Diagnostics of the readiness for self-improvement of the student-future teacher in the conditions of pandemic

Diagnóstico da prontidão para autoaperfeiçoamento do futuro aluno-professor em condições de pandemia

Diagnóstico de la preparación para la superación personal del alumno-futuro maestro en condiciones de pandemia

Valentyna Bilyk1, Artem Tkachov2, Ivanna Tkach1

1 National Pedagogical Dragomanov University, Kyiv, Ukraine.
2 G. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

Corresponding author:
Valentyna Bilyk
Email: piddu906@ukr.net


ABSTRACT
The society's need for competitive specialists capable of solving urgent issues requires focusing efforts on solving the most pressing problems in education in today's pandemic conditions. The psychological and pedagogical literature has repeatedly emphasized the need for self-improvement as a component of self-education of a person in general and a teacher in particular. One of the most important factors in the success of further professional activity is the formation of students' readiness for professional self-improvement. The issues of training future teachers remain topical, because both the intellectual, moral and spiritual development of children and youth, the socio-economic well-being of the country depend on their activities. Since the attention of specialists is focused on the personal potential of a person, the urgent is the problem of the formation of future teachers' readiness for self-improvement in the process of individualization of professional training pedagogical science. For this, the methods of theoretical research of profile sources were used, and also theoretical and ascertaining experiments were carried out. It is proved that the training of a future teacher should be focused on the personality, the recognition of a person as the highest value in society, and providing conditions for personal self-improvement of the future teacher is one of the priority areas in the educational process of the university.

Keywords: Competitive specialists. Educational environment. Pandemic conditions. Pedagogy. Self-improvement.
RESUMO
A necessidade da sociedade por especialistas competitivos capazes de resolver questões urgentes exige que se concentrem esforços na solução dos problemas mais urgentes da educação nas condições pandêmicas de hoje. A literatura psicológica e pedagógica enfatizou repetidamente a necessidade de autoaperfeiçoamento como um componente da autoeducação de uma pessoa em geral e de um professor em particular. Um dos fatores mais importantes para o sucesso do prosseguimento da atividade profissional é a formação da prontidão dos alunos para o autodesenvolvimento profissional. As questões da formação de futuros professores permanecem atuais, porque tanto o desenvolvimento intelectual, moral e espiritual de crianças e jovens, como o bem-estar socioeconômico do país dependem de suas atividades. Uma vez que a atenção dos especialistas está voltada para o potencial pessoal de uma pessoa, a urgência é o problema da formação da prontidão dos futuros professores para o autoaperfeiçoamento no processo de individualização da formação profissional em ciências pedagógicas. Para tanto, foram utilizados os métodos de pesquisa teórica das fontes de perfis e realizados experimentos teóricos e de apuração. Está comprovado que a formação de um futuro professor deve estar voltada para a personalidade, o reconhecimento da pessoa como pessoa de maior valor na sociedade, e proporcionar condições para o autoaperfeiçoamento pessoal do futuro professor é uma das áreas prioritárias no processo educacional da universidade.

RESUMEN
La necesidad de la sociedad de especialistas competitivos capaces de resolver problemas urgentes requiere concentrar los esfuerzos en resolver los problemas más urgentes en educación en las condiciones pandémicas actuales. La literatura psicológica y pedagógica ha enfatizado repetidamente la necesidad de la superación personal como un componente de la autoeducación de una persona en general y de un maestro en particular. Uno de los factores más importantes para el éxito de la actividad profesional posterior es la formación de la preparación de los estudiantes para la superación personal profesional. Los temas de la formación de futuros docentes siguen siendo de actualidad, porque tanto el desarrollo intelectual, moral y espiritual de los niños y jóvenes, como el bienestar socioeconómico del país dependen de sus actividades. Dado que la atención de los especialistas se centra en el potencial personal de una persona, lo urgente es el problema de la formación de la preparación de los futuros docentes para la superación personal en el proceso de individualización de la ciencia pedagógica de formación profesional. Para ello, se utilizaron los métodos de investigación teórica de fuentes de perfiles, y también se llevaron a cabo experimentos teóricos y comprobantes. Está comprobado que la formación de un futuro docente debe estar enfocada a la personalidad, el reconocimiento de la persona como el más alto valor en la sociedad, y brindar condiciones para la superación personal del futuro docente es una de las áreas prioritarias en el proceso educativo de la universidad.

