The Aqmeological Framework for Modern Higher Education as a Step Towards Sustainable Development of Society

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Abstract---The article considers the issues, connected with the development of acmeological basis of modern higher education, which contributes to the fulfillment of requirements for the provision of sustainable development of society in the context of the formation of human ability to learn to live to contribute to the own personality prosperity and be able to act, demonstrating independence, judgement independence and personal responsibility. The research results on the use of the acmeological approach in the professional training of applicants for higher education, the organization of acmeological impact and the support of future specialists during the professional formation period are presented. Theoretically justified the implementation of the mentioned psychological and pedagogical condition at the professional training system level, sets the necessary strategy in achieving integrative competence by higher education applicants (the organization of educational process depends on this level); at the level of the educational process, sets the action algorithm for achieving the results of mastering theoretical knowledge, practice-oriented and independent activity of a specific topic and discipline as a whole (allows you to use the full potential of the chosen topic to achieve optimum performance in mastering general and special...
competencies) at the level of the teaching situation, promotes optimal exposure concentration on the personality of higher education applicants.

**Keywords**—aqmeological framework, development of society, modern higher education.

**Introduction**

The sustainable development concept embodies a new approach, a methodology that allows for a global comprehensive reassessment and planning for change in all spheres of life. These development strategies are closely related, practically intertwined with the ideas of human development that have been spread throughout the world (Mishra et al., 2020; Van Dinther et al., 2011). The concept of "human development" defines that the goal of social development should be the expansion of opportunities for people to choose the parameters of their lives and the prospects for personal development. There are three components - human well-being, health and education, which together contribute to increasing human potential as a driving force for sustainable development, its impact on economic and social processes, preservation of the environment and its balanced development (Sadovenko et al., 2011). That is why, sustainable development must ensure the accumulation, preservation and transfer of the spiritual potential, personal development of public person.

In the metaphor "The mission of education in the 21st century should be the skills acquisition to: know, act, live together and be together" reflects the awareness of the main modern problems facing humanity and related areas for the improvement of societies in the era of global problems related to the ecology of being of specific societies and humanity in general in the broadly speaking.

The way to achieve this mission is to shape the ability of human beings to learn to live to contribute to the flourishing of their personality and to be able to act while showing independence, judgement autonomy and personal responsibility. For this purpose, in the field of education not to neglect any of the potential abilities of each individual: memory, ability to reflect, aesthetic sense, physical abilities, ability to communicate. The main link in modern higher education is the individual. Maximum disclosure of his abilities, unique, unique features of psyche and intellect become the main goal of the whole educational process.

Thus, the national education development strategy in Ukraine so far is associated with the priority of educating a person of innovative type of thinking and culture, the design of acmeological educational space, taking into consideration the innovative education development, personal needs, the needs of society and the state (Lotz-Sisitka et al., 2015; Wals, 2014). In particular, the problem of providing personal development of higher education applicants, taking into account their individual skills, abilities, needs on the basis of lifelong learning is actual for today, for the solution of which it is important to realize the essence of the phenomenon "acme" in professional formation, its criteria and achievement conditions.
Materials and Methods

To achieve the goal and objectives of the study a set of interrelated methods were used: analysis of normative and legal documents, psychological and pedagogical literature and scientific research to determine the essence of the phenomenon "acme" in the professional formation of higher education applicants and the features of conditions of its achievement; search experiment to assess the acmeological capabilities of educational environment of higher education institutions; statistical methods to track the percentage ratio of selected indicators (Lambrechts et al., 2013; Graham et al., 2013).

The search experiment to identify positive factors of influence in the process of professional training involved 426 applicants for higher education in the 4th year of physics and mathematics departments of higher education institutions in Ukraine. Even though professional growth is an internal need of personality development, we checked the orientation of applicants for higher education for future professional activity. According to the results of the questionnaire revealed that 41.1% of the respondents remain only resource potent for professional activity, so improving the quality of their professional training during mastering the specialty is relevant.

With the help of V. Yadov methodology in the modification of Kuzmina & Rean (2006) determined the future profession attractiveness factors according to higher education applicants opinion: dominating external positive and negative factors are: work with people and public importance of the chosen profession (+); small salary (-); internal factors - creative development, social recognition, respect, self-improvement (+); overwork and own character inconsistency (-).

