

## PERSONALIZED LEARNING – NEW OPPORTUNITIES IN EDUCATION

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**Abstract:** This article examines personalized learning as a contemporary educational approach that focuses on the individual abilities, needs, and interests of learners. It presents the thesis that the future of education lies in the use of a person-centered approach as the foundation for achieving educational goals. Its theoretical foundations are analyzed through an examination of certain classical psychological and pedagogical theories. In the context of contemporary educational transformations, a comparison is made between the traditional model of instruction and the person-centered approach, with attention given to the role of artificial intelligence as a tool for implementing personalized learning. The object of this study is the learning process within the context of the contemporary educational environment, and the subject is personalized learning as an effective approach for organizing and implementing the learning process. The aim is to analyze the theoretical foundations and characteristics of personalized learning, as well as to explore its potential for application in educational practice. The primary task in achieving this objective is to clarify the essence of personalized learning by analyzing the main psychological and pedagogical theories, as well as to compare the traditional and person-centered approaches. The study employs the method of theoretical analysis to clarify conceptual statements, as well as the method of comparative analysis to contrast the traditional and person-centered approaches. Personalized learning is established as a necessity in educational practice because it builds upon the traditional model and places the individual at the center of the learning process. An analysis of the psychological and pedagogical concepts discussed reveals that the individual approach has deep historical roots, indicating that the topic has long captivated many researchers, but its implementation is only possible today through modern technological solutions. The use of artificial intelligence in various educational systems creates a real opportunity for personalized learning, which is adapted to the individual progress of each learner. A transition must be made from the rote acquisition of knowledge to the development of skills for independent thinking and personal growth. This requires the teacher not only to impart ready-made knowledge but also, as a facilitator, to guide and support the individual path of development.

**Keywords:** personalized learning, student-centered approach, dynamic didactics, educational process.

### 1. INTRODUCTION

Change is a hallmark of every historical period of development and of every society; while the pace of change varies, it encompasses both social and cultural development. These social dynamics also affect education, which is undergoing dynamic transformations driven by the emergence of numerous new technological and innovative solutions, including artificial intelligence systems. The traditional model of education, which is based on the delivery of standardized curriculum content through uniform methods and tools, is increasingly proving insufficient for achieving high academic outcomes. In the search for new pedagogical solutions, researchers are increasingly focusing on the individual student and their specific needs, interests, and ways of learning the material. Various innovative approaches emphasizing the importance of the individual are increasingly being applied in response to emerging contemporary challenges.

Personalized learning, which places the learner at the center of the educational process, creates the conditions necessary to adapt instructional content to the learner's individual needs and specific characteristics, while also stimulating and encouraging independent work. It is viewed as a means and an opportunity to adapt the learning process to the individual needs and pace of the learner (Bayly-Castaneda, K. B., Ramirez-Montoya, M.-S., & Morita-Alexander, A., 2024). The role of personalized learning is growing as a new contemporary approach in educational practice, and the introduction of new technological and innovative solutions provides an opportunity for its practical implementation. Various educational systems based on the use of artificial intelligence create conditions for learning activities tailored to the individual needs and pace of development of each student, tracking their individual progress and developing adapted learning content.

The aim of this study is to conduct a theoretical analysis of the essential characteristics and practical applications of personalized learning as a contemporary educational approach that emphasizes the individual needs, abilities, and specific characteristics of learners. To achieve this goal, it is necessary to address tasks related to discussing and clarifying the fundamental theoretical principles of person-centered learning. It is also necessary to examine some key psychological and pedagogical ideas, using them to conceptually clarify the possibility of its practical application in today's educational practice. In line with contemporary pedagogical perspectives, special attention is

given to the need for a dynamic approach in the learning process and to the role of artificial intelligence as a didactic tool for building and implementing an innovative, adaptive, and personalized learning process.

## 2. MATERIALS AND METHODS

The focus of this study is the learning process within the context of the modern educational environment, and its subject is personalized learning as a contemporary and effective approach to organizing and implementing the learning process. The aim is to examine and analyze the theoretical foundations and characteristics of personalized learning, as well as to explore its potential for application in educational practice. The primary task in achieving this objective is to clarify the essence of personalized learning by analyzing the main psychological and pedagogical theories, as well as to compare the traditional and person-centered approaches. The study employs the method of theoretical analysis to clarify conceptual claims, and the method of comparative analysis to contrast the traditional and person-centered approaches. Through the interpretive approach, authors such as Vygotsky, Leontiev, and Serikov are examined, clarifying their main conceptual views. The similarities and differences in their theoretical positions are discussed, which clarifies the concept of person-centered education. The methodological framework of the theoretical study focuses on the possibility of applying adaptive approaches in pedagogical practice within the context of a new contemporary reality, filled with new effective technological solutions that are constantly changing and evolving.

