



DEVELOPMENT OF STUDENTS' PERSONAL AND PROFESSIONAL MATURITY IN HIGHER EDUCATION

DESARROLLO DE LA MADUREZ PERSONAL Y PROFESIONAL DE LOS ESTUDIANTES DE EDUCACIÓN SUPERIOR

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ABSTRACT:

The article shows the importance of developing the personal and professional maturity of students during their studies in higher education institutions for their professional development. Approaches to the development of personal and professional maturity of students are considered, and a conclusion is made about the requirements for modern training of specialists in higher education institutions in terms of taking into account the professional and personal development of future specialists. The main elements of cooperative learning to develop personal and professional maturity of students during their studies in higher education institutions, and the main principles of personal and professional growth of students to the level of pedagogical professionalism are characterized. The conducted formative experiment confirmed the effectiveness of the developed system for the formation of students' personal and professional maturity during their studies at a higher education institution. In particular, in all structural

components of the personal and professional maturity of EG students, we observe reliable statistical changes, which are manifested in the positive overall dynamics of their levels. In CG, we also see a general positive dynamic in the development of the personal and professional maturity of future specialists, but it is much less pronounced.

Keywords:

Personal and professional maturity of students; Higher education institutions; Professional development of the individual; Competitiveness of a specialist; Professional activity

RESUMEN:

El artículo muestra la importancia de desarrollar la madurez personal y profesional de los estudiantes durante sus estudios en instituciones de educación superior para su desarrollo profesional. Se consideran los enfoques



para el desarrollo de la madurez personal y profesional de los estudiantes y se llega a una conclusión sobre los requisitos para la formación moderna de especialistas en instituciones de educación superior en términos de tener en cuenta el desarrollo profesional y personal de los futuros especialistas. Se caracterizan los principales elementos del aprendizaje cooperativo para desarrollar la madurez personal y profesional de los estudiantes durante sus estudios en instituciones de educación superior y los principios fundamentales del crecimiento personal y profesional de los estudiantes hasta el nivel de profesionalismo pedagógico. El experimento formativo realizado confirmó la efectividad del sistema desarrollado para la formación de la madurez personal y profesional de los estudiantes durante sus estudios en una institución de educación superior. En particular, en todos los componentes estructurales de la madurez personal y profesional de los estudiantes de GE, observamos cambios estadísticos confiables, que se manifiestan en la dinámica general positiva de sus niveles. En CG, también vemos una dinámica positiva general en el desarrollo de la madurez personal y profesional de los futuros especialistas, pero es mucho menos pronunciada.

Palabras clave:

Madurez personal y profesional de los estudiantes; Instituciones de educación superior; Desarrollo profesional del individuo; Competitividad del especialista; Actividad profesional.

INTRODUCTION

One of the urgent problems for the entire world community is improving the quality of higher education. Its solution is associated with the optimization of technologies and methods of organizing the educational process, modernization of its content, and rethinking the result and purpose of education. In society, in the last decade, there has been a reorientation of the assessment of the final educational product, therefore, the competency-based approach is becoming a priority in education, which is directly related to the idea of developing the personal and professional maturity of students during their studies in higher education institutions, with the idea of comprehensive professional training of the future specialist as a professional and a person. The issues of the student's personal development and the formation of the future specialist's readiness for professional activity are key in the practice and theory of improving the content of education and in the innovative functioning of a modern higher education institution.

When preparing a future specialist for professional activity, special attention should be paid to the formation of a personal attitude to their future activity, the professional

component, and the development of their professional position.

Objective changes in the socio-cultural, political, and economic life of society today require students to use information of various quantities and qualities, master effective methods of obtaining and processing information, and train creative individuals with a harmonious perception of the surrounding reality, a holistic experience, and a developed system of value orientations.

The future specialist must be provided with special, professional, and innovative training that ensures a high level of development of their personal and professional maturity during their studies at a higher education institution, their social maturity, and culture. It is precisely such professional training that should provide an understanding of the essence of society and man, a deep knowledge of the individual, and the interconnections in the process of development. Only under this condition is it possible to implement the most important pedagogical principles of the unity of education and training during studies at a higher education institution.

The readiness of a future specialist to develop professional potential and personal and professional maturity, to self-development, and to ensure the development of individual opportunities is the dominant goal of his professional training. Therefore, research into the problem of developing a student's personal and professional potential and his personal and professional maturity during his studies at a higher education institution is relevant.

Literature review

The problem of developing a student's personal and professional maturity during his studies at a higher education institution is being studied by scientists from different countries.

The authors Kovalenko et al. (2021) investigate the maturity of automated management systems in higher education institutions, focusing on the integration of learning management systems (LMS) with broader support and administrative processes. The study highlights the need to assess the level of automation across diverse institutional activities, including teaching, research, project management, and administrative support, to ensure efficient operations and high-quality educational services. The authors identify four primary user groups – students, teachers, management, and support staff – whose needs drive the design of an effective electronic educational environment. Findings indicate that many institutions operate with fragmented systems, causing duplication of information and inefficiencies. The proposed maturity assessment method enables institutions to catalog processes, evaluate automation levels, identify gaps, and develop targeted improvement

plans, thereby fostering a coherent and high-functioning information ecosystem that supports both academic and administrative objectives.

According to Rizun & Pańkowska (2022) introduce the Education Personalization Maturity Model as a tool for assessing the extent to which higher education institutions tailor their offerings to individual student preferences. Recognizing that modern students increasingly seek personalized experiences across all aspects of their academic life, the model evaluates four key process areas: online platforms and institutional websites, courses and fields of study, research activities, and extracurricular engagement. Applied to 51 institutions across 25 countries, the model provides a comparative analysis of personalization practices, highlighting variations in institutional approaches and identifying opportunities for enhancing student-centered education. The study underscores the importance of systematic assessment of personalization as a strategy to increase student engagement, satisfaction, and the overall effectiveness of higher education delivery.

