DIGITAL DIDACTIC AND ITS BASIC PRINCIPLES

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ABSTRACT

This article describes the concept of digital didactics and its main principles, their technologies. In addition, information about the main principles of the digital education process and its role and importance in human life is presented.

Keywords: Digital didactics, the principle of assessment, the principle of polymodality (multimedia), the principle of saturation of the educational environment, the principle of increasing complexity, the principle of practice orientation, collaborative learning, collaborative learning, the principle of success, flexibility principle, the principle of targeting, the principle of personalization, the principle of superiority.

RAQAMLI DIDAKTIKA VA UNING ASOSIY TAMOYILLARI

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Annotatsiya

Ushbu maqolada raqamli didaktika va uning asosiy tamoyillari tushunchalari, ularning texnologiyalari yoritib berilgan. Shu bilan bir qatorda, raqamli ta'lim jarayonining asosiy tamoyillari va inson hayotidagi o'rni va ahamiyati haqida ma'lumotlar keltirib o'tilgan.

Kalit so'zlar: raqamli didaktika, baholash tamoyili, polimodallik (multimedia) tamoyili, ta'lim muhitining to'yinganligi tamoyili, murakkablikni oshirish tamoyili, amaliyotga yo'naltirilganlik tamoyili, hamkorlikda o'rganish, hamkorlikda o'rganish, muvaffaqiyatlilik tamoyili, moslashuvchanlik tamoyili, maqsadlilik tamoyili, shaxsiylashtirish tamoyili, ustunlik tamoyili.

ЦИФРОВАЯ ДИДАКТИКА И ЕЕ ОСНОВНЫЕ ПРИНЦИПЫ

Аннотация

В данной статье описывается понятие цифровой дидактики и ее основные принципы, их технологии. Кроме того, представлена информация об основных принципах процесса цифрового образования, его роли и значении в жизни человека.

Ключевые слова: цифровая дидактика, принцип оценивания, принцип полимодальности (мультимедиа), принцип насыщенности образовательной среды, принцип возрастания сложности, принцип практико ориентированности, совместное обучение, совместное обучение, принцип успешности, принцип гибкости, принцип таргетированности, принцип персонализации, принцип превосходства.

INTRODUCTION

Digitalization of education has become an integral part of modern pedagogical practice, transforming traditional approaches to teaching and learning. In this context, digital didactics emerges as a new field of pedagogical science aimed at organizing the educational process within a digital environment. It not only utilizes and supplements traditional didactic principles but also adapts them to the conditions of digital learning, creating opportunities for individualized and personalized educational activities.

The introduction of the concept of digital didactics addresses key challenges of modern education, such as increasing accessibility to knowledge, developing professional skills, and ensuring effective independent learning. By leveraging digital technologies, new educational resources, approaches, and principles are developed to support purposeful, adaptive, and practice-oriented learning.

This paper focuses on the study of the principles and tools of digital didactics, as well as their role in enhancing the educational process and professional training of students in the context of a digital society.

Digital didactics is a part of pedagogy and is considered as a science for organizing the learning process in a digital educational environment. Digital didactics is a science that uses, complements and changes the basic concepts and principles of traditional didactics based on the conditions of the digital environment. D. D'Angelo proposed to introduce the concept of "e-Didactics", which means the concept of digital didactics or digital educational didactics. M. Choshanov defined the term digital didactics as "the science of the art of effective learning with the widespread use of digital technologies and multimedia tools." According to V.I. Blinova, the main tools of digital didactics are:

– a person-centered educational process;
– digital educational technologies;
– meta-digital educational complexes.

Basic Teaching Principles

- 1. Timing
- 2. Organizing teaching material
- 3. Speaking the client's language
- 4. Maintaining learner attention and participation
- 5. Building on existing knowledge
- 6. Reinforcing
- 7. Matching teaching methods with learner's needs

The didactic principles of digital education are considered open, and due to their novelty, they require additions as the theoretical and practical possibilities of digital education develop. As a result of the digitalization of education, effective independent learning is achieved based on individual learning processes and constant monitoring of student activity. Digital education expands the possibilities of using group and individual forms of training, ensures the full mastery of professional knowledge and skills, and also has a qualitative impact on the development of inclusive education.