## 3. RESULTS AND DISCUSSION

The intellectual, moral, and physical development of the individual has been a subject of interest for many researchers. Various psychological and pedagogical studies attest to a wide range of concepts in this area. Many educators emphasize the significance of the changes that have occurred in the socio-cultural reality, which in one way or another influences education. The emphasis is shifting toward the process rather than the result, with the goal not being to impart ready-made knowledge to be passively received and then reproduced, but rather to be understood and internalized through the development of skills that provide opportunities for its practical application. It is now essential to enhance the active role of learners, transforming them from passive participants in the learning process into active agents capable of independently navigating the acquisition of new knowledge, as Gerjikov emphasizes: „the most important task of teaching is to teach the learner to think“ (Gerjikov, 1999, pp. 47–49). All of this leads to the necessity for the pedagogical process to be developmental in nature, in which the child’s development proceeds in accordance with individual natural laws that truly correspond to their psychological development. Thus, a connection and mutual interdependence are revealed between individual and social development, driven by factors such as heredity, the environment, upbringing, and social experience. „Nature versus nurture has perhaps been the most contested topic in the human sciences for the past 150 years“ (Conley, 2025). Various aspects point in one direction or another, but ultimately it can be said that personality development is a complex pedagogical process linked to the interaction between a multitude of biological and social factors and conditions.

Personalized learning is gaining recognition as a modern educational approach that focuses on the individual capabilities and needs of the learner. The idea of placing the individual at the center of the learning process is not new as a pedagogical concept. Its theoretical foundations can be found in classical psychological and pedagogical concepts, with a particularly significant contribution coming from L. S. Vygotsky’s cultural-historical theory, according to which learning and development are interrelated. The author draws attention to the role of language (the sign) in the growth and development of the child’s consciousness, which is influenced by a specific cultural-historical period that plays a huge role in the child’s social and psychological development. This psychological process, involving imperceptible internal changes in the child’s personality and alternating periods of abrupt changes—which can be defined as conflicts of various kinds—is constantly shifting in one direction or another. These imperceptible changes accumulate up to a certain threshold, which marks the beginning of new structural changes. Vygotsky identifies five such „crises“: „the newborn crisis, the one-year-old crisis, the three-year-old crisis, the seven-year-old crisis, and the thirteen-year-old crisis,“ with each period having its own specific “social situation of development” (Vygotsky, 2006, p. 11). This distinctiveness is unique and unrepeatable for every child, who experiences and acquires individual social experience gained in a specific reality. They may be able to solve a given task independently, which has a completely different and unique solution, but it may also be the case that the child needs additional guidance to achieve success. Through the use of the „zone of proximal development,“ Vygotsky emphasizes the need for education to be tailored to the current level of individual development and oriented toward the potential level of development.

Vygotsky’s psychological theory provides a suitable foundation for personalized learning, as it offers the necessary theoretical basis for applying an individualized approach to each student, who possesses a unique level of cognitive development. However, for personalized learning to occur, pedagogical interventions must be adapted to the

individual needs and developmental potential of each student, which can be achieved through the implementation of systems utilizing artificial intelligence.

Following Vygotsky's cultural-historical approach and its influence on conscious human processes, Leontiev's concrete-psychological theory of consciousness as a higher form reflecting reality gained public support. According to him, the personality is formed and developed through practical activity, and the student must be viewed as an active subject in the learning process, which means that they are not passive in practice, as the activity „is characterized by a constant flow of the objective into the subjective“ (Leontiev, 1975, p. 29). For the author, needs and desires determine the direction of the activities undertaken, while psychological experiences stimulate the personality, transform needs, and generate new ones, „as a result of which their hierarchy changes, so that the satisfaction of some of them is reduced to the status of mere necessary conditions for human activity, for one's existence as a person“ (Leontiev, 1975). The role of needs is also examined by Maslow, for whom their satisfaction plays a „determining and organizing role“ (Maslow, 2001, p. 103).

Traditional education is socially oriented and uses the individual as a means to achieve predetermined social goals. In contrast, the conceptual framework of person-centered education, as examined by Serikov, focuses on the role of the individual as both a goal and a means within the educational process. In this context, the personality-oriented approach „examines the mechanisms of human existence—reflection, meaning-making, inventiveness, responsibility, autonomy, etc.—as the end goal of education, the achievement of which, ultimately, is subordinate to its content and procedural components“ (Serikov, 1999, pp. 6–7). If we consider the functionally defined parameters, in the traditional approach, academic achievement, behavior, motivation, etc., can be said to provide an opportunity for achieving the identified societal goals, whereas in the personal approach, content acquires personal meaning, and pedagogical activity is directed toward the subjective awakening to „meaning, not just knowledge“ (Serikov, 1999, p. 9). Personal development determines the means and factors that underpin the pedagogical process.