The authors de Boer Garbin et al. (2022) propose the Capability Maturity Model for Active Learning (CMMAL) to assess and enhance the adoption of active learning methodologies in higher education institutions (HEIs), particularly within STEM disciplines. Recognizing that traditional pedagogical practices often dominate despite the known benefits of active learning, the study integrates key factors – including teaching and learning processes, project management, team development, resource allocation, infrastructure, and assessment methods – into a structured model. Validation with 295 STEM professors and experts demonstrated that the CMMAL effectively evaluates the maturity of active learning practices and supports the institutionalization of innovative teaching approaches. The model provides actionable insights for planning, decision-making, and fostering a culture of student-centered pedagogy, offering HEIs a practical framework to systematically improve teaching performance and the dissemination of active learning across programs and departments.

The authors Karahan et al. (2021) examine the design and implementation of a STEM career maturity program aimed at enhancing the career counseling competencies of prospective counselors. Addressing the gap in clearly defined roles and processes for guiding students toward STEM pathways, the study employs a mixed-methods sequential explanatory design to evaluate the program's effectiveness. Quantitative findings reveal statistically significant improvements in career counseling competencies and performance indicators among participants in the experimental group compared to the control group, with a moderate effect size (0.58). Qualitative analysis further

identifies key developmental themes, including personal and professional growth, increased awareness of STEM majors and careers, strengthened STEM-focused counseling practices, and positive evaluations of the program. The results demonstrate that a structured STEM career maturity framework can effectively prepare pre-service counselors to support students' informed decision-making in STEM fields, thereby contributing to national workforce development goals and broader STEM education reform initiatives.

So, as a result of the analysis of recent research and publications, we see that scientists have substantiated the relevance of the problem of developing the personal and professional potential of a student, the personal and professional maturity of a specialist during study at a higher education institution in the context of a competency-based approach in education, which is directly related to the idea of comprehensive training of an individual as a person, a subject of individuality and activity, and training of a professional, a specialist in his field, which will contribute to increasing professional mobility in the labor market, its demand for job placement, and competitiveness; the concepts of "professional training", "professionalization", "professional development", "professional socialization", "professional path of the individual" have been specified; it has been proven that the process of obtaining professional education will be more effective during study at a higher education institution if it is interconnected with the process of professionalization of students.

Purpose of the study. To show the importance of developing students' personal and professional maturity during their studies and to develop and implement a system for forming students' personal and professional maturity during their studies at a higher education institution.

METHODOLOGY

The research hypothesis was based on the assumption that the progressive development of students' personal and professional maturity, their maturity during their studies at a higher education institution, is possible if it is carried out based on a developed system based on personally oriented, environmental, acmeological, competency, and dialogic approaches.

To achieve the goal and verify the formulated research hypothesis, theoretical and empirical research methods were used:

- theoretical – analysis of psychological, pedagogical, and philosophical literature to clarify the essence of students' personal and professional maturity during their studies; interpretative and analytical method for analyzing research sources using generalization,

comparison, and interpretation techniques; classification, logical-system analysis, and systematization of approaches to students' personal and professional maturity during their studies at a higher education institution to determine the main principles of the study;

- empirical – methods of content analysis, self-assessment, observation, questionnaires, diagnostic interviews were used to determine the level of formation of personal and professional maturity of students during their studies at a higher education institution; a formative experiment was necessary to verify the effectiveness of the developed system for the development of personal and professional maturity of students during their studies at a higher education institution;
- statistical methods were used to verify the reliability of the research results and to perform quantitative analysis of the data obtained.

The research was conducted during 2023–2024.

At the theoretical stage, an analysis of psychological, pedagogical and philosophical literature was carried out to clarify the essence of personal and professional maturity of students during their studies; empirical research materials were systematized and generalized; a methodology for theoretical and experimental research was developed, criteria for the development of personal and professional maturity of students during their studies at a higher education institution were determined.

At the *diagnostic stage*, an experimental check of the state of formation of personal and professional maturity of students during their studies at a higher education institution was carried out; scientific and methodological support for this process was developed.

At the *experimental stage*, an experimental check of the research hypothesis was carried out, intermediate results of the study and the results of the formative experiment were analyzed, general conclusions were formulated, and prospects for further study of the problem under study were determined.

In the structure of the personal and professional maturity of the future student, we distinguish the following components: motivational, personal, cognitive, and functional. By identifying the components of the personal and professional maturity of the student, the criteria for its formation were identified.

We have developed a system for forming the personal and professional maturity of students during their studies at a higher education institution, which we define as a structural and functional ordered unity of components and which comprehensively reflects the tasks, goals, principles, conditions, methods, forms, techniques of professional

training of future specialists, and the results of their professional development at a higher education institution.

The ascertaining cross-section was carried out among third-year students of socioeconomic specialties of higher education institutions and was aimed at diagnosing the levels of formation of personal and professional maturity of students during their studies at a higher education institution. This process made it possible to clarify the issue of the homogeneity of the EG and CG groups and the significance of their use in the formative experiment.

Using statistical methods (χ^2 criterion), the processing of the results confirmed the absence of differences in the levels of formation of personal and professional maturity of EG and CG students at the beginning of the study.

At the ascertaining stage of the study, we say that, despite the development of student youth, most students are characterized by a transitional level, an insufficient level of personal and professional maturity of students during their studies. This necessitates the introduction of a specially organized system for the formation of personal and professional maturity of students during their studies at a higher education institution, at the stage of their professional training.