Identification of expectations of applicants for higher education regarding future professional activity was carried out on the basis of project creation activity products analysis. We found that students' expectations are related to their own potential realization, indicates the ability to self-development in achieving acme by regular concentration of their key desires, active efforts (actions) to implement them to achieve balance and harmony (Lans et al., 2014; Georgina & Olson, 2008). The analysis of higher education applicants' motivation led to the conclusion that the dominant motivation is self-improvement ability.

So, the main purpose of our pedagogical experiment was to check the theoretical provisions and confirm the working hypothesis of the study, which was the assumption that the professional training efficiency of applicants for higher education can be significantly increased if we provide the organization of acmeological impact and support during their professional formation.

Analysis of the latest researches and publications

The key direction of state educational policy is to reform the education system based on human-centered philosophy, which has absorbed the most important humanism ideas. In particular, the ideas of existentialist philosophy representatives M. Heidegger, K. Jaspers and others, who rightly point out that the scientific thought should focus on the individual, his freedom and activity,
remain relevant. Philosophy of humanocentrism develops also leading ideas of personalism concept representatives (P. Baum, R. Fluelling, H. Kerr, W. Withern, S. Brightman, etc.) About person and his spiritual values recognition by the higher sense of progressive society development; about human individuality, which realizes itself; about sovereign self, which shows itself in freedom; about the highest value of the person - his a priori productive activity, ability to perfection.

In the context of human-centered philosophy, acmeology - the science of personality development and self-development, its orientation to achieve worthy results in various areas of life, including professional ones - acquires special importance. From the point of view of our study, the following tasks of pedagogical acmeology are important, which were highlighted by the researcher Nikolaescu (2012): development of those excellent internal features of students, which are necessary for the most complete professional self-realization; research of psychological and pedagogical conditions of personality professional formation during training in the walls of special institutions of different accreditation level; finding ways to improve the pedagogical skills of teachers in pre-school, general education, secondary specialized and higher education institutions; development of problems associated with mechanisms of formation of the future specialist's professional motivation, self-reflection, the need to actualize professional and personal potential.

The condition for the acmeologization of the pedagogical process is the creation of a special "acmeological environment" - comfortable teaching and learning environment, stimulates the desire for self-realization, creativity, success and reflection. B. Vakulenko defines the acmeological approach as a basic generalizing concept of acmeology, which accumulates a set of principles, methods, techniques, means of organization and construction of theoretical and practical activity, focused on the quality result prediction in specialist training, high level of performance and professional maturity. Future specialists training should be carried out taking into account the essential characteristics of the acmeological approach, which provides: the use of methodological foundations of acmeology for building a professional training system; mastering the categorical and conceptual apparatus of acmeology, its regularities, principles; application of acmeological models, technologies and methods in practical training; theoretical and practical training orientation on productive models of professional activity, achievement of acme tops (Vakulenko, 2008; Pakhomova et al., 2021; Kryvylova et al., 2021).

Acmeological approach is implemented in the plane of certain principles, namely: humanization (humanistic educational orientation process), democratization (democratic relations between all participants in the educational process), continuity (integrity and continuity of all procedural and systemic education aspects), fundamentalization (education focus on fundamental, interdisciplinary nature of knowledge), personification (personally-oriented educational process content, taking into account personal-activity features and value orientations of interaction subjects), consistency (the educational process focus on systemic integrity in the construction and education process analysis), dialogicality (participants interaction in the educational process, the content of which is the exchange of intellectual, emotional, moral values), nature-responsiveness
(professional training is based on scientific understanding of natural and social processes, which are consistent with the general laws of nature and human development), multiculturalism (multicultural nature of the educational process), culturoviscience (education and training should be based on universal values and norms of national cultures) (Dubaseniuk, 2011)

So, the acmeological approach contributes to the qualitative result of the future specialists' professional training process and increases the level of their professional formation (Robért, 2000; Garrison & Kanuka, 2004). However, the issues related to the creation of an acmeological environment in the conditions of higher education institutions require further study.

