ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.

Scientific Herald

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE. PROFESSIONAL PEDAGOGY

No 1(18)'2019

Was founded
April 07, 2011

Founder
Institute of vocational education and training of NAES of Ukraine

Editor-in-chief
Valentyna Radkevych

Publication frequency: 2 times a year

Registered *Ministry of Justice*

Certificate of registration for print media
series KB № 17626-6476P as of 07.04.2011

Recommended for publishing
Academic Board of the Institute of vocational education and training of NAES of Ukraine (Minutes № 8 as of June 24, 2019)

Referee *is provided by editorial board members and external reviewers*

Address of the Editorial Office:
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The collection of scientific papers is in the List of scientific professional scientific publications of Ukraine for pedagogic sciences (Decree of MoES of Ukraine № 1411 as of 10.10.2013. Decree of MoES of Ukraine as of 15.01.2018).

Indexed: *scientometrical data base Index Copernicus International (12.07.2018); Google Scholar (since 2011)*
Added to the *database Ulrich's Periodicals Directory (25.08.2014)*
Reviewed: *Ukrainian abstract journal "Dzherelo" (the Source), abstract data base "Ukrainika naukova" (Scientific Ukrainika), sectoral abstract data base of V.O. Sukhomlynskyi State scientific and pedagogical library of Ukraine*

Archived *National library of Ukraine Vernadsky*

Represented *in digital catalogues of Yaroslav Mudryi National library of Ukraine, V. O. Sukhomlynskyi State scientific and pedagogical library of Ukraine*

Kyiv 2019

https://doi.org/ 10.32835/2223-5752.2019.18.

https://doi.org/ 10.32835/2223-5752.2019.18.

S 34 **Scientific Herald** of the Institute of Vocational Education and Training of the National Academy of Pedagogical Sciences of Ukraine. Vocational pedagogy: collection of researches: 18h ed. Editorial board: Institute of Vocational Education of NAPS of Ukraine; [V. O. Radkevych (head) et al]. – Vyd.«Polissia», 2019 – 220 p.
https://doi.org/10.32835/2223-5752.2019.18.

The collection of scientific papers substantiates the theoretical and practical problems of the development of professional, career, entrepreneurial, marketing, self-education, digital and other key competencies of trainees / students in vocational, pre-tertiary vocational and higher education institutions. The methodical aspects of forming of their professional ethics, legal and digital culture are highlighted. The results of the analysis of the current state of VET teachers' readiness for use of SMART complexes, innovative forms of research activities, the elements of distance and dual training of future workers for the engineering, agrarian, construction, marine industries, as well as physical culture and sports, social work, etc. are presented. The historical aspects of the activity of marine educational institutions in Ukraine are presented. It is characterized the peculiarities of formation and development of adult education in Slovakia, teachers' professional training in Great Britain.

For scientists, scientific and pedagogical and pedagogical stuff of the vocational, pre-tertiary vocational and higher education institutions, training centers of enterprises, institutes of postgraduate pedagogical education, educational (scientific) -methodical centers of vocational education, postgraduate and doctoral students.

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)

Part I

THEORY AND METHODOLOGICAL FUNDAMENTALS OF VOCATIONAL EDUCATION AND TRAINING DEVELOPMENT

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.4-10

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 4-10

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

CAREER COUNSELLING: A CONSTRUCTIVE INTERACTION BETWEEN SCIENCE AND PRACTICE

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Abstract. The article analyzes the current status of student counselling in vocational education institutions, contextualizes findings on this problem and discloses contradictory points of counselling. It is justified that vocational education institutions normally view professional career counselling as the processes of dealing with and solving students' internal conflicts within professional self-determination. Career centres are positioned to be the implementers of the ideas of student career counselling. However, such research methods as theoretical analysis, comparison, pedagogical observations and logical generalization made it possible to specify some typical problematic aspects of career counselling within professional development of the modern personality, which are mostly reduced to the inconsistencies of the ideal and real images of the chosen career, subjective perception and ignoring of value orientations in relation to professional success and career growth in a market environment, irrelevant self-assessment of individual and personal qualities, etc. The authors of the research suggest some promising ways of solving the problematic aspects of student counselling in vocational education institutions, which are conceptualized in the mechanisms of a productive innovative interaction between scholars from the Institute for Vocational Education of the National Academy of Pedagogical Sciences (NAPS) of Ukraine and the teaching staff and are implemented in the framework of introducing the system of professional career counselling in vocational education.

Keywords: *professional career, centres for professional career, student counselling, professional career counselling, vocational education.*

Introduction. Socioeconomic changes caused by civilizational transformations such as dynamic progress of production and the emergence of a market economy in Ukraine require that specialists should review and reconsider value orientations, the importance of acquired competencies and the designing of career development strategies. The system of vocational education gradually adopts a new educational paradigm extrapolated from the economically developed countries, where a form of ownership and a source of profit are "determined intelligence, that is, the ability to continuously gain and effectively apply the acquired knowledge, skills, experience and to build trajectories of career development and to discover optimal ways of self-realization in an unstable society" (Falkenberg, 1997). In this regard, it is essential to study how to implement the following paradigmatic ideas in vocational education institutions: to analytically comprehend the realities of student career counselling; to identify its positive achievements and problematic aspects; to outline certain effective methods and means of their solving.

Materials and methods. Over the past 20 years, different aspects of career counselling have been studied by many scholars. For one, the main motives, goals and mechanisms of motivation towards professional career were justified by E. Berne, R. Burns, V. Lozovetska, E. Sandstrom, L. Vygotsky,

D. Winter et al. The peculiarities of personality development within the framework of planning and realizing professional career were highlighted by V. Berg, E. Klimov, O. Kucheriavyi, L. Peter, B. Schwalbe, H. Schwalbe et al. The mechanisms for organizing professional career management were analyzed by V. Biskup, D. Francis, G. Goldstein, L. Karamushka, V. Rybalka, M. Woodcock et al. Some methodical aspects of student career counselling were clarified by S. Alekseeva, V. Biskup, M. Klymenko, L. Kuzminska, D. Zakatnov et al. Only some papers disclose the technologies of professional career counselling and theoretically justify methods and models of student career counselling. However, the Internet promotes career coaching services, consulting services, tutoring practice, as well as scientifically unjustified, experimentally non-verified recommendations for organization and implementation of career counselling for the adult population.

Research methods include the following: theoretical analysis of the regulatory and legislative framework, researches on pedagogy, psychology, sociology and related sub-fields – to determine the coverage of the problem under study; theoretical analysis, comparison and generalization of conceptual views on the problem under study – to single out relevant aspects of the research; theoretical and methodical analysis, synthesis, logical generalization – to specify the functions of centres for professional career counselling; theoretical analysis, comparison, generalization – to identify achievements and failures in student career counseling; independent expert evaluation was partially used to evaluate the significance of the developed career counselling system; praximetric methods, including the study and analysis of long-term career counselling experience, programmes and concepts of career counselling centres – to clarify practices of student career counselling in vocational education institutions; oral and written surveys – to identify career orientations of future specialists and development levels of their career competency in the pedagogical context.

The article aims to analyze the conditions of student career counselling in vocational education institutions, identify its achievements and contradictory points and, therefore, justify some promising ways of their solving. This can be achieved only due to constructive cooperation between scholars and practitioners, namely, through the implementation of the system for career counselling in vocational education institutions developed by the Institute for Vocational Education of NAES of Ukraine.

Results and discussions. Professional career counselling is one of the effective psycho-pedagogical driving forces of career growth. The very concept was introduced only in the early 21st century. Therefore, such terms as counselling in matters of career, counselling for career, career counselling, professional career counselling coexist in pedagogical discourse. The essence of career counselling is reflected in the communicative interaction between a counsellor (teacher, psychologist, tutor, mentor, coach) and an individual or a group of individuals when discussing some problematic situations, considering and determining the significance of the acquired competencies and experience.

The conducted analysis of the existing conditions proves that professional career counselling in vocational education institutions normally focuses on solving individual and personal internal conflicts in students, which may arise within professional self-determination and/or professional development. The most effective ways to do this are the following: 1) inventing alternative scenarios for successful self-realization; 2) predicting prospects for career development with specified "achievable, measurable" goals, optimal ways and mechanisms for implementing each stage and type of activity; 3) imitating or "playing out" some work situations with focus on "authorship" of professional life; 4) discovering new meanings of professional activity in the context of preparing individual plans for professional development and career development; 5) motivating to transform the levels of needs, analyzing and adjusting ambivalent instructions, in particular when planning the paths of educational and professional career development; 6) promoting professional integrity of personality; 7) identifying probable risks, failures, crisis of professional development, etc.

The activities of centres for career counselling established as structural units at educational institutions are seen as an innovative way of implementing paradigmatic ideas of student career counselling. Within the functioning of such units, professional counsellors conditionally form "experimental groups of students" according to a specific criterion of essential characteristics of the problem under study, taking into account the corresponding volume of work. According to the criterion "interests and skills: the ratio and correlation", students from vocational education institutions were divided into four teams. The first team consisted of students, who lacked the necessary professional interests and skills to master the chosen profession. In this case, external positive motives (a right to scholarship; the advice of parents and friends, etc.) influenced the choice of the profession. When working with this group of students, it is important that counsellors motivate each individual towards self-analysis in order to ignite interest in themselves, their skills and abilities and, finally, their own future.

Personal development training (e.g., the knowledge cloud) can be rather effective at this stage. The second team consisted of students with the developed professional interests, who were eager to master the profession, but without clearly expressed inclinations for future professional activity. In this case, it is important that counsellors organize as many developmental programmes and training as possible. The third group consisted of students with advanced professional skills, but without clearly expressed interests in future professional activities, that is, they were unsure of what kind of activity they would like to do. In this case, it is vital to involve independent counsellors and career coaches in career counselling. The fourth group of students consisted of individuals with clearly expressed professional interests and developed skills for future professional activities. Therefore, when working with such students, it is important to conduct training sessions to improve existing professional inclinations and skills.

Thus, professional counsellors often have to be "experts" or "referees" to carry out various types of counselling and research activities. Nevertheless, their main task should be to develop models and specific mechanisms for preparing students for employment and successful self-realization and improving cooperation with employers.

As evidenced by the results of experimental institutions, student career counselling can be improved due to research activities focused on the process of forming career competency: experiments, sociometric studies, sociological surveys, tests, etc. They will have significant results if they are based on the collaboration between scholars from the Institute for Vocational Education of NAES of Ukraine, employees of centres for career counselling, teachers, heads of vocational education institutions and social partners. In order to provide high-quality scientific and methodological support to such centres, the scholars from the NAES of Ukraine offer to provide teachers from vocational education institutions with scientifically justified and practice-oriented materials prepared within the framework of implementing fundamental and applied research.

In the framework of fundamental research between 2016 and 2018, the employees of the Professional Career Laboratory developed, scientifically justified and experimentally verified a system of career counselling at the following stages: career guidance; forming career orientations during vocational training and employment.

Nonetheless, the problems related to the process of forming career orientations and further career development can be effectively solved if the system of counselling is viewed and implemented holistically. According to D. Zakatnov (2011), the main aim of career guidance in vocational education institutions is not to prepare for professional self-determination, but for planning and realizing a professional career. Therefore, career counselling is a possible form of activities of educational institutions since it involves providing the student with certain career counselling services.

Aptitude, enthusiasm and moral responsibility are those important categories for forming professional and career orientations, which, unfortunately, are not incorporated in the State Standard for Vocational Training. Career orientations are interpreted as stable entities, which determine a professional path of an individual, are defined by value orientations and relevant philosophical priorities in choosing and modelling a professional trajectory. The function of career orientations is explained by an understanding of their essence as an internal source of career goals, which are characterized by a supertemporal personal and professional significance. Some typical psychological problems of forming career orientations, professional development of a modern person can be generally defined as follows: the inconsistency between the ideal and the real image of the chosen profession; the rejection of value orientations towards professional success in a market environment; the inconsistency between the real and ideal motivation towards professional self-actualization of personality under modern working conditions; non-relevant self-assessment of their own abilities and capabilities (lozowiecka, 2008). The authors of the article believe that the reason behind it lies in the inconsistency between the processes of professional and career orientation, which should complement each other based on the principle of continuity.

Social partners, relying on the ideas of foreign approaches to career planning, outline the relevant requirements for professional and personal qualities of employees at each stage of their career growth. Therefore, it is important to take into account modern requirements in the field of professional pedagogy and encourage teachers to form career orientation in students in vocational education institutions. These orientations, in turn, will contribute to optimal planning of career, rational clarity of goals, objective assessment of one's capabilities and acquired competencies and, finally, the discovery of effective ways to improve them and reconsider the values of professional and managerial experience.

The process of developing career orientations is a complex dynamic system of quantitative and qualitative changes, which somehow occur in the minds of students in vocational schools. After all, the applicants, who wish to be admitted to a vocational school, are necessarily informed about the advantages

of a particular profession. In each lesson, teachers encourage future specialists to engage in cognitive activity and, therefore, pay attention to the predictability and viability of the acquired knowledge and skills, as well as their importance to professional success. Thus, they form the views on a possible professional future. However, it is essential that teachers master pedagogical technologies for forming and developing them or technologies of professional career counselling so that this process may become consistently stable and be transformed into a dynamic system for developing career orientations.

From a psycho-pedagogical point of view, an individual career based on self-knowledge, self-improvement and self-organization is considered to be the most successful one. There are the main eight directions of career orientations, which E. Shein (1996) interprets as "career anchors". This is an important advancement, which ensures the observance of scientificity in career counselling. First of all, it refers to professional competency, that is, the orientation of people towards professional self-improvement. It is associated with the availability of abilities and capabilities for self-realization in a particular area of professional activity. People with such an orientation are eager to become real experts; they are especially happy when they are successful in the professional field, but they quickly lose interest in work that does not allow them to develop their abilities.

There are always students, who have certain leadership abilities and seek to lead other people. E. Shein (1996) defined this orientation as "management". In this case, the orientation towards integrating efforts of other individuals and readiness to be responsible for final results are of paramount importance. The process of developing this career orientation in future specialists is related to age and work experience. It can help to develop analytical skills and also contribute to interpersonal and group communication, as well as emotional balance. It must be noted, though, that individuals oriented towards leadership (management) believe that they have not achieved their career goals until they hold the post allowing them to lead the activities of other employees and thus contribute to production development.

Most future specialists are oriented towards autonomy (independence) and attempt to avoid organizational rules, regulations and restrictions. They tend to do everything in their own way, decide for themselves when and how much to work. Such students do not always want to obey the rules established in the institution. If such an orientation is clearly expressed, they do not pay much attention to the information about the system of vocational training and future career. They may also refuse to comply with the mentor's instructions and rules in order to preserve their independence. In the future, they may work in an area, which provides them with sufficient freedom and where they will not feel serious commitments or loyalty to the organization and will reject any attempts to limit their autonomy.

We should be able to notice students who appreciate stability. This career orientation (stability) is driven by the need for security and stability and the desire to make future life events predictable. It refers to a stable workplace or residence. With regard to a stable workplace, it is related to long-term work in a certain reliable organization with a good reputation, where they care about employees. The views of future specialists with such an orientation are characterized by readiness to shift responsibility for the development of their careers onto the employer. Another characteristic feature of orientation towards stability is unwillingness to change residence. In the future, stability-oriented specialists may show their ability to grow professionally. Preferring a stable job and life, however, they are able to refuse high posts if there may appear some risks or temporary inconveniences, even in the case of certain prospects.