The conducted formative experiment confirmed the effectiveness of the developed system for the formation of personal and professional maturity of students during their studies at a higher education institution. In particular, in all structural components of personal and professional maturity of EG students, we observe reliable statistical changes, which are manifested in the positive overall dynamics of their levels.

At the formative stage of the experiment in CG, we also see general positive dynamics in the development of personal and professional maturity of future specialists. However, it is much less pronounced.

We note that the differences in the EG and CG between the levels of development of personal and professional maturity of students, identified during the final diagnostic section, are statistically significant and are not random, which was confirmed by the use of the non-parametric criterion χ^2

Since at the beginning of the experimental study, both groups did not differ in the levels of development of personal and professional maturity of future specialists, this gives grounds to say that the differences identified at the end are due to the implementation of the developed, implemented, and substantiated system of development of personal and professional maturity of future specialists. Therefore, the hypothesis of the study is confirmed.

RESULTS AND DISCUSSION

The importance of the development of personal and professional maturity of students during their studies at a higher education institution for their professional development.

The most significant stage of a person's personal and professional development is the time of studying at a higher education institution. Studentship is a period of adaptation to new requirements and conditions, to a new social role, which are presented to work on oneself, the self-organization of students, and is based on a new high degree of responsibility.

At the initial stages of a person's professional development, the main source of professional development is the level of a student's personal development. The ratio of professional and personal development during studies at a higher education institution acquires the character of a certain integrity when the professional development of the individual begins to determine and dominate personal development.

In the process of a person's professional development, the main factor in the formation of a person's professional and life path is responsibility, the formation of which is associated with the freedom of decision-making by the individual throughout his or her life path.

At the center of the educational process should be the holistic unique personality of the student, who reveals his inner potential, strives to develop personal and professional potential during his studies at a higher education institution, to maximize his capabilities, is open to the realization of responsibility for life choices, and to the acceptance of further experience in various conditions of reality.

One of the main stages of the development of the personal and professional potential of students during their studies at a higher education institution, their professional formation is the innovative process of studying at a higher school itself, in which not only the acquisition of professional basic skills and abilities occurs, students become familiar with the specifics of the chosen profession, but also a value-motivational attitude towards future professional activities throughout life is formed. During their studies at a higher school, students form key components that are necessary for the formation of a future specialist and the development of their personality. During their studies at a higher school, personal connections and contacts are established that ensure the formation of "initial social capital", which enables the individual to optimally enter the professional community. It is in a higher educational institution that the fundamental foundations of the personality are laid, which in the future provide the opportunity to withstand all the difficulties and complex challenges of

professional activity, determine the integrity and stability of the professional position of a specialist, which means that the specifics and content of professional training in higher education should be the focus of special attention of practitioners and scientists (Kovalenko et al., 2021).

The main approaches to the development of personal and professional maturity of students during their studies at a higher education institution.

Let us consider the approaches to the development of personal and professional maturity of students during their studies at a higher education institution and draw a conclusion about the requirements for modern training of specialists in higher education institutions in terms of taking into account the professional and personal development of future specialists.

A special place in education today is occupied by the competency-based approach, which contributes to the replacement of the traditional qualification of a specialist (functional correspondence between the goals of education and the requirements of the profession, determined by a standard set of skills, abilities, knowledge) with the competence of a specialist, which certifies the level of development in future specialists of systematically organized communicative, moral, intellectual principles, which, in broad economic, cultural, social contexts, allow them to successfully organize professional activities; ensures the individual's permanent readiness for self-development and self-improvement, provides the ability to find optimal solutions to current problems, analyze the situation and quickly navigate in changing conditions and adapt to these conditions in the present. The competency-based approach is humanistic in its essence because it is directly related to the idea of educating an individual and his or her comprehensive training as a holistic personality, and not just as a professional in his or her field, a specialist (Awdziej et al., 2023). Therefore, the competency-based approach not only contributes to the formation of a system of skills, abilities, and knowledge in future specialists, but also contributes to the ability to make individual creative decisions, develop students' horizons, provides a desire for self-education and self-study, and forms humanistic values, which are the basis of the student's professional position.

Without a holistic and comprehensive approach to the development of personal and professional maturity of students during their studies at a higher education institution, without studying the student's personality and understanding his cognitive and mental activity, it is impossible to improve the educational field, the system of modern higher pedagogical education, and the education of the individual throughout life (Mytnyk et al., 2024).

The higher education system in training future specialists should focus on shaping a self-confident, independent, and socially active individual who possesses professional competence and a high level of responsibility. This will enable them to achieve both professional and personal self-realization during their studies at a higher education institution. Therefore, when organizing the system of professional training for students in a higher education institution, it is essential to consider their individual characteristics and the patterns of their psychological development and systematically guide the process of their personal and professional growth. (Knysch et al., 2024).

In connection with the importance and relevance of the development of personal and professional maturity of students during their studies in a higher education institution, we note that during the period of formation of professional maturity of students, individual characteristics develop at a creative level, which affect professional adaptation, self-determination in the profession (interests, needs, level of commitment, attitudes, features of intelligence, etc.), as well as pedagogical activity negatively or positively affects the formation of self-determination, self-esteem.

In the process of developing the personal and professional maturity of students during their studies in a higher education institution, the internal potential of the individual is multiplied, not just revealed.

The increase in personal and professional maturity of students is characterized by the following features: dominance of self-realization needs, expansion of the circle of cognitive interests, increase in the level of pedagogical skills, interest in self-education methods, and development of independence processes.

Having considered the approaches to the development of personal and professional maturity of students during their studies at a higher education institution, it was concluded that modern training in higher education institutions must take into account the professional and personal development of future specialists (Lyu et al, 2022).

