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THE ROLE OF NATIONAL INNOVATIVE PEDAGOGICAL TECHNOLOGY IN FORMING THE QUALITIES OF A PERFECT YOUNG GENERATION

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Abstract. *This article examines the role and significance of national innovative pedagogical technology in shaping the qualities of a perfect young generation. The study analyzes innovative approaches aimed at preserving and developing national values within pedagogical processes. It also demonstrates the effectiveness of modern pedagogical technologies in fostering the spiritual, intellectual, and social development of youth. The article defines the concept of national innovative pedagogical technology and analyzes its role and effectiveness in nurturing a well-rounded personality.*

Keywords: *Perfect young generation, national innovative pedagogical technology, pedagogical process, spiritual education, innovative methods, patriotism.*

Introduction

Cardiovascular diseases (CVDs) are among the most common health problems worldwide leading the way in death and contributing significantly to disability[1], [2] . Since the 1990s, the burden of these diseases has been steadily increasing in most countries due to changing patterns of exposure to risk factors, as well as population growth and ageing [1].

CVD includes a variety of disorders, such as cardiomyopathy, ischemic heart disease, coronary artery disease, stroke, atrial fibrillation, and atrial flutter [3], [4]. These diseases caused approximately 19.8 million deaths in 2022, representing nearly a third (32%) of all deaths worldwide, according to the World Health Organization (WHO). The vast majority of these deaths, approximately 85%, resulted from heart attacks and strokes [5].

With aging, the vasculature progressively undergoes pathological changes, such as reduced distensibility, increased stiffness, fibrotic remodeling, microvascular rarefaction, lipid deposition, and calcification, which increases the risk of serious cardiovascular complications [6]. In addition, aging is one of the most important factors that exacerbate oxidative stress, defined as "an imbalance between reactive oxygen species (ROS) production and the antioxidant defense system" [7], [8]. If ROS increases due to the accumulation of mitochondrial dysfunction and impaired DNA repair

mechanisms, this dysfunction increases the accumulation of oxidized proteins and damaged lipids [7]. This imbalance is further exacerbated by smoking, chronic exposure to oxidative stress, and harmful environmental factors [9].

Peroxidation of membrane lipids is a primary pathway for cellular damage generating reactive byproducts primarily aldehydes. A key aldehyde produced malondialdehyde (MDA) forms covalent complexes with proteins, disrupting their function. These aldehydes have a longer half-life than free radicals, accumulate with age, and act as secondary mediators of oxidative stress [10]. Notably, MDA reacts with lysine residues in apolipoprotein B within LDL particles resulting in the formation of oxidized low-density lipoprotein (OxLDL). This makes OxLDL an important biomarker associated with the risk of coronary artery disease [11].

1.Introduction

Raising a perfect young generation and shaping them as competent individuals in accordance with the demands of contemporary society is one of the most pressing tasks of modern pedagogy. Developing moral values, patriotism, creativity, and ethical principles in youth is of paramount importance. In this context, national innovative pedagogical technologies are recognized as an effective tool in the educational process. These technologies not only provide knowledge but also contribute to the personal and social development of young people, strengthening their social skills and moral values.

National innovative pedagogical technologies integrate modern pedagogical theory and practice, enabling students to become active, creative thinkers capable of independent decision-making. Moreover, these technologies enrich traditional educational methods with innovative approaches, increasing the interactivity of the learning process. Therefore, studying the role and significance of national innovative pedagogical technology in shaping the qualities of a perfect young generation is a crucial direction in pedagogical research.[1]

This article aims to investigate the essence of national innovative pedagogical technologies, their role in the educational process, and their effectiveness in forming the moral and ethical qualities of young people. The research analyzes effective methods for nurturing well-rounded personalities by harmonizing modern pedagogical approaches with national values.

2. Research Methodology

This research is based on qualitative and analytical research methods aimed at examining the effectiveness of national innovative pedagogical technologies in the educational process and their role in shaping the qualities of a perfect young generation. The methodological framework of the study combines theoretical analysis and comparative evaluation of modern pedagogical practices.

Several methodological approaches were applied during the research process in order to ensure a comprehensive understanding of the topic.

