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RESEARCH ARTICLE

Theoretical Foundations of Using Innovative Methods and Tools in Teaching Pedagogical Sciences

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Abstract

This article highlights the theoretical and practical foundations of substantively improving the process of teaching pedagogical sciences in the higher education system and introducing innovative methods and technologies. The role of innovation in the educational process, its importance in developing the student's personality, and the priority aspects of the personality-oriented approach are analyzed. The article also reveals the didactic features of innovative methods such as cooperative learning, the differential approach, reflective conversation, and social role-playing games. The theoretical paradigms of innovative pedagogy are substantiated on the basis of the scientific views of foreign and local scholars. As a result of the research, it was determined that innovative methods are an important factor in increasing educational effectiveness, directing students toward independent thinking, and developing their professional competencies.

KEYWORDS

Innovative education, pedagogical process, interactive methods, reflective approach, cooperative learning, differential teaching, pedagogical competence, personality-oriented education, educational effectiveness, digital technologies.

INTRODUCTION

In the higher education system, the issues of substantively improving the activity of the educational process, widely implementing modern and advanced foreign experience in practice, and developing students' interest in pedagogical sciences are emerging as a scientific problem that must be solved integrally and consistently. This approach is especially important in teaching pedagogical sciences, because the teacher prepares the student for future professional activity by supporting each of their social actions and developing their professional needs. Therefore, innovative methods direct the student not to "act", but to develop with the times.

The role and significance of innovation in the process of teaching pedagogical sciences are directly related to the level of development of the modern education system. While in the traditional education model the main process is aimed at transmitting ready-made knowledge to the audience, the innovative approach turns the student into an active subject of the educational process. In this respect, innovation serves to fundamentally renew the content, form, and methods of the process of teaching pedagogical sciences.

First of all, innovation is an important factor that increases the effectiveness of the process of teaching pedagogical sciences. In the conditions of innovative education, students' independent thinking, problem-solving ability, and creative approach acquire priority importance. From this point of view, innovative methods and tools turn students from passive listeners into active participants. This leads to deeper and more meaningful assimilation of knowledge and to the

expansion of opportunities to apply it in practice.

Another important aspect of innovation in the pedagogical process is ensuring the personality-oriented nature of education. Taking into account the individual characteristics, interests, and needs of each student is the main requirement of modern education. Innovative approaches, in particular interactive methods and digital technologies, enable the teacher to form an individual development trajectory for students. This, along with improving the quality of education, also strengthens students' self-development competence.

Innovation is also manifested as a means of increasing students' motivation in the process of teaching pedagogical sciences. Traditional lesson forms are often characterized by uniformity, which may lead to a decrease in students' interest. Innovative methods, however, enliven the lesson process and ensure active participation among students. For example, students' internal motivation is strengthened through the creation of problem situations, project-based learning, or the use of digital platforms.

From a scientific point of view, the importance of innovation in the pedagogical process has been substantiated by many researchers. The significance of innovative approaches in the pedagogical process is determined not only by the application of separate methods, but also by the fundamental reform and renewal of the education system. Modern researchers interpret innovation as a solid factor that increases educational effectiveness.

In particular, Tony Bates emphasizes that the use of digital technologies in education increases the flexibility of the learning process and expands the possibility of individualizing and differentiating knowledge. According to his teaching, innovative tools make the teaching process not only effective, but also a student-oriented system.

Also, Sugata Mitra, in his concept of "self-organized learning environments" (SOLE), substantiates that an innovative environment plays a decisive role in developing students' ability for independent learning. According to him, an educational environment enriched with technologies strengthens students' activity based on internal interest and forms learning based on self-management.

In addition, A.V. Khutorskoy, linking innovative approaches in modern didactics with competence-based education, emphasizes the need to form in students not only knowledge, but also practical skills and personal development competencies. In his concept, innovation is a means of renewing the content and results of education.

Another important factor is that Diana Laurillard promotes an interactive and dialogic teaching model in the process of digitalizing education. She substantiates that innovative technologies ensure effective communication between teacher and student and serve to deepen the learning process.

