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HEURISTIC POTENTIAL OF TRANSFORMATIVE LEARNING IDEAS

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Abstract. The transformative learning ideas focus the educational process on the maximum development of a person's abilities, the creation of a powerful motivation for self-development. In this process, a significant role is played by not so much the ability to acquire new knowledge, as the ability to comprehend and rethink previously acquired knowledge and skills critically. Transformation immanently reflects the learning essence, which is realized in a natural, arbitrary way and is based on a person's intellectual abilities, physiological characteristics and mental inclinations. The learning result is to present not only the world to a person, but also a person to the world. In the educational process, a person overcomes his own essential limitation, opens new horizons of his existence. Educational activity appears as a system of flexible and dynamically cognitive connections with the socio-cultural context oriented to the advanced learning strategy. The learning becomes a process of a person's self-knowledge, self-creation, self-construction while participating in the educational interaction and social environment.

Keywords: personality; transformation; self-development; transformative learning; person's abilities

Introduction. Topicality

The modern world is marked by profound changes in all spheres of human life. They signify the formation of a qualitatively new society type. Its peculiar features are the absence of main development ways, chaotic processes and self-organization of new local orders. On the one hand, the situation of permanent changes and transitions to "unknown being" makes a person feel anxiety and confusion, and, on the other hand, it encourages him to look for life ways in the transition space. Everything that was valuable in previous epochs loses its importance and is denied to a certain extent. Life is being built contrary to the well-established values and life rules, which have been decisive so far. This situation causes a person's state of confusion, anxiety

and misunderstanding of the phenomena and processes that are happening around, a desire to escape from the unpredictable realities of our time. At the same time, a person realizes the need to survive and be successful in conditions of instability. Since isolation, locality and inertia doom a person to the role of an eternal outsider in the process of global civilizational transformations, then the person's way of life is not stability, but mobility. At the same time, constant presence within different cultural communicative fields presupposes a new nomadic life for a person. A nomadic person (a nomad) always leaves his inhabited world (for real or online), which is a certain point of support for him. As a result, modernity replaces the heteronomous definition of a person's social position with mandatory autonomous self-determination and selfrealization in ever-changing social contexts. In the contexts of changing existence, a person is considered to be a human being who is constituted in opening himself and overcoming himself, who is actualized in his relations to the Other in order to gain new experience and knowledge. Which educational strategies may be relevant in the context of permanent process and "elusive" inter-existence? What should modern education be like to be considered truly modern? Why and how is it necessary to teach a person to be successful in a volatile environment? Certainly, these questions require a number of thorough studies. However, analysing the state of the educational sphere and outlining strategies for its development, scientists and practicing educators note even today that in the era of permanent social change, education can never be completed, it should be constantly updated. After all, each new educational task arises in conditions, which are fundamentally different from the previous ones, and each time it requires new knowledge and skills.

Accordingly, the nature of modern education is flexible and varied. It is in constant motion and self-change, that is, it is transformative in nature and pluralistic in content. Paying attention to this fact, researchers believe (Hanaba et al. 2020) that the priority in the field of education is not the provision of systematic information, but the ability to create, on the basis of the acquired experience and the obtained information resource, new knowledge, which is relevant for comprehensive and contextual problem consideration and the ability to identify problems in familiar situations. While creating new knowledge it is important to involve personal experience and learners' life practices in educational activities. Thus, there is a constant transformation of their worldview and established life practices.

The outlined educational strategies are implemented through a number of approaches, ideas, methods and techniques of educational activity. From this perspective the transformative learning ideas are highly relevant, because they allow us to rethink knowledge not from the standpoint of established experience, but on the basis of critical reflection.

The purpose of the article is to analyse the heuristic potential of the transformative learning ideas in the educational activity organization, based on the prospects of future social development and future education.

Review of the research on the topic

Note that the theoretical foundations of transformative learning were developed by an American sociologist, specialist in the field of adult and continuing education, Emeritus Professor at Columbia University Jack Mezirow.