The value orientations of people for whom career implies serving people are the following: working with people, serving mankind, helping people, readiness to make the world better. People with such a career orientation often choose a profession in the service sector, nature protection, quality control of products and goods, consumer rights protection, etc. They need recognition and respect for their serving humanity motivated by the desire to affirm their ideological beliefs. The process of developing such an orientation should be specified in the provision of services and the results of work set out by vocational training of future specialists.

People have to deal with many different life challenges. E. Shein (1996) views the concept of challenges and reaction to them as one of the types of career orientation. The main values of such a career orientation include the desire to win over others, overcome obstacles, solve difficult problems requiring the individual to mobilize his/her strengths and potentials, that is, competitiveness. Both struggle and victory are more important for him/her than a particular field of activity or qualification. Thus, a student from a vocational school or college with this orientation may consider arguments with groupmates and teachers as a game to be won. Novelty, diversity and challenges are rather valuable for them. They are not interested in simple things.

Career orientation defined as "an integration of lifestyles" is vital, too. When students are focused on the integration of various aspects and lifestyles, they

do not believe in the prevalence of one particular sphere (education, family or career). They strive to balance various aspects and value their life in general, namely a place of residence, opportunities for self-development and self-realization, rather than an educational institution, a specific job or a post. When developing career orientations in students with such an orientation, it is important to notice positive moments in their behaviour and actions and, at the same time, motivate them to cooperate with other people and be open to changes taking into account their own interests and the interests of society.

Over the last few decades, the number of people oriented towards entrepreneurship has increased significantly. People with such a career orientation attempt to create something new, overcome obstacles and are ready to take risks. They do not want to work for others, are willing to create their own business, concepts or organizations and hope for financial success. In addition, they want their business to become a lifetime project, which will provide many opportunities for self-realization. People oriented towards entrepreneurship will continue their business even if they realize the probability of serious risks.

In Ukraine, the views of graduates from vocational schools on career are traditionally oriented towards the national industrial relations, in which financial incentives are the main stimulus of involving specialists in updating production and increasing productivity. A well-paid job is considered to be the most favourable workplace.

In the EU and the USA, scholars believe that people appreciate their own contribution to the cause rather than financial rewards. There is also an idea that a salary implies expectations and not a stimulus for creative self-realization (Zakatnov, 2011). The individual guided only by financial interests cannot regularly produce high-quality products since he/she is more oriented towards earnings than quality.

The motivation to make a career is one of the significant desires of students and expresses the level of willingness to realize their personal potential, as well as the views on professional success. Therefore, it is important that professional counsellors provide favourable conditions for students' self-awareness of their career priorities so that they may know what they can succeed in and how they can develop professionally. The diversity of orientations in social and professional interaction allows future specialists to enjoy their work, overcome problematic situations and strive for personal self-realization.

To this end, the research staff of the Professional Career Laboratory at the Institute for Vocational Education of NAES of Ukraine actively develop modern methods and technologies for forming career orientations, developing career and entrepreneurial competencies in future specialists. The conducted studies show encouraging results.

The employees of centres for career counselling established as structural units at educational institutions provide organizational, technical, informational and psycho-pedagogical support to professional and career development of individuals at the stage of acquiring vocational education, taking into account the peculiarities of vocational education institutions (students, training duration, profession-oriented training, prospects of employment and career development, etc.) and the needs of the labour market.

In vocational education institutions, the pedagogical effectiveness of professional career counselling for students is ensured through the implementation of the following professional organizational and methodical conditions in the practice of centres for professional career: providing psycho-pedagogical support of career development based on competency-based approach; activating and improving psychological services in vocational institutions; using interactive technologies of counselling, including computer technologies; creating a website for career counselling; enhancing motivation towards career growth, etc. Professional career counselling leads to positive changes in the hierarchy of factors, which influence the choice of a future career in terms of increasing the importance of pedagogical factors (career counselling, career guidance, etc.). However, the vast majority of respondents (over 90%) indicate the need for career counselling.

The implementation of career counselling made it possible to successfully improve educational and professional trajectories of graduates from vocational education institutions, which resulted in a 9.3% increase in the number of students planning to practice their professions. However, scientific and methodological support to centres for career counselling, provided by the employees of the Institute for Vocational Education of NAES of Ukraine, has increased the number of students who managed to prepare real long-term plans for career development (for more than 5 years). The implementation of career counselling in vocational education institutions has positively influenced the development of students' career competency by the indicators of such components as motivation and values, cognitive aspects, reflection and evaluation, activities and the mentioned integral entity in general.

Based on the study of the regulatory and legislative framework, analysis of theoretical studies on sociology, psychology, pedagogy and sub-fields of the mentioned sciences, Ukrainian and foreign experience, the main functions of centres for professional career counselling were specified: *assessment and identification* imply

determining motives for choosing types and ways of professional career realization in students and graduates from vocational education institutions and identifying career orientations and development levels of career competency; *educational communication* is aimed at teaching students to use technologies of professional career planning by means of an individual and personal interaction, information exchange, identification, consolidation and recreation of relations and relationships, which form a system of values, norms, individual actions, ways of activity, consolidate and standardize the behaviour of students under the conditions of the labour market at the appropriate stages of civilizational progress; *integration and coordination* determine the cross-cutting activity vectors of the employees from centres for professional career counselling and the teaching staff from vocational education institutions as for vocational training of competitive workers, who are able to plan a professional career, strive for self-realization within the professional activity and professional growth based on the activation of such processes as grouping individuals with common interests and values orientations and cultivating a sense of mutual responsibility in the representatives of professional communities; *sociological counselling and regulation* include students' conscious comprehension of professional culture standards, social roles, normal (typical) patterns (stereotypes) of behaviour and mechanisms of their implementation, as well as the processes of forming value orientations and providing counselling services in the context of professional career planning; *information provision and stimulation* provide students with relevant information about probable ways of building a professional career and further career development, as well as the modern conditions of the labour market, in-demand professions, employers' requirements and also focus on timely identification of achievements and failures when building and realizing a professional career, applying methods aimed at consolidating, strengthening and developing positive changes and blocking or eliminating negative ones.

Provided that these functions are realized, centres for career counselling will become stable mechanisms for productive provision of the country's employment potential, which involves creating an information database on future specialists of a particular region, taking into account their psychological and physiological characteristics, skills, abilities, interests and aspirations, and will serve as a certain "knot-based constructor" for forming values and norms within society.

Conclusions. In Ukraine, the problems of professional orientation and employment are addressed by state employment centres and career counselling centres, which function as social projects or structural units at educational institutions. Based on the study on the activities of these centers, the following problematic aspects were outlined: the inconsistency in the information provided by job bank and the real demand in the labour market; a partial consideration of regional characteristics of the labour market; the inconsistency between the skills of graduates and employers' requirements; stereotypes, narrow and one-sided views on the labour market, institutions, enterprises; low motivation of young people towards work, professional success and career growth; the imbalance between the realities of the regional labour market and the number of graduates with specific professions; an insufficient number of qualified counsellors, etc. In addition, career counselling focuses primarily on planning career, discovering rational ways of career development and modifying career development plans.

The mentioned problems can be solved if the content and functions of centres for career counselling in vocational education institutions are clarified.

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УДК 377.011.3-052:[331.36-027.56]:005.572

Консультування з кар'єри: конструктивна взаємодія науки і практики

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Реферат. У статті проаналізовано дійсний стан консультування учнівської молоді закладів професійної (професійно-технічної) освіти (далі:ЗП(ПТ)О), виявлено напрацювання з означеної проблеми та суперечливі моменти консультування. Обґрунтовано, що у ЗП(ПТ)О консультування з професійної кар'єри традиційно зводиться до перегляду й розв'язання внутрішніх конфліктів учнів у межах професійного самовизначення. Значним досягненням у реалізації ідей кар'єрного консультування учнівської молоді позиціоновано діяльність центрів кар'єри. Водночас на основі теоретичного аналізу, порівняння, педагогічних спостережень і логічного узагальнення уточнено типові проблемні аспекти кар'єрного консультування в межах професійного становлення сучасної особистості, що цілісно зводяться до невідповідностей ідеального й реального образів обраного фаху, суб'єктивного сприйняття й ігнорування ціннісних орієнтацій щодо професійного успіху та кар'єрного зростання в умовах ринкового середовища, неадекватності самооцінки індивідуально-особистісних якостей тощо. Авторами запропоновано перспективні способи вирішення проблемних аспектів консультування учнів закладів професійної (професійно-технічної) освіти, що концептуалізуються в механізмах продуктивної інноваційної взаємодії науковців Інституту професійно-технічної освіти НАПН України з педагогічними працівниками й реалізуються в рамках упровадження системи консультування з професійної кар'єри в закладах професійної (професійно-технічної) освіти.

Ключові слова: *професійна кар'єра, центри професійної кар'єри, консультування учнівської молоді, консультування з професійної кар'єри, професійно-технічна освіта.*

Received: 15 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.11-15

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp.11-15

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THEORETICAL PRINCIPLES OF FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE SPECIALISTS OF THE ECONOMIC BRANCH IN INSTITUTIONS OF HIGHER EDUCATION

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Abstract. The necessity of studying the processes of formation and development of professional competence of future specialists of the economic branch in higher educational institutions (hereinafter: HEI) (in the conditions of education reforming in Ukraine and its approximation to the common European standards) is substantiated. The emphasis is placed on the fact that in today's conditions of development of Ukrainian society in the process of raising the level of professional training of future specialists of the economic branch, attention is paid to intellectual, moral, cultural development, creative self-realization of future specialists (economists, accountants, financiers, bankers), as well as formation and improvement of their professional competence. On the basis of the analysis of scientific works of well-known researchers in the field of philosophy, sociology, psychology, pedagogy, it is found that the concept of "professional competence" mainly means: the general culture of the specialist; the ability to think and act professionally; the degree of development of individual and professional qualities; a set of functions, rights and responsibilities of the specialist; readiness for professional activity.

The content of the concepts of "competency", "competence" and "professional competence" is specified. Their essential characteristics are defined, namely: "competency" is the general ability and capability of the future specialist of the economic branch, based on his skills and knowledge to realize himself in professional activity; "competence" is a complex personality trait (of the future specialist of the economic branch), which includes the results of knowledge, skills and abilities, and the capability to perform a professional role in accordance with specified requirements, taking into account the actual production situation. The professional competence of specialists of the economic branch is interpreted as a high potential of functional education and professional training for accounting and economic, financial, banking, organizational and managerial, analytical and scientific research activities in the field of economics in production, sphere of services, management and scientific research institutions.

Keywords: *vocational education, economic education, professional competence of specialists of economic branch.*

Introduction. In the conditions of the reform of the higher school of Ukraine and its approximation to the common European standards, it is necessary to note an increase in the gap between the requirements for the graduate of the HEI and the actual result of the professional training of future specialists. With the development of the market economy and the emergence of new professions requiring a high level of intellectual contents, with the change in the professionally qualifying functions of labor in general, there is an objective need to develop theoretical foundations and practical mechanisms for the professional training of students of economic vocation. Problems of modern higher education require to strengthen the practical component of all theoretical studies, pay attention to the measurement and

evaluation of the professional training that has been achieved by real specialists, because the success of the implementation of reforms and, in the final decision, the economic and social development of society as a whole will depend on them. It is possible to solve these problems by means of a broader and scientifically based introduction of a competent approach in the study of the effectiveness of the professional activity of the future economist, accountant, financier, and banker. That's why, first we turn to the analysis of existing classifications of professional competencies, and then consider the possibility of structuring the professional training of future specialists through the system of their competencies (Levochko, 2008a, p. 120; Radkevich, 2011, p. 11; Romanova, 2010).

In today's conditions of development of Ukrainian society, in the process of raising the level of professional training of future specialists of the economic branch, attention is paid to intellectual, moral, cultural development, creative independence of the future specialist (economist, accountant, financier, banker), as well as their formation and improvement of professional competence.

Materials and methods. The concept of professional competence today is very relevant among scientists working to improve the professional training of future specialists of the economic branch (Levochko, 2008b, p. 96). A.Gorkunenko, I.Zarubinskaya, G.Kordiumov, M.Levochko and others have studied the problem of improving the training of future specialists of the economic branch for professional activity; the problem of the formation of professional competence was studied by domestic scientists (N. Bulgakov, T. Desiatov, E. Luzik, N. Morse, O. Pometun, G. Romanov, M. Telovata), foreign scientists (L. Morris, D. Ricken, F. Taylor)

The issues of professional competence, orientation, professional interest, professional orientation, the process of forming a conscientious attitude to work; the problem of personal qualities, as well as other categories and concepts are considered in the works of V. Astahova, I. Yermakova, E. Ziera, I. Zimnaya, N. Kuzmina, S. Klepko, V. Maslov, O. Ovcharuk, E. Pavlyutenkova, I. Sotabovska, V. Slastonina, G. Trotsko, V. Shadrikova, O. Khutorsky, Y. Yakuba and others. Studies of various sources have shown that the study of the problem of the professional training quality of the graduate of the HEI as a problem of development and the formation of his professional competence, have not found a separate handling.

In the course of the work, theoretical methods were used: analysis of scientific research in philosophy, sociology, psychology, pedagogy – to establish the essence, content and structure of professional competence of future specialists of the economic branch; deduction and induction – to determine the conceptual foundations of the research topic; synthesis and synthesis – to substantiate the methodological and methodological foundations of the research topic; analysis of definitions, formalization, generalization – to substantiate the conceptual apparatus of research and to formulate conclusions and recommendations.

The aim of the paper is to distinquish the theoretical foundations of professional competence of future specialists of the economic branch in HEI and determine the essential characteristics of the main concepts of the research.

Results and discussion. The entry of Ukraine into the world educational space requires the formation of qualitative educational services for the professional training of future specialists of higher qualification and their compliance with the conditions of the international labor market.

In conditions of economic restructuring, the modern paradigm of Ukraine's economic education involves the training of the highly skilled future specialist, and this process encompasses not only the development of his professional competence, but also the formation of internal readiness to master the profession. Conceptual ideas, that determine the priority of future specialists based on the competency paradigm of vocational education, are reflected in the National Strategy for the Development of Education of Ukraine for the period up to 2021, the Resolution of the Cabinet of Ministers of Ukraine "On Approval of the National Qualifications Framework", the Strategy for Sustainable Development "Ukraine 2020" .

Taking into account the important approach of development and formation of the professional competence of future specialists in HEI, the process of transformation of the economic system from planning to market requires not only changes in economic structures, but also changes in higher education. The main essence and complexity of this process is to provide the appropriate professional training of future specialists of the economic branch who will carry out this transformation. The provision of the set requirements raises the problem of the quality of training of future specialists of the economic branch (accountants, economists, financiers, bankers) (Levochko, 2008b, p. 96).

Although interest in the process of forming professional competence has grown recently, the professional competence of specialists of the economic branch remains an underdeveloped and theoretically poorly studied aspect; the problem of the formation of professional competence of future specialists of the economic branch is not given enough attention, despite the fact that specialists (accountants,

financiers, economists, bankers) are among the most necessary professions in the modern world.

Taking into consideration the complex of theoretical positions, normative-legal documents it is necessary to focus on the educational-professional program of higher education, in which the competence of specialists of the economic branch is interpreted as "high potential of functional education and professional training for accounting and economic, financial, banking, organizational and managerial, analytical and research activities in the field of economics in production, sphere of services, management and scientific research institutions". On one hand, the industrial practice makes such requirements as a high intellectual level, possession of certain professional, practical skills to the specialists of the economic branch, and on the other hand it is the availability of proper accounting and economic experience (Levochko, 2008b).