INTRODUCTION
The internal condition for the development of personality is constant "incompleteness" as a characteristic genetic feature of the organization of the individual, as his potential for unlimited development. At the same time, the personality has passed the stages of development, more precisely, the personality neoplasms characteristic of these stages, "saturating" each other with their content, turn into a synergistic working level of a holistic personal organization. It is these levels, passing through awareness, reflection, critical assessments, thoughtful choice, development
of optimal action systems, gradually become the psychological foundations of the personality, its foundation and phenomenologically manifest themselves in aesthetic tastes, intuition, premonitions, moral behavior, and the like (Bansak & Starr, 2021).

Self-improvement is viewed as an opportunity for a person's personal growth and his independent desire to approach a certain ideal in order to obtain personality traits and qualities, mastering those types of activities that it does not yet possess. Therefore, self-improvement has a special role in the formation of personality because it affects the ability of a person to cognize his own "I", and according to reflection on himself. Realizing his achievements and shortcomings, a person shows a desire for self-improvement, for self-education and self-education. Creating new values, she herself grows personally, becomes the subject of her own development (Shevchenko et. al., 2019).

The key trend of our time is the awareness of the importance of the formation and development of personality, constantly striving for self-improvement. This problem is of particular importance when it comes to preparing the future teacher, because the development of the creative potential of children and adolescents to a certain extent depends on the efforts of the teacher. A teacher should be able to adapt to the modern requirements of society, flexibly use the available opportunities and strengths in accordance with new situations, use their own resources to achieve professional goals, be ready for professional self-improvement. The theoretical and practical aspects of self-improvement are devoted to the study of scientists who prove the reflexive nature of the self-improvement process, considering the teacher's self-improvement as revealing the teacher's subject development. The problems of forming the readiness of future teachers for self-education, self-development and self-education are reflected in the laws, concepts and scientific research of teachers, psychologists, philosophers, sociologists (Sydorenko et. al, 2020).

We consider the self-improvement of the future teacher in close connection with development and self-development: the objective processes of quantitative and qualitative changes in mental processes, states, properties, is expressed in the natural restructuring of the personality; with the fundamental ability of a person to be the subject of his professional life, the transformation of an individual mode of activity into a subject of practical changes, taking into account the characteristics of the professional educational environment. In addition, we believe that the self-improvement of the future teacher is based on professional self-education, which is a conscious process of the student's implementation of a set of creative actions based on the unity of his consciousness and self-awareness, self-knowledge, and is aimed at mastering his integral readiness for professional self-improvement after graduation.

The synthesis of personal meanings and professional preferences is indicated by many scientists who consider professional self-education as "an integral system of actions with awareness, determination of life and professional priorities, its analytical consideration, correlation, critical assessment, constant reflection of one's own actions and deeds."

Since this process is conscious, it is necessary to talk about the formation of the need for professional self-education (as a self-improvement mechanism), based on the personal activity of the future specialist. The teacher's need for professional self-improvement is based on personal activity. Researchers prove that professional self-improvement is the conscious work of developing oneself as a professional. Personality is characterized as a subject of work, cognition, professional formation and development. At the same time, attention is focused on the value of individual original characteristics in the development of social and moral qualities of an individual, mastering pedagogical skills, professional competence.

An analysis of scientific literature has shown that outstanding philosophers interpret the meaning of human life in the idealistic, materialistic and dialectical sense as a movement to the heights of perfection. The idealistic understanding is based on the recognition of the intrinsic value
of personal self-improvement as a purely internal activity aimed at developing spirituality, enriching a person's inner world by actualizing its potential forces and capabilities.

The materialistic approach characterizes self-improvement as a predominantly external activity of a person, aimed at achieving a socially given and socially determined ideal of mental, physical and moral perfection by correcting one's own activities and behavior in accordance with the norms and values of a given society with the aim of self-affirmation in it and ensuring existence. In the dialectical approach, idealistic and materialistic views on the nature of this phenomenon are harmonized on the basis of the unity of opposites and the priority of humanistic values, in accordance with which self-improvement of a person is understood as an activity aimed both at enriching the inner world and at improving the external manifestations of a person. Based on the analysis of scientific sources, it was found that self-improvement of an individual, on the one hand, is defined as a process of entry, individualization and integration of a person in new conditions of the social environment, on the other hand, as a process of the formation of an individual's personal qualities by means of socialization and education (Orchard et al., 2016).