In the 70s of the last century, the scholar presented his ideas to the scientific community. The researcher believed that the fundamental idea of transformative learning was the person's worldview changes, which occur in the process of reviewing his values, expectations and experience (Mezirow 1991). From this perspective, researchers A. Morrell and M. O'Connor (2002) believe that these shifts in worldviews contribute to new experiences acquisition, which is based on a review of previously acquired knowledge and skills. Thus, breaking through the prism of consciousness, they gain a personal character and become more inclusive. P. Cranton (2016) states that the transformative learning effectiveness is determined by changes in the person's intellectual development (Cranton 2016). L. S. Horbunova (2013) considers practical possibilities of transformative learning in adult education. The researcher believes that a transformative approach will help change the educational paradigm from traditional to personality-cantered (Horbunova 2013). The main feature of transformative learning is to facilitate the individual potential disclosure, to determine the cognitive diversity formation. It provides the formation of cognitive diversity through semantic and methodological variability as well as the educational process richness. This idea is presented in the concept of generative didactics by O. Karpov (2011).

We should say that the transformative learning ideas were greatly influenced by T. Kuhn's (2012) concept of paradigm shift. He considers the paradigm as a set of concepts, beliefs, research methods, and values that is used in specific research. Provided that a new set of concepts and beliefs prevails over the previous one within a particular scientific discipline, a "paradigm shift" occurs (Kuhn 2012). It symbolizes the system transformation of a person's cognitive and value orientations and the semantic perspectives associated with it. Thus, transformative learning leads a person to a "paradigm shift" to revise previously acquired experience and the system of value and moral orientations. The emergence of J. Mezirow's theory was facilitated by the work of Brazilian educationalist Paulo Freire. Thus, in the work "Pedagogy of the Oppressed" P. Freire (2018) analyses two educational models: "accumulative" and "problematic", using the dichotomy of "dominanceoppression". The researcher thinks that "accumulative" model of education involves memorizing and just reproducing a certain information resource. The result of such learning is the reproductive thinking formation. Obviously, there are no transformative changes in a person's worldview. There is no critical reflection on the acquired knowledge and experience. Whereas, the "problematic" model of education orients a person to the need for comprehension and critical rethinking of information. Thus, learning process includes not only a critical understanding of new knowledge, but also a rethinking of previously acquired knowledge and experience. Critical rethinking is transgressive, as it predetermines the refutation of existing knowledge boundaries and the creation of new ones. As P. Freire (2018) says this model represents education as a practice of freedom. The learners are regarded as those, who overcome the boundaries of previously constructed social, cultural, political and the like ideas (Freire 2018).

The views of J. Habermas also had an influence on the formation of J. Mezirow's theory. In the work "The theory of communicative action" J. Habermas (1991) analyses the possibilities of communication in reviewing the acquired values, expectations and personal experience and obtaining new ones (Habermas 1991).

Statement of the main material

Explanatory dictionary defines transformation as "change, transformation of the form, shape, essential properties of something. Consequently, the concepts of transformation and change are presented as unambiguous; there is no clear terminological differentiation. We should analyse the difference between such notions as change and transformation. According to Finnish scientists E. Kallio and H. Marchand, the idea of transformation is understood not simply as a change in a certain state, phase or level of development. It rather testifies to its qualitative, radical restructuring to obtain a qualitatively new product or result (Kallio & Marchand 2012). These are changes of a qualitatively new level, which involve a significant restructuring of a certain structure or a composition as a result of going beyond its limits. This is a complex, significant change in the composition, the structure or its metamorphosis (Scott 2002). Obviously, in educational activity, the transformative approach indicates not just the changes that occur to a person, but their special quality, dynamism and depth. This activity is considered as a process of self-knowledge, self-creation, self-construction of the environment and the person. In the educational space, a new human identity is being formed – a personautopoiesis, a person, who creates himself. Thus, the transformative learning ideas focus the educational process on the maximum development of a person's creative abilities, on the creation of a powerful motivation for self-development. In this process, a significant role is played not so much by the ability to acquire new knowledge, as by the ability to comprehend and rethink previously acquired knowledge and skills critically. J. Mezirow (1978) interprets it as "the process of using the existing interpretation of one's own experience in order to construct a new one or rethink one's own experience meaning to develop further activity strategies" (Mezirow 1978). At the same time, he believes that during learning, students become dependent on institutional and social pressure. The acts of pressure restrict a person's freedom of choice and affect the ability to be in full control of one's own life significantly. Therefore, the person sometimes takes for granted the impossibility to change anything. In this perspective, transformative learning is a kind of liberation. The point is that it gives the right to understand critically how and why psychological and cultural frameworks become a barrier to the persons' objective vision of themselves and their relationships. Transformative learning also contributes to the reproduction of a freer existence model for self-expression, integrating the accumulated experience and a new scheme of functioning in the society. Transformation immanently reflects the essence of learning, which is realized in a natural, arbitrary way and is based on a complex of a person's intellectual abilities, physiological characteristics and mental inclinations. The result of this learning is the presentation of not only the world to a person, but also a person to the world.