In accordance with this or that kind of professional activity, domestic and foreign researchers distinguish between the concepts of "competence" and "professional competence". The introduction of the concept of "professional competence" is due to the breadth of its content, the integrity of the characteristics that enable such concepts as "professionalism", "qualification", "professional abilities", etc.

In pedagogical science, the concept of "professional competence" is considered as a set of knowledge and skills that determine the effectiveness of labor, namely: the amount of skills in solving problems; a combination of personal qualities and properties; a complex of knowledge and professionally meaningful personal qualities; vector of professionalization; the unity of theoretical and practical readiness for work; the ability to perceive complex activities.

In modern scientific literature, the capability to carry out any professional activity is defined by the term professional competence, which is understood as a complex integrated quality of the individual, and, it is not about the individual knowledge or skills, and not even about a set of separate procedures of the activity, but about the property that allows a person to carry out the activity in general (Levochko, 2008b, p. 97). This opinion is expressed quite greatly in the definition of J. Bergoen: "Competence is the ability and readiness to perform tasks. It can contain knowledge, skills, understanding and will"(Strelnikov, 1995).

Questions of the formation of professional competence as a component of the economic vocation in the professional training of students were considered at different levels and from different points of view by such domestic and foreign scholars as V. Adolff, V. Anishchenko, S. Amonashvili, E. Bondarevskaya, V. Bolotov, A. Bermuss, T. Brahe, S. Budak, A. Vasiluk, S. Vershlovsky, O. Gazman, T. Dobudko, N. Efremova, G. Kovalchuk, N. Kopylova, K. Korsak, I. Kotov, N. Kuzmin, B. Krichevsky, A. Mihailichenko, A. Markova, O. Ovcharuk, R. Ovcharova, V. Serikov, V. Slastonin, L. Solomko, I. Taranenko, T. Ulasova, A. Hutorski, E. Short, Ye. Shyyanov, O. Shyyan and others.

In analyzing the scientific work of well-known researchers, we see that in the content of the concept of "professional competence" they fix:

- ✓ the general culture of the specialist, reflected in the totality of scientific knowledge, valuable orientations, motives of activity, his cognition of the surrounding world and understanding of his place in it, the ability to develop creative potential (T. Brazhe);
- ✓ the ability to think and act professionally (A. Myshchenko, L. Mishchenko, E. Shiyanov);
- ✓ degree of development of individual and professional qualities necessary for effective performance of professional activity in a concrete subject area, expressed in business and partner communication with people in solving their life problems (S. Bati?chev, E. Kholostova);
- ✓ a set of functions, rights and responsibilities of the specialist (V. Afanasyev);
- ✓ readiness for professional activity (G. Trofimova).

There are different approaches to understanding the essence of professional competence. One of them is the functional-active approach (N.Kuzmina, A.Markova, V.Simonov, R.Shakurov, A.Shcherbakov, etc.), considering competence as the unity of theoretical and practical readiness to perform professional functions in which the main parameters of professional competence are given by the functional structure of professional activity (Levochko, 2008, p. 47).

Therefore, in professional training of the specialist-professional, the today' actual task is such a professional training, the result of which is the ability to perceive market transformations, adapt to changes in life easily, develop his own competence. The future specialist, trained for the professional activity with a formed professional competence at a high level, will have the opportunity to analyze different situations more flexibly, react to changes in social, cultural, economic life of society mobilely, conduct effective business communication, take into account the basic economic laws in the process of professional activity, improve himself throughout all his life (Levochko, 2008b, p. 97). In defining the contents of the concept of professional competence, scientists consider it as a relationship of methodological, scientific-theoretical and practical knowledge (N. Kuzmina, I. Ogorodnikov, M. Skatkin, V. Slastonin), a combination of scientific-

theoretical, constructive-technological, normative knowledge (V. Kraevsky), meaningful and operational knowledge (M. Skatkin), the unity of fundamental and instrumental knowledge (S. Arkhangelsky), theoretical and practical knowledge (Yu. Kulyutkin).

In summary, we will add that professional competence, due to the exceptional significance in the structure of personality qualities, serves as the object of increased research attention of foreign scientists (D. Britel, E. Gim?z, R. Kvasnytsia, V. Landesheer, P. Mercer, M. Robinson). All of the above mentioned scientific works have important theoretical and practical significance. At the same time, many issues related to the problem of the development of forming the professional competence of future specialists of the economic branch remain open (Levochko, 2008, p 48).

Conclusions. The pedagogical problem of developing professional competence of future specialists is not only to teach them to perform their professional functions, but also to inoculate them a systematic approach to the analysis of problem situations and the ability, based on this analysis to make optimal solutions that take into account the content and structure of their activities. The content of the concepts of "competency", "competence" and "professional competence" is specified. Their essential characteristics are defined, namely: "competency" is the general ability and capability of the future specialist of the economic branch, based on his skills and knowledge to realize himself in professional activity; "competence" is a complex personality trait (of the future specialist of the economic branch), which includes the results of knowledge, skills and the ability to perform a professional role in accordance with specified requirements, taking into account the actual production situation. The professional competence of specialists of the economic branch is interpreted as a high potential of functional education and professional training for accounting and economic, financial, banking, organizational and managerial, analytical and research activities in the field of economics in production, sphere of services, management and scientific research institutions.

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УДК 378:33]:005.33.2-027.561

Теоретичні засади формування професійної компетентності майбутніх фахівців економічної галузі в закладах вищої освіти

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Реферат. Обґрунтовано необхідність вивчення процесів формування і розвитку професійної компетентності майбутніх фахівців економічної галузі в закладах вищої освіти (далі: ЗВО) в умовах реформування освіти в Україні та з метою її наближення до загальноєвропейських стандартів. Акцентовано увагу на тому, що в сучасних умовах розвитку українського суспільства в процесі підвищення рівня професійної підготовки майбутніх фахівців економічної галузі увага приділяється інтелектуальному, моральному, культурному розвиткові, творчій самореалізації майбутніх фахівців (економістів, бухгалтерів, фінансистів, банкірів), а також формуванню та вдосконаленню у них професійної компетентності. На основі аналізу наукових робіт відомих дослідників у галузі філософії, соціології, психології, педагогіки з'ясовано, що поняття "професійна компетентність" здебільшого означає: загальну культуру фахівця; уміння мислити і діяти професійно; ступінь розвиненості індивідуально-професійних якостей; сукупність функцій, прав і відповідальності фахівця; готовність до професійної діяльності.

Уточнено зміст понять "компетенція", "компетентність" та "професійна компетентність". Визначено їх істотні характеристики, а саме: "компетенція" – загальна здібність і здатність майбутнього фахівця економічної галузі на основі його вмінь і знань реалізувати себе в професійній діяльності; "компетентність" – комплексна характеристика особистості (майбутнього фахівця економічної галузі), що включає результати знань, умінь і навичок та здатність виконувати професійну роль відповідно до визначених вимог з урахуванням реальної виробничої ситуації. "Професійна компетентність" фахівців економічної галузі трактується як високий потенціал функціональної освіти і професійної підготовки для обліково-економічної, фінансової, банківської, організаційно-управлінської, аналітичної і дослідної діяльності в галузі економіки на виробництві, у сфері послуг, в управлінні й науково-дослідних установах.

Ключові слова: *професійна освіта, економічна освіта, професійна компетентність фахівців економічної галузі.*

Received: 06 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.16-23

Scientific herald of the Institute of vocational education and training of NAES of Ukraine. Professional Pedagogy/1(18)'2019, pp. 16-23

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE. PROFESSIONAL PEDAGOGY

RELEVANT CONCEPTS OF DEVELOPING ENTREPRENEURSHIP COMPETENCE IN FUTURE SPECIALISTS IN PHYSICAL EDUCATION AND SPORT

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Abstract. The article highlights that the increasing quality of goods and services in physical education depends on human resourcing and indicates the need to improve the quality of physical education and training of specialists for successful self-realization in the modern labour market. The author considers sports entrepreneurship to be a special kind of business, which is specified by relevant value orientations, knowledge and skills in certain activities in sports and commerce. Therefore, there appears to be a need not only for professional training of future athletes, physical education teachers and coaches as specialists but also as entrepreneurs. In this context, the article analyzes socioeconomic and legal conditions of social progress, which determine professional activities and areas of specialists' self-realization, including in physical education and sport. It also justifies the need to create favourable conditions in the system of higher physical education in order to develop entrepreneurship competence in the participants in the educational process. Thus, the conducted research proves the need to enhance professional training of future specialists in physical education and sport in higher education institutions. However, sports entrepreneurship is regarded as a special type of business, whose successful implementation requires the acquisition of relevant knowledge and skills. The author believes that an entrepreneurial approach enables the integrity of forming entrepreneurship competence in future specialists in physical education and sport.

Keywords: *higher professional education, physical education, entrepreneurship, sports entrepreneurship, entrepreneurship competence.*

Introduction. Given transformational changes and attempts to create a market economy in Ukraine, entrepreneurship is recognized as the basis of economic and social progress and a powerful tool to solve certain social problems, in particular, to overcome poverty and ensure higher living standards. On the one hand, intensive commercialization and professionalization of sport and, on the other hand, sharp competition around budget funds require that professional training of specialists in physical education and sport should be improved in the context of entrepreneurship. Taking into account dynamic modernization of the national educational system, an integral criterion for the quality of professional training for specialists in physical education and sport, in accordance with the European trends, is determined by successful entrepreneurial activities of such specialists under the conditions of the modern labour market.

Materials and methods. Such scholars as Z. Krykhovetskyi, T. Lazanska, S. Mochernyi, O. Padalka, T. Panevnyk, O. Romanovskyi, R. Umerov, I. Tsyhylyk, Z. Varnalii and J. Schumpeter revealed historical sources and theoretical principles of entrepreneurship development. R. Aron, P. Drucker, F. Hayek, A. Marshall, D. Ricardo, W. Rostow and P. Samuelson justified characteristic features of entrepreneurship, namely initiative and autonomy, innovation and creativity, systematicity, professionalism and riskiness, legal and social responsibility, focus on profitability. Yu. Bilova, V. Madzihon, H. Matukova, O. Protsenko and S. Pryshepa clarified essential personality traits of

entrepreneurs. Therefore, the main attributes of entrepreneurs include pursuing commercial success and profit (P. Drucker, A. Kaminka, A. Smith et al.); taking active actions under risky conditions (R. Cantillon, A. Petra?ycki et al.); synthesizing functions of the capital owner, manager and employee (J. Baudot); presenting a commercial idea (A. Smith, P. Drucker); combining resources and transferring capital to the zone of maximum profitability (P. Drucker, J. Say, J. Schumpeter); a certain set of personality traits (J. Schumpeter); freedom in choosing areas and methods of activity (L. Abalkin); the availability of one's own capital (A. Smith); generating new ideas or technologies (P. Drucker); offering a new service or product; studying a new segment of the market (P. Drucker). In this context, some aspects of developing entrepreneurship competence are occasionally discussed, mainly in foreign studies (J. Fleming, J. McClelland, D. Katz, R. Kiyosaki et al.) and Ukrainian psychologists (L. Karamushka, N. Khudiakova, O. Kredentser, S. Maksymenko, V. Moskalenko, Yu. Pachkovskyi et al.). However, there are still no studies, whose content would reflect the characteristics of professional training for future specialists in physical education and sport, taking into account the socioeconomic component. During the last decade, the papers have not disclosed socioeconomic, legal and pedagogical factors in sports entrepreneurship in relation to the problem of professional training for future specialists in physical education and sport in higher education institutions.

Research methods include content analysis and synthesis of scientific works – to determine the coverage of the problem under study; analysis, synthesis, generalization of the legislative framework – to reveal achievements and failures in the mechanism for legal regulation of entrepreneurial activity; study and analysis of long-term entrepreneurial experience, social support programmes for entrepreneurship – to determine the essential characteristics of some problematic moments for entrepreneurial activity in Ukraine, in particular in Chernivtsi region; surveys – to clarify socioeconomic, legal, pedagogical factors of developing entrepreneurship competence in future specialists in physical education and sport.

The article aims to characterize socioeconomic and legal factors of developing the Ukrainian society, which influence professional activities of specialists in physical education and sport and, thus, highlight the need to integrate the processes of developing professional and entrepreneurship competences in future specialists in physical education and sport in the context of small and medium-sized business.

Results and discussions. Theoretical analysis of studies on sociology, psychology and economics shows that the market economy and business in Ukraine had no development prospects for a long time and led to the devaluation of public values. Therefore, private entrepreneurship was seen as an act that might entail criminal charges.

However, since the early 1990s, there has been a gradual development of entrepreneurship as an independent socioeconomic phenomenon in the Ukrainian state. The rationale behind it lies in the content of the Laws of Ukraine "On Entrepreneurship" (1991), "On Enterprises in Ukraine" (1991), "On Joint Stock Companies" (1991), "On Business Associations" (1991), "On Property" (1992), "On Limitation of Monopoly and Prevention of Unfair Competition in Entrepreneurship Activities" (1992), "On Leasing Property of State Enterprises and Organizations" (1992), "On Bankruptcy" (1992), "On Protection against Unfair Competition" (1996), "On the State Registration of Legal Entities and Individual Entrepreneurs" (2003) etc. In addition to supporting active entrepreneurship at the state level, they started to establish organizations to meet the needs and promote the common interests of business entities or solve problem issues in regional centres, economically progressive cities.

In Chernivtsi region in 1998, an information and analytical centre for civic activity, titled "Synergy" was founded. It organizes training sessions, seminars, courses for those who wish to start their own business and also provide information, communication, consulting, legal, analytical and expert support. Since 1999, the public association, titled "Business Centre (a service centre for business)" has been successfully operating there. Its activities are aimed at protecting the rights of entrepreneurs in Chernivtsi region and the city of Chernivtsi.

Entrepreneurship activity of Ukrainian citizens is promoted by the Economic, Civil and Tax Codes of Ukraine, the Law of Ukraine "On Development and State Support to Small and Medium-Sized Entrepreneurship in Ukraine" (2012), the Strategy for Development of Small and Medium-Sized Enterprises in Ukraine until 2020 (2017), the National Programme for Promotion of Small Entrepreneurship in Ukraine (2000), the Medium-Term Plan for Priority Actions of the Government for the Period until 2020 (2017), etc. Still, the legal framework of entrepreneurship activity covers two strategic areas of its regulation. The first one is related to regulating the implementation of Ukrainian citizens' right to entrepreneurship with the further guarantee of inviolability and clarification of the legal status of economic entities. The second one determines the formulation of goals, selection of organizational and legal methods, techniques and means of the state's influence on entrepreneurship

activity. Consequently, the content of the bills provides for the legal regulation of entrepreneurship activity, creation of favourable conditions and use of effective means for successful management of the economy.

In addition, the scientific concepts of the last decade view entrepreneurship as a general cultural phenomenon, which includes economic, social, personal, moral, developmental, active, intellectual and other sources. Sport, however, is an important branch of the economy in developed countries and a multifunctional phenomenon of modernized reality in the Ukrainian state, which highlights the importance of the physical and intellectual culture of its people. This sector involves considerable material and financial resources and the working force.

Foreign experience proves that progress and welfare in society can be ensured by promoting and supporting creative specialists, developing their entrepreneurship competence, financing various entrepreneurial projects. Therefore, it is important to improve the legal framework, approve the social status of entrepreneurs, allow the representatives of small and medium-sized business to enter the world market economy. These steps should facilitate the successful implementation of entrepreneurship activities of specialists in various social fields.