In the context of the pedagogical theory and practice of self-improvement, it discovers productive ways and means of strengthening the inner self-creative activity of the individual and develops in the context of the multi-subject pedagogical paradigm, which, in contrast to the mono-subject (both child-centered - free, and teacher-centered - authoritarian), successfully harmonizes the self-activity of the individual with purposeful actions on its growth due to the development of subjectivity of all participants in the educational process, self-improvement of which is a priority task and an important prerequisite for effective pedagogical interaction (Roth et al., 2020).

So, self-improvement of the future teacher includes professional self-education, as an active conscious process of self-change in accordance with professional tasks, associated with self-determination and requires self-educational activities of the student, his self-organization. Scientists associate self-improvement with self-actualization, self-realization and individualization. Self-actualization is closely related to the processes of personal self-improvement and includes protective mechanisms, overcoming an inferiority complex by a person, a desire to move to a higher level of development, emphasizing the uniqueness and integrity of a person striving for self-improvement (Moore et al., 2021).

At the same time, the personality develops while maintaining its integrity. In K. Horney's theory, the concept of "real self" I"is described as a set of innate potencies inherent in a person, as temperament, abilities, inclinations, requiring favorable conditions for development. The author believes that self-actualization is associated with the realization of personal potential and is the path from the unconscious "ideal image" to "real self" I. The scientist points to the problem of overcoming internal conflict through awareness of one's own needs, contradictory factors of one's existence, and is, according to K. Horney, the basis of self-realization. Studying the achievements of scientists, L. Karamushka, M. Tkalich note that K. Jung sees the ultimate life goal of the individual through the realization of "I", the formation of an integral individual. At the same time, the development of each person occurs constantly, he is unique. This process is defined as individualization, the result of which, according to K. Jung, is self-realization. According to K. Jung, individualization and “full realization of the I” constitute the self-actualization of the personality, presupposes the formation of a single, unique and integral individual, the conscious realization by a person of his unique psychic reality.

Thus, self-actualization of the future teacher, firstly, requires the development and realization of his personal potencies through the realization of his own needs; secondly, it is the basis for the individualization of a specialist and the basis for his self-realization. So, scientists associate the process of teacher self-improvement with (Korman et al., 2021):

1) self-determination of professional development based on the teacher’s ability to be aware of himself, his own "I";
2) self-education, self-organization, self-development, self-education, professional growth of the teacher; 3) the formation of processes of selfhood, individualization, self-actualization; 4) professional self-realization.

Research serves as the basis for a more accurate understanding of the problem of self-improvement and depends on the chosen scientific position. Professional self-improvement of future teachers is interdisciplinary in nature and is the subject of research by philosophers, sociologists, psychologists, and teachers. Of particular importance in the study of the problem of self-improvement of a teacher is a philosophical concept that expands the idea of the fundamental principles of human existence, of the essential characteristics of a person's attitude to transformations in society, of the teacher's place in society. Self-improvement presupposes awareness, self-knowledge and self-understanding, in the process of which the future teacher acquires the ability, through his own experience, to realize himself as a harmonious individuality, to comprehend all aspects of his being, to overcome the imbalance between the objective and subjective aspects of life.

METHODOLOGY

The main goal of the study is to analyze the current state of the scientific and theoretical study of the problem of readiness for professional self-improvement, to clarify the definition of the key category in relation to future teachers. For this, a number of methods were applied that make up the research methodology. The research was carried out using the following theoretical methods: systems analysis and synthesis, induction and deduction, comparison, classification, generalization and systematization, idealization and abstraction. In addition, a practical experiment was carried out to determine the readiness of future teachers for self-improvement.