The heuristic character of the transformative learning ideas in educational practices lies in the fact that the cognitive activity of educational subjects is aimed at searching for potentially new things in the acquired experience. It is not a question of obtaining radically new knowledge, but rather of its modification and diversity.

Provided that previously acquired knowledge is given new meanings and value orientations, its heuristic potential is relevant to explain today's practices. Therefore, to understand the changes that take place in a person's life, it is necessary to comprehend them on the basis of critical reflection. This allows you to see the prospects for development and problem solving in the future. According to J. Mezirow (1978), the impetus for rethinking of knowledge on the basis of critical reflection is the person's unbalanced and inharmonious internal and external vision of an outlined problem. The sociologist assumes that everyone understands the modern world realities depending on the factors of the socio-cultural situation in which he acts. The socio-cultural situation is the starting point in the further process of cognition. However, the acquired experience and knowledge will gain the ability to transform under the condition of a certain life crisis, which pushes a person to find ways out of it (Mezirow 1978). This circumstance determines the necessity of searching for new knowledge or rethinking the already acquired one. In a state of imbalance as for his views and disharmony a person needs to rethink the acquired knowledge, reflecting on his own life experience. The American sociologist defines such a transformation as a promising one, that is, the one that can offer new vision and understanding of problems by reference to the prospects of the future. He identifies the following stages of this process: disorganizing dilemma; self-analysis; critical assessment and feeling of alienation; dissatisfaction with the experience of others; search for options of new behaviour ways; building confidence within these new behaviour ways; action planning; acquiring knowledge to implement plans; experimenting with new social roles; reintegration into society (Mezirow 1978). J. Mezirow (1978) notes that the sequence of passing the abovementioned stages is not necessary, as the transformation can be gradual and sudden. As learners go through the indicated transformation stages, they acquire personal maturity. They develop cognitive dynamism, perspective vision, self-organization, interaction,

which provides for the development of abilities up to their transformation in line with the social life strategy (Mezirow 1978). Learning for acquiring new knowledge and re-evaluating the acquired one is based on the person's needs, his expectations, evaluation of alternatives and future prospects.

Transformative learning is a sphere of a person's dynamic action and interaction. The result of interaction involves not only the birth of new meanings, but also the abandonment of already acquired ones, their disintegration and subsequent transformation. In this process, the range of problems cannot be defined clearly. They arise in the learning process, symbolizing the emergence of new meanings, their use and reformatting depending on the change of the research perspective or context and the ways to solve them. It is a constant process of transition from one state to another, which is devoid of clear semantic boundaries. This process has no states of certainty, such as: I know-I do not know, I understand-I do not understand, I can-I cannot. Its value is in the fluidity, in the movement, in the potential aspiration for something new and different. This process reveals the self-organizing nature of the system, which creates itself, involving an external resource, if it is necessary. Accordingly, knowledge is not regarded as something that is given a priori, but as a constant that is created constantly and is the result of learners' dynamic activity. Within the framework of transformative learning there is a transition from learning as a process of memorizing, training, reproduction of information resources to learning as a process of cognition, understanding and its creation. Decisive in this process is not repetition, but reflection. It is important to take into account the fact that a person comes to the classroom not as a "tabula rasa", which must be filled with a certain amount of information, but he comes with certain knowledge, experience, hopes and expectations. In the learning process, they serve as a foundation (starting point) for further creation of a knowledge resource. Let us illustrate this position with the example of E. Kösel's "subjective didactics" (Kösel 1997). The basic idea of his concept is the recognition of the reality as a subjective construction. The scholar says, any content or problematics are significant in the educational process if they are related to the subject and are valuable for him. E. Kösel (1997) uses the concept of "primary inclination" to denote those configurations of knowledge, which he acquires in the process of designing a person during the first years of learning. According to the researcher, they are fundamental in the further process of acquiring knowledge. A number of methods play an important role here, such as: neurolinguistic programming, psychodrama, transactional analysis, meditation and so forth. These methods show that E. Kösel (1997) "subjective didactics" deals with the consciousness structures of learners. It produces a special culture of learning that focuses on the person himself. The potential of subjective didactics presupposes the problematic nature of learning, that is the learner's ability not only to solve already outlined problems, but also to identify the problem that requires solution (Kösel 1997).