However, the success of entrepreneurship activity in general and particular is determined by the implementation of the current legislation. Theoretical analysis of legal documents on entrepreneurship activity and scientific publications makes it possible to summarize certain failures of Ukrainian legislation, namely an ambiguous interpretation of laws and no clear indications of priority to specific laws on legalization and legal regulation of entrepreneurship activity; instability, contradiction and voluminosity of legal and regulatory grounds; incommensurability of laws and by-laws, their declarative and practically non-functional character, which leads to low executive discipline as for legal regulation of entrepreneurship; undeveloped mechanisms for implementing certain laws and absence of their description in the texts of bills; a certain neglect of issues related to the implementation of human rights and freedoms guaranteed by international conventions.

Therefore, professional training should provide future specialists in physical education and sport with the opportunity to acquaint themselves with legal norms, become aware of general guarantees of entrepreneurial rights, legal principles of state support to entrepreneurship and state regulation of entrepreneurship activity so that they may be confident in their knowledge and be sure that their future is protected by Ukrainian legislation, and, therefore, they are entitled to uphold their right to be successful in their home country.

It must be noted that the aim and objectives of Ukrainian citizens' entrepreneurship activity are regulated at the state level. In Art 84 of the Civil Code of Ukraine, entrepreneurial activity is aimed at "receiving profits and distributing them among the participants" (Zakonodavstvo Ukrainy, 2003b). In Art 42 of the Commercial Code of Ukraine, the aim of entrepreneurship activity is specified as follows: "to achieve economic and social results" (Zakonodavstvo Ukrainy, 2003a). In the context of economic and social aspects, however, the results of entrepreneurship activity of specialists in physical education and sport are positioned to meet the needs of the Ukrainian people within intellectual and material interests. Indeed, the activity whose aim and objectives are not intended to meet public needs is not recognized as entrepreneurial at the national level. The authors of the article believe that economic and social results of entrepreneurship activity of specialists in physical education and sport reflect the public aspect of entrepreneurship activity, namely meeting the needs of the Ukrainian society. Therefore, one can observe a significant strengthening of entrepreneurship activity in public and legal domains and also actualization of the social, economic and sociological significance of entrepreneurship.

Socioeconomic and humanitarian aspects of the objective need for developing entrepreneurship competence in future specialists in physical education and sport are reinforced by the provisions of state concepts and programmes. The National Doctrine of Education Development (2002) highlights the importance of promoting economic knowledge, information on the principles of a market economy, forms of economic activity and developing practical abilities and skills necessary to involve future specialists in productive activity and to encourage them to explore innovative areas of professional activity (Natsionalna doctryna, 2002). The National Strategy for Education Development in Ukraine for 2012-2021 indicates, "education is a strategic resource for socioeconomic, cultural and intellectual development of society, improvement of people's well-being, protection of national interests, strengthening of international authority, promotion of the country's positive image and creation of conditions for self-realization" (Prezydent Ukrainy, 2017). Despite the support of entrepreneurship at the national level, as stated in the Strategy for Development of Small and Medium-Sized Enterprises in Ukraine until 2020" (Kabinet Ministriv Ukrainy, 2017), the process of developing entrepreneurship competence in future specialists in physical education and sport in higher education institutions is characterized by a number of contradictions and inconsistencies.

Unfortunately, the Laws of Ukraine "On Education" and "On Higher Education" do not directly reflect the issue of developing entrepreneurship competence in pupils and students. Nonetheless, scientific works consider the process of developing entrepreneurial skills in future specialists to be a priority area for improving professional education and a driving force of social progress, which will promote the development of small and medium-sized businesses in Ukraine, and, consequently, the socioeconomic stability of the state. The Law of Ukraine "On Physical Education and Sport" (2009) states that physical education implies "activities of participants in physical education and sport, which are aimed at ensuring sport activity of people to promote physical development and healthy lifestyle"; sport implies "activities of participants in physical education and sport, which are aimed at revealing and comparing achievements in physical, intellectual and other spheres by means of sports competitions and appropriate training for them" (Verkhovna Rada Ukrainy, 1994). Consequently, the Law does not foresee professional training of specialists in physical education and sport in the context of entrepreneurship activity. To a certain extent, it is not coordinated with modern socioeconomic factors and needs to be amended accordingly.

The authors of the research agree that education based on an entrepreneurial approach holistically orients professional training of future specialists towards developing personal qualities rather than only functional competences (Obrazovanie i biznes: predprinimatelskiy podhod v obuchenii kak faktor sotsialnoy adaptatsii molodezhi, 1996). Therefore, the aim and objectives of such training are more oriented towards developing an entrepreneurial attitude and discovering new ways to solve difficulties than towards mere acquiring theoretical knowledge, practical abilities, skills and methods of activity to fulfil professional duties.

It must be noted that if an entrepreneurial approach is applied to higher physical education, it will conceptualize the personality of the student as a subject of activity and encourage him/her to reveal creative potential. Despite the fact that these socioeconomic factors positively affect entrepreneurship competence in future specialists in physical education and sport in Ukrainian higher education institutions, little attention is paid to creating favourable conditions, which shuld take into account the peculiarities of cultivating entrepreneurial thinking and skills in future specialists.

The research supports the view that the driving force of entrepreneurship is will, ideas and the power of thought. The entrepreneur reflects on the process of activity, and, consequently, creates new product features and fills market gaps. For this, they should need knowledge and capacity for projection (Schedrovitskiy, 1991). Extrapolating the very idea into the context of this research, the authors have reason to assert that the holders of master's degree in physical education and sport, who have well-developed entrepreneurship competence, will be distinguished by distinct manifestations of innovators who are able to plan their actions for self-development and improvement and also to adapt to new demands and requirements of the labour market. After all, in the late 1980s, entrepreneurship was regarded as a multidimensional concept, which involves performing professional tasks innovatively, taking risky decisions and being proactive in the competitive struggle (Miller, 1983).

The recent papers consider specialists' motivation towards entrepreneurship as the basis of economic evolution and scientific concept, which contributes to confronting the aggressiveness of the market and its participants. Still, entrepreneurial actions are viewed as the basis of business when they help to search, use, discover and realize conditions which carry sustainable competitive advantages; a combination of production factors, which specify the success of activities and, in fact, income, are regarded as the key function of entrepreneurs (Fedotova, 2016). Given the significance of paradigmatic views on the education of "thinking and modelling" rather than "knowledge and action", one can consider the views of H. Matukova (2015) rather relevant. She believes, "the key to successful future activities of entrepreneurs is to develop those competences, which make it possible to select or create the necessary tools of learning under specific situations".

Taking into account the above-mentioned views, sports entrepreneurship is a special kind of business, which is specified by relevant value orientations, knowledge and skills in certain activities in sport and commerce. The study of practical experience and results obtained from the surveys of entrepreneurs, athletes, and coaches prove that the success of sports entrepreneurship is conditioned not only by advanced organizational skills but also by profound knowledge about anatomy, biochemistry, physiology, nutrition, sports medicine, sports psychology and pedagogy, sports management and marketing. In this regard, the essential achievement of sports entrepreneurship development lies in activating services of sports agents (managers), who act as facilitators between employers and athletes. In this case, rewards for agents are commissions from the number of contracts entered into by athletes.

Under today's conditions of forming market relations in Ukraine, sport generates its own specific market. Firstly, it is a market for sporting goods;

secondly, it is a market for entertainment since sport can attract numerous audiences; thirdly, it is a market for services in physical education and sport. The market for sporting goods depends on the number of those engaged in different sports. The market for sports entertainment is connected with such an interest, which ensure full house in sports halls, on stadiums and appropriate coverage of sports events in the media. Sports and fitness services have also become a buy-and-sell item. In this regard, the developers of sports services require service providers (coaches, teachers, instructors, athletes, methodologists of physical education and sport). The results of their activities are organized forms of exercises and sport; sports entertainment; software and methodical products. The society needs these goods and services be of good quality. Therefore, they must be provided by those specialists who are well aware of physical education and sports development. However, they must also know about the specifics of the relevant industry market. The consumers of sports services are those who are engaged in sport and physical fitness; spectators, sports fans, sponsors, coaches, teachers, instructors and clients in sports clubs, fitness centres, martial arts sections, etc.

It must be noted that the industry of physical education and sport is, first and foremost, a branch of culture based on humanistic components. Its aim is to promote personal culture and improve the physical health of students. Until recently, the term "health" was mainly considered in a narrow biological sense. In modern discourse, health is viewed as a universal capacity for comprehensive adaptation in response to the influence of the external environment and changes in the internal environment. In this case, it refers to the physiological adaptive capabilities of individuals.

Nowadays, the concept of health is characterized not only by biological but also by economic and socially semantic aspects since it covers almost all spheres of the society's life. In the unity of biological and socioeconomic components, the health of the nation is an important social value, and its preservation and multiplication are top-priorities of a civilized society. Physical exercise and sports increase the physical ability of individuals in physical, intellectual and cognitive aspects. In this regard, the role and significance of physical education and sports industry are ever-increasing. Sports facilities and, above all, qualified specialists, physical education teachers and coaches will enhance the significance of working resources in society.

R. Kiyosaki (2014), an American millionaire, entrepreneur, lecturer and author of many works on entrepreneurship, indicates that maximum disclosure of an individual's economic potential is possible under the conditions of complex socioeconomic circumstances and financial constraints. He believes that anyone can and should be engaged in entrepreneurship if they seek to protect and improve their own economic situation. In 2001, R. Kiyosaki warned, "the US and many other Western countries are going to face a financial catastrophe caused by the inability of education to provide students with relevant financial knowledge". Thus, he urged Americans and Europeans to start their own business immediately (Kiyosaki, Fleming and Kiyosaki, 2014, p. 21).

In addition, the European Commission proposed a programme, titled "A New Skills Agenda for Europe: working together to strengthen human capital, employability and competitiveness", that is aimed at challenges facing by Europe in terms of competence development. This document states that every citizen must have a key set of competences necessary for personal development, social integration, active citizenship and employment. Such competences include native and foreign languages proficiency; knowledge of mathematics and natural sciences; such cross-cutting competences as skills in information technology, entrepreneurship, critical thinking, problem-solving and ability to learn. The European entrepreneurship competence framework, also known as EntreComp, offers a tool to improve the entrepreneurial capacity of citizens and organizations in Europe. The framework aims to achieve a common understanding of entrepreneurship competence by identifying three areas of competences, 15 competences, learning outcomes and skill levels, which underpin current and future initiatives (Bachihalupo, Kampylis, Piuni, and Brande, 2016).

Conclusions. Theoretical analysis of normative legal acts and scientific works reveals the need for future specialists in the field of physical culture and sports to prepare themselves for self-realization in the conditions of the modern labor market, including through independent entrepreneurial activity. The main issues of entrepreneurial competence development of future specialists are: strategic directions of regulatory and legal regulation of entrepreneurial activity, in particular, provision of favorable conditions for successful economic management and economic management at the state level; strengthening the public-law nature of entrepreneurial activity and accentuation of social, economic, and sociological significance of entrepreneurship; contradictions in the practice of entrepreneurial competence development of future specialists in physical culture and sports in domestic institutions of higher education; awareness of teachers about the need for a holistic orientation of the process of professional training of future specialists for the development of personal qualities, rather than

functional competencies; resource potential of the entrepreneurial approach and the likelihood of its application to higher physical education, will conceptualize the student's personality as a subject of activity, will encourage him to maximize the realization of creative potential. Despite the stated actuality that positively affects the entrepreneurial competence of future specialists in physical culture and sports in domestic higher educational institutions, understanding their professional training, their own pedagogical experience shows that in the traditional system of higher physical education, insufficient attention is paid to ensuring favorable conditions that take into account the particularities the formation of future entrepreneurship type thinking and entrepreneurial ability.

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УДК 378:37.011.3-051:796]:005.342

Актуалітети розвитку підприємницької компетентності майбутніх фахівців у галузі фізичної культури і спорту

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Реферат. У публікації наголошується, що зростання якості товарів і послуг у сфері фізичної культури залежить від кадрового забезпечення цього процесу, актуалізує необхідність удосконалення якості фізкультурної освіти та підготовки фахівців до успішної самореалізації в умовах сучасного ринку праці. Особливим видом бізнесу автор розглядає спортивне підприємництво, що конкретизується відповідними ціннісними орієнтаціями, знаннями, уміннями з певних способів діяльності у сферах спорту та комерції. Відтак виникає потреба не лише у професійній підготовці майбутніх спортсменів, учителів фізичної культури і тренерів як фахівців, але й як підприємців. У такому контексті проаналізовано соціально-економічні, правові обставини суспільного поступу, що зумовлюють професійну діяльність і напрями самореалізації фахівців, у тому числі в галузі фізичної культури і спорту. Аргументовано необхідність забезпечення в системі вищої фізкультурної освіти сприятливих обставин для розвитку підприємницької компетентності суб'єктів освітнього процесу. Таким чином, обґрунтовано доцільність удосконалення професійної підготовки майбутніх фахівців у галузі фізичної культури і спорту в закладах вищої освіти. При цьому спортивне підприємництво розглядається як особливий вид бізнесу, успішна реалізація якого потребує набуття відповідних знань і вмінь. Автор обстоює позицію, що застосування підприємницького підходу уможливлює цілісність процесу формування підприємницької компетентності майбутніх фахівців у галузі фізичної культури і спорту.

Ключові слова: *вища професійна освіта, фізкультурна освіта, підприємництво, спортивне підприємництво, підприємницька компетентність.*

Received: 02 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.24-30

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 24-30

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

CONCEPTUAL FRAMEWORK OF THE DEVELOPMENT OF PROSPECTIVE SKILLED MACHINE-BUILDING INDUSTRY EMPLOYEES' SELF-EDUCATION COMPETENCE

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Abstract. The conceptual provisions of the purposeful development of the prospective skilled employees' self-education competence in the Institutions of Vocational Education (Vocational Education and Training) (hereinafter referred to as IVE (VET)) are investigated. It is determined that at present the level of educational process organization in IVE (VET) doesn't meet the requirements of modern production. Among the main vectors for the modernization of vocational training of prospective skilled employees, the dominant of which should be made on the development of students' self-educational abilities, and technological knowledge of the machine-building industry skilled employees must be constantly improved and replenished with new information.

The results of the definitive analysis of such significant for the research concepts as "competence approach", "competence", "qualification" are manifested.

Self-education competence is interpreted as a personality's integrated property synthesizing knowledge, skills, experience of self-education and personal qualities that can be performed in productive student's self-education activity and behavior and ensure a prospective skilled worker's preparedness and ability to identify deliberately the reality, to master reasonably the social experience of mankind and perform self-realization.

It is defined that self-education competence of a prospective machine-building industry skilled employee is constructed of five interdependent and mutually determined components: motivational-valuable, cognitive, operational-activity-oriented, organizational-volitional and reflexive-evaluative.

The principal methodological approaches (competence, personality-oriented, activity-oriented, systematic, reflexive, axiological, informational, environmental) and pedagogical principles of the development of prospective skilled employees' self-education competence (value-substantive orientation, system and consistency, continuity, personification, mobility, researching, reflection, visibility, humanization, problem solving, integration) are suggested.

On the basis of factor analysis, pedagogical conditions are determined, the directions for achieving the goal of purposeful development of students' self-education competence in IVE(VET) of machine-building profile are given.

The prospect of further scientific research, related to the design of methods and technologies for the development of students' self-educational competence in the Institutions of VE (VET) of machine-building profile, are defined.

