DEVELOPMENT OF THE CREATIVE POTENTIAL OF THE PERSONALITY AS A BASIS FOR THE CREATIVE COMPETENCE FORMATION IN THE LEARNING PROCESS AT TECHNICAL UNIVERSITY

ROZROBKA Tворчого потенціалу ліцензіності як основа формування творчої компетенції у процесі навчання на технічну університети

Svetlana DIMITROVA-BURLAYENKO

Abstract
The concept of «person creative potential» has been analyzed in this article. Its main characteristics have been formulated. The peculiarities of creating the creative potential of a person as a factor in the formation of readiness of students of technical universities to reveal creative competence in professional activity have been investigated. It is summed up that the development of the creative potential of the individual is decisive for the formation of cognitive and personality-reflective components of the creative competence of students of technical universities.

Keywords
Creative potential, Creativity, Creative competence, Students of technical universities.

Introduction
The current stage in the development of higher education puts forward new requirements for the preparation of students of higher educational institutions, including technical ones. The possession of only specialized professional knowledge is no longer sufficient to be a competitive specialist. In the modern labor market, creativity and competence become basic individual psychological qualities that characterize the success of any professional activity. Creativity becomes that quality that provides an individual the opportunity to adapt to the changing conditions of life and is the key to a person's success in professional activity. Creativity is an important factor in personal development. It determines the willingness of an individual to change and give up stereotypes. Therefore, the main task of higher professional education today is the preparation of a competent, qualified graduate who can not only apply knowledge, abilities and skills, but also take original and non-standard solutions in situations arising in professional activities. The basis for the formation of creative competence is the development of the creative potential of the individual.

Problem statement
Studies of the creative potential of the individual are presented in the works of many scientists. The concept of "potential" (from Latin - pententia) is widely used in characterizing the activities of the individual. In the reference sources it is interpreted as a resource, charge, stock, (internal, vital) reserves, opportunities [14]; In the philosophical sense, the notion of "potential" is most often associated with the awareness of the activity source of the individual's being, which means power, ability, potential possibilities, mental energy [17]. The potential of man, that is, what he can do, is
certainly much more than is usually realized. Teachers view the potential sphere as "an internal, unrealized essence of the personality, which under appropriate conditions (favorable for overcoming internal contradictions) becomes a reality" [10]. In the encyclopedic meaning, creative potential is ingenuity in science and art, the ability to see new things in the usual ways, the existence of a free imagination game. It is a rare quality inherent not only to talented individuals but also to ordinary people who are realized with the assistance of education combined with enthusiasm and hard work [2].

Understanding the essence of creativity in psychological and pedagogical research is represented by an ontological, ability and activity approach. In the ontological approach (M. Kopezova, A. Dovganan, and others) this concept is defined as a characteristic property of the individual. It establishes the measure of the possibilities of the individual in creative self-improvement and self-realization, the individual's need for internal transformations. Representatives of the ability approach (Bogoyavleneskaya, Brushinsky, Ovsyanetsky, Yakovleva, ...) emphasize the role of creative potential as the basis of man's creative abilities and see it as an intellectual and creative prerequisite for creative and creative activity. The activity approach (Altshuller, Molyako, Ovchinnikov, ...) considers the creative potential as a system of properties that characterize the measure of a person's ability to carry out creative activity, while not only the set of properties composing his structure, but also the nature and intensity of their importance the relationship [4].

The multidimensionality of the problem of determining creative potential requires a more detailed consideration of the positions of some modern scholars on this issue. So, Glotova and Guskova ( ) understand by this term potential creativity, which has not yet been fully identified and updated, and note that the creative potential is based on innate inclinations and abilities, directly depends on the features of man's creative thinking [13].

The analysis of scientific literature makes it possible to conclude that, in spite of the very active interest of researchers in the problems related to creativity, the study of the development of creative potential of the individual, like a way of forming the creative competence of future engineers in the process of their training in higher education institutions needs more detailed consideration.

The aim of research is to reveal the essence of the concept of "creative potential of the individual", to determine its main characteristics; analyze the features of creating the creative potential of the individual as a factor in the formation of readiness of students of technical universities to demonstrate creative competence in professional activities.

**Main results**

Interesting for our study is the definition of the creative potential of the individual as a component of the total interpersonal reserves, based on the basic mental processes. They are determined by the volume and quality of information that the person has at the moment; contain the psychological qualities with which cognitive activity of a person is connected develop more productively if they are actualized on the initiative of the subject himself, providing a link between internal processes and their manifestation from the outside [19].