The transformative nature of education is aimed at the prospective understanding of problem situations, the ability of educational activity subjects to self-organization and interaction, the development of their abilities to transform in line with life strategies and practices. It is not only about creating a new knowledge resource during learning, but also about the development of a person's transformative abilities. There is self-building and self-change in learning. The content of educational activity is likened to the process, the result of which is the impetus for further transformative actions.

A person does not just change, gaining new knowledge and skills. In the process of learning, he constantly rethinks his life experience, life values and priorities, forming the need and willingness for continuous retraining. A person overcomes his former boundaries, acquiring the qualities of his new Self. Thus, he constantly transgresses, going beyond his established Self, until he opens himself completely. Thus, as L. S. Horbunova notes, the transformative approach "helps the person, on the one hand, to reveal his own potential as a nomadic, transversal personality, which due to the ability to transgress, can conquer new cultural spaces endlessly, and on the other hand – to develop communication skills and mutual understanding in order to create new common meanings and value orientations" (Horbunova 2013, 107). According to the researcher, cognitive processes play a fundamental role in transformation acts. "Mental experience constructions, inner meanings and reflection are common elements of this approach, aimed at understanding how we to comprehend our lives and how we come to changing the personal cognitive and value structure through understanding our experience," she writes (Horbunova 2013, 77). New knowledge is acquired and the already acquired one is re-evaluated through the comprehension prism.

The initial model in the transformative learning practices is the image of a person, who changes constantly. In educational practice, it means rethinking of one's own experience as a "self-technique" (Millet 1996). The researcher says there is no experience that could not be transformed. In the transformation process not only the experience changes but also the person's worldview does. It means the process of transforming a person, his ability to become the Other. And to become the Other means to become oneself. That is, during transformation, a person creates himself, reveals his inner potential. You can become yourself only by becoming the Other, that is, by changing. Accordingly, the French researcher believes that transformation does not provide for the transition from one formation to another, transformation is nothing else, but (self) formation, its deployment (Millet 1996). In the educational process, a person overcomes his own essential limitation, opens new horizons of his existence. The centre of the educational activity is creativity acts, which are regarded as a union of a person's inner world with external objective realities, which leads to new vision, understanding, experience, the impact of the realities of the outside world, determines its further development horizons.

We are talking about the possibility of realizing the multifaceted essence of a person, proceeding from the creative impulse, which is a kind of domination of the spirit over nature and the soul.

The relevance of the transformative approach in educational practices also lies in the fact that it allows us to consider educational practices as the practices of open knowledge, which are acquired through the independent interaction between subjects of learning and represents the functioning of educational activities as a plastic, flexible and self-organizing didactic system. At the heart of transformative learning is the phenomenon of recursion. It indicates that the obtained results of educational activity enter the educational process again (they are transferred for viewing, supplemented and changed in order to obtain new characteristics). The learning process is constantly regenerating and transforming the involved persons on the assumption of future opportunities, that is to say in the context of whom a person can become.

Transformative educational practices involve self-movement and self-regulation of cognitive activity. In general, they allow to present a person's qualitative change (his transformation) in complex, changing, nonlinear socio-cultural contexts through the critical reflection of their own experience, beliefs, feelings and mental ideas to create or revise different interpretations. A person appears as a nomad, who is ready for constant challenges and life changes, self-study during constant learning and retraining, reorientation of thinking style. He demonstrates the ability to readjust according to the conditions – to choose adequate solutions, to overcome his own limits in the extreme manifestations of his experience and be actualized in his relationship with the Other, as well as to change himself on the basis of his own experience rethinking. The core of a person's behaviour is freedom as a moral value. The personality gets into the border area – the cognitive field of constant interactions of various cultural, social and historical codes, which actualize individual components in the constitution of the personality and enables the process of its identity redefining. Thus, a freedom space is created, where self-creation of an individual takes place.

The heuristic potential of transformative learning involves the use of a multifunctional approach in the diagnosis and solution of many educational problems. Such learning concentrates its efforts on designing learning strategies. Accordingly, its role and significance are not limited to specific didactic patterns and constructions. This learning strategies are to set guidelines for the development of educational practices depending on the specific conditions, demands and needs of the educational environment. Changes in educational practices take place only in that case, when they exhaust their heuristic potential and lose their effectiveness or even expediency. Under such conditions, transformative learning strategies can be reformatted flexibly by revising the generally accepted rules and patterns and finding gaps, new opportunities for further improvement, change and development.