The main principles of the digital educational process include: the principle of priority, the principle of personalization, the principle of purposefulness, the principle of flexibility, the principle of success, the principle of collaborative learning, the principle of practice orientation, the principle of increasing complexity, the principle of saturation of the educational environment, the principle of multimodality (multimedia), the principle of assessment.

1. The principle of priority is aimed at the student's independent educational activity in the digital educational environment. It is necessary to organize the educational process, support and assist the student in the learning process.

2. The principle of personalization implies the student's ability to independently determine the learning goal, choose the strategy of the educational process, the pace and level of development of the curriculum. This approach allows the teacher to monitor personal development indicators and student learning outcomes.

3. The principle of purposefulness intersects with the traditional didactic principle of purposefulness: the educational process requires the use of digital technologies that ensure the maximum achievement of the goals set for a particular student in the educational process. This principle does not imply the use of ineffective pedagogical technologies and tools without clearly defining educational goals.

4. The principle of adaptability allows you to develop an individual approach depending on the conditions of the digital educational process. The digital educational process allows you to

automatically adjust the program for each student, taking into account such aspects as the order, method and pace of presentation of educational material. This principle also takes into account the level and nature of teacher support.

5. The principle of success requires the achievement of goals, the complete mastery of knowledge, skills and competencies. In the digital educational process, this principle is the final element of the didactic chain "explanation - reinforcement - control". Additional teaching hours are allocated to consolidate the material, face-to-face meetings of teachers and students are often organized. The teacher carefully monitors the optimal ratio of group and individual forms of reinforcement. Digital tools significantly accelerate this process.

6. The principle of cooperative learning (similar to the didactic principle of interactivity) requires building the educational process on the basis of active multilateral - real and networked communication between the teacher and the student. This principle involves the use of group forms of network learning.

7. The principle of practice-orientedness is directly related to the traditional didactic principle of linking education with life and requires setting clear goals and specific results. This requires educational goals, tasks and problem situations, practical assignments, and the application of the knowledge gained in practice.

8. The principle of increasing complexity is related to the didactic principle of availability, systematicity and consistency, and the principle of increasing complexity involves a consistent transition: from simple to complex and from complex to simple, from general to specific and from specific to general, from individual to group. and from group to individual and other educational processes.

9. The principle of saturation of the educational environment requires additional information resources to create an individual educational strategy. Such redundancy can be implemented using a network educational resource - a single information educational environment.

10. The principle of polymodality (multimedia) is a more detailed didactic principle of visualization, which includes visual, auditory and motor (kinesthetic) methods of perception in the educational process. For this, various devices are used, such as simulators, sensors, as well as augmented reality tools.

11. The principle of assessment requires a continuous assessment of student success throughout the entire educational process. Digital technologies provide instant feedback, constantly transmitting the necessary information to the student on the results of the assignment. With this, the teacher draws conclusions about the strengths and weaknesses of the student, which allows you to adjust development scenarios and learning goals directly in the learning process. Thus, digital technologies ensure objectivity and transparency of the final assessment of the implementation of a particular task. In conclusion, it can be said that in digital education, didactic principles are considered open, and due to their novelty, they require additions as the theoretical and practical capabilities of digital education develop. As a result of the digitalization of education, effective independent learning is obtained based on constant monitoring of individual educational processes and student activity. Digital education expands the possibilities of using group and individual forms of training, ensures the full mastery of professional knowledge and skills, and also has a qualitative impact on the development of inclusive education.

Conclusion

Digital didactics plays a pivotal role in transforming the educational process in the context of modern digital society. By integrating digital technologies with traditional pedagogical principles, it creates new opportunities for individualized learning, accessibility, and the development of professional competencies. The principles of digital didactics, such as personalization, adaptability, collaborative learning, and practice orientation, provide a foundation for an effective and flexible educational process.

The continuous development and refinement of digital didactics are necessary to address the evolving demands of education in a digital environment. As theoretical and practical capabilities expand, digital didactics will further enhance independent learning, enable constant monitoring of student activity, and support diverse forms of group and individual training.

Ultimately, digital education not only improves the mastery of professional knowledge and skills but also significantly contributes to the development of inclusive education, ensuring equal learning opportunities for all students. This emphasizes the importance of ongoing research and implementation of innovative approaches within digital didactics to meet the challenges of modern education.

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