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## HIGH SCHOOL EDUCATIONAL PROCESSES DEVELOPMENT: FROM DIFFERENTIAL TO PERSONALIZED APPROACH

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### *Abstract*

The article reveals the essence of personalized learning, in general, and higher education institutions, in particular, aimed at developing student's personality on the basis of his/her personal goal-setting, psychological needs, self-discovery and independent reflexive control. The article analyses the theoretical aspects of differentiated and personality-oriented approaches, as well as individualization of learning, which forms the basis for personalization as a modern pedagogical technology. Based on the issues in the field of higher education and the requirements that a society and employers set for university graduates, the authors propose to consider personalized learning as a modern educational technology, including professional education that can solve the tasks. The article reveals the principles and components of personalized learning at a university as a modern pedagogical technology and examines teaching methods that implement the personalization principles. In this paper, the authors provide a definition of personalized learning, which involves not only the development of skills and competencies necessary to solve professional task, but also personal development, self-education and independence throughout life. The authors conclude that the personalization of education allows students to comprehend and interpret the most important concepts of modern cross-cultural life, as well as to understand themselves and their positions from the point of view of personal goal-setting and social values. Understanding oneself as a person in future professional life, as well as in the context of social and cultural processes enables students to understand the value of education taking into account the values of modern life and culture.

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**Keywords:** Personalization of learning, personalized learning, modern pedagogical technologies.



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## 1. Introduction

Education is one of the most interesting and at the same time the most important social phenomena. Its main task is to prepare a person for life and successful activity in a particular society in accordance with the moral and aesthetic, legal and cultural rules and norms that have developed in it. On the one hand future specialists need to be provided with not only necessary and relevant knowledge, skills and competencies, but also to develop the need to be useful for society. On the other hand, it is necessary to instill the need for learning, self-development throughout life, to teach how to set goals and be able to achieve them. This, in turn, requires the educational system to be flexible and understanding which of the skills, knowledge and competencies are vital in given conditions for self-actualization of person and which can be considered insignificant. In another words, it is important not only to give knowledge about the society, but also to learn to adapt to changing conditions, to instill the ability to find a rational solution in a controversial life situations taking into account not only the interests of society and the employer, but the interests and goals of oneself. Everything mentioned above leads to the fact that education is constantly looking for new ways of learning, while relying on the existing experience, as well as on the requirements of a changing society.

The idea of achieving harmony related to personal and public interests was put forward by J. Locke in XVII–XVIII centuries. Later on these ideas were developed by Herbart (2016), German philosopher, who believed that in the process of training and education it is necessary to take into account the character of a person. Ushinsky (2015), Russian teacher, argued that education should be based on the age and psychological characteristics of a student. When we talk about current development of education, we talk not only about the abilities, the level of personality development and interests, but also about taking into account the results and goals that a person sets for himself/herself in the process of learning and/or mastering a particular specialty or profession. In this work, we rely on the principles of differentiated learning aimed to create optimum conditions for identifying students' abilities and forms of organization of educational activities based on the interests, abilities, motivation and other characteristics of a person.

## 2. Problem Statement

In pedagogy, they distinguish between external differentiation (division into single-level groups) and internal differentiation (variability of teaching methodology while maintaining a multilevel group).

Along with a differentiated approach, the ideas of individualization of learning is developed. Individualization of learning is a process aimed at manifestation and preservation of individual abilities of students. The content of such learning allows and takes into account an individual vision and understanding of the subject by each student, along with normative knowledge, and the methods, means and forms of learning allow students to actively participate in the educational process and organization of training, showing those character traits and abilities that are unique to them. This contributes to the formation and development of independence, industriousness, and creativity.

Individualization goals are as follows:

- accounting of individual differences for the best implementation of learning goals;
- development of individuality in order to counter the leveling of personality.

In the works of Klarin (1982) a contradiction between a group training and an individual nature of acquisition of knowledge, skills and abilities is put forward as the main reason for the transition of pedagogy to the search for the ways of individual learning.