**Purposes and objectives**

The study aims to theoretically substantiate the acmeological basis of professional training of applicants for higher education. Research objectives: to consider the essence of acmeological impact and accompaniment of applicants for higher education in the professional formation period; to determine the course of action for the implementation of this psychological and pedagogical condition in the professional training of applicants for higher education.

**Results**

Acmeological approach is focused on creating conditions that encourage a person to progressive self-development, self-organization and, accordingly, professional self-improvement in achieving the optimal level of professional training and integrative competence of higher education applicants (as an end result of training). Realization of this approach is realized due to the following activities: determination of the needs and potential of professional training of higher education applicants, corresponding to the professional requirements for the chosen specialty; formulation of learning outcomes in accordance with the selected disciplines of professional training in general and their individual structural units (modules); definition of approaches to teaching, training and evaluation regarding the acmeological impact and accompaniment in the process of professional training (the selection and organization of activities of different levels, which will contribute to greater consideration of the position of the subject, cognition needs, professional activity and communication; gradual training of students adequate choice of purpose and planning of cognitive activity, conscious organization of its regulation, the ability of objective control, self-assessment and self-analysis of its results; subject orientation in the design and direct implementation the pedagogical impact on students as the goal, the subject, the result and the main condition for the effectiveness of training and education, that is, recognition of the personality uniqueness, its intellectual and moral freedom, the right to respect, appeal to the natural self-development process and creative potential); description of training programs special courses and specific modules in disciplines based on general and special competencies, learning outcomes, credit distribution, certain approaches to training and assessment; checking by mathematical statistics methods the balance and realism of professional training in accordance with the achievements of selected competencies and students'
capabilities; monitoring and improving professional training in the implementation process.

One of the conditions of training applicants for higher education is the implementation of acmeological impact and support throughout the whole period of their professional formation in higher education institutions. The implementation of the designated condition contributes to the disclosure of internal potential of students' personality, properties and qualities development, contributing to the achievement of their own optimums in mastering general and special competences of the chosen specialty (Kryvylova, 2017; Sosnytska & Kryvylova, 2020). Acmeological influence is an integrated and targeted action carried out on a person or group, which has humanistic content and is aimed primarily at the progressive development of a person or group (Derkach & Zazykin, 2003).

Increasing the self-regulation level as a result of acmeological influence is necessary in order to form self-confidence in higher education applicants; to exclude the occurrence of pessimistic moods; to strengthen the ability to more fully realize inner potential, in other words, to make the personality more strong. Acmeological influence is carried out due to the organization of appropriate accompaniment. Regarding our study, we believe that acmeological support is an active activity on the part of teachers aimed at achieving together with applicants for higher education intermediate and strategic goals on the way to the optimum, namely: orientation on the ways of professional improvement; cooperation in the educational process; observation of changes in the personality of an individual applicant and implementation of individual work to help them reach the top of the professional formation.

General tasks of providing acmeological influence and accompaniment of training of applicants for higher education are carried out by levels:

**level of professional training system**: to determine the optimums in achievement of integrative competence; to determine the motives in achievement of "acme" of future professional activity; to update the content of professional training in the context of acmeology; to choose the forms, methods, techniques and ways of acmeological influence and support; to develop the content and tools of self-control of the academic (personal) achievements of applicants for higher education; to develop criteria for self-diagnostics of the academic (personal) achievements in the context of acceleration and acceleration of professional activity.

**level of the educational process**: to determine optimums in achievement of learning outcomes; to choose methods of stimulation of achievement of "acme" in future professional activity; to choose content for independent work; to choose forms, methods, techniques and ways of homeopathic influence and accompaniment; to develop content and tools of self-control of the level of academic (personal) achievements of applicants for higher education on a particular topic and discipline as a whole; to develop criteria of self-diagnostics of the level of academic (personal) achievements of applicants for higher education; to develop criteria for
self-diagnostics of the level of academic (personal) achievements of students on a particular topic and the discipline as a whole.