Thus, modern scientific views show that innovations in the process of teaching pedagogical sciences not only have a theoretical basis, but also possess high practical effectiveness. This determines the need for the consistent introduction of innovative methods and tools into the education system.

In addition, innovation serves as the main means of modernizing the pedagogical process. The development of information and communication technologies has created new opportunities for the educational process: distance learning, electronic resources, and platforms based on artificial intelligence are among them. These tools ensure the openness and flexibility of education and strengthen interactivity between teacher and student.

The role of innovation in the process of teaching pedagogical sciences is to bring education to a qualitatively new stage, and its significance consists in ensuring the comprehensive development of students, increasing educational effectiveness, and training personnel corresponding to the requirements of modern society. Therefore, the consistent and scientifically grounded introduction of innovative approaches into pedagogical practice is considered one of the priority tasks of today's education.

Activity theory also plays an important role in understanding the essence of the pedagogical process. This theory (Leontiev, Vygotsky) emphasizes that personality development is carried out through activity. When each student participates in the pedagogical process as a subject of activity, their self-confidence increases and they feel themselves as a member of society. Therefore, innovative methods reduce the risk of the student "remaining outside learning" and expand the possibility of involving them in self-educational activity.

Innovative pedagogy is also directly connected with moral values. Because an innovative lesson is not only teaching, but also a space for teaching human relations. In pedagogical sciences, with the help of innovative methods (empathetic conversation, role-playing, collaborative discussion), students learn to value each other's opinions and to feel solidarity and

justice. In this respect, innovative methods strengthen the moral foundation of the pedagogical process and turn the lesson into a "school of understanding the human being".

Summarizing these ideas, we can say that innovative pedagogy has theoretically formed at the point of intersection of several paradigms: social constructivism (the social nature of knowledge), activity theory (the active subject of development), humanism (recognition of the value of the individual), and emancipatory pedagogy (the idea of equality and justice). In teaching pedagogical sciences, these approaches turn into a unified system and make the student not only a bearer of knowledge, but also a bearer of values and culture.

In teaching pedagogical sciences, the methods of an innovative environment serve to reveal the range of opportunities of each student, taking into account the socio-cultural experience of the individual. When considering the didactic basis of the methods, the main attention is focused on the principle of "education for all". This principle was developed by Ainscow and Miles and implies that the education system should be fair, flexible, and developmental for every student. The specificity of pedagogical sciences is that they are aimed at forming values and attitudes rather than knowledge; therefore, innovative methods here rely on personal experience.

The theory of pedagogical technologies plays an important role in the didactic basis of innovative methods. According to the definition of Tolipov and Usmonboyeva, pedagogical technology is a pre-designed systematic process that guarantees the educational result. Innovative methods also require the same systematic approach, only in this case the specific needs, psychological state, and social experience of students are taken as the main criterion.

In Muslimov's studies, pedagogical competence is indicated as the main criterion of a teacher's activity. In pedagogical sciences, this competence is manifested as an activity aimed at developing students' skills such as making moral decisions, cooperation, and problem solving. From this point of view, innovative methods form the teacher not as a source of knowledge, but as a facilitator.

Didactically, the structure of innovative methods consists of three main components: content, process, and result. Content is the differentiated form of educational material, process is active learning based on cooperation, and result is an individualized form of personal development. This model harmonizes with the "multi-layered learning" approach, because in it each student has the opportunity to learn at their own pace and in their own style.

One of the main innovative methods in teaching pedagogical sciences is cooperative learning. This approach, developed by Johnson, places team cooperation at the center of educational activity. In teaching pedagogical sciences, this method is implemented through activities of "collaborative decision-making" and "analysis of moral dilemmas". Students exchange opinions in small groups, listen to each other's points of view, and come to an agreed conclusion. This process, in fact, forms mutual respect, communication, and cooperation.

The second important method is the differential approach. Because if we rely on Tomlinson's concept, differentiated teaching is the process of "bringing all students to the same goal by different paths". In teaching the subject of pedagogical rhetoric, this is implemented, for example, by offering students assignments in various formats (essay, poster, video, dramatization) on the topic "The role of reading in forming speech culture". This method allows the student's strengths to be demonstrated and, as a result, social equality in the group is strengthened.