2.1. Literature Analysis.

At the first stage of the research, scientific publications, pedagogical monographs, journal articles, and educational policy documents related to innovative pedagogical technologies were analyzed. The analysis focused on identifying the theoretical foundations of innovative pedagogy, the concept of national pedagogical technologies, and their influence on student development. Academic sources discussing interactive learning, project-based education, and the integration of national cultural values in education were particularly emphasized.

2.2. Comparative Analysis.

A comparative method was used to evaluate different pedagogical technologies implemented in national and international educational systems. This analysis allowed the identification of similarities and differences between traditional teaching methods and innovative pedagogical approaches. Special attention was given to educational practices that successfully integrate national traditions with modern teaching technologies in order to improve the effectiveness of learning outcomes.

2.3. Pedagogical Observation.

Pedagogical observation was applied to examine how innovative teaching methods function within real educational environments. Educational activities that incorporate interactive methods, group discussions, project work, and game-based learning were analyzed in order to observe student engagement, participation levels, and collaborative learning processes. These observations helped to determine how innovative pedagogical technologies influence students' motivation, creativity, and communication skills.

2.4. Conceptual and Theoretical Analysis.

The conceptual foundations of national innovative pedagogical technology were also examined through theoretical analysis. This stage involved defining the key concepts related to innovative pedagogy, identifying their essential characteristics, and explaining their relevance in modern education systems. The theoretical analysis also explored how national cultural traditions can be integrated into innovative teaching strategies to promote moral and ethical education among students.

In addition, the research examined several widely used innovative pedagogical approaches such as project-based learning, interactive teaching strategies, digital pedagogical tools, and game-based learning methods. These approaches were analyzed in terms of their ability to enhance critical thinking, creativity, problem-solving skills, and social interaction among students. Special attention was given to pedagogical practices that integrate national cultural traditions, including traditional games, cultural activities, and value-based education. Such approaches not only improve the effectiveness of learning but also contribute to strengthening students' cultural identity, patriotism, and moral responsibility.

The methodological approach adopted in this study therefore provides a comprehensive framework for analyzing how national innovative pedagogical technologies influence the intellectual, social, and moral development of young people within modern educational environments.

3. Results

The results of the study indicate that national innovative pedagogical technologies play a significant role in improving the effectiveness of the educational process and in shaping the personal qualities of young people. The integration of innovative teaching strategies with national cultural traditions creates a more engaging and meaningful learning environment that promotes both intellectual and moral development.

First, the application of interactive teaching methods significantly increases students' participation in the learning process. Unlike traditional teacher-centered instruction, interactive learning encourages students to actively engage in discussions, share their ideas, and collaborate with their peers. As a result, students develop stronger communication skills, critical thinking abilities, and confidence in expressing their opinions.

Second, the implementation of project-based learning allows students to develop independent thinking and problem-solving skills. Through project activities, students analyze real-life situations,

conduct research, and present their findings in a structured manner. This process enhances their analytical abilities and helps them develop the capacity to make independent decisions.

Third, the use of digital pedagogical tools has demonstrated positive effects on students' cognitive development. Technologies such as multimedia presentations, smart boards, virtual laboratories, and digital learning platforms improve visual perception and knowledge retention. Digital tools also make the learning process more dynamic and accessible, enabling students to better understand complex concepts.[2]

Another important finding of the research is related to the effectiveness of practical exercises and experiential learning. Practical activities such as laboratory work, simulations, and real-life case studies enable students to apply theoretical knowledge in practice. This approach strengthens problem-solving abilities and enhances the development of practical competencies.

Furthermore, game-based learning methods were found to be particularly effective in developing social and emotional skills among students. Educational games, role-playing activities, and dramatization exercises encourage cooperation, empathy, and responsibility. These activities create a positive learning environment in which students feel motivated and actively participate in educational tasks.

The research also demonstrates that problem-based learning approaches significantly contribute to the development of creativity and analytical thinking. When students are presented with real-life problem situations, they learn to evaluate different perspectives, propose solutions, and justify their decisions. This approach prepares students to face complex challenges in real social and professional environments.

