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INNOVATIONS IN THE STAGED EDUCATION SYSTEM

Annotation: *Current problems of teaching with the help of innovative technologies in the differential education system, conceptual ideas, communications, and information based on the selection of ways and means of applying highly effective modern education and innovation technologies in the educational process are highlighted.*

Keywords: *science, technology, digital tools, mobile learning (m-learning), inclusive education, personalized learning, digitalization.*

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ИННОВАЦИИ В СИСТЕМЕ ПОЭТАПНОГО ОБРАЗОВАНИЯ

Аннотация: *Освещены актуальные проблемы обучения с использованием инновационных технологий в системе дифференцированного образования, концептуальные идеи, коммуникации и информация на основе выбора путей и средств применения высокоэффективных современных образовательных и инновационных технологий в образовательном процессе.*

Ключевые слова: наука, технологии, цифровые инструменты, мобильное обучение (*m-learning*), инклюзивное образование, персонализированное обучение, цифровизация.

Innovations in differentiated education involve the use of new approaches, technologies, and methods to take into account the diverse needs and abilities of students. The differentiated education system aims to create conditions for each student to receive an educational experience that is tailored to their individual characteristics, including their learning speed, interests, and cognitive abilities [1-2].

Use of technology and digital tools - Modern educational technologies such as online platforms, interactive whiteboards, learning apps, and virtual labs enable personalized learning by providing access to a variety of materials and tasks.

Mobile learning (*m-learning*) - the introduction of mobile devices and applications allows students to access educational materials anytime, anywhere. This allows the needs of different students to be met, allowing them to work at their own pace [2-3].

Inclusive education is the development of inclusive approaches where every student can participate in the educational process, regardless of physical or intellectual limitations. This includes the use of assistive technologies, adapted educational materials and methods that take into account the characteristics of perception and assimilation of information.

Personalized learning - This approach involves creating personalized learning paths where students choose topics and assignments based on their interests and needs. This can be achieved by analyzing data about each student (for example, through learning management systems) and providing appropriate resources for their development.

Project-based and problem-based learning - these methods emphasize solving real-world problems, allow students to work in groups, and develop collaboration and critical thinking skills. This promotes greater differentiation in learning as each student can choose a project or assignment that matches their interests and abilities [4].

Flexible forms of learning - Blended (or blended) learning, which combines face-to-face classes and online courses, as well as flexible study schedules, allows for accommodating different learning styles and learning paces. This is especially useful for students of different levels.

Adaptive assessment systems - introducing new approaches to assessment that allow you to track the success of each student, identify their strengths and weaknesses, and adjust the educational process based on this information. Such systems often use algorithms that adapt assignments and tests based on student performance.

Gamification - the use of game elements in the educational process helps increase student motivation and engagement [4-5]. Individual achievements, rankings, and elements of competition allow each student to differentiate their approach, making the learning process more engaging and personalized.

There are several types of gamification: intrinsic, extrinsic, and behavior modification. Internal gamification works within a single organization and the motivational component must be consistent with the management and incentive system of that company. External gamification, on the other hand, helps improve the relationship between the coach and the student. Some of its elements are present in the general secondary education system [3-5]. It is mostly used in schools and especially in programs for elementary school teachers. Because elementary school students are more playful psychophysiologically. This is explained by the high level of effectiveness of teaching them through various games and interesting activities [4-5]. It helps the student to master the subject quickly, easily, and with great interest. This will certainly be convenient for the teacher as well.

Conclusion: Thus, innovations in differentiated education and digitization aim to create a more flexible, personalized, and inclusive learning environment that respects the diversity of learners and helps each individual develop their abilities and potential, leading to a further increase in the quality of education.

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