The main aspects that significantly affect the competitiveness of professional activity and the further viability of students.

The features of the training of specialists and the development of personal and professional maturity of students during their studies at a higher education institution are outlined by the main interrelated aspects that significantly affect the competitiveness of professional activity and further viability.

The main aspect that significantly affects the competitiveness of professional activity and further viability is associated with the formation of the scientific position of the

future specialist and with the mastery of a complex of professional disciplines.

An important aspect concerns the moral and spiritual image of the student, the formation of the personality of which is based on the depth of acceptance and understanding of principles and ethical norms. This is due to the peculiarity of the object of psychological and pedagogical influence, the uniqueness, and the specificity of the techniques that contribute to deep penetration into the inner world of a person. Orientation to the value of a person as a unique individual, to his professional activity, sharpens the self-acceptance of a specialist, his capabilities, and his personal problems as a certain influence on others, which is based on responsibility for his professional actions, a sense of professional duty, and experiences (Kovalenko et al., 2021).

The professional position of a modern future specialist is outlined by certain requirements. The first step for a student in forming himself as a professional is the awareness of his own "I" and self-acceptance, which determines the professional longevity of a specialist and professional suitability and is a necessary condition for an objective attitude towards his capabilities and professional competencies (Shaiuk, 2020). The dominance of professional orientation and clear expression of cognitive interests in the inner world of a person implies the activity of a highly qualified specialist.

One of the main requirements, which is a necessary component of the personal and professional maturity of students during their studies at a higher education institution, is the ability to professional development and self-education. To solve complex professional tasks, it is not enough to simply possess a set of certain professional techniques and tools, to be oriented in directions and theoretical approaches. You need to be able to produce innovative professional knowledge yourself, and for this, you need to develop as a person, to be constantly in a state of scientific search as a professional.

The professional position of a specialist encompasses the personality of the person himself and his professional approach; therefore, as a personal formation, it has an individual peculiarity, specified in the interconnected components of the student:

1. attitude towards people in the profession determined by the values and meanings of the personality – a humane attitude implies that humanistic values should form the basis of professional values; includes openness, love for people, benevolence, empathy, tolerance, ethics, etc.;
2. methods of implementing and mastering professional activity reflect the individual's attitude to future

professional activity and may have an adaptive-passive nature, when creative, proactive, developed algorithms of solutions are used to master professional activity where there is a search for the formation of an individual style of activity, non-standard ways of solving problems, activity, creativity, flexibility, intellectuality in mastering professional activity, initiative;

3. self-attitude as a future specialist: the desire for self-understanding, awareness of the limits of one's competence, acceptance or rejection of oneself, knowledge of one's weaknesses and strengths. Thus, the professional position of a student psychologist appears as a stable system of his development of personal and professional maturity during his studies at a higher education institution, attitudes to various aspects of future professional activity, which determine the intentions, professional plans, areas of activity, and professional worldview of the future specialist.

Therefore, the main components of the development of personal and professional maturity of students during their studies at a higher education institution, in our opinion, should be attitude towards people in the profession, self-image of the individual, and attitude towards future professional activity (Kovalenko et al., 2021).

The main positions through which the starting points of the personality-oriented system for the development of the personal and professional potential of students during their studies at a higher education institution are determined.

The starting points of the personality-oriented system for the development of the personal and professional maturity of students during their studies at a higher education institution are determined through the following positions:

- a personality-oriented system for the development of the personal and professional maturity of students during their studies at a higher education institution should ensure self-development and development of the personality as a subject of subject and cognitive activity;
- a personality-oriented system for the development of the personal and professional maturity of students during their studies at a higher education institution should be the main goal of modern education, to provide each student with accessible education, based on their inclinations, interests, subjective experience, abilities, value orientations, and the opportunity to realize themselves in various types of activity;
- a personality-oriented system for the development of students' personal and professional maturity during their studies at a higher education institution should provide innovative content of education, its methods and means are organized in such a way that the

student has the opportunity to choose the necessary subject material, type, and form;

- a personality-oriented system for the development of students' personal and professional maturity during their studies at a higher education institution is the most important means of developing the student's intellectual and spiritual qualities, using subjective experience in interpreting and evaluating facts, phenomena, perception of the world, the possibility of its creative transformation, based on personally significant values of events of the surrounding reality and internal guidelines;
- a personality-oriented system for the development of students' personal and professional maturity during their studies at a higher education institution has such factors of a personality-oriented educational process that create conditions for self-development of the personality, develop the student's individuality, and promote self-expression (Kuchai et al., 2017).

Taking into account the main positions through which the starting points of the personality-oriented system of development of personal and professional maturity of students during their studies at a higher education institution are determined, the goal of student education becomes the comprehensive development of the personality and the harmonious formation of a person-specialist in the educational process of higher education, the acquisition of one's own "I", the disclosure of individuality, creative forces.

To this end, a higher education teacher faces unique and important tasks: to develop human qualities, to help a student find himself in the profession and life, to form effective mechanisms of self-realization, self-determination, adaptation, self-improvement, self-development in the conditions of educational and cognitive activity of higher education, which will contribute to the formation and formation of a student's creative personality.

Such tasks significantly change the functions of the educational process: its main functions become the function of self-improvement, developmental, and educational, and not educational as in traditional education. Education in higher education, with this approach, is humanized, comprehensively contributes to the development of a person, helps their spiritual, intellectual, and physical wealth, and socialization in the conditions of educational activity in an institution of higher education, which automatically requires a significant correction of the ways and methods of implementing the content of education.

The substantive component of education in an institution of higher education should include:

- everything that a future specialist needs for the development and formation of their own personality;

- everything that a future specialist needs for the formation of their personality as a professional (Kuchai et al., 2022).