RESULTS AND DISCUSSION

Humanistic values and principles of morality are fundamental for human development. In the twentieth century, the attention of scientists is riveted to personalist ideas. Scientists associate the effective activity of a teacher with personal self-expression, and overcoming certain crisis situations contributes to the transition to higher levels of balanced existence. Current research focuses on (Weaver, 2020):

1) the processes of conscious creation of new values for a person, sensory creativity;
2) manifestations of the spiritual and creative potential of the individual;
3) aspirations of independent creation of conditions for the full manifestation of their potencies;
4) accentuation of a person’s incompleteness, open to self-improvement throughout life;
5) positions of personality integrity as a condition for effective self-development of the future teacher.

Objectification of the intellectual and creative potential of teaching by gradually abandoning the thoroughly regulated, formal and informal determinants of pedagogical work requires a more detailed study of professional self-improvement.

The self-determination is based on the teacher’s conscious professional activity in the system of his pedagogical education, which happens all the time. Such activity contributes to the further development of professionally significant qualities, increased professional readiness, professional self-realization. As the author rightly notes, this increases the effectiveness of the educational process through the corresponding needs, motives, interests and opportunities of students and society about the professional and personal development of a person, his socialization (Shkabarina, 2020).
This proves that self-improvement is associated with the personal growth of a specialist. Scientists explain that personal growth presupposes the consistent satisfaction of "higher" needs based on the basic ones achieved. That is, not individual achievements are taken into account, but a set of characteristics reflecting relations with the world and ourselves, the core of which is the attitude, the best choice in life is always within us. Personal growth is facilitated by the desire to deepen competence in accordance with the biological capabilities of the body (Kryshtanovych et al., 2020).

At the same time, qualitative changes in the individual predicted development should take place. The driving force of self-improvement is the combination of real and ideal "I", which activates the growth and development of personality. The combination of "I-real" and "I-ideal" is an internal stimulus for personal self-improvement, promotes self-realization.

A large number of scientists define self-improvement as the conscious work of a future teacher to develop his personality as a professional, provides for the adaptation of his own individual non-repetitive characteristics to the requirements of pedagogical activity, constant improvement of professional competence and the development of social and moral qualities (Zeer & Symanyuk, 2014).

So, for the successful self-improvement of an individual, it is necessary to realize the importance of this process for the life of the individual, to determine the goal, to draw up a plan for the implementation of the planned in accordance with their individual characteristics, to be ready for self-development. In the structure of an individual's self-improvement activities, scientists distinguish the following components: forms, methods, means, principles, goals, objectives, and results. They point to a characteristic sign of self-improvement - the presence of an ideal for the formation of an idea of the highest perfection (sample), which determines the nature of the personality's activity, professional behavior (Midgette et. al., 2018).


The implementation of methods in practice occurs through the use of certain techniques: aimed at using the intellect (certain rules, personal mottos, self-rewarding) based on feelings (self-approval, self-encouragement, self-criticism, self-punishment) using volitional efforts (self-denigration, self-obsession, intention, self-defense, self-suppression). The result of self-improvement are qualitative changes in the personality, they are manifested in the ability to control their emotional sphere, support a good, cheerful mood, and follow personal rules.

So, “professional self-improvement” is an active, systematic activity aimed at transforming one's personal and professional potential in accordance with the requirements of pedagogical activity, mastering the norms and rules of professional activity by future teachers, developing the ability to subordinate one's own self-education, self-education and self-development to professional interests in conditions an individualized educational environment created in an institution of higher education. Note that self-improvement presupposes awareness, self-knowledge and self-understanding, in the process of which the future teacher acquires the ability, through his own experience, to realize himself as a harmonious individuality, to comprehend all aspects of his being, to overcome the imbalance between the objective and subjective aspects of life (Kryshtanovych et. al., 2020).

Based on the definition of the concept of personal self-improvement as an integrative personal education, it is a component of the general culture of the student's personality and is characterized by formation as an active creative process of the subject studying himself, his abilities, capabilities (self-knowledge), consciously changing his personal and professionally significant qualities (self-education), strengthening sustainable motivation of personal self-development,
cognitive activity in mastering professional competence (self-education) in accordance with the requirements of the future profession and on the basis of a personal self-development program, we investigated the problem of diagnosing the process of personal self-improvement from the point of view of pedagogical science, considering it as an analysis of pedagogical aspects that contribute to or they hinder the process of personal self-improvement of the future teacher in the integral process of a higher pedagogical educational institution. The effectiveness of the organizational and methodological system of personal self-improvement of future teachers in the integral educational process of a pedagogical university is determined by the results of two interrelated processes - diagnostics and monitoring (Ochirov, 2016).