The level of pedagogical situation: to determine the goals and objectives in achieving the optimum of learning outcomes; to determine the acmeological potential of the pedagogical situation regarding the discipline (separate topic) and its impact on the motivational sphere of higher education applicants; to fill the content of the pedagogical situation towards achieving the optimum of expected results; to choose the forms, methods, techniques and ways of acmeological impact and accompaniment; to develop the content and tools for self-monitoring of the level of academic (personal) achievements of students in a particular pedagogical situation; to develop criteria for self-diagnosis of the level of academic (personal) achievements of students in a particular pedagogical situation.

In the process of training higher education students the following should be done: on the part of the teachers: use of acceleration forms, methods and tools; orientation of theoretical and practical training to achieve the optimum in mastering general and specialized competences (professional competence as the final result); on the side of the students: assimilation of the general provisions of acmeology and specificity of "acme" in the given specialty; mastering the technologies of self-knowledge, self-regulation and self-actualization; formation of skills and abilities: independently plan the development of professional competence taking into account own abilities, qualities and potential capabilities, needs and notes; to identify the nearest and further prospects of development; to use own experience; to be focused on reaching the state of "acme".

Realization of acmeological influence and supervision of higher education students at the level of the system of professional training sets the necessary strategy for achieving integrative competence by future professionals (this level determines the organization of the educational process); at the level of the educational process sets the algorithm of actions to achieve the results of theoretical knowledge acquisition, The educational process provides the algorithm for achieving the results of theoretical knowledge and practical and self-study activities of the specific themes and the discipline as a whole (allows using the whole potential of the themes for optimal effectiveness in mastering general and specialized competencies); at the level of the pedagogical situation contributes to the optimal concentration of influence on the personality of higher education students.

An example of the use of the action algorithm for the implementation of the acmeological impact and accompaniment of higher education applicants on the example of the discipline development.

- The discipline "Pedagogical Acmeology".
- Module 1. "General Fundamentals of Pedagogical Acmeology".
- Theme "The Tops of Human Professional Development" (1 lecture, 1 practical session, 1 individual work)
- Objective component: critical reflection on the main conceptual theories of "acme" achievement, understanding of the professional "acme" criteria, its achievement conditions, and the desire to use them in own activities.
• value-motivational component: development of imaginary professional career.
• The content component: the role of talent and genius in professional development.
• Operational-activitistic component: emotional stimulation method (formation of cognitive interest by creating positive emotions for the proposed activity, increasing interest and motivation for the learning process).
• Control and regulation component: questions for self-control: what is the difference between the concepts of "talent" and "genius"; what are the physiological foundations of talent and genius; what do psychologists see in the similarity between the behavior of an individual and a person with a mental deviation; how is the giftedness of genius in childhood; what formula for genius was proposed by V. Druzhinin; how can creative activity influence the life course of talented and genius people.
• Assessment and result stage: criteria for evaluation of independent works; criteria of self-assessment.

Thus, the implementation of the acmeological approach as the organization of appropriate influence and accompaniment of higher education applicants provide the possibility to achieve the expected results of professional training and create an optimal environment for the formation of integrative competence at the level of system, process and situation.

Discussion

The research results were used in the preparation of applicants for higher education in physics and mathematics departments of higher educational institutions of Ukraine such as: Berdyansk State Pedagogical University, Kamenetz-Podolsk National Ivan Ogienko University, Zaporozhe National University, DVNZ "Krivoy Rog State Pedagogical University", Vinnitsa State Pedagogical University named after Mikhail Kotsyubinsky, Uman State Pedagogical University named after Pavel Tychina, and pol

Conclusion

The professional training efficiency of applicants for higher education depends on psychological and pedagogical conditions, which act as its catalyst and determine the results, objectively ensuring the possibility of their achievement. The organization of acmeological influence and support in the educational process contributes to changes in the subjective state of future specialists, assumes the achievement of optimum in mastering general and special competences in the chosen specialty. The expected impact corresponds with the requirements of the society sustainable development concept, in particular: orientation of applicants for higher education towards lifelong learning for the sake of self-realization and personal career; interest in learning and pleasure in achieving results; subjective position in active mastering of learning information; responsibility for own learning; independence; equality in relations with educational process participants; self-control of academic (personal) achievements level and their self-diagnosis.
References


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