Nevertheless, the educational system came across some drawbacks when implementing the ideas of differentiation and individualization of education in higher vocational schools. First, the direct supervisory role of a teacher is becoming less powerful. Secondly, training focuses on the reproducing content of the material. Thirdly, there is no single general educational base for students from different schools and even regions, which brings a negative effect regarding the quality of education. These drawbacks have resulted in a quality decrease of education not only nationwide, but also within the same group and university. Based on the fact that the pedagogical process is holistic it can be said that the choice of forms and methods in education should be made taking into account the main goal of education. One of the tasks of the university is to educate a person who is capable of independently achieving the goal, which may arise a contradiction between the goals that the teacher sets for him or herself and the group of students and the goals that each individual person sets for him or herself.

### **3. Research Questions**

In modern pedagogical science, personalization is considered as a way to eliminate the costs of higher education giving it a character that meets personal goals of students regardless of their level of education.

Today it is recognized that the individuality and individual development are those values that must be preserved and formed in the learning process. Our modern society needs independent and creative people who can make their own choices and bear responsibility for their actions and deeds; therefore, the process of training and obtaining a profession should not be reduced to the development of procedural skills of students. It is necessary to pay attention to the semantic side of the concepts being studied, finding of personal meanings in what is taught, which is the main characteristic of personalized learning. (Sviridova, 2018).

The educational process relevance to the educational needs of each student in a group has always been a difficult task for the teacher. Educational technologies of the 21st century make it possible to go beyond the boundaries of the traditional approach and ensure personalization of training in accordance with the individual educational needs and goals of each student (Barbashova, 2014).

Modern teaching practice has long brought the educational process to the level of interpersonal relations, that is, it turns it into interaction and dialogue as sources of personal growth of both participants in the process (Smirnov, 2005).

The problem of personalization of learning or personalized learning has been studied by many scientist: Petrovsky (1982) developed a psychological concept for personalizing a person; Solonina

(1997) substantiated the concept of ‘personalization of learning’; Bepalko (2007) devoted his fundamental research to the theory and methodology of personalized learning; Alyunina (2005) and others investigated the problem of personality-based teaching of foreign languages to students of non-linguistic universities. In this paper, the group of authors relied on the ideas of Kizesova (2007) and Grachev (2007) who focused on theoretical foundations of personalizing the educational process in the field of higher education. Kaloshina (2000) investigated self-educational activities of university students in the context of personalized learning. For all the variety of contexts of the term personalization of education or learning process or personalized learning the disclosure of the essence of this concept clearly reveals general, basic features that allow us to conclude that this technology is focused on student’s internal activity and his or her independence in the activity as well as outcomes.

As a definition of personalized learning, it is proposed in the article to take the following definition (most accurately reflects the meaning of this concept): Personalized learning as a learning technology is characterized by the interaction of subjects in the process of cognition and development of the surrounding world, as a result of which a real idea of another subject is formed (object) influencing the development of such personal properties and abilities as personal identity, self-understanding, self-esteem, and self-prediction. This learning process involves the development of not only the procedural skills necessary to solve the task, but also the ability to personal goal-setting in the short and long term.

The phenomenon of personal identity is currently considered as a leading characteristic of person’s personal potential and his or her social maturity. Maddi (1968) introduces the concept of psychological needs of an individual along with the biological and social ones. He considers the needs for symbolization, judgment, and imagination to be psychological. No one has previously associated these cognitive processes with needs. Maddi (1968) showed that in the cases where biological and social needs dominate, a person perceives him or herself as the embodiment of social needs and roles and floats “with the flow”, that is, he or she builds the life in an adaptive way. When psychological needs come first, then a person asks about the meaning, visualizes the future and has a powerful support for determining his or her role in the society in the form of life goals, meanings, etc., which completely rebuilds the structure of his or her activities (Maddi, 1968).

One can often hear that society and employers are interested in the mobility of citizens and employees. A “mobile” person prefers to determine the path of his or her behavior independently based on personal characteristics, life experience and goals. In a situation of globalization with a high level of digitalization, a person is increasingly striving to maintain the autonomy and independence as a way of his or her personal life arrangement. Human activity is most often not limited to basic needs. He or she is mobile for the life goal achievement. Another question is how far these goals go beyond his or her personality and how much he or she is able to correctly set them and plan his or her activities in the proposed conditions, i.e. how mobile the person is (Alyunina, 2005).