The main elements of cooperative learning are to develop the personal and professional maturity of students during their studies in higher education institutions.

During classes with students, we created a special partnership environment that helps to reveal the individual world of the student, release their creative potential, promote the manifestation of cognitive abilities, etc.

We relied on five main elements of learning in cooperation:

- The first element – necessary for achieving educational success is the joint activity of students.
- The second element – to achieve the set goal, the collective and individual responsibility of students.
- The third element – the active stimulation of students' communication with each other in a group in the process of mutual support, mutual assistance, and joint learning.
- The fourth element – the manifestation of such innovative skills of social behavior of the individual that will be able to ensure the unification of students into a team.
- The fifth element – ensuring the creation of a technology of joint work, which involves the following stages: support of partnership relationships; discussion of different ways of achieving goals facing the group; organization of work in innovative forms; thorough analysis of the results of joint work, etc. (de Boer Garbin et al., 2022).

Principles of personal and professional growth of students to the level of pedagogical professionalism during their studies in higher education.

The personal and professional development of future specialists to pedagogical professionalism depends significantly on the optimality of the functioning of the first phase, which is revealed in institutions of higher pedagogical education.

The principle of syncretism of the values-means of a specialist and the values-goals of the subject of constant movement to professional professionalism actualizes the existence of de facto two groups of personal pedagogical values of a specialist on the path of the individual's movement to professional professionalism. The principle also focuses on the self-actualization and self-realization of a specialist and the isolation of two types of syncretic relationships in the entire system of his axiological "I" as a professional in an innovative environment. These are syncretic relationships of a holistic plan: the goals-values of the specialist's self-movement determine their value-meaning potential and their direction, all subgroups of values-means.

The principle of determining the development of a specialist as a competent individual by the values of the reference subsystem of professionalism of the personality of a modern specialist. The reference subsystem of professionalism of the personality of a modern specialist is an innovative form of reflection at the ideal level of the phenomenon, in which the following function: innovative-pedagogical and humanistic orientation; perspective, systematicity, creativity of professional thinking; subordination to the value-target orientations of self-creation, career self-movement of professional creativity; the ability in the context of professional and personal development to self-organize and self-motivate a holistic plan; reflective-pedagogical and affective-self-regulatory skills of a specialist; patriotic, spiritual-moral, perceptive, aesthetic and other qualities significant for the specialist, etc. The specified value world directs the individual to career self-movement to the first milestone of professional maturity.

The principle of priority of self-cultivation by a specialist in the role of intrinsic values of the professionalism of the individual, of the innovative and creative component during higher education. The innovative, creative component of the professionalism of the future specialist is a value-strategic orientation of this principle, which is a key characteristic of the development of the individual. Analyzing from the position of a personal-differentiated approach, this subsystem of professional professionalism, Rahim et al. (2021) offers "the innovative and creative potential of the personality of a teacher in the unity of individual-typological and individual-specific sides".

The conscious reference model of the axis of professionalism of professional activity is the principle of integral determination of the development of professional competence of a specialist, personal and professional potential of students during their studies at a higher education institution. The appropriation by a specialist of a complexly structured axiological series of a model representation of the professionalism of professional activity requires appropriate regulations.

The principle of the conditionality (in types of professional activity) of the development of professional competence of a specialist by the complication of goals of various functional subordination is based on psychological and pedagogical fundamental provisions about the development in the activity of the individual, the ability to productive creative activity of the individual, which is the most important sign of personal development and personal and professional maturity of students during their studies at a higher education institution. The principle clearly defines the necessary condition for the professional development of a specialist in the personal and activity dimension to the level of professional professionalism – his solving target

tasks that tend to complicate and initiate professional activity (Puhach et al., 2021).

The principle of self-creation of the harmonization of the personality as a professional in the system of self-educational and self-educational actions. The corresponding requirement for a specialist to “humanize” professional education as a subject of self-creation is derived from the need for humanization. The requirement for a specialist orients the personality to subordinate the action to harmonize self-creative own activity based on the corresponding direction of its innovative, integral content, target program, varieties of methods and forms of the idea of harmonizing the development of the personality – its need-motivational, spiritual-moral, affective, cognitive, socio-psychological spheres (Shuliak et al., 2022).

The principle of informatization of the system of values-means of the self-creative movement of the future specialist to pedagogical professionalism during training in an institution of higher education. The main leading integrative means of the self-creative process of a specialist, which is aimed at developing the personal and professional maturity of students during training in an institution of higher education, mastering the values of professionalism, are communication and information technologies. The purpose of the informatization of the system of values-means of self-educational activity of a specialist and his self-educational activity as a carrier of creative potential is to improve the quality of personal and professional maturity of students during their studies at a higher education institution and their influence on the self-development process.

Leading conditions for the success of students’ personal and professional development during their studies at a higher education institution.

Let us name the leading conditions for the success of students’ personal and professional development during their studies at a higher education institution:

1. general:

- in achieving the conscious goal of the personal and professional development of a future specialist, it is necessary to have a high-quality functioning of an integral system of specialist activity, intellectual and communicative development of the individual;
- harmonization of internal and external factors stimulating the personal and professional development of students during their studies at a higher education institution, and professional self-awareness and consciousness of the specialist’s personality;
- on the axiologically determined process of the acme-synergetic mechanism ensuring the predominance of the influence of its regulation;

2. specific:

- in the phase of self-movement of the specialist’s dominance towards pedagogical professionalism, from professional competence to creative activity of professional, cognitive, and other plans;
- new changes in the personal and professional development of students in the professional self-creation of a specialist during their studies at a higher education institution, which are associated with going beyond the framework of adaptability and value-target orientation, updating the value component of the content, motivation, and methodological resources of the training process at a higher education institution;
- reflection on the near and far prospects in the oriented target programs of the personal and professional self-development of the student by professionally creative and self-creative means, on the one hand, of all components of the object of the process of personal and professional development of students as a special integrity, and on the other – realized as components that have not yet been mastered but are valuable in themselves during their studies at a higher education institution, and elements of the value-content richness of pedagogical professionalism (Karahan et al., 2021).