The term for diagnostics comes from the Greek. diagnosis - recognition - the process of recognition and interpretation; in general, the doctrine of the principles and methods of diagnosis.

In a general sense, diagnostics is a special type of cognition, located between scientific knowledge of the essence and the cognition of a single phenomenon. Pedagogical diagnostics is the process of studying (recognizing, identifying, determining) the state, changes in the state and the reasons for the change in the state of the participants in the pedagogical process as a result of their interaction. The main conceptual idea of the study is the provision that the training of a future teacher should be personality-oriented, the recognition of a person as the highest value in society, and providing conditions for personal self-improvement of the future teacher is one of the priority directions in the educational process of the university.

This is due to the modern tasks of higher education, which provides not only the training of highly professional competent specialists, but also bright personalities capable of self-development, self-knowledge, and self-improvement.

According to the concept, the general goals of pedagogical monitoring were determined: studying the system of organizing the process of personal self-improvement at a pedagogical university, studying the nature and degree of influence of its personality developmental result; development and implementation of technology for personal self-improvement of future teachers; verification of the effectiveness of the developed technology. The main goal of the first stage of diagnostics was to clarify the initial level of formation of the criteria for personal self-improvement of future teachers, to determine the corresponding qualities that characterize them as a spiritual, highly moral, aesthetically developed person, what a modern teacher should be (Kryshtanovych et. al., 2021).

The tasks at the stage of the ascertaining experiment were the following: determining the readiness of the teaching staff to participate in the experiment and identifying the level of competence in the field of technologies for ensuring personal self-improvement of students in a higher pedagogical educational institution; elucidation of the educational potential of the educational process of a pedagogical university, in particular, the professional training of teachers, extracurricular educational work; self-educational, self-educated and self-educating activity of the future teacher, his focus on personal self-improvement; verification of diagnostic techniques that allow you to determine the level of development of each of the criteria for the personal self-improvement of a future teacher. To determine the readiness of the teaching staff of pedagogical universities to participate in the experiment and to identify their level of competence in providing technologies for personal self-improvement of future teachers, explanatory work was carried out with teachers, curators of academic groups in order to realize the relevance of this problem, its practical significance and form their readiness to participate in the experiment. Based on conversations with teachers, analysis of curricula and work plans for teacher training, the following conclusions were drawn:

- the training of future teachers is characterized by a certain standardization of the educational process, the preservation of authoritarian ways of forming a value attitude towards the world in a finished form, there is a replacement of humanistic approaches with a random set of
educational measures that impede the individual’s ascent to spirituality on the path of self-education, self-realization and self-improvement;

- higher education basically failed to overcome authoritarianism, radically change the philosophy and ideology of upbringing, turn to the interests of the student's personality, his inner world;

- the cultural and creative function of the educational space today is not yet recognized as dominant among the priorities of the professional training of student youth; insufficiently developed theoretical, methodological, technological base of upbringing the spiritual culture of students, insufficient informational level of coverage of educational problems in pedagogical literature, in particular of a methodological nature;

- there is an insufficient level of technological readiness of teaching staff in a higher educational institution in the organization of the process of personal self-improvement of students; teaching professional disciplines does not provide for the process of creative self-development of the individual;

- special attention should be paid to the organization of extracurricular educational work to draw up an individual plan for self-improvement and develop a program for its implementation.

The program of the ascertaining stage of the experiment included appropriate diagnostic techniques for each criterion of personal self-improvement of future teachers and provided for the use of certain diagnostic methods. The method of conversation was used to identify and clarify information about the essential features of personal self-improvement of future teachers.

It should be noted that the results obtained in the course of conversations do not lend themselves to formalization and statistical processing, therefore, they can only be judged in general terms about the presence of personal characteristics. In order to clarify the essential features of the process of personal self-improvement in various types of activity, the observation method was used, which provided an opportunity to concretize thoughts and feelings, attitudes and motives, attitudes and other mental components that are inaccessible for direct perception, which make it possible to find the characteristic tendencies of the process of personal self-improvement of students.