Keywords: *competence approach, self-education competence, prospective machine-building industry employees, educational process, methodological approaches.*

Introduction. The socioeconomic challenges of the present suggest the substantial renovation of the skilled workers' vocational training: the level of the educational process organization in the Institutions of Vocational Education (Vocational Education and Training) (hereinafter referred to as IVE (VET)) does not meet the requirements of modern production. This is the consequence of the lack of sufficient logistics of the IVE (VET), outdated qualification characteristics, which are extremely slowly replaced by modern

professional standards, insufficient level of pedagogical skills of teachers and vocational training instructors, decline of labour occupations prestige. Instead, the scientific and technological progress proves to be the most important transformational factor. Innovative development in technology, equipment, information confirm it's impossible to provide a student with a certain amount of knowledge and skills for the whole life. The required technological knowledge of the machine-building industry specialist must be constantly improved, updated with new information on the implementation of labor operations and activities ? otherwise he becomes functionally incapacitated.

Naturally, it is impossible to predict such changes in the content of training the prospective turners, millers, locksmiths, electric welders, even on the principles of cutting-edge vocational training. Therefore there is an urgent need to form students' self-educational abilities, abilities and skills of independent development of their intellectual and creative potential. Taking these positions into account, the problem of students' self-education competence development in IVE (VET) is a pertinent scientific task.

Materials and methods. Scientific and pedagogical aspects of students' vocational self-education, self-development, independent work remain relevant and controversial at all stages of the pedagogical science development. These issues have been investigated by A. Eisenberg, A. Avdeyev, L. Aristova, A. Asherov, S. Goncharenko, N. Zhuravskaya, S. Zaskalet, O. Kovalenko, G. Kodzhespirova, V. Kozakov, N. Kuzmina, M. Lerner, N. Nichkalo, V. Radkevich, G. Serikov, M. Skatkin, M. Fitsula. The fundamentals for forming self-education competence of those who are studying is considered in the куыуфсруы of V. Buryak, N. Bukhlova, B. Vovk, M. Kuzmina, N. Kubrakova, S. Melnyk, I. Mosi, P. Osipovov, N. Polovnikova, V. Sknar and others.

It has been determined that the self-educational competence of a student is an integrative property of a person that structurally and functionally ensures effective mastering of future vocational activity and is the factor that provides the social competitiveness of a graduate of a vocational educational institution. However, the results of the analysis of psycho-pedagogical literature confirm the conceptual and theoretical aspects of the development of the prospective skilled machine-building industry' self-educational competence are considered to be insufficiently substantiated, and this impedes the development and application of productive technologies and techniques for students' self-education activities under the conditions of IVE (VET).

Research methods. Theoretical: theoretical analysis, normative documents study, analysis of educational process in order to determine the state of the problem's development and to define the directions of scientific research; comparison in order to investigate various scientific approaches to problem study; analysis and synthesis for substantiation of methodological approaches and the principles of development of students' self-educational competence; empirical: observation, conversation, questionnaire in order to determine the factors, pedagogical conditions, stages of development of students' self-educational competence; peer reviewing for assessing the importance of certain factors for the development of students' self-educational competence.

The aim of the paper is to determine the conceptual provisions for the purposeful development of the prospective skilled machine-building industry employees' self-educational competence in the IVE (VET).

Results and discussions. The conventional model of the educational process in IVE (VET) (primarily to provide students with programmed amount of knowledge, and then to involve them in the application of the theory into practice) has not really been sufficiently renovated according to the logic of the competence approach providing the prospective skilled specialists' with comprehensive mastery of integrative knowledge and practical skills, personal competency system, which facilitates the successful functioning of a person in main spheres of human life. In this regard, the improvement of the vocational training of the prospective skilled specialists, taking into account the provisions of the competence approach, is one of the most significant tasks of the national vocational education at all levels.

The analysis of available psycho-pedagogical and philosophical researches confirms a solid experience of scholars in the field of the skilled employees' competence-oriented training in IVE (VET). In the national scientific and pedagogical environment, scientists and practitioners developed a consensus on the essence of the main terms of the competence paradigm in education: *competence* is a dynamic combination of knowledge, skills, ways of thinking, views, values, other personal qualities, which determines the ability of a person to socialize successfully, conduct professional and / or further educational activities (Law of Ukraine "On Education", 2017); *competency approach* is a new paradigm that directs education to develop a whole set of competences (knowledge, skills, attitudes, etc.) that the prospective specialists have to master (Khiminets, 2009); *a method of modeling the results of vocational education and training* and their representation in the form of quality standards for the skilled workers' training. The peculiarity of the competency approach in vocational education and training is its humanistic,

humanitarian and practical orientation for ensuring professional development and self-affirmation of the individual (Radkevich, 2012); orientation on the development of the system complex of skills, semantic orientations, adaptation opportunities, experience and methods of transformation activity to obtain a specific product (Nagach, 2008); shifting the emphasis from the process of accumulation of normatively defined knowledge, skills and abilities of the prospective specialists into the area of formation and development of the ability to implement in practice and apply creatively the acquired knowledge and experience in different situations (Rudnitskaya, 2016). *Qualification* is recognized by the qualification center as the subject of educational activity, another authorized entity, and a standardized set of competencies (results of training) acquired by the person certified with the corresponding document, which allow to perform a certain type of work or perform professional activities (Pukhovskaya et al., 2014).

Agreeing with the opinions of scholars (Kalensky and others, 2018; Rudnitskaya, 2012) regarding the essence of the professional competence of the prospective skilled employees, we determine this phenomenon as an integrative property of the individual, which is manifested in practice, behavior and actions of the individual and stipulates his readiness to perfom functions of a skilled worker by virtue of of a balanced combination of a complex of knowledge, abilities, needs and motives of self-improvement, moral and ethical values and necessary personal and professional qualities.

In the study, the self-educational competence is defined as an integrated personality property that synthesizes knowledge, skills, self-education experience and personal qualities that are manifested in productive self-education and student behavior and ensure the readiness and ability of a prospective skilled employees to identify deliberately the reality motivating to master the social experience of mankind and self-realization.

In this interpretation, the self-educational competence, on the one hand, is a criterion for the preparation of an IVE (VET) graduate to professional activity, an indicator of the quality of his vocational training, and therefore, in our opinion, can support the system of generic-specific relationships with the professional competence of a person. From such perspective, the formation of a graduate's self-education competence ensures his professional mobility – the ability not only to continue improving independently his professional knowledge and skills, but also the intention to improve systematically the qualifications, if necessary, to change the specialty. On the other hand, self-education competence is firmly attributed to a group of key (subjective, interdisciplinary) competencies that are at its top in the "pyramid of competencies"and provide a successful development of the pertinent ability of a person to operate effectively in a social environment. In this sense, the self-education competence of the graduate of the IVE (VET) determines the academic mobility of the prospective skilled worker, his ability to master the educational-professional program, and so on.

In our scientific research it is determined that the self-educational competence of the prospective machine-building industry skilled employee is the construct of such interdependent and mutually determined components: *motivational-valuable* (involves the formation of persistent needs, positive motives, aspiration for constant self-education, awareness of the personal and social significance of self-education); *cognitive* (characterizes the amount of knowledge about the techniques of self-education, its form, content, receptions, levels of possession of general, objective and professional knowledge and skills, the skills of applying modern IT technologies in self-education); *operational-activity* (performing an instrumental function, this component represents an interconnected set of skills and abilities, the ability to choose the appropriate types and methods of teaching that facilitate effective self-education activities implementation); *organizational-volitional* (characterizes persistence, purposefulness, student's confidence in successful self-development, self-improvement, involves the formation of the skills of optimal organization of their own self-education activities, skills of rational organization of the workplace); *reflexive-evaluative* (involves student's analysis and self-evaluation of his achievements, the ability to reflect in self-education, the possession of reflexive technologies in self-education).

The content of the determined components of the prospective machine-building industry skilled employee's self-educational competence is concordant with the position of V.Buryak concerning the structure of person's preparedness for self-education, the main elements of which the scientist equitably allocates to such groups (Buryak, 2005): a holistic emotional and personal apparatus (need for self-improvement, personal values, emotional-volitional framework, general mental abilities, etc.); a system of knowledge and skills, skills of self-education, assimilated by a personality (completeness and depth of scientific concepts, interrelations between them, ability to correlate scientific concepts with objective reality, etc.); skills and abilities to work competently with the main sources of social information, books in particular, bibliographic systems, automated information searching tools, ability to navigate in large volumes of information, choose the main material, record it, etc.; system of organizational and managerial skills and

abilities (to set and fulfill the tasks of self-education, plan the work, skillfully distribute time, provide favorable conditions for activity, perform self-control, self-analysis of results, etc.).

Taking into account that the self-education competence of the prospective machine-building industry skilled employee is a dynamic capability of a person, we distinguish four levels in the process of its development: low; average; sufficient; high.

The methodology of developing the prospective skilled employees' self-education competence is determined by the unity of such fundamental scientific approaches: *competence* (reflects the content of self-education, which is not limited to a knowledge-oriented component, but involves the acquisition of a holistic experience of solving problems arising in socio-professional situations); *personally oriented* (involves students' interests, motives, guidelines, values, the unity of intellectual, cultural, spiritual development of the individual and is implemented through the strengthening of the content of self-education human-science, personally significant material); *activity approach* (directing practice, grounded on the development of self-educational competence, to forming the motivation of the prospective skilled employees, learning how to understand the educational problems, determining the ways of their solving, the ability to perform self-education by means of direct involvement of students in self-education activity); *systemic* (enabling the development of self-education competence as a complex personality formation in the context of improving the structure of the self-education process (the purpose of self-education, methods, forms, means, self-education content, self-control of results, etc.); *reflexive* (development of reflexive knowledge, students' reflexive thinking, reflexive attitude, reflexive skills and methodological reflection for the purpose of self-examination and self-control of own self-education activity); *axiological* (directing the self-educational process onto the obtaining the system of universal, national, civic, family, personal and other values by prospective machine-building industry skilled employee that determine the IVE (VET) students' attitude to the world, to people, to oneself); *informational* (involving the rational use of educational and cognitive potential of informational activity, using IT technologies in particular, in the aspect of search, accumulation, analytical and synthetic processing, storage and distribution of educational information); *environmental* (provides the opportunity to recognize the informational and educational environment as the main factor in attracting students to self-education, as a complex of pedagogical incentives for self-education).

The mentioned methodology for the development of the prospective skilled employees' self-education competence is being implemented under the following principles: value-content orientation, system and sustainability, continuity, personification, mobility, scientific development, reflection, visibility, humanization, problem solving, integration.

It's reasonable that the compliance with these principles requires establishing the appropriate conditions for the development of the students' self-educational competence, determined by means of factor analysis. The results of our experimental study suggest the main psychological and pedagogical factors of the investigated process: establishing students' need for self-education; capacities of modern IT technologies and the Internet; organization of educational process (share of independent work in the structure of study time); innovative learning technologies (design, problem-developing, training, simulation games, etc.); the complexity of the modern content of education; Information and educational environment of IVE(VET); educational activities of the teacher, instructor of industrial training; the system of control of students' achievements in IVE(VET); students' cognitive abilities; requirements of production (practice) for the qualification of machine-building industry skilled employee; organization of intellectual extra-curricular activities of students (contests, circles, clubs, studios, etc.).

Pedagogical conditions are defined on the basis of the inductive method of establishing cause-and-effect relations and these conditions being provided can transform experimentally determined factors into real determinants of the development of students' self-education abilities, giving them the qualities of effectuality. The suggested pedagogical conditions are: permanent formation of students' needs for self-education; productive organization of independent work of the prospective skilled employees; implementation of interactive learning technologies into the process of skilled workers' vocational training; purposeful development of informational and analytical culture of the pedagogical interaction participants.

At the same time, it should be noted that the driving forces for the development of the prospective machine-building industry skilled employees' self-education competence are not single factors or conditions, but the contradictions arising in the real educational process. Acquaintance with the results of academic researches of scholars, pedagogical experience of practical development of students' self-educational abilities made it possible to identify a number of *contradictions* existing in vocational (vocational and training) education, particularly between:

– the needs of the machine-building industry for workers with a high level of vocational competence – and the low preparedness of graduates of IVE (VET) for self-education;

– requirements of the National Qualification Framework, the Law of Ukraine "On Education", qualification standards for key competencies of skilled workers, and insufficient development of theoretical and methodological foundations for the purposeful development of self-educational abilities of students of the IVE (VET) in the machine-building educational profile;

– the latest tasks of the IVE (VET) concerning the training of competitive, professionally mobile workers in the machine-building industry – and the low preparedness of teachers, instructors of industrial training to provide pedagogical support to the processes of developing students' self-education activities;

– the necessity to train the vocationally competent skilled workers with established preparedness for self education ? and the lack of educational and methodical and didactic materials providing students' self-education in IVE (VET) in the machine-building educational profile.

According to the results of the pilot experimental study, we define the following directions of the revealed contradictions solution:

– substantiation and implementation of interactive learning technologies (technology teaching projects, case study, technology of distance learning, etc.) into the educational process which, structurally and functionally, requires the student's independent work;

– extensive implementation of the system of teaching methods comprising reproductive, algorithmic methods of teaching systematically replaced by productive, research methods of mastering professional knowledge, and modern innovative teaching methods (IT technologies) in pedagogical practice;

– interdisciplinary, methodological character of the training of prospective machine-building industry skilled employees with an orientation towards creative development of the individual;

– overall informatization of vocational education, designing and establishing of informational and educational environment in IVE (VET) of the machine-building profile;

– selection and structuring of the content of education of prospective machine-building industry skilled employees on advanced training principles;

– objectivity of methods of evaluation (and self-evaluation) of students' learning achievements, in particular in conditions of distance learning or mixed learning;

– pedagogical support of the processes of students self-education and self-development.

We should state that the implementing of the above-mentioned directions of contradictions resolving, and the achieving the goal of purposeful development of students' self-educational abilities must be performed within three consecutive stages: *diagnostic and motivational* (to determine the state of applicants' for the machine-building industry skilled employee training programme the ability of self-education activities, to form the students perceptions of their intellectual ability, to form an aspiration for self-improvement, an interest in independent obtaining vocational and other knowledge, ability to self-educational activity planning, to organize comfortable workplace for learning, to inspire students to make personal start "portfolio" and program of self-education, etc.); *activity-technological* (provision of organizational and pedagogical conditions for gradual advancement of students from episodic self-education, as a result of pedagogical incentives, to sustainable self-education activities under the influence of motives-interests, implementation of self-education programme by students on their own self-educating trajectory at a comfortable rhythm of self-education classes; *reflexive-corrective* (maintaining skills of self-education and self-development, improvement of students' ability to analyze, evaluate, correct the results of self-education using methods of self-influence – self-controlling, self-reporting, self-persuasion, self-programming, self-examining, self-correcting, complacency, etc.).

Conclusions. Summing up, in our study we investigated and determined the provisions of purposeful development of the prospective skilled employees' self-education competence in IVE (VET) based on the substantiated directions and stages of solving the problem as an attempt to elaborate methodological and theoretical concepts of this integrative individual property development.

Prospects for further scientific research are related to the design of methods and technologies for the development of the students' self-educational competence in IVE (VET) of machine-building educational profile.