The experimental research.

The research hypothesis was based on the assumption that the progressive development of students’ personal and professional maturity, their maturity during their studies at a higher education institution, is possible if carried out based on a developed system based on personally oriented, environmental, acmeological, competency, and dialogic approaches.

To achieve the goal and to verify the formulated research hypothesis, theoretical and empirical research methods were used:

- theoretical – analysis of psychological, pedagogical and philosophical literature to clarify the essence of students’ personal and professional maturity during their studies; interpretative and analytical method for analyzing research sources using generalization, comparison, interpretation techniques; classification, logical and systemic analysis, systematization of approaches to students’ personal and professional maturity during their studies at a higher education institution to determine the main principles of the study;
- empirical – methods of content analysis, self-assessment, observation, questionnaires, diagnostic interviews were used to determine the level of formation of personal and professional maturity of students during their studies at a higher education institution; a formative experiment was necessary to verify the effectiveness of the developed system for the development of personal and professional maturity of students during their studies at a higher education institution;

- statistical methods were used to verify the reliability of the research results and to perform quantitative analysis of the data obtained.

The research was conducted during 2023–2024.

At the theoretical stage, an analysis of psychological, pedagogical and philosophical literature was carried out to clarify the essence of personal and professional maturity of students during their studies; empirical research materials were systematized and generalized; a methodology for theoretical and experimental research was developed, criteria for the development of personal and professional maturity of students during their studies at a higher education institution were determined.

At the diagnostic stage, an experimental verification of the state of formation of personal and professional maturity of students during their studies at a higher education institution was carried out; scientific and methodological support for this process was developed.

At the experimental stage, an experimental verification of the research hypothesis was carried out, intermediate research results and the results of the formative experiment were analyzed, general conclusions were formulated, and prospects for further study of the problem under study were determined.

In the process of integrating knowledge about the structure of personal and professional maturity of students during their studies at a higher education institution, we relied on the principles of personal and professional growth of students to the level of pedagogical professionalism during their studies at a higher school, which provided for a comprehensive and holistic consideration of the subject of study. Analysis of the principles of personal and professional growth of students to the level of pedagogical professionalism during their studies in higher education gave grounds to single out the main aspects of the description of personal and professional maturity of future specialists: clarification of the relationships between the components and the content of maturity – structural aspect, determination of the functions of maturity – functional aspect, identification of the properties of maturity – qualitative aspect.

We believe that the most general personality properties, in which the formation of personal and professional maturity of students during their studies in a higher education institution is manifested, are self-actualization, self-regulation, and self-determination, which determine, in the complex, the integral ability to professional activity and self-organization of life.

In the structure of personal and professional maturity of a future student, we distinguish the following components: motivational – includes a hierarchical structure of value orientations and motives, personal – includes the formation

of important professional qualities; cognitive – includes the intellectual prerequisites of professional maturity of the individual; functional – includes such forms of activity that allow the student to self-regulate, self-develop, self-express, self-determine, self-realize, self-organize professional activity, independently build professional and life prospects, build relationships with the world around him and himself. We believe that it is such components that reflect the degree of formation of the corresponding areas of the personality.

By the identified components of the student's personal and professional maturity, we identify the criteria for its formation:

- the motivational criterion reflects the structure of value orientations, which include in their content the following vectors of orientation: intra-individual (self-actualization, self-development, self-organization, self-determination) and inter-individual (orientation on universal moral values, needs, and interests of other people);
- the personal criterion includes in its content the development of personally professionally important characteristics: empathy, subjectivity, identity, tolerance, reflexivity, and internality;
- the cognitive criterion includes in its content the formation of professional dialectical thinking, which is manifested in the following indicators: procedurality, balance, moderation, tolerance for uncertainty;
- the functional criterion encompasses the manifestations of the student's personal maturity, including responsibility, self-organization, self-determination, independence, professional self-improvement, and activity.

We have developed a system for the formation of personal and professional maturity of students during their studies at a higher education institution, which we define as a structural and functional ordered unity of components and which comprehensively reflects the tasks, goals, principles, conditions, methods, forms, techniques of professional training of future specialists, the results of their professional development at a higher education institution.

The developed system is aimed at interaction with students and the formation of personal and professional maturity of students during their studies at a higher education institution. The system included:

- organization of pedagogical practice, research, scientific activities of students: implementation of scientific projects, essays, participation in scientific paper competitions, olympiads, in scientific conferences;
- conducting training for the personal and professional maturity of students;
- personally oriented teaching of professional disciplines;

- use of case method, group discussions, conversations, business and role-playing games, modeling,
- analysis of professional situations, special developmental exercises;
- conducting diagnostic methods and analysis of their results;
- organization of extracurricular educational work with students; holding pedagogical competitions, meetings with university graduates,
- conducting individual conversations-consultations, etc.

The main component of the developed system is pedagogical support for the formation of personal and professional maturity of students during their studies at a higher education institution, which provides for the following main areas of activity: diagnostic direction, corrective direction, consulting direction, and orientation towards professional improvement.