The method of questioning on modified and author's questionnaires was used to study the levels of criteria for personal self-improvement, its brightness, flexibility and originality of thoughts, moods, views, and the level of pedagogical competence. The value of the questionnaire application was that, in addition to obtaining information about the attitude of students to the process of self-improvement, their adjustment to the organization of self-learning and self-education activities, the questionnaire was done using a questionnaire method of formulating tasks to ensure the process of personal self-improvement. This was achieved by the logic of constructing the methodology, the content and composition of questions in the questionnaire, which tuned students to organize the self-educational process.

The testing method turned out to be valuable, because it made a purposeful, identical examination for all studied, was organized under strict control and was distinguished by simplicity, accessibility, accuracy, the possibility of automation in assessing students' professional knowledge and an objective assessment of the characteristics of the pedagogical process of personal self-improvement.

The method of psychodiagnostic tests was used to obtain quantitative and qualitative indicators of the personal self-improvement of future teachers. Its specificity is the measuring and evaluative orientation, standardization (the presence of norms), validity (the method evaluates exactly the mental property for which it is intended to be measured) and reliability (the accuracy of the psychodiagnostic method as a measuring instrument and its resistance to random factors, which makes the reproduction of the results under the same conditions). Valuable when conducting psychodiagnostic tests is that it was possible to not only ascertain the initial level of personal self-improvement. Students had the opportunity to obtain information about themselves, the
effectiveness and method (features) of organizing the process of personal self-improvement. We used the method of expert assessments as a procedure for obtaining empirical data from specially selected experts on the basis of their professional status (heads of departments, teachers), who provided the necessary information about the personality of future teachers.

The analysis of scientific research and the analysis of the procedure for the process of assessing the educational process made it possible to determine the main factors that provide an objective interpretation of the results of diagnostics of the process of personal self-improvement of future teachers: the speed of the implementation of mental operations by students when solving various diagnostic problems; the complexity and direction of various types of diagnostic tasks on various components and indicators of personal self-improvement; the experience of students in performing tasks of this type; the level of interest of undergraduates in the results of diagnosis; features of the psychological state of the respondents during diagnosis and the possibility of its influence on its results; taking into account the individual and age characteristics of students; the presence or absence of psychological irritants during the diagnosis, etc.

The generalization of the results of the ascertaining experiment showed that the overwhelming majority of students had a latent (low) (30.6%) and pronounced (average) (49.7%) level of development of the components of personal self-improvement.

CONCLUSION

Summarizing the results of the ascertaining stage of the study, there is reason to assert that in the majority of the respondents, the focus on the process of personal self-improvement manifests itself situationally and has an unstable character, combined with a general ignorance of the mechanisms and principles of organizing the self-evolving process and the external attractiveness of the concept of self-improvement without realizing its deep meaning. This indicates the absence of a conscious desire to master the methods and technologies of personal self-improvement and is largely due to ignorance or lack of understanding of the importance of organizing the process of self-education and self-education in the process of professional training in a higher pedagogical educational institution.

A lack of interest in research activity, a weak craving for creative pedagogical activity was noted. Only one third of students show manifestations of motives for self-improvement, which is due to the lack of clear requirements for the search and research activity of students, its formalism and insufficient pedagogical support, or, on the contrary, by rigid frameworks that limit the free self-expression and self-development of future teachers. Students lack the skills of conscious management of the psychophysical apparatus, internal attunement to the design of the self-educational process, which leads to constant internal discomfort and difficulties in identifying the causes of errors and failures. The activation of the processes of personal self-development and self-improvement of the student in the educational process of the university will be most successful if teachers actualize the activities of self-development and self-improvement in the process of teaching a special course; introduction of special technologies into the educational process, which should ensure the inclusion of the future teacher in the activity of self-creation and self-improvement in the pedagogical process.

Authors’ Contributions: Bilyk, V.: conception and design, acquisition of data, drafting the article, critical review of important intellectual content; Tkachov, A.: conception and design, acquisition of data, drafting the article, critical review of important intellectual content; Tkach, I.: conception and design, acquisition of data, drafting the article, critical review of important intellectual content. All authors have read and approved the final version of the manuscript.

Ethics Approval: Not applicable.

Acknowledgments: Not applicable.
REFERENCES


Received: 11 June 2021 | Accepted: 22 September 2021 | Published: 19 November 2021

This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.