technologies during lessons in order to achieve a new level

of educational quality. For this purpose, it is necessary to improve teachers' qualifications and provide methodological support to ensure the widespread use of information and communication technologies in the educational process.

The difficulties in the theory and practice of comprehensively implementing the informatization of the educational process in primary schools are accompanied by objectively existing contradictions, including:

- between the expected outcomes of state investments in the development of informatization and the actual changes observed in primary education practice;
- between the necessity of informatizing primary education and the insufficient theoretical development of this process;
- between the need to modify the characteristics of the educational process in primary schools in accordance with the changing primary education paradigm and existing educational and upbringing traditions;
- between the readiness of primary school teachers to widely use modern information technologies in the educational process and the insufficient didactic and methodological support for developing this readiness;
- between the need for new approaches to assessing learning outcomes in an educational process that is constantly changing under conditions of informatization and the established practices of evaluation.

The large-scale introduction of information and communication technologies into the educational process provides the following benefits:

a reduction in the time required for students and faculty members to search for educational and scientific information;

accelerated updating of the content of electronic educational resources in accordance with current demands;

more engaging and effective organization of the educational process;

allocation of additional time for students' independent learning, and others.

World experience also shows that one of the promising directions for using information and communication technologies in the educational process is the organization of interactive lectures based on multimedia technologies.

The need to eliminate the identified contradictions necessitates a theoretical justification, development, and implementation in educational practice of a comprehensive approach to the informational of the primary school educational process. The need to develop primary school teachers' readiness to effectively use information technologies remains relevant.

Education is an organized process formed on the basis of interaction between the activities of teachers and learners. At its center lies the mutual influence of teaching and learning activities. In modeling the activities of educational participants in primary school lessons through project-based learning, it is important to distinguish teaching and learning activities, organize them properly, and make broad use of design opportunities during the implementation of activities. Through project-based learning, the organization of learning activities in primary school lessons is designed in order to establish a connection between the learner and the learning material.

Project-based learning has been used in pedagogical science for more than nearly 300 years. According to the research of the German educator M. Knoll, the emergence of the concept of "project" dates back to the 16th century and is associated with the attempts of Italian architects to declare architecture a science and elevate it to the level of an academic discipline, thereby turning their activities into a profession. As a result of the emergence of the engineering profession at the end of the 18th century, the educational project was first introduced in France, then in Germany, Austria,

and Switzerland, and by the mid-19th century, it began to be applied in technical and industrial higher education institutions in the United States.

The term "project" came from the field of engineering into the social sciences and means "Project (from Latin projects) — the main idea of reconstructing a particular situation in a certain field according to specific rules." Projects can take various forms:

- a set of prepared documents (calculations, drawings, models) aimed at constructing a building or structure, or creating a specific object;
- a pre-date text of a document;
- a plan, target, or idea.

Project planning in the educational process is a specially organized goal-oriented learning activity that ensures the student's independent actions—from searching for a problem and planning activities to solving it, organizing the process, and conducting mass evaluation—under the guidance of the teacher.

In implementing a teaching project in the educational process, a teacher's personal qualities—such as professional skills, motivation, pedagogical abilities, character, temperament, mental state, self-awareness, and others—come into play. When designing the educational process, the teacher, as both project planner and executor, chooses the most effective way to implement the project. Principles of designing information support serve to structure information within the educational project. The principle of socio-economic planning ensures alignment with economic goals. Social and economic design of the educational process is the responsibility of the education manager. Currently, designing modern lessons in primary education remains a subject of debate. Primary education plays a central role in the school education system. The goal of primary education is to develop the learning activities of primary school students. Therefore, in our view, learning activities should be based on the principles of modern lesson design. Accordingly, the typology of lessons and their stages should be determined with consideration of the structure of educational activities.

The essence of project-based learning requires the teacher to have comprehensive knowledge and experience in project-based teaching; it builds on students' existing fundamental knowledge in the subject and motivates them to acquire new knowledge; it encourages collaborative work to study real problems and develop skills according to the curriculum; it is challenging, creativity-oriented, achievable, supported, and long-term; it is implemented step by step, aimed at developing students' knowledge, skills, and addressing gaps; through project-based learning, students, teachers, schools, and educational organizations can improve, systematize, and evaluate their practice; it encompasses content based on social demand and standards, as well as skills such as critical thinking, problem-solving, communication, self-management, project management, and collaboration; it defines learning objectives based on students' level of mastery, following a progression from simple to complex across classes; it fosters a chain of skills including knowledge, comprehension, understanding, teamwork, listening to others, reasoning, responsibility, diligence, and achievement; it teaches students the ability to create or present a product.

In conclusion, in the context of informatized primary education, lesson design requires teachers to have high-level knowledge, competence, skills, and strong familiarity with modern information technologies. Therefore, for a teacher to design each lesson effectively, they must not only know the subject matter but also understand how to convey it to students through well-structured projects. In other words, a teacher must be creative and able to use innovations effectively. Each lesson plan must engage students in an interesting and meaningful way. Only then can the lesson process be successfully designed in today's informatized educational environment.

References

1. Decree of the President of the Republic of Uzbekistan "On Approving the Concept for the Development of the Public Education System of the Republic of Uzbekistan until 2030," No. 5712, April 29, 2019.

2. Otaxonov, N.A., & Aldashev, I.T. “Factors of Informatization in the Primary Education Process,” Economics and Society, No. 2(81), Part 1, 2021.
3. Husenova, A.Sh. “Methodology for Projecting Teacher Activity in Integrating Primary School Native Language and Reading Lessons,” PhD dissertation abstract in Pedagogical Sciences, Bukhara, 2023.
4. Jumayeva, H.G‘. “Methodology for Improving Students’ Creative Abilities in Primary School Native Language Education Based on a Project-Based Approach,” PhD dissertation abstract, Bukhara, 2024.
5. Haydarqulova, M.Z. “The Importance of Designing the Content of Education,” Pedagogical Mastery Scientific-Theoretical and Methodological Journal, No. 11, 2024.
6. Haydarkulova, M.Z. “The Use of the Principle of Design Education by Primary School Teachers,” Collection of Materials of the XVII International Scientific-Theoretical Conference of Young Scientists of Higher Education Institutions of Russia, Uzbekistan, and Tajikistan, April 26, 2024.
7. Haydarqulova, M.Z. “Training Future Primary School Teachers to Design Educational Content,” Education and Innovations Journal, No. 10, 2024.