The formation of personal and professional maturity of students during their studies at a higher education institution through the developed system took place in stages:

- Diagnostic stage. The initial level of students' personal and professional maturity during their studies at a higher education institution was determined by introducing diagnostic methods and analyzing the results;
- Correctional stage. During educational activities, a complex of technologies, methods, forms, and techniques was used aimed at activating students' reflective processes, forming a value-based attitude to professional activity as a means of personal self-realization;
- Reflexive stage. During this stage, changes in students' professional values were assessed, the dynamics of important professional personal qualities of students were analyzed, and their corrective developmental work and professional identity were summarized.

The formation of students' personal and professional maturity during their studies at a higher education institution occurred in the process of subjective activity associated with creative interpretation, choice, search, and actualization by future teachers of the axiological, worldview, and cultural components of professional activity in the process of interaction with teachers.

Important importance in the process of forming the personal and professional maturity of students during their studies at a higher education institution was given to the training of professional personal maturity, which was based on the principles of activating reflection, complexity, subjective positioning of students, and motivated participation.

The training work consisted of the following stages: motivational, reflective, value-orientation, cognitive-informational, and final. Each of the stages was aimed at developing the proposed components of the personal and professional maturity of students during their studies at a higher education institution.

The ascertaining section was conducted among third-year students and was aimed at diagnosing the levels of formation of personal and professional maturity of students during their studies at a higher education institution. This process made it possible to clarify the issue of the homogeneity of the EG and CG groups and the significance of their use in the formative experiment.

Using statistical methods (χ^2 criterion), the processing of the results confirmed the absence of differences in the levels of formation of personal and professional maturity of EG and CG students at the beginning of the study.

The results obtained at the ascertaining stage of the study, which were conducted in the form of interviews and their generalization, indicate the development of personal and professional maturity of students during their studies at higher education institutions, the insufficient personal and professional maturity of their future specialists, heterochrony, which is manifested in the uneven formation of components at different stages of professional training, the variability of individual indicators, small relative stabilization, and the alternation of periods of intensive development.

During the study in higher education institutions, positive individual trends are observed in the personal and professional development of students during their studies: self-esteem of the professional self-concept increases, the adequacy of professionally important qualities gradually increases, and the direction of professional growth increases.

At the ascertaining stage of the study, we say that, despite the development of student youth, most students are characterized by a transitional level, an insufficient level of personal and professional maturity of students during their studies, which is manifested in the uncertainty of the system of professional and value orientations, the diffuseness of professional identity, tolerance and reflexivity, lack of subjectivity, a tendency to professional thinking and a simplified understanding of professional processes, in insufficient self-regulation and the formation of self-organization skills, self-development.

This necessitates the implementation of a specially organized system for the formation of personal and professional maturity of students during their studies in a higher education institution at the stage of their professional training.

The purpose of the formative stage of the study was to test the hypothesis that reflects the essence of our approach to the system of forming personal and professional maturity of students during their studies at a higher education institution. It was necessary to practically confirm that the implementation of the developed system of forming personal and professional maturity of students during their studies at a higher education institution, which is based on the personal, competency, holistic, and comprehensive approaches disclosed above in the article, involves the use of a set of proposed technologies, forms, conditions, and methods, and contributes to increasing the levels of formation of personal and professional maturity of students during their studies at a higher education institution.

The ascertaining cross-section was conducted among third-year students and was aimed at diagnosing the levels of formation of personal and professional maturity of students during their studies at a higher education institution. This process made it possible to clarify the issue of the homogeneity of the EG and CG groups and the significance of their use in the formative experiment.

Using statistical methods (χ^2 criterion), the processing of the results confirmed the absence of differences in the levels of formation of personal and professional maturity of EG and CG students at the beginning of the study.

At the ascertaining stage of the study, we say that, despite the development of student youth, most students are characterized by a transitional level, an insufficient level of personal and professional maturity of students during their studies. This necessitates the implementation of a specially organized system of formation of personal and professional maturity of students during their studies at a higher education institution, at the stage of their professional training.

The conducted formative experiment confirmed the effectiveness of the developed system of formation of personal and professional maturity of students during their studies at a higher education institution.

In particular, in all structural components of personal and professional maturity of EG students, we observe reliable statistical changes, which are manifested in the positive overall dynamics of their levels (Figura 1):

- from 31% to 9% – we observe a significant decrease in the number of students in EG with a pre-subject level of personal and professional maturity;
- from 25% to 45% – we observe an increase in the percentage of students with a subjective level;
- from 44% to 46% – the number of respondents with a transitional level of personal and professional maturity has changed little during the formative study.

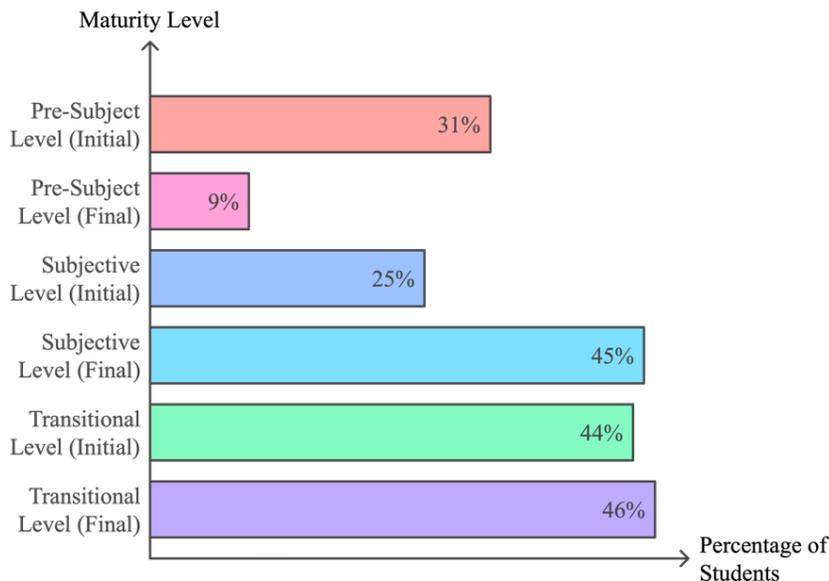


Figure 1: Changes in Personal and Professional Maturity Levels (EG)

This is explained by the fact that many students with this level have moved to the subjective level of personal and professional maturity, a higher level. This transition to a higher level was compensated for by the positive dynamics of the development of students who have reached a transitional level of maturity with a pre-subject level.