Researchers emphasize that the creative potential of an individual is a powerful factor in its development, determines the willingness of a person to change, to abandon stereotypical ways of behavior and thinking. V. Molyako speaks about the creative potential as a resource of man's creative possibilities, the ability of a particular person to commit creative actions, creative activity in general [9].

Kharky ( ) defines the content of the concept of "creative potential" as a complex subsystem, closely intertwined with other structural components of the psyche that determine the creative processes of elements. He calls such its components: openness to the new, curiosity, the ability for non-standard solutions; dominance of cognitive interests; speed in learning new information; intelligence; perseverance, purposefulness, determination [18].
Summarizing the positions of scientists regarding the definition of the characteristics of the creative potential of the personality, B. Kwasha calls such attributes: the ease of associating (the ability to quickly and freely switch thoughts, the ability to evoke images in the mind and create new combinations of them), the ability to value judgments and critical thinking the ability to choose one of the many alternatives to its verification, the ability to transfer solutions, the willingness of memory (mastering a sufficiently large amount of systematized knowledge, orderliness and dynamism) and the ability to generalize and rejecting unimportant, originality, heuristic, concentration, clarity, fantasy, activity, sensitivity [8].

In psychological and pedagogical studies the following characteristics of the creative potential are distinguished: the creative orientation of professional interests; the need for innovative activities; propensity to innovate; high level of general and some special types of intelligence; propensity to form associative links; developed imagination; strong willful regulation of behavior and activity; independence; the ability to manage one's own state, self-motivation (Anisimov, Vishnyakova, Derkach, .......). From this position, the creative potential can be considered a condition for creative self-development of the individual, which manifests itself in openness to new ideas, propensity to change stable stereotypes in order to create new ones, to receive non-trivial, unexpected and unusual solutions.

We believe that the process of developing the creative potential as an internal resource for each person also implies the development of critical thinking and intellectual abilities such as the ability to observe, compare, analyze, combine, improvise, generalize, systematize, draw conclusions.

The founder of the theory, Altshuller [1], calls her the following basic postulates:

1. Theory is the catalyst for the creative solution of problems.
2. Knowledge is an instrument, the basis of creative intuition.
3. You can learn the creativity as any other activity.

The main principles of this technology implementation is motivation of pupils to creativity in cognitive activity, formation of the emotional and valuable relation to offered contents or actions; building relations of dialogue, subject-subject interaction; providing in the educational process the context of search and discovering, and not the "rhetoric of statements"; Proposal of such types of actions as: "compare", "bring", "make a choice", "argue", "present and justify your option". The main forms of organizing classes on this technology are conducting research, setting experiments, solving problem problems and situations, protecting projects. The result of the introduction of this technology should be the development of creative and creative abilities of students, namely: independent vision of problems, analytical thinking, the ability to transfer knowledge, skills and mental actions in a new situation, the vision of a new party in a familiar object (alternative thinking), the ability to combine, synthesize the previously learned methods of activity into new (synthetic, combinational thinking) [3].

The development of creative potential can also be realized through the inclusion of participants in the educational process in the reflexive and innovative learning technologies aimed at maximizing the creative potential of the future engineer. We see important ways of preparing for revealing the creative potential of the individual in attracting students to creative activity in classes in various disciplines and organizing independent work in order to encourage students to reflective activity. The development of reflexive skills in the educational process of an institution of higher education is, according to O. Rezvan, the most important condition for the development of future specialists as subjects of their own professional activity, development of readiness for activity, the leading factor in the self-development of the individual [12]. We assume with the purpose of developing the creative potential of the student's personality in the process of preparing for the manifestation of creative competence the use of such forms of reflexive activity: analysis and self-analysis of answers to practical and seminar studies, debates, debates, problem solving, participation in trainings, and the like. We also consider project activities of students, participation in scientific
conferences, writing abstracts, and performing research tasks by means of effective methods and means that help overcome barriers to psychological protection, disclose intellectual capabilities, and support creative creativity.

**Conclusion**

The basis for the formation of creative competence is the development of the creative potential of the individual by removing the psychological barriers to creativity, shaping the need for creative self-realization in the future profession and the students' awareness of the presence of creativity as a necessary condition for this self-realization.

The development of the creative potential of the individual is crucial for the formation of cognitive and personality-reflective components of the creative competence of students of technical universities.

**Literature**


Contact
Svetlana Dimitrova-Burlayenko, MSc.
Department of Higher Mathematics, National Technical University ‘KhPI’, Kyrpychova 2, 61002 Kharkiv, Ukraine
Phone: 00380- 577076087
Email: s.dimitrovaburlayenko@gmail.com

Reviewer
doc. PhDr. Oksana Rezvan, PhD.