It is necessary to teach students how to design their lives, anticipate possible situations and changing conditions, and accordingly change their behavior without losing their individuality. A personalized learning situation is a projective situation. There are more and more such situations in our life when nothing and no one can tell you how to act when a person makes decisions. Education should teach a young man to make decisions, make a choice from great cultural heritage, which cannot be fully

mastered and implemented in life by any person, as well as coordinate it with your conscious interests and needs (Barbashova, 2014).

UNESCO has set ambitious goals for the teaching community and put forward 4 pillars of education of the 21st century, i.e. to be able to learn; be able to work together; to be able to live with others and be able to just live. Those are the key life skills that help a person find his or her life path and profession in a changing world.

#### **4. Purpose of the Study**

The aim of the work is to study modern pedagogical technologies including personalization of learning, which are designed to solve the tasks set for education:

- To master the ways of organizing cognitive and creative activity by specific person (ability to learn)
- To develop person's understanding regarding the essence of things and activities and excluding formalized assimilation of different set of information and knowledge. To form their own meaning of teaching and life, including professional one based on the coordination of this understanding with the life program
- To master the ways to successfully solve professional problems jointly (team work);
- To master the methods of tolerant communication with other people (in any form of making contacts);
- To master the ways of organizing your own life, based on the principles of environmental friendliness, social success, etc.

The educational standards that impose requirements on the training of specialists for higher education institutions set and outline goals in a form of a set of competencies that a student has to master in each discipline. The standard includes a list of student's abilities using the acquired knowledge in solving professional problems, as well as in the implementation of his life position and value orientations.

In all educational standards one of the main characteristics of a future specialist is independence, i.e. complete readiness to successfully navigate in a new social situation and successfully solve new professional problems without any additional instructions and outside assistance. This requires a person to be not only a good performer, but also a designer of his or her activity. Besides, it requires a developed ability to reflection and self-reflection as a necessary psychological mechanism of life and profession.

The best way to develop the ability to critical thinking and reflection is to create situations in the educational process that constantly require independent solutions of new tasks that gradually become more complicated for a student not only during a project implementation, but also under conditions of mastering information from other sources. In another words, an important task in the field of education is the development of students' ability to choose from a variety of information obtained by other people, which, from his or her personal point of view, meets the main idea (Kaloshina, 2000).

According to Solonina (1997), the technology of personalization of education or learning in the context of socialization of a person includes the following components:

- content localization, which means program division into topics that are optionally studied by individual students, which is fully consistent with the objectives of teaching students to set their goals and plan their activities in accordance with these goals;
- fundamentalization of teaching methods is the analysis of various sources, as well as interpretation and synthesis of information received in relation to a given situation;
- localized learning is when a student who has thoroughly studied some topic is able to perform educational activities in relation to other students and even teachers, bring some new ideas, and ideas to achieve common goal (Solonina, 1997).

The proposed components of personalized learning are closely intertwined with fundamental principles of personalization of learning as a pedagogical technology.

The principles of personalized learning are as follows:

- generalization and fundamentality is a reliance on fundamental sciences and basic concepts (both scientific and moral principles) that exist in society;
- semantic focus deals with training and profession obtaining which should not be limited to the development of procedural skills and the development of significant competencies among students. It is necessary to pay attention to the semantic side of the concepts being studied and search for personal meanings;
- problematicity is a problem statement of modern significance. Training should be pragmatic, professionally oriented, i.e. offer the solutions to not abstract, invented problems, but consider specific situations and learn to find a way out of them;
- openness is the ability to find a rational solution in contradictory life and professional situation, conscious adaptation to the proposed conditions;
- constructiveness is the ability and willingness to interact with other participants in the process;
- humanization is a value of human person, both a student and a teacher, as equal participants of educational processes;
- alternativeness is the ability to make their own choices, based on goals and objectives, and be responsible for their own actions and deeds;
- flexibility and variability is conscious self-regulation of student behavior in educational processes;
- research direction is the development of ability to search for information, find and rely on the most liquid sources of information, to be able to interpret the information received based on current situation (Grachev, 2007).

## 5. Research Methods

In the course of study such methods as the analysis of scientific literature, student questionnaire aimed at determining their plans after graduation, teaching staff questionnaire aimed at compiling a list of the most effective methods for personalized learning were used. Besides, individual and group conversations took place.