At the formative stage of the experiment in the CG, we also see general positive dynamics in the development of personal and professional maturity of future specialists. However, it is much less pronounced (Fig. 2):

- from 32% to 22% – we observe that the number of students with a pre-subject level has decreased, but not significantly;
- from 27% to 35% – we observe that the number of students with a subject level has increased, but not significantly;
- from 41% to 43% – we observe that the number of students with a transitional level has remained practically unchanged.

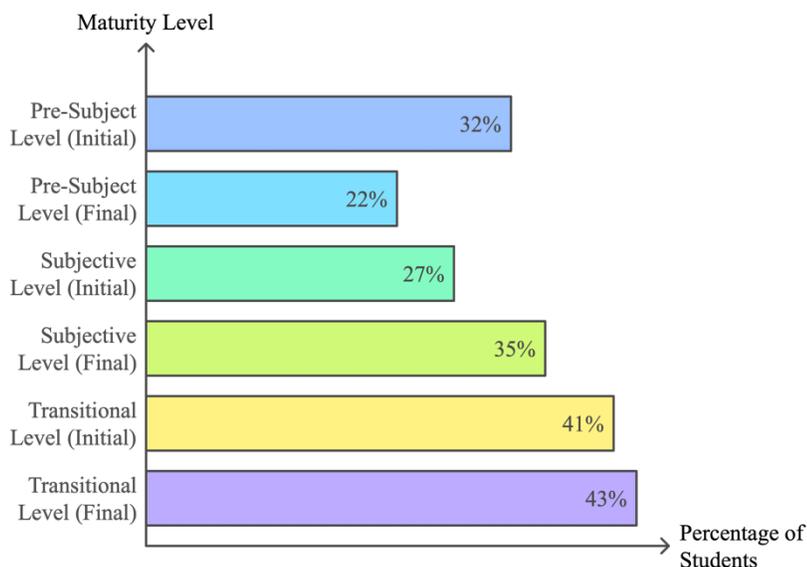


Figure 2: Changes in Personal and Professional Maturity Levels (CG)

We note that the differences in the EG and CG between the levels of development of personal and professional maturity of students, identified during the final diagnostic section, are statistically significant and are not random, which was confirmed by the use of the non-parametric criterion χ^2

Since at the beginning of the experimental study, both groups did not differ in the levels of development of personal and professional maturity of future specialists, this gives grounds to say that the differences identified at the end are due to the implementation of the developed, implemented, and substantiated system of development of personal and professional maturity of future specialists. Thus, the hypothesis of the study is confirmed.

CONCLUSION

The importance of developing the personal and professional maturity of students during their studies at a higher education institution for their professional development has been shown.

The approaches to the development of personal and professional maturity of students during their studies at a higher education institution are considered, and a conclusion is made about the requirements for modern training of specialists in higher education institutions regarding the consideration of the professional and personal development of future specialists.

The main aspects that significantly affect the competitiveness of professional activity and the further viability of students are identified. The main positions through which the starting points of a personality-oriented system for the development of personal and professional potential of students during their studies at a higher education institution are determined are named.

The main elements of cooperative learning are characterized to develop personal and professional maturity of students during their studies at higher education institutions, and the main principles of personal and professional growth of students to the level of pedagogical professionalism are shown.

The leading conditions for the success of personal and professional development of students during their studies at a higher education institution are shown.

We have developed a system for forming students' personal and professional maturity during their studies at a higher education institution. We define this system as a structurally and functionally ordered unity of components that comprehensively reflects the tasks, goals, principles, conditions, methods, forms, and techniques of professional training for future specialists and the results of their professional development at a higher education institution.

The ascertaining cross-section was carried out among third-year students of socioeconomic specialties of higher education institutions and was aimed at diagnosing the levels of formation of personal and professional maturity of students during their studies at a higher education institution. This process made it possible to clarify the issue of the homogeneity of EG and CG groups and the significance of their use in a formative experiment.

At the ascertaining stage of the study, we say that, regardless of the development of student youth, most students are characterized by a transitional level, an insufficient level of personal and professional maturity of students during their studies. This necessitates implementing a specially organized system to form students' personal and professional maturity during their studies at a higher education institution at the stage of their professional training.

The conducted formative experiment confirmed the effectiveness of the developed system for the formation of students' personal and professional maturity during their studies at a higher education institution. In particular, in all structural components of the personal and professional maturity of EG students, we observe reliable statistical changes, which are manifested in the positive overall dynamics of their levels.

At the formative stage of the experiment in the CG, we also see general positive dynamics in the development of personal and professional maturity of future specialists. However, it is much less pronounced.

Since at the beginning of the experimental study, both groups did not differ in the levels of development of personal and professional maturity of future specialists, this gives grounds to say that the differences identified at the end are due to the implementation of the developed,

implemented, and substantiated system of development of personal and professional maturity of future specialists. Thus, the hypothesis of the study is confirmed.

We see the prospects for further research in clarifying the possibilities of developing personal and professional maturity of students during the study of professional disciplines and pedagogical practice, during independent professional activity and professional adaptation, and during the generalization, study, and implementation of foreign experience of personal and professional development of students.

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