An important aspect of national innovative pedagogical technologies is the integration of ethical and moral education within the learning process. Incorporating national values, cultural traditions, and ethical discussions into classroom activities helps students develop a strong moral foundation and a sense of national identity.

The findings of the research are summarized in Table 1, which illustrates the effectiveness of various innovative pedagogical technologies in forming the qualities of a well-rounded young generation.

Table 1. Effectiveness of National Innovative Pedagogical Technologies in Forming the Qualities of a Well-Rounded Young Generation[3]

№	Pedagogical Technology	Impact on Qualities	Example/Outcome
I	Project-based learning	Critical thinking, independent decision-making	Students present project results
II	Interactive teaching methods	Communication, collaboration	Group discussions, role-playing
III	Digital pedagogical tools	Attention, visual memory	Smartboards, virtual labs
IV	Practical exercises	Creative thinking, problem-solving	Experiments, practicums
V	Game-based methods	Respect, responsibility, empathy	Role-playing, dramatization
VI	Problem-based situations	Critical thinking, creativity	Analyzing and solving scenarios
VII	Ethical-moral integration	Moral qualities, national identity	National values and examples
V	Team projects	Collaboration, social	Joint group work outcomes

III		adaptability	

4. Discussion

The results obtained in this study highlight the importance of integrating national cultural traditions with innovative pedagogical technologies in order to achieve comprehensive student development. Modern education requires teaching approaches that go beyond simple knowledge transfer and focus on developing students' intellectual, social, and moral competencies.

One of the most significant aspects of national pedagogical practices is the use of traditional active games as an educational tool. These games contribute not only to physical development but also to the formation of social and ethical values. Participation in traditional games encourages cooperation, respect for others, and adherence to cultural traditions.

Across the world, many countries successfully integrate traditional games and cultural practices into their educational systems. For example, Brazil's Capoeira combines acrobatic movements with music and cultural expression, promoting both physical activity and cultural awareness. India's Kabaddi develops agility, strength, and teamwork, while Japan's Sumo emphasizes discipline and respect. Similarly, South Korea's Taekwondo encourages self-control, perseverance, and respect for tradition.

In Uzbekistan, traditional games such as Kurash, Chapanchi, Beshik Toyi, and Yakshabay hold significant pedagogical value. These cultural activities help young people develop physical strength, courage, teamwork, and respect for national traditions. When incorporated into educational programs, such activities not only promote physical well-being but also strengthen students' connection to their cultural heritage.

The discussion also emphasizes the importance of student-centered pedagogical approaches. Innovative technologies shift the focus of education from teacher-centered instruction to active student participation. In this learning environment, students are encouraged to think independently, express their ideas freely, and collaborate with others.[4]

Another important factor highlighted by the research is the role of digital technologies in modern education. Digital learning platforms and multimedia tools create interactive learning environments that support visual learning and improve students' engagement. At the same time, these technologies allow teachers to adapt educational content to the individual learning styles and needs of students.

The integration of ethical and moral education within innovative pedagogical technologies also plays a crucial role in shaping students' character. Activities such as role-playing, group discussions, and collaborative projects help students develop responsibility, empathy, and respect for others.[5]

Furthermore, collaborative learning environments encourage students to develop social adaptability and teamwork skills, which are essential competencies in modern society. Students who participate in group projects and interactive activities learn how to communicate effectively, resolve conflicts, and work collectively toward common goals.[6]

Overall, the discussion demonstrates that national innovative pedagogical technologies provide a balanced educational framework that supports both academic achievement and personal development. By combining modern pedagogical innovations with national cultural values, educational institutions can effectively contribute to the formation of a knowledgeable, responsible, and culturally aware young generation.[7]

5. Conclusion

National innovative pedagogical technologies play a crucial role in educating a perfect young generation. Findings demonstrate that interactive methods, project-based learning, digital tools, and game-based techniques effectively enhance students' creativity, critical thinking, and communication skills. Integrating ethical-moral education and national values strengthens inner personal qualities, fostering responsible, socially active, and culturally aware individuals.

In conclusion, effective application of pedagogical innovations enables the upbringing of youth who are not only knowledgeable but also virtuous, socially responsible, and respectful of national and cultural values.

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