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УДК 377.3:621]:37.041

Концептуальні основи розвитку самоосвітньої компетентності майбутніх кваліфікованих робітників машинобудівної галузі

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Реферат. Висвітлено концептуальні положення цілеспрямованого розвитку самоосвітньої компетентності майбутніх кваліфікованих робітників машинобудівної галузі в закладах професійної (професійно-технічної) освіти (далі ЗП(ПТ)О). Наголошено, що наразі рівень організації освітнього процесу в ЗП(ПТ)О вже не відповідає вимогам сучасного виробництва. Серед основних векторів модернізації професійної підготовки майбутніх кваліфікованих робітників домінанта має зміститися на розвиток самоосвітніх здатностей учнів, а технологічні знання робітника машинобудівної галузі мають постійно змінюватися, поповнюватися новою інформацією.

Наведено результати дефінітивного аналізу найважливіших для проблеми дослідження понять: "компетентнісний підхід", "компететність", "кваліфікація". Самоосвітню компетентність витлумачено як інтегровану властивість особистості, що синтезує знання, уміння, навички, досвід самоосвіти та особистісні якості, котрі виявляються у продуктивній самоосвітній діяльності і поведінці учня та забезпечують готовність і здатність майбутнього кваліфікованого робітника цілеспрямовано пізнавати дійсність, вмотивовано освоювати соціальний досвід людства й самореалізовуватися. Визначено, що самоосвітня компетентність майбутнього робітника машинобудівної галузі є конструктом п’яти взаємозалежних і взаємозумовлених компонентів: мотиваційно-ціннісного, когнітивного, операційно-діяльнісного, організаційно-вольового та рефлексивно-оцінного.

Виокремлено основні методологічні підходи (компетентнісний, особистісно-орієнтований, діяльнісний, системний, рефлексивний, аксіологічний, інформаційний, середовищний) та педагогічні принципи (ціннісно-змістової спрямованості, системності й послідовності, безперервності, персоніфікації, мобільності, науковості, рефлексії, наочності, гуманізації, проблемності, інтегрованості) розвитку самоосвітньої компетентності майбутніх кваліфікованих робітників машинобудівної галузі. На основі факторного аналізу сформульовано педагогічні умови, подано напрями досягнення мети цілеспрямованого розвитку самоосвітньої компетентності учнів ЗП(ПТ)О) машинобудівного профілю.

Вказано на перспективи подальших наукових розвідок, пов'язаних із проектуванням методів і технологій розвитку самоосвітньої компетентності учнів у закладах П(ПТ)О машинобудівного профілю.

Ключові слова: *компетентнісний підхід, самоосвітня компетентність, майбутні робітники машинобудівної галузі, освітній процес, методологічні підходи.*

Received: 02 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.31-36

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 31-36

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THE ESSENCE AND STRUCTURE OF KEY COMPETENCIES OF FUTURE SKILLED SEWING WORKERS

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Abstract. The article presents key competencies as a complex of important qualities of a modern specialist, which are required for successful professional performance, self-realization and full-fledged life of an individual. The relevance of the topic is caused by the rapid growth of requirements for a skilled worker, the interest of modern entrepreneurs in the specialists, who are able to work with information, be creative and think critically, discover optimal solutions, express and defend their own opinion, cooperate and collaborate. Such concepts as "competency" and "key competencies" are specified. The views on key competencies are presented in the context of European and Ukrainian legislation. The article highlights the need to develop those competencies in future skilled workers, which contribute to developing personal potential, promote self-realization, expand employment opportunities and ensure success in a rapidly changing society.

Key competencies of future sewing workers are presented as a system of competencies, which, when combined with professional knowledge, skills and abilities, will allow such workers to achieve positive results in personal and professional life and will ensure an effective interpersonal interaction in the production environment. It is proved that the key and professional competencies of sewing workers are interrelated and should be formed and developed simultaneously. The article justifies the need to develop these qualities in the process of educating future tailors and cutters, whose professional activity is connected with communication with the customer, the choice of a model and material, fittings, detection and elimination of defects, ability to work on several orders simultaneously.

The list of key competencies needed to be formed in future sewing workers is prepared taking into account the functions of tailors and cutters and based on "soft skills" announced at the 48th World Economic Forum in Davos. They include the ability to solve problems comprehensively; creativity; interaction with people; emotional intelligence; ability to express one's own opinion; focus on the customer; ability to quickly switch from one thought to another.

Keywords: *key competencies, professional competencies, competency-based approach, skilled worker, sewing industry.*

Introduction. Under today's conditions, there appears to be a considerable need for an individual who is able to adapt to the changing nature of a modern socioeconomic environment. The traditional system of education aimed at acquiring knowledge and skills does not correspond to the modern social order, which requires independent, initiative and responsible members of society, who should be willing to fulfil social, production and economic tasks (Yershova, 2015, Kravets, 2014).

The rapid development of globalization processes in society leads to a steady increase in the requirements for a skilled worker. A modern entrepreneur is interested in the worker who is able to think independently, critically and creatively, work with information, discover optimal solutions to overcome current production issues, be sociable (Kravets, 2014, p. 105). A modern individual tends to develop a professional career, which is ensured by a non-standard approach to solving problems, capacity for professional

adaptation, ability to prove their own opinion, connect to people, work in a team, strive for self-study. Therefore, modern educational institutions should not only transmit knowledge but also form personal qualities in future skilled workers, which they will need for effective professional performance and integration of professional knowledge, skills and abilities, psychological readiness for professional activity, the achievement of professional success and career growth (Romanova, 2009). Thus, it is important to form and develop key competencies in future sewing workers.

The sewing industry requires competent, mobile and competitive workers who meet the level of modern and advanced requirements of this industry. The current problem of vocational education includes updating and improving the content of vocational training and the system of qualifications. Modern employers consider them ineffective since they do not provide objective information about the quality of the acquired knowledge, skills and competencies, which would meet current needs of the labour market (Radkevych, 2000, pp. 151-152).

Materials and methods. Modern models for developing key competencies rely on the principles of competency-based approach. Its essence is rooted in the fact that the main attention is paid to learning outcomes. As a result, the emphasis is placed on the individual's ability to act effectively in various professional and life situations rather than the amount of the acquired information. This is reflected in researches by many Ukrainian and foreign scholars (A. Barannikov, V. Baidenko, V. Bezrukova, N. Bibik, N. Chomsky, M. Holsted, H. Khalazh, A. Khutorskyi, S. Kravets, N. Kuzmina, A. Markova, T. Orji, V. Petruk, O. Pometun, V. Radkevych, J. Raven, O. Semenog, M. Stoart, O. Temniatkin, E. Zeyer, I. Zymniaia et al.). This problem was in particular studied by I. Zymniaia (key competencies as the target-based ground of competency-based approach in education), A. Khutorskyi (key competencies as a personality-oriented paradigm of education), N. Bibik (a reflexive analysis on the application of competency-based approach), V. Radkevych (the importance of professional and key competencies in professional education), S. Kravets (forming key competencies in future restaurant specialists).

Theoretical analysis of scientific works was employed to prove the need to study the problem of forming key competencies in future sewing workers and thoroughly explore the content and structure of their key competencies.

The research aims to study and analyze the essence and structure of key competencies of future sewing workers.

Results and discussions. The English psychologist J. Raven (1999) defines competency "as a specific ability to effectively perform concrete actions in a subject area, including narrow subject knowledge, a particular type of subject skills, ways of thinking, understanding of responsibility for one's actions". O. Pometun (Bibik et al., 2004, p. 18) notes that competency is "an integrated combination of knowledge, abilities and skills that allow one to effectively solve certain problems and tasks in a particular activity". According to H. Selevko (2004, p. 139), competency is an integral quality of an individual, which manifests itself in their overall ability and readiness for activity based on the knowledge and experience acquired during learning and socialization and focused on independent and successful participation in the activity. K. Dmytrenko (2018, p.6) defines competency as a quality acquired by "living situations" and "reflecting experience" and expands it into components (knowledge, skills, abilities, patterns of behaviour, efforts).

The Law of Ukraine "On Higher Education" (2014) defines competency as a dynamic combination of knowledge, abilities and practical skills, ways of thinking, professional, ideological and civic qualities, moral and ethical values, which "determines the ability of an individual to successfully conduct professional and further educational activities and is the result of studying at a certain level of higher education".

This leads to a conclusion that competency is an ability and willingness of an individual to conduct certain professional activities based on knowledge and experience and solve difficult problems by mobilizing their own psychological resources.

According to the Concept of the New Ukrainian School, key competencies are communication in the national language (and mother tongue if different); communication in foreign languages; mathematical literacy; competencies in sciences and technologies; ICT and digital competencies; lifelong learning skill; social and civil competencies; sense of entrepreneurship; cultural awareness; environmental awareness and healthy lifestyles (Ministerstvo osvity i nauky Ukrainy, 2016, pp. 11-12).

The European Commission's working document "Key Competences for Lifelong Learning" defines the term "competence" as a combination of skills, knowledge, abilities and attitudes to learning and gaining practical experience (Key Competences for Lifelong Learning, 2018). In addition, on January 17, 2018, the European Parliament and the Council of the European Union approved the framework programme for updated key competences for lifelong learning, which includes literacy; linguistic competence; mathematical competence and competence in sciences, technologies and engineering; digital competence; personal, social and educational competence; civil competence; entrepreneurial competence; cultural

awareness and self-expression (life skills-based education).

Practice shows that only professional skills are not enough to achieve professional success. An individual achieves professional realization if they have not only hard skills but also soft and digital skills (Yershova, 2018, p. 165). Top 10 soft skills needed to achieve professional success and career growth were announced at the 48th World Economic Forum in Davos. They include ability to solve problems comprehensively; critical thinking; creativity; ability to manage people; interaction with people; emotional intelligence; ability to express one's own opinion; focus on the customer; ability to negotiate; flexible brain (ability to quickly switch from one thought to another). In 2019, at the World Economic Forum in Davos, they highlighted the need for significant educational changes related to the Fourth Industrial Revolution, the need to focus on the ways and forms of learning. They include "studying computer science with an emphasis on teamwork and creativity, learning through games that develop critical thinking, support of students' initiative outside the curriculum" (Korniienko, 2019). Thus, the main attention is paid to the need to develop key competencies. These competencies are necessary for life activity, development and growth of personal potential, self-realization, expansion of employment opportunities, success in a fast-changing society. These competences begin to form from an early age and develop in the process of learning throughout their lives.

Therefore, the modernization of Ukrainian education is aimed at the need to form key competencies at school. Given the existing trends in education and training, the European Commission's Key Competences for Lifelong Learning, the results of the World Economic Forum in Davos and the impact of technologies on the labour market, one can conclude that key competencies should be formed and developed during the educational process in the institutions of general, professional (vocational) and higher education.

Both rapid development of the fashion industry and dynamic enhancement of sewing equipment and technology highlight the need for competent sewing workers, who possess knowledge of related professions. They should possess profound professional competencies. Indeed, they should be able to define the characteristics of figure, take measurements, choose a model of clothing in accordance with the customer's figure, choose materials based on their measurements and in accordance with a type and model of clothing, create a design, model properly, make a product of high quality, create a positive emotional atmosphere for the customer.

In order to achieve high results, it is important to take into account each stage of creating clothing. The main sources of acquiring these competencies include vocational training and personal experience. One cannot become a famous designer, start one's own business or promote one's own brand without acquiring a trade job, without gradually mastering all aspects of professional craftsmanship, namely a sewer, a tailor and a cutter.

However, O. Dubnytska (2013, p. 5) believes that the process of acquiring key competencies allows sewing workers to achieve results in their personal and professional lives, ensuring "effective interpersonal interaction in the production environment". In other words, key competencies, apart from purely professional knowledge and skills, also include such qualities as initiative, cooperation, sociability, ability to work in teams, evaluate and analyze problems, use the obtained information and choose the most optimal solutions.

O. Dubnytska (2013, p. 6), studying competency-based and inherent approaches to forming vocational training of sewing workers, proves the close connection between professional and key competencies. The researcher indicates that this approach "directs professional activity towards forming and recreating social requirements of society", while the level of professionalism "generates the necessary creative attitude towards work, ability to make decisions and evaluate them".

Successful professional activity is an integral part of a full-fledged life and self-realization of an individual. It is ensured through forming and developing key and professional competencies. The functions of sewing workers at enterprises are aimed at solving specific problems, namely making sewing products, performing one or more technological operations. This type of work requires that tailors should be attentive to details, possess relevant motor skills, show emotional restraint and stability in emergency situations, possess tactile sensitivity, understand the interlinks between their knowledge, be ready for monotonous activity, be able to work effectively as a subordinate, organize their work and be responsible for the results, work both independently and in a team, show integrity and discipline, think critically and analytically.

In the field of consumer services, the integral part of tailors' and cutters' duties, who work in workshops and tailoring houses with individual orders, includes communication with customers when placing an order, discussing and choosing a model, selecting materials, taking measurements, identifying and removing defects. Therefore, the representatives of these professions should possess the following well-developed qualities: sociability, interaction with

people, ability to express their own opinions and make decisions, listening skills, emotional self-control, creative and critical thinking, ability to focus, etc. Sewing workers, especially cutters, should also develop artistic skills, a sense of taste and style, a sense of fashion and strive for self-development since cutters in fashion and tailoring houses also perform a role of a designer.

Consequently, one can conclude that the main components of key competencies of future sewing workers should be the ability to solve problems comprehensively; creativity; interaction with people; emotional intelligence; ability to express one's own opinion; focus on the customer; ability to quickly switch from one thought to another. The ability to solve problems comprehensively determines the conscious attitude of future cutters towards the entire list of production tasks and understanding of the most rational algorithm for their solving; ability to identify and eliminate the causes of production situations rather than their consequences. Thus, cutters' ability to solve problems comprehensively should be formed based on a systematic and interdisciplinary approach to organizing their vocational training. This competency is important at the stage of placing an order: understanding the characteristics of the customer's figure, taking measurements, choosing models and materials. It is closely intertwined with professional knowledge, skills and abilities. Creativity is an ability to think innovatively, creatively develop one's own experience, apply innovative approaches to problem-solving. Workers specializing in the sewing industry and, in particular, consumer services should be interested in the development of fashion trends, study design techniques, develop spatial thinking, model complex structures, explore and select small operating methods for processing materials.

Interaction with people determines the establishment of relationships at different levels, creating a common field of activity for solving problems. Emotional intelligence is an ability to recognize and understand the intentions of others, control one's own emotions and influence the emotions of others. Being able to express one's own opinion implies the courage to make independent decisions and readiness to answer for their consequences. The focus on customer characterizes the interaction with others and the process of solving people's problems based on the understanding of their values and needs. Since interaction with people, emotional intelligence, ability to express one's own opinion and focus on the interests and needs of customers form the basis of communication skills, the current research suggests that they should be combined into a group of "key communicative competences".

Being able to quickly switch from one thought to another involves contemplating several ideas and simultaneous solving of several production tasks. This is due to the fact that at the enterprises of both mass production and individual order, sewing workers face the need to simultaneously cut and assemble several different types and patterns of clothing. Therefore, such competency is extremely important.

Conclusions. Thus, key competencies of future sewing workers form a system of competencies, which, when combined with professional knowledge, skills and abilities, will allow such workers to achieve positive results in personal and professional life and will ensure an effective interpersonal interaction in the production environment. Key and professional competencies of sewing workers are interrelated and should be formed and developed simultaneously. Successful professional activity depends directly on the level of theoretical and practical knowledge, abilities, skills and experience, as well as the ability to effectively act in various professional and life situations.

Therefore, key competencies of future sewing workers are closely related to professional knowledge, abilities and skills. The processes of their forming and developing is a thorny issue of vocational education, which affects the success of the relevant professional activity, the quality of the service sector and the competitiveness of the enterprise. Therefore, further research should be aimed at studying the peculiarities of forming key competencies in future sewing workers in vocational education institutions.

