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INNOVATIVE TEACHING METHODS IN THE CONTEXT OF THE NEW EDUCATIONAL ENVIRONMENT

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Abstract
The article presents the essence of teaching technology and innovative methods that improve the teaching process. It also introduces a new method called "Penguins on the Iceberg", which contributes not only to deep knowledge acquisition but also to the development of self-sufficient, responsible, and creative individuals.

Keywords: Technology, innovative educational process, hypodynamia, "Penguins on the Iceberg".

Introduction

In recent years, terms such as teaching technology, innovative teaching methods, and new instructional technologies have become increasingly common in academic discourse. So, what exactly are innovative methods of teaching a subject? And what are the new pedagogical technologies?

To address these questions, let us first clarify what the learning process entails. The learning process is a sequential and integrated set of actions performed by the teacher and the learners under the teacher's guidance, aimed at the conscious and thorough mastery of a system of knowledge and skills.

The teacher acts as the organizer of the learning process, whose primary function is to ensure that students successfully assimilate the instructional material. The learner, in turn, is an active participant in the learning process, acquiring knowledge and developing corresponding competencies.

The key components of the learning process include:

• **The learner** — the individual who assimilates educational content and acquires practical skills;

• **The academic subject** — the content and focus of activity directed toward the formation of knowledge and skills;

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• **Teaching technology** — a set of methods and techniques that ensure effective assimilation of educational material;
• **The teacher** — the individual who facilitates purposeful learning and helps students master both knowledge and methods of activity.

To ensure that students effectively grasp the subject, it is essential to establish the proper relationship between the teacher and the learner — a concept known in pedagogy as the interaction between instructor and student. It is also necessary to identify the main idea or teaching concept. In the new paradigm of education, the central elements are the learner, the instructional materials, and the teacher.

The choice of teaching method is determined by the characteristics of the audience. Thus, a traditional method, a learner-centered approach, or a free-learning model may be employed. Contemporary educational technologies rely on learner-centered instruction, where the student becomes the central figure, and the teaching process is constructed with consideration for individual characteristics and active participation in knowledge acquisition.

Today it is no secret that with the rapid development of science, technology, and informatics, new generations of phones, gadgets, and computers are produced every year. This, in turn, contributes to hypodynamia.

Hypodynamia refers to physical inactivity. Previously, this term was used mainly in reference to office workers, but today it applies to a much broader population. Hypodynamia often leads to cardiovascular issues, hypertension, and conditions rooted in obesity, low physical activity, stress, and mental strain.

To prevent such conditions and promote more active physical engagement in education, we have developed a new teaching method called **“Penguins on an Iceberg.”** This method was tested at Secondary School No. 42 in the city of Bukhara and among first- and second-year students of the Pedagogical Faculty at Bukhara University. Among schoolchildren, the method was particularly engaging; as noted earlier, its effectiveness depends heavily on the characteristics of the audience. The method is highly dynamic and proved interesting even for university students, who actively participated during the lesson.

The “Penguins on an Iceberg” method is conducted as follows. It can be used in both theoretical and practical lessons, for review, reinforcement of material, or oral assessment. The teacher draws a large circle on the board (or floor), large enough to accommodate 5–6 students. The circle represents the iceberg, and the students represent penguins. In nature, penguins form such clusters in winter to stay warm; the penguin in the center, once warmed, swaps places with another.

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Similarly, one student stands in the middle and answers questions posed by surrounding students. If the student in the center answers a question correctly, they exchange places with the student who asked it, and the new student continues responding to questions from the "penguins" around them. This continues until each student has asked two questions.

If the student in the center fails to answer three questions, they leave the game. The last remaining student becomes the "wisest" and takes the role of leader.

At the same time, students posing questions must walk along the circle's perimeter without stepping out; anyone who steps outside is eliminated. This method has a positive effect on the nervous system: the central student becomes physically active, breaking free from the sedentary nature of traditional lessons, while the moving students develop their vestibular system, responsible for balance. Additionally, the teacher can incorporate information about penguin behavior and adaptation. When used in primary grades, the method is especially effective, as children love animals and are naturally drawn to these charming creatures.

In today's educational process, the teacher no longer functions solely as a bearer of "objective knowledge" transmitted to learners. Instead, the teacher's primary task is to stimulate initiative and independence as students discover new knowledge and learn how to apply it in solving diverse problem-based tasks. During the problem-solving stage, the teacher guides students in formulating and testing hypotheses, thus enabling learning through exploration, trial, and error. Consequently, modern pedagogical technologies play a vital role in creating a new, development-oriented educational environment.

To ensure more structured and systematic work in academic courses focused on contemporary pedagogical technologies, we propose the use of our newly developed method. Modern pedagogical approaches represent innovative teaching technologies that allow educators to achieve high learning outcomes, ensure lesson quality, and facilitate effective assimilation of new knowledge and skills.

Contemporary pedagogical research increasingly emphasizes the importance of numerous audience-related factors, as well as the need to master relevant and innovative teaching methods.

First, adapting teaching strategies to a specific audience increases the effectiveness of the learning process. By considering students' level of preparation, interests, and individual learning styles, teachers can design more

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relevant and motivating learning trajectories. This approach aligns with the concept of active learning, which fosters cognitive engagement through problem-solving, discussion, and interaction rather than simple transmission of information.

Second, new pedagogical technologies — including project-based and problem-based learning — support the development of essential 21st-century competencies such as critical thinking, independence, collaboration, and creativity. Through audience-centered work, teachers can encourage student initiative and active participation in inquiry and discovery.

A third important aspect is motivation and emotional engagement. Modern pedagogical perspectives emphasize that motivation is one of the key driving forces of learning. When the teacher shifts from being merely a transmitter of knowledge to acting as a facilitator who creates space for hypotheses, experimentation, and error, students develop a stronger sense of responsibility and ownership of their learning.

Additionally, teachers must continuously develop their professional skills and apply innovative methods. Research indicates that teacher preparation and continuous professional development — including mastery of digital technologies and adaptive methodologies — enhance instructional quality and the effectiveness of the learning process.

Ultimately, working with the audience and integrating new teaching methods are not simply desirable but essential components of modern education. They ensure flexibility, adaptability, and practical relevance, contributing not only to deep knowledge acquisition but also to the formation of self-reliant, responsible, and creative individuals.

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