The third direction is the method of reflective conversation. In this approach, the teacher ends the lesson not with a final conclusion, but with open questions. For example, questions such as "What idea changed you today?" or "In which situation would you behave differently?" develop students' skills of self-analysis, evaluation of their own activity, and understanding the point of view of others.

This method is in harmony with the model of "forming inclusiveness through educational reflection" developed by Rano Mavlonova. In this model, reflection is interpreted as a means of developing a person's social adaptation and empathic competencies.

The theoretical foundations of the reflective approach are also widely covered in international pedagogy and psychology. In particular, Donald Schön explains reflection as "thinking during activity" and "analysis after activity". This approach is of great importance both in the teacher's professional development and in the student's process of self-awareness.

Also, the experiential learning model developed by David Kolb defines reflection as a central stage of the learning process. According to Kolb's cycle, concrete experience is analyzed

through reflective observation, and this process leads to the formation of new knowledge and skills.

In addition, Jack Mezirow, in the theory of transformative learning, substantiates reflection as a mechanism for reconsidering a person's views and beliefs. In his opinion, through critical reflection, students broaden their worldview and take a socially active position.

The fourth direction is social role-playing games. This method is one of the most effective forms of pedagogical rhetoric lessons. Students feel social roles by dramatizing various social situations, for example, "softening a situation through speech creativity in a problematic situation" and "delivering fair speech". In this way, their behavioral motives and social feelings develop. This process of development is based on the idea of "learning through social experience" emphasized by Vygotsky.

For the effective application of innovative methods, their didactic features can be summarized through the following table (see Table 1.1):

Table 1.1.

Didactic features of innovative methods in the subject of pedagogical rhetoric.

Innovative method	Didactic feature	Application in pedagogical rhetoric	Pedagogical purpose	Expected result
Debate	Interactivity, analysis of opposing opinions	Argumentation and substantiation of counterarguments	Development of critical thinking and speech culture	Logical and convincing speech is formed
Case-study	Analysis of real situations	Analysis and evaluation of a speech situation	Understanding the rhetorical situation	The skill of composing speech appropriate to the situation develops
Project method	Practical orientation	Preparation of a speech performance/presentation	Development of the skill of influencing the audience	Independent speech creation and presentation are formed
Reflective conversation	Self-analysis	Self-assessment and analysis of speech	Development of metacognitive and reflective competencies	Awareness and correction of shortcomings in speech
Role-playing	Learning based on simulation and experience	Modeling various communicative situations	Development of speech adaptability	Ability to compose speech appropriate to different audiences
Mental attack (brainstorming)	Free generation of	Development of speech ideas	Development of creative	Original and creative

	ideas		thinking	speech is formed
ICT-based methods	Visuality and digitization	Creation of multimedia speech/slides, video	Formation of modern speech culture	Effective and visual speech skills develop

It can be seen from the table that innovative methods in the subject of pedagogical rhetoric serve not only to provide knowledge, but also to develop students' speech, communicative, and influential competencies. Each method forms a specific aspect of rhetorical activity — argumentation, adaptation to the audience, speech analysis, and presentation skills. Therefore, the use of innovative methods is considered an important didactic factor ensuring high effectiveness in teaching the subject of pedagogical rhetoric.

The most important aspect for the teacher is to assume a flexible role during the lesson process: sometimes they act as a motivator, sometimes as a facilitator, and sometimes as an observer. This variability makes it possible to cover the aspects among students and create a comfortable learning environment for everyone. In an innovative educational environment, the structuring of methods is also specific. The lesson consists of three phases: motivational introduction, interactive activity, and reflective conclusion. At the introductory stage, the teacher psychologically prepares students for the topic; at the interactive stage, group and individual activities are combined; and at the final stage, students analyze and share their learning process. This cycle, in fact, constitutes a "flexible didactic model" in teaching pedagogical sciences.

Taking all this into account, we can say that innovative methods are not only a means of teaching, but also a mechanism that enriches the spiritual content of the pedagogical process. They make it possible to reconstruct the lesson on the basis of human values, respect, and cooperation.

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