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УДК 377.3:687]:005.336.2-027.561

Суть і структура ключових компетентностей майбутніх кваліфікованих робітників швейного профілю

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Реферат. Ключові компетентності представлені в статті як комплекс важливих якостей сучасного фахівця, потрібних для успішної професійної діяльності, самореалізації та повноцінного життя особистості. Актуальність даної теми зумовлюється стрімким зростанням вимог до кваліфікованого робітника, зацікавленістю сучасних підприємців у спеціалістах, які вміють працювати з інформацією, володіють творчим та критичним мисленням, знаходять оптимальні рішення, вміють висловлювати та відстоювати власну думку, комунікабельні. Уточнено суть понять "компетентність" і "ключові компетентності". Представлений погляд на ключові компетентності зі сторони європейського та вітчизняного законодавства. Наголошується на необхідності формувати дані компетентності в майбутніх кваліфікованих робітників, що сприяють розвитку особистого потенціалу, самореалізації, розширенню можливостей працевлаштування, успіху в швидкозмінному суспільстві.

Ключові компетентності майбутніх фахівців швейного профілю представлено як систему компетентностей, що в сукупності з професійними знаннями, вміннями та навичками, дасть змогу робітнику даної галузі здобути позитивні результати в особистому і професійному житті та забезпечить ефективну міжособистісну взаємодію в умовах виробництва. Доведено, що ключові та професійні компетентності фахівців швейного напряму взаємопов'язані та повинні формуватися й розвиватися паралельно. Обгрунтовано необхідність розвитку цих якостей у процесі підготовки майбутніх кравців і закрійників, професійна діяльність яких пов'язана зі спілкуванням із замовником, вибором моделі та матеріалу, проведенням примірок, виявленням та усуненням дефектів посадки, здатністю працювати паралельно з декількома замовленнями.

Керуючись функціями кравців та закрійників, взявши за основу "soft skills", озвучених на 48-му Всесвітньому економічному форумі в Давосі, подано перелік ключових компетентностей, які необхідно формувати в майбутньому робітникові даної професії: комплексне розв'язання проблеми; креативність; взаємодія з людьми; емоційний інтелект; уміння формувати власну думку; орієнтація на клієнта; вміння швидко переключатися з однієї думки на іншу.

Ключові слова: *ключові компетентності, професійні компетентності, компетентнісний підхід, кваліфікований робітник, швейна галузь.*

Received: 26 April 2019
Accepted: 19 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.37-41

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 37-41

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PEDAGOGICAL SYSTEM FOR FORMING PROFESSIONAL ETHICS IN FUTURE SOCIAL WORKERS AT UNIVERSITIES

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Abstract. The article presents key components of a pedagogical system for professional and ethical training of future social workers, which contribute to increasing their level of professional ethics. It determines the essence of the pedagogical system, which unities the processes of forming, developing, education and learning with all forms, methods and terms of their occurrence.

The pedagogical system for forming professional ethics in future social workers at universities is described. It is considered as the multiplicity of interrelated components necessary for an organized and purposeful professional and pedagogical influence on the process of developing moral and ethical qualities in future specialists. The objectives of the pedagogical system for forming professional ethics in future social workers are determined. They are the following: professional and ideological (to form moral consciousness in students; to intensify their activities in professional and ethical training); behavioural and deontological (to facilitate the processes of decision-making in accordance with the requirements of professional ethics, to acquire skills in ethical modelling and predicting production situations, to follow moral and ethical norms); personally significant (to consolidate such personal qualities as humanism, ethical maturity, responsibility, sense of justice, dignity and respect for others, tolerance, politeness, decency, empathy, attentiveness, diligence, sincerity, sociability, social adaptability).

The possible stages of forming professional ethics in future social workers at universities are outlined. They are as follows: the motivation and goals stage (preparing students to understand the goals of professional training, which enhance their motivation to form professional ethics); the procedure stage (it builds relevant knowledge, skills, experience and develops personally and professionally important qualities in students with the help of content, forms, methods and technologies); the evaluation and diagnostics stage (it verifies the efficiency of the introduced pedagogical system and is implemented through such components as motivation and values, cognitive and ideological aspects, activities and behaviour, personal and positional aspects, reflexive and creative aspects).

Keywords: *pedagogical system, professional ethics, social worker, university, educational process.*

Introduction. The processes of updating and reforming higher education, certain socioeconomic changes in society and the growing number of the population who need social assistance and protection have caused the increasing requirements for professional training of future social workers. The efficiency of such training at universities depends on the capacity of students for self-development, self-study, self-organization and self-realization. Therefore, one should pay particular attention to the systemic approach in order to solve the problems of developing and reforming modern higher education. It is the factor of transforming the acquired experience into personal and socially significant psychological characteristics of a person.

Materials and methods. Such scholars as B. Bespalko, B. Beziazychnyi, M. Chunosov, I. Druz, A. Kalenskyi, O. Karpenko, V. Kuzmina,

M. Mykhniuk, H. Skachkova dealt with the problem of developing a system of professional training. For one, B. Beziazychnyi (2016) described the system for forming ethical competency in future teachers of physical education. A. Kalenskyi (2016) justified the pedagogical system of developing professional and pedagogical ethics in future subject teachers in higher education institutions specializing in agriculture and nature protection. M. Mykhniuk (2017) outlined the main components of a methodical system for developing a pedagogical culture in teachers who teach construction-oriented subjects. However, the pedagogical system for forming moral qualities in future social workers at universities has not been properly studied yet.

Research methods include theoretical analysis and study of the system for professional training of specialists at universities.

The research aim is to justify the pedagogical system for professional and ethical training of future social workers at universities, which contributes to increasing their level of professional ethics.

Results and discussions. The conducted analysis of current conditions for forming professional ethics in future social workers at universities allows one to look at the systemic approach to studying the problem from a different angle. It involves the unity of interrelated pedagogical phenomena (elements), which are aimed at achieving a certain pedagogical result.

Some scholars interpret a pedagogical system as a combination of all key components, which unite the processes of forming, developing, education and learning with all forms, methods and terms of their occurrence (Fokshek, 2011, p. 207).

The current research pays particular attention to N. Kuzmina's views on the essence of the pedagogical system (2002, pp. 139-145). First, she introduced the very concept of a pedagogical system and defined its structural components. They are: 1) educational information; 2) pedagogical communication tools (forms, methods, techniques); 3) participants in the education process; 4) teacher; 5) goals of educational activities. In addition, the scholar identified the functional components, which should provide a link between the structural components (constructive, communicational, organizational and prognostic).

The structural components of the pedagogical system are the main characteristics of the educational process, whose range and presence distinguish them from all other systems. They include goals, educational information, pedagogical communication tools, students and teachers (Ortynskyi, 2009, p. 32). Consequently, the pedagogical system sets certain goals and consists of specific components.

Given the current functioning of the educational sector, only the prognostic approach to justifying goals of the pedagogical system at universities will make it possible to most accurately take into account the new trends in the development of society and all its spheres, production and provision of social assistance, as well as scientific, pedagogical, informational and other activities.

Still, the prognosis stage is rather important to the educational process at universities. Without it, one cannot fully take into account the continuous changes taking place today. If organized properly, the planned actions will be implemented at a very advanced pace, which will positively affect the quality of future specialists' training.

The process of forming professional ethics in future social workers requires that a modern pedagogical system for professional and ethical training should be built based on innovations, which are a set of interrelated components, necessary for an organized and purposeful professional and pedagogical influence on the process of developing moral and ethical qualities in future social workers at universities.

The pedagogical system for forming professional ethics in future social workers includes:

- ✓ applying forms and methods of active context and simulation learning, which motivate students to acquire professional ethical knowledge, skills and abilities;
- ✓ modelling professional and ethical activities in the educational process by motivating students to invent and solve moral and ethical tasks and master the course in Ethics of Social Work;
- ✓ involving students into professional and ethical activities, which includes consolidating the acquired knowledge and skills and applying different forms of social work in practice;
- ✓ building the training content based on the development level of modern social, informational, pedagogical technologies and relevant to future professional activities;
- ✓ promoting a proactive character of professional training, which should be based on the process of forming professional ethics and professionally important qualities in future specialists in the context of educational, professional and ethical activities (Chunosov, 2014, p. 117).

As for the objectives of the pedagogical system for forming professional ethics in future social workers, they are preliminarily divided into the following groups:

- ✓ *professional and ideological* (to form moral consciousness in students; to intensify their activities in professional and ethical training);
- ✓ *behavioural and deontological* (to facilitate the processes of decision-making in accordance with the requirements of professional ethics, to acquire skills in ethical modelling and predicting production

situations, to motivate students to be responsible, initiative and demand more of themselves and others, to follow moral and ethical norms);

✓ *personally significant* (to consolidate such personal qualities as humanism, ethical maturity, personal and social responsibility, sense of justice, dignity and respect for others, tolerance, politeness, decency, empathy, ability to understand the client and provide high-quality services, attentiveness, diligence, sincerity, sociability, social adaptability, ability to conduct a systematic ethical analysis of events and situations, real self-esteem, culture of self-study activities) (Beziazychnyi, 2016, p. 129).

When forming professional ethics in future social workers at universities, one should focus on a purposeful and systematic subject-subject interaction between teachers and students during various activities. In this regard, the main aim consists in non-violent development of moral consciousness and moral development and cultivating positive moral qualities in future specialists based on the basic moral values of norms and standards.

The analysis of different approaches to the educational process proves that any system is characterized by content, procedure and results. Therefore, the pedagogical system is implemented based on the possible stages of forming professional ethics in future social workers at universities, namely the motivation and goals stage, the procedure stage, the evaluation and diagnostics stage.

The motivation and goals stage allows students to identify and understand the set goals in order to enhance their motivation to form professional ethics in the educational process. This stage is realized, first of all, through the content of such courses as Introduction to Profession, The History of Ukrainian Culture, The History of Social Work, Volunteering. At this stage, future social workers form a positive emotional and ethical attitude towards mastering professional and ethical principles of the chosen profession and also develop a humane emotional and ethical attitude towards others.

The procedure stage aims to develop the relevant components of forming professional ethics in future social workers (motivation and values, cognitive and ideological aspects, activities and behaviour, personal and positional aspects, reflexive and creative aspects) through the content of relevant courses and the introduction of relevant forms, methods and innovative technologies. The main goal of the stage is to form relevant professional and ethical knowledge, skills and abilities in students and motivate them to develop personal and moral professional qualities, skills in ethical reflection, etc. The procedure stage is realized through the content of such courses as Introduction to Profession, Ethics of Social Work, Volunteering, The History and Theory of Social Work, Professional Skills of Social Worker, Social Conflictology and Partnership.

The evaluation and diagnostics stage makes it possible to verify the effectiveness of the introduced pedagogical system and determine the level of professional ethics in future social workers. It can be realized through practical work (volunteering, providing social services and other professional activities).

The implementation of the pedagogical system is aimed at increasing the level of professional ethics in future social workers. The main components of professional ethics in future social workers are motivation and values (a positive attitude towards professional ethics, capacity for professional and ethical development and self-development), cognitive and ideological aspects (a system of general and professional ethics), activities and behaviour (a system of profession-oriented, deontological skills), personal and positional aspects (professional and ethical views, personally moral and professionally important qualities), reflexive and creative aspects (ethical reflection). The outlined components are the basis for determining the criteria, indicators and levels for forming professional ethics in future social workers at universities.

The functioning of the pedagogical system is subject to the patterns associated with the internal structure of the system itself when the change of one or several of its components will change the entire system.

Conclusions. The described pedagogical system is based on the following: the process of forming professional ethics in future social workers at universities is integral and based on the unity of its content, functional and personal components. They are aimed at forming students' knowledge and skills in professional ethics and establishing an interaction with the participants in the educational process due to deepening ethical and professional orientation, professionally important personal qualities. Further research should verify the effectiveness of the introduced system in professional training of future social workers at universities.

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УДК: 378.4:364-43]:174

Педагогічна система формування професійної етики майбутніх соціальних працівників в університетах

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Реферат. У статті подано ключові компоненти педагогічної системи професійно-етичної підготовки майбутніх соціальних працівників, що сприяють підвищенню рівня сформованості професійної етики в майбутніх фахівців. Визначено суть педагогічної системи як єдності процесів формування, розвитку, виховання і навчання з усіма формами, методами й умовами їх протікання.

Охарактеризовано педагогічну систему формування професійної етики майбутніх соціальних працівників в університетах, яку розглядаємо як множинність взаємопов'язаних компонентів, потрібних для впорядкованого і цілеспрямованого професійно-педагогічного впливу на розвиток морально-етичних якостей особистості майбутніх фахівців. Виокремлено завдання педагогічної системи формування професійної етики майбутніх соціальних працівників, до яких відносять: професійно-світоглядні (сприяють формуванню моральної свідомості студентів, активізації їхньої діяльності у професійно-етичній підготовці); поведінково-деонтологічні (направлені на оволодіння процедурою прийняття рішень відповідно до вимог професійної етики, навичками етичного моделювання і прогнозування виробничих ситуацій, дотримання морально-етичних норм); особистісно-значущі (відповідають за поглиблення таких особистісних якостей, як: гуманізм, етична зрілість, відповідальність, почуття справедливості, гідності та поваги до

іншої людини, терпимість, ввічливість, порядність, емпатійність, уважність, старанність, щирість, комунікабельність, соціальна адаптованість).

Окреслено умовні етапи формування професійної етики майбутніх соціальних працівників в університетах: мотиваційно-цільовий (зумовлює усвідомлення цілей професійної підготовки студентами, що активізують їхню мотивацію до формування професійної етики); процесуальний (за допомогою змісту, форм, методів і технологій сприяє формуванню відповідних знань, умінь, навичок, особистісно і професійно важливих рис); оцінно-діагностичний (перевіряє ефективність упровадження педагогічної системи й реалізується у компонентах – мотиваційно-ціннісному, когнітивно-світоглядному, діяльнісно-поведінковому, особистісно-позиційному, рефлексивно-творчому).

Ключові слова: *педагогічна система, професійна етика, соціальний працівник, університет, освітній процес.*

Received: 08 April 2019
Accepted: 19 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/10.32835/2223-5752.2019.18.42-46

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 42-46

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MODEL OF FORMING THE PROFESSIONAL-ETHIC CULTURE FOR GRAPHIC DESIGNERS IN COLLEGES

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Abstract. Model of forming the professional-ethic culture for graphic designers is described in the context of ethics training for specialists in colleges. While research the following methods are applied: analysis, synthesis, generalisation, systematisation, previous experience studying, questionnaires and expert estimation.

The model structure and maintenance of professional-ethic culture forming for graphic designers are first reasonable in colleges. It consist of following blocks: methodological (professional-ethic culture forming for graphic designers determination), content-technological (pedagogical conditions, technologies, methods, forms and facilities of professional-ethic culture), substantiates the criteria and levels of formation graphic designers' professional-ethic culture. Based on generalising the different theoretical positions laid in the methodological concept of research, the leading conceptual approaches defined its aim and tasks realisation, namely: axiology, culturological, system, sinergistical, activitaly, technological, personality oriented. The sequence process stages of professional-ethic culture forming for graphic designers and their controllability. are described. The worked out model exposes the research work logic in relation to purposeful ethic norms and values development for artistic colleges students; serves for determining the professional-ethic culture as a pedagogical category; forecasts the graphic designers' professional-ethic culture forming results; demonstrates the major semantic blocks of the investigated process; gives an opportunity for clear tracing intercommunications of separate structural constituents. The prospects of the further scientific studies are determined. They cover technology development for planning and providing the ethic oriented professional training for junior graphic specialists in colleges.