Meanings are sought and cognitive potential is drawn just in contradictions, coincidences, exceptions, and not in regularities and obviousness. It allows us to find adequate solutions in the multiplicity of various multifaceted processes, their interpretation and understanding. Educational activity appears as a system of flexible and dynamically cognitive connections with the socio-cultural context oriented to the advanced learning strategy.

The model of organizing educational levels can serve as a systematization of the aforementioned thoughts. It is based on the theory of three levels of learning by G. Bateson (Bateson 1987). The first level of learning involves the transmission of some knowledge that a person has to learn. As a rule, this knowledge is rather weakly connected with a person's life experience and hardly affects his motivational and value sphere. The second level of learning ("learning how to learn") deals with acquiring and using the skills of getting necessary information in life practices, with forming tasks in the future, etc. Despite the fact that this level of learning is focused on experience, acquisition of competencies and involvement of the individual's axiological sphere in the educational process, this level is effective in a stable and predictable world. In times of radical socio-cultural transformations and unpredictable changing life, third level of learning is relevant, which involves the development of the ability "to learn how to relearn", that is to be able to relearn, to change the acquired knowledge configuration constantly, to get rid of patterns and stereotyped rules depending on socio-cultural changes and the demands of the era. The type of learning, which appears to be valuable, is based on uncertainty. Therefore, it encourages new interpretations and new knowledge configurations. This learning helps to reveal a person's potential and, thus, to stand out against the background of the general routine, to reveal and acquire unique personal traits.

Table 1

| Level of learning | Educational model | Characteristics | Personality orientation | Tools |
|---------------------------------|-------------------|---|--|---|
| I level (proto- learning) | Accumulative | Use of readily available information and acquired knowledge and skills in solving standard situations, in carrying out a set of algorithmic tasks, etc. | This educational model is not sufficiently focused on the personality development and it is not fully involved in a person's cognitive activity, life experience and preferences | The use of a number of methods and techniques that meet the educational objectives and are aimed at the formation of certain skills and abilities: information technology, personality-oriented learning technology, etc. |

| II level (learning how to learn) | Problem defining | Ability to consider problems comprehensively and contextually, to outline new problems in familiar situations; Involvement of personal experience and life practices in the educational process | This model is aimed at the development of critical and creative thinking, personal potential, involvement of personal life experience and aspirations | The use of a set of technologies aimed at the ability to work with information resources and create a new information product: critical thinking technologies, Gestalt technologies, developmental education technologies, etc. |
|--|---------------------|---|---|--|
| III level (learning how to relearn) | Transforma- tive | The model is aimed not only at the birth of new meanings, but also at rethinking the gained experience in order to develop further strategies of cognitive activity. This epistemic learning is aimed at qualitative and profound changes in the ways of cognition and thinking, which forms a person's perception of the world and his interaction with it | The development of a person's transformative abilities, his self-construction, self-changing, his constant overcoming of the constructed boundaries of his Self, acquiring of new personal qualities, a change in value-cognitive parameters. | An integrated approach is used. It is based on the idea of synthetic theorizing, through which various approaches, concepts and technologies are not considered as oppositional, but as complementary ones in revealing a person's inner potential as well as the processes of his development and transformation. As an example: project technologies, information technology, modelling technologies (contextual learning), development of soft skills (in particular socially-oriented learning technologies), etc. |

Conclusions

Thus, the transformative learning ideas focus the educational process on the maximum development of a person's abilities, on the creation of a powerful

motivation for self-development. In this process, a significant role is played not so much by the ability to acquire new knowledge, as by the ability to comprehend and rethink previously acquired knowledge and skills critically. Transformation immanently reflects the essence of learning, which is realized in a natural, arbitrary way and is based on a complex of a person's intellectual abilities, physiological characteristics and mental inclinations. The result of this learning is the presentation of not only the world to a person, but also a person to the world. In the educational process, a person overcomes his own essential limitation, opens new horizons of his existence. The centre of the educational activity is creativity acts, which are regarded as a union of a person's inner world with external objective realities, which leads to a new vision, understanding, experience, living of the external world, determines its further development horizons. Educational activity appears as a system of flexible and dynamically cognitive connections with the socio-cultural context oriented to the advanced learning strategy.

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