AJLLSE GLOBAL RESEARCH NETWORK

AMERICAN Journal of Language, Literacy and Learning in STEM Education
Volume 3, Issue 1, 2025 ISSN (E): 2993-2769

Scientific and Methodological Foundations of Primary Education Methodology

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Abstract: *The effectiveness of education in primary grades depends on compliance with the principles of education and the correct selection of educational methods and techniques, as well as their correct application in practice. Method (Greek) – means "method" and is a set of methods for performing a specific task, practical or theoretical mastery (knowledge) of existence, serving to achieve a specific goal. The pedagogical meaning of the concept of method is to equip with knowledge, skills, and qualifications and apply them in practice.*

Key words: *primary education, methodology, pedagogy, analytical and creative thinking, interactive methods, didactic games, technologies, collaboration, 4K module, theory and practice*

INTRODUCTION

In today's rapidly developing age of development, political, economic, cultural and scientific changes are becoming more relevant every day. Being constantly aware of such developments and carrying out reforms in accordance with them requires high thinking, logical, critical and creative thinking, as well as strong scientific potential. Educating and raising a generation that meets global standards is the most important issue facing today's teachers. Therefore, it is not without reason that great importance is attached to the lower levels of education, especially primary education.

In order to take a worthy place in the world community, in line with world development, it is worth highlighting the reforms being carried out in the field of education in our country and their results. In the era of the "Third Renaissance" being created in the new Uzbekistan, in the words of our President Sh.M. Mirziyoev, the following priority tasks of primary education have been established:

- Developing the ability of primary school students to think critically and creatively;
- Improving primary education based on advanced foreign experiences;
- Increasing the efficiency of primary education.

The foundations of the methodology of primary education are the following:

- Regulatory and legal documents on primary education;
- Theory and practice of primary education;
- Eastern and Western pedagogical experiences in primary education;
- Scientific research on primary education.

METHODS

During the research work, the observation and experiments methods are mainly used to learn the theme and analyze the results.

The use of interactive methods and didactic games, modern innovative technologies in primary grades helps students to think independently, expand the scope of creative research and logical thinking, as well as connect what they have learned in lessons with life, and increase their interest. Effective use of such conditions by teachers, created on the basis of modern requirements, and organization of lessons on the basis of advanced pedagogical and information and communication technologies, guarantees the quality of the educational process.

Based on the physiological and psychological age characteristics of primary school students, a number of game technologies have been developed that are effective in teaching science. According to research conducted by specialists, the main type of human activity is manifested in three forms: labor, play and educational activities. All of these activities are formed in connection with one other.

The laws of formation of mental actions of primary school students based on educational materials at school are revealed in game activities. But game-based education is not the main form of education in working with students. Although game-based education does not form students' cognitive abilities, it increases their cognitive activity and arouses interest in the lesson. And due to interest, the quality of education improves even more.

Didactic game technologies are used in the educational process in the form of didactic game lessons. In these lessons, the process of students' learning is combined through game activities. Therefore, lessons in which students' learning activities are combined with game activities are called didactic game lessons.

The 4K module, which is being implemented in many areas in the 21st century, serves to help students acquire knowledge, skills and qualifications in accordance with the requirements of the time, based on communication, collaboration, critical thinking and creativity.

RESULTS

The following competencies and 4 K modules are implemented in student activities through games:

- Through game activities, the student's interest in studying and working increases;
- During the game, the student helps to enter into communication, that is, to acquire a communicative culture;
- The student is given the opportunity to demonstrate his talents, interests, knowledge and identity;
- It helps to overcome various difficulties that arise in life and in the game process and to develop critical thinking skills, such as the ability to correctly set goals, analyze, form logical connections, and draw independent conclusions;
- in the process of the game, it creates an opportunity to acquire behavior consistent with social norms, eliminate shortcomings, expand one's worldview, be imaginative, curious, put forward one's own options, find new solutions and methods, and form creative thinking;
- attention is paid to studying the system of values important for humanity, especially social, spiritual, cultural, national and universal values;
- The development of team communication, a culture of cooperation – collaboration (working together or in partnership) among the participants of the game is envisaged.

The teaching method, which is a structural element of the pedagogical system in primary education, is important in ensuring the result of this process – that is, the goal of the lesson. The effective introduction of pedagogical technologies in the process of lessons leads to independent activity of learners in the educational process.

DISCUSSION

If we consider the pedagogical and methodological foundations of primary education:

- Scientific basis: This refers to research, theories and evidence from fields such as psychology, cognitive science and neuroscience that inform effective teaching practice.

- Methodological basis: This includes practical approaches, methods and strategies used to implement these theories in the classroom.
- Primary education: This identifies the age group (usually grades 1-4) and their specific developmental needs.

When organizing primary education, teachers are required to:

- Focus on a specific methodology:
- The effectiveness of inquiry-based learning in primary subjects: explore the scientific basis and practical application of this approach;
- Comparative study of different approaches to teaching reading using scientific evidence;
- Project-based teaching of mathematics: an analysis of its advantages and problems for primary school students;
- The impact of formative assessment on students' knowledge in primary schools: a study of the scientific principles of this assessment and methods of its effective implementation;
- The role of play in early literacy development: a study of the effectiveness of play-based education in literacy acquisition;
- Teaching scientific thinking through experience and observation in primary education: a study of how to form scientific thinking in young students;
- Focusing on a specific area of development;
- Applying theories of cognitive development in the development of primary curricula: using theories such as Piaget or Vygotsky in the development of curricula;
- Developing practical activities in primary education: analyzing the role of classroom practical work in developing practical skills.
- Adapting primary education methodologies to students' level of knowledge: developing special strategies for students with learning disabilities or other special needs;
- The impact of students' socio-economic status on their academic achievement: exploring the role of the environment and how to address its impact through methodologies and approaches.

CONCLUSION

In conclusion, it can be said that all levels of the education system, especially primary education, which is considered one of the lower levels, need to pay great attention to providing strong knowledge and teaching broad thinking. Today, the ability to acquire deep knowledge while thinking independently is the demand of the time. It follows that the current issue of pedagogical technology is to ensure that learners achieve the goal of education through the development of their knowledge.

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