The traditional educational approach focuses on imparting systematic knowledge and fostering specific habits that enable learners to participate in the social life of society. To this end, the curriculum must be standardized and predefined, aligned with predetermined goals, and focused on the acquisition of ready-made knowledge and skills through which habits are formed. And educational activities should be directed toward a specific level of development for all students, reflecting specific views and beliefs, with the results achieved being directly linked to knowledge, which holds absolute value, i.e., knowledge is assessed solely through its reproductive recall, which has been previously acquired by the student. In the traditional approach, assessment results quantitatively measure a relatively formal average level of acquired knowledge, which does not always reflect the actual level of personal development. This reinforces a model of mass education and training in which standardized requirements take precedence, with little attention paid to the significance of individual differences among students. It is necessary to acknowledge the fact that students have different individual characteristics, and education must take these differences into account (Dumont, H. & Ready, D. D., 2023). Personalized learning can support the educational process by not only accounting for individual differences among students but also creating the conditions for an equitable and effective educational environment. It supports learning engagement and enhances the overall effectiveness of instruction (Zhong, 2023). By adapting instructional content to the needs of each student, barriers to the acquisition of knowledge and skills are reduced, and the opportunity for equal access is significantly increased.

The student-centered approach focuses on individual development, in which the student is not a passive recipient of knowledge but an active participant in the learning process. The curriculum is tailored to the learner's individual needs. This allows the teacher to leverage a student's strengths to compensate for their weaknesses, thereby building their self-esteem and increasing their motivation, which enables them to overcome new challenges. „There is another option: for teachers to take advantage of the different ways in which students learn“ (Willingham, 2024, p. 189). All of this creates an opportunity for the learning process to be tailored to the individual characteristics and cognitive needs of each individual student. Content objectives and procedural characteristics „must be developed in accordance with the overall conceptual framework of the essential features of student-centered learning,“ the basis of which is the assimilation of content, achieved through the “removal” of objective knowledge and the revelation of subjective meaning that reflects personal values (Serikov, 1999, p. 10). It is important to note that purposeful and consistent pedagogical influence on the individual allows the educational content to be assimilated in accordance with the individual's level of development, which is directly linked to their formed worldview.

The development of each individual is strictly personal and linked to consciousness, which „can develop only spontaneously—or, better said, voluntarily“ (Serikov, 1999, p. 17). This natural mechanism must not include any element of coercion, since, according to Serikov, it would be associated with violence without having a positive effect; on the contrary, the personality would adopt a defensive stance and adapt to punishment. All of this shows that personality development is a complex process linked to the specific acceptance or rejection of behavioral patterns. These acquire substantive character and the meaning of already acquired experience in every situation

experienced. Thus, over time, some meanings intensify, while others weaken under the influence of accepted or rejected actions, which ensures the evolutionary accumulation of emotional and personality traits. Therefore, a learning process focused on personal development will become meaningful to the individual because it will encompass goals, content, forms, and methods for acquiring knowledge and developing specific skills that are appropriate for them.

From this perspective, the person-centered approach is difficult to implement because each individual exhibits a wide variety of possible personality traits. All of this creates numerous challenges for any educator who seeks to apply the same pedagogical principles, methods, and tools to all of their students. From this perspective, the transition from the traditional model to the person-centered approach can be achieved through the introduction of new technological solutions, including systems that utilize artificial intelligence in the context of dynamic didactics. It views the learning process as an open, flexible, and adaptive dynamic system that is constantly changing depending on the individual characteristics and abilities of the learners. Dynamic didactics implies variability in the construction and presentation of educational content, which is adapted and tailored to individual needs and abilities. This conceptual approach creates conditions for the practical implementation of personalized learning, as it allows for and facilitates continuous change and adaptation of pedagogical interactions between teacher and student as active participants in the learning process. In this sense, dynamic didactics can be viewed as the foundation for implementing personalized learning in the contemporary educational environment, and artificial intelligence as a didactic tool that allows learning tasks to be adapted to the needs of learners.

#### 4. CONCLUSION

Personalized learning is establishing itself as a necessity in educational practice because it builds upon the traditional model and places the individual at the center of the learning process. An analysis of the psychological and pedagogical concepts discussed shows that the individualized approach has deep historical roots. The topic has captivated the minds of many researchers, but its implementation is possible today precisely through the use of modern technological solutions. The use of artificial intelligence in various educational systems creates a real opportunity for personalized learning that is adapted to the individual progress of each learner.

A transition is needed from the rote acquisition of knowledge to the development of skills for independent thinking and personal growth. This requires the teacher not only to impart ready-made knowledge but also, as a facilitator, to guide and support the individual path of growth. From this perspective, the implementation of personalized learning involves the dynamic and flexible integration of various pedagogical approaches and practices that enable the creation of an adaptive learning process tailored to the individual needs and characteristics of learners. The future of education is increasingly tied to the use of adaptive and personalized pedagogical models that create conditions for the full development of the individual and successful integration into today's rapidly changing society.

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