## 6. Findings

The study showed that the presence of personal identity, self-attitude, self-esteem, etc. are the indicators of the development of students' independence. While studying, a person rarely creates new things according to social and ethical criteria, but "for him or herself" he or she can constantly discover new things, i.e. to show creativity and thereby develop oneself mastering the experience of mankind.

The greatest effect when applying the methods associated with the discovery of something new is provided by designing at a different level and scale where creativity is combined with analytical work and is built basing on the existing experience. Undoubtedly, the design is the creativity directed towards clearly predictable result. Moreover, the project represents a meaningful and practice-oriented outcome.

The student's ability to create a project as a personalized product of his or her work that meets both the requirements of society and personal goals is a result of personalized learning. The identification of modern problems and the possession of methods for their solution require the development of research type of thinking and the creative interpretation of existing information, and, therefore, the ability to critical thinking.

It was repeatedly noted that an independent activity is impossible without interpreting the information received or one's life experience, without adapting one's previously acquired knowledge and skills to the proposed conditions. Interpretation as a way of mastering the knowledge created by other people and generations has always been and remains the main channel for the implementation of his or her active life.

Interpretation is a productive creative process, which is of particular importance in vocational education since in the process of developing such an ability a student simultaneously receives metacognitive skills that are necessary for assessing achievements in his or her own creative activity. In other words, a student can only comprehend and appreciate the novelty and significance of his or her own achievements based on the values, experience, or evaluation criteria created by other people.

In the process of analyzing information created by others, a person can either agree with the interpretation of a fact, phenomenon, pattern, etc., carried out by other people, or try to comprehend and re-define the main meanings, contexts, consequences, etc. The second is most often carried out if a person independently solves some new problem, searches for a hypothesis explaining new facts, etc. Therefore, an interpretation as a way of cognition can also be a productive creative act.

The result of such students' activity is the formation of a conscious reflective mechanism as a generalized ability to perform any type of cognitive and educational activity. A condition for the development of such an ability at a level of goal-setting and the internal mechanism for its implementation is the organization of training, which provides a constant opportunity to explain your personal choice, for example, in the solution of complex problem situations, i.e. cases when making self-analysis of activities, etc. during practical classes at university.

Personalization of learning can also be implemented using Case-study method (or the case method). Students need to provide as much materials as possible about the production activities of specific enterprises and organizations, banks, departments, government departments, etc.; texts highlighting different points of view on the problem and/or various ways of solving it, which will give students the right to choose and encourage them to personally significant communicative activity, during

which such concept as personalization will take place. The classes organized on the basis of this concept make it possible to set aside the role masks and express your own opinion based on personally significant life experience. Increasing the time of personal communication between a teacher and a student, between students in a classroom by bringing all the components to the needs of each student allows students to gain invaluable communication experience in the proposed real situations, when you need to rely not only on the knowledge and competencies, but be able to navigate situations and change your behavior depending on your goals. In the process of working with cases, it is necessary to give as many tasks as possible, which require expressing one's own judgments regarding a particular problem, i.e. interviewing classmates, writing essays and problematic tasks for organizing group and pair work (Bratanich, 2014).

However, the most important thing is that in the process of such work a need for personalization is formed, which in the educational environment based on knowledge that the person seeks to share with other students, teachers, etc.

Almost every professional competence is designated as a person's ability to independently solve non-standard new tasks in a chosen field of activity since any practical situation is unique in its own way and requires a specialist to find a way to solve it.

Preparation of a student for future activity of this kind in the process of education is ensured by personalized approach to higher professional education. Personalization is important for several reasons because it makes the acquired knowledge, skills and competencies relevant for students and educational activity significant for them, as well as it contributes to better memorizing of educational material.

## 7. Conclusion

The condition for ensuring the effectiveness of university training is based on the component setting up of educational process, which contributes to the development of worldview, socialization and personalization of future specialists in multinational and multicultural professional environment.

Personalized education approach allows students to find a new way to think about the most important areas and forms of modern social and cultural life, and, most importantly, to understand their positions, meanings and goals implemented in the process of education and addressed to the future.

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