Keywords: *professional education, professional-ethic culture, graphic designers, model, design.*

Introduction. The research actuality consists of professional-ethic culture forming for graphic designers while their studying in the colleges of Ukraine and depends on the pedagogical terms complex development that effectively co-operates with other factors for future specialists professional becoming. It is known that determination of all important aspects, indexes and stages for the following process will encourage the appropriate model designing.

Materials. Before describing the pedagogical model process of professional-ethic culture forming for graphic designers, it is necessary to find out the value of the concept "model". It is widely represented in modern scientifically-pedagogical literature. The decision of this task needs also to determine the essence of designing method in pedagogical research.

In general, the Model (lat. modus – measure) is an analogue (chart, sign system, structure) of certain object (to the original), reality fragment, artefacts, culture creation, conceptually-theoretical formations etc. The model is also related to the method of design. In turn, the design is a scientific method of indirect (mediated) research of cognition objects. The direct study is rather impossible, complicated, inefficient or inadvisable – subject, and signor conceivable systems as they recreate, imitate or represent certain descriptions (properties, signs, principles of internals or function) of originals. (Shynkaruk, 7). The academic dictionary of the Ukrainian language (2005) gives the interpretation to the model as a standard for some new reasons – a product of good example. A standard that recreates and imitates the object's structure and action and is used for getting the new knowledge about an

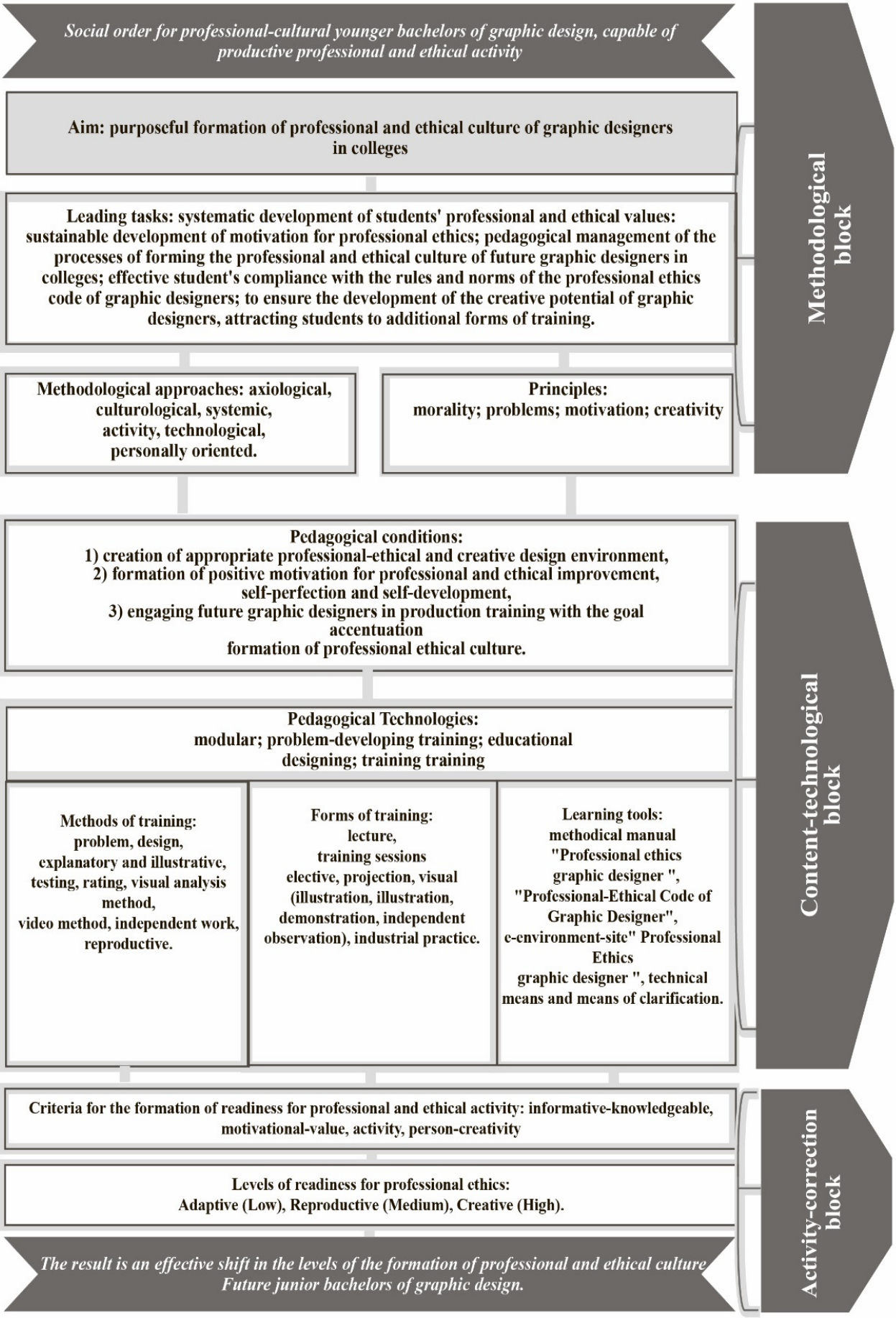

Fig. 1. Model of forming professional-ethic culture for graphic designers in colleges

object. So, the analysis of references, psychological and pedagogical literature confirms the need in the studying model developing.

The **purpose** of our article consequently grounds the model of forming professional-ethic culture for junior Bachelors in graphic design.

Methods. The research process foresees the following methods of analysis, synthesis, generalisation, systematisation, previous experience studying, questionnaire and expert estimation.

Results and discussions. Developing the pedagogical model of forming professional-ethic culture for graphic designers envisages taking into account its properties. The following model means the scheme of training ethics for future graphic designers in colleges. It represents the basic structural components of process of professional-ethic culture for graphic designers forming. They are stages, aim, task, methodological approaches, principles, pedagogical terms, pedagogical technologies, methods, forms and facilities of studies, criteria and levels. It makes their successful professional activity possible. The theoretical analysis defines the following basic structural blocks. They are methodological, content-technological and activity-correctional (fig. 1).

The methodological block includes the aim as purposeful process of graphic designers' professional-ethic culture formation; a task is the systematic development of professional-ethic values for graphic designers while their designing activity and productive studies; pedagogical guidance by the processes of ethic values and norms forming, abilities and skills of a junior Bachelor in graphic design; providing the effective knowledge mastering of ethics activity by students; sustainable students' motivation development for their professional-ethic activity; bringing students to additional professional-ethic activity studies form. The aim and task of the process submit to the modern requirements of the society to professional training quality for future graphic designers in artistic colleges (Fursa, Orlov, 2015).

Made up the methodological concept researches based on different general theoretical positions, certain leading conceptual approaches for its aim and tasks realisation are defined, namely: axiology, culture, system, synergy, activity, technological, personality-oriented. The marked methodological approaches are more detailed considered in the article "Methodological approaches professional-ethic culture forming for graphic designers" (Prokhorcuk, 2019). Thus, the basic principles for graphic designers' professional-ethic culture forming are the problems of morality, motivation and work.

The worked out model includes also a content-technological block. It envisages pedagogical terms description, e.g. creating the appropriate professional-ethic and creative design environment, forming the positive motivation to professional-ethic perfection; attracting future graphic designers to in-service training with the accent on professional ethic culture forming; (Prokhorchuk, 2018; 2019) selecting the technologies, methods, forms and facilities forming future graphic designers' professional-ethic culture in colleges. (Prokhorchuk, 2016).

*Activity-correctiona*l block contains reasonable criteria and levels of graphic designers' professional-ethic culture forming. The analysis of pedagogical literature by the theme of research (Kalenskyi, 2016) and taking into account of features of professional-ethic culture for future graphic designers in colleges provide us the opportunity to distinguish some criteria of forming graphic designers' professional-ethic culture. They are the motivational-valued (determines the system of values, explains professional-ethic behaviour), informative-knowledge (promotes formation the readiness to be engaged in professional ethics-based activities), activity (assists forming of readiness for realisation the professional activity on ethic principles), personality-creatively (characterizes the ability to self-estimation and creativity in professional ethics) (Kalenskyi, 2016). In accordance with the worked out criteria and taking into account the scientists' opinions in relation the levels of cleared up moral values, it is possible to distinguish the three levels of future graphic designers' already formed professional-ethic culture. They are adaptive (subzero), reproductive (middle) and creative (high).

It is important to notice that the following stages confirm the sequence of graphic designers' professional-ethic culture forming process and its manageability. Thus, the design provides an opportunity to interpret knowledge, check up the defined suppositions and conceptual statements in practice and form the best strategy.

Conclusions. The described model performs several functions, in particular: representing the research logic in relation to purposeful development of ethic norms and values for artistic colleges students; serving determination for professional-ethic culture as a pedagogical category; forecasts the results of professional-ethic culture forming for graphic designers; envisaging the most important content blocks of the investigated process; clear interconnections tracking of individual structural components.

The offered model will be used for methodological, technological and diagnostic aspects of the dissertation research. The appropriate scientific publications will be devoted to that.

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УДК 377/378:006

Модель формування професійно-етичної культури майбутніх графічних дизайнерів у коледжах

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Реферат. Модель формування професійно-етичної культури майбутніх графічних дизайнерів охарактеризовано в контексті етичної підготовки фахівців у коледжах. У процесі дослідження застосовано низку методів: аналіз, синтез, узагальнення, систематизацію, вивчення попереднього досвіду, анкетування та експертну оцінку. Вперше обґрунтовано структуру та зміст моделі формування професійно-етичної культури майбутніх графічних дизайнерів у коледжах. Виокремлено такі її структурні блоки: методологічний (визначає цілеспрямоване формування професійно-етичної культури майбутніх графічних дизайнерів), змістовно-технологічний (характеризує педагогічні умови, тех-

нології, методи, форми та засоби формування професійно-етичної культури), діяльнісно-коригувальний (обґрунтовує критерії та рівні сформованості професійно-етичної культури майбутніх графічних дизайнерів).

На основі узагальнення різних теоретичних положень, що склали методологічний концепт дослідження, визначено провідні концептуальні підходи до реалізації його мети і завдань, а саме: аксіологічний, культурологічний, системний, синергетичний, діяльнісний, технологічний, особистісно-орієнтований. Охарактеризовано етапи, що визначають послідовність процесу формування професійно-етичної культури майбутніх графічних дизайнерів та його керованість. Розроблена модель розкриває логіку дослідницької роботи щодо цілеспрямованого розвитку етичних норм та цінностей студентів мистецьких коледжів; слугує засобом визначення професійно-етичної культури як педагогічної категорії; прогнозує результати формування професійно-етичної культури майбутніх графічних дизайнерів; унаочнює найважливіші змістові блоки досліджуваного процесу; дає змогу чітко прослідковувати взаємозв'язки окремих структурних складових. Визначено перспективи подальших наукових розвідок, пов'язаних з розробленням технології проектування змісту етично орієнтованої професійної підготовки молодших спеціалістів графічного дизайну у закладах фахової передвищої освіти.

Ключові слова: *професійна освіта, професійно-етична культура, графічні дизайнери, модель, моделювання.*

Received: 10 Aprile 2019
Accepted: 19 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.47-53

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 47-53

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BASIC DETERMINANTS OF LEGAL CULTURE FORMING OF FUTURE QUALIFIED SEAFOOD WORKERS

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Abstract. The article substantiates the main pedagogical conditions of purposeful formation of the legal culture of future qualified sailors working in VET schools.The formation of the legal culture of future seamen workers, first of all, is aimed at mastering modern legal knowledge of students, in particular in the field of international maritime law, formation of their legal awareness, ability to successfully resolve future professional and legal situations, readiness to constantly replenish the amount of legal knowledge in self-education activities. Today it is especially relevant for graduates of vocational education institutions of the maritime profile: domestic shipping is changing substantially, changing conditions of work of the floating crew, in particular, on international vessels.

The leading idea of the research characterizes the position that the legal culture, legal awareness, legal behavior, in particular future qualified skilled workers, should be purposefully formed, developed.

In the work of the means of expert evaluation revealed a number of factors that have the greatest impact on the formation of the legal culture of future skilled seamen workers, in particular: innovative pedagogical technologies; the content of the professional training of future seamen workers; modern means (including IT technologies) of vocational training; informational and educational environment of the institution of VET schools; pedagogical integration; self-education cognitive and legal activity of the student; effective methods of mastering students with legal knowledge and skills; vocational and pedagogical competence of teachers involved in the training program of seamen; experience of professional and legal behavior; motivation of students to master professional-legal knowledge; diagnostics, evaluation and management of the formation of the legal culture of students.

According to the results of the factor analysis, the following basic pedagogical conditions were substantiated: purposeful formation of the needs of students in the professional legal knowledge; application of innovative pedagogical technologies in professional legal training of seamen's workers; organization of productive self-education cognitive and legal activity of students; establishment of the elective course "Legal Culture of a Modern Seaman" in the educational process of VET schools.

Keywords: *professional education, legal culture, future qualified worker-sailor, international maritime law, legal awareness.*

Introduction. The tendencies of social and economic development of the Ukrainian society, having been investigated in recent years, are convincing that the formation of the citizens' legal culture, their high legal awareness is the dominant vector of modernization process. This, in turn, requires a thorough vocational and legal training of skilled workers in all sectors of production, seafarers in particular.

Since shipping has undergone significant changes over the past decade, the problem is especially relevant: the new generation of ships have appeared, a significant part of production processes with new forms of work organization have been updated, new technologies of

navigation security in particular have been introduced. A considerable number of the graduates of domestic vocational maritime institutions work on foreign maritime vessels. According to the Labor Market Survey, the World Trade Maritime Fleet (Manpower Report), today Ukraine assumes the sixth position in the rankings among the maritime labor supply countries (International Maritime Organization, 2017).

Ukraine is a member of the International Maritime Organization (IMO) and has signed major international regulations on maritime safety, in particular the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (Manila Amendment, 2012). The implementation of the agreements, codes and recommendations of this international organization into the legislative framework of Ukraine obliges the management of maritime transport to make up the crews with highly proficient seafarers, who could ensure the safe operation of ships, the preservation of cargoes, and who obtained high professional (vocational) and legal training, in the field of international maritime law in paticular.

Materials and methods. The problem of the formation of the prospective skilled seafarers' and proficient specialists' legal culture has been investigated in scientific research of teachers, philosophers, lawyers. As a component of professional culture, the legal culture of the future specialist has been developed by V.Grinev, I.Zyazun, V.Lozova, M.Kozyar, D.Kovalenko, M.Fitsula and others. Scientific aspect of legal culture formation by means of educational activities was the subject of the research carried out by such scholars as: G.Vasyanovich, M.Gorodysky, I.Darmansky, V.Kopeychikov, V.Kotyuk, O.Rem. The legal culture of personality as a result of the mechanisms of legal education has been investigated by I.Gryaznov, N.Luginova, T.Osipova, V.Rayko, G.Yavorskaya. In a number of papers written by scholars-lawyers (O.Skakun, S.Slivka, V.Tsarenko, V.Yarmolenko) the peculiarities of the development of the professional legal culture of the law enforcement officers has been determined.

At the same time, there are very few works in which the scientific aspects of the legal culture formation of the prospective skilled seafarers have been investigated, this fact substantially actualizes the problem and determines the search for answers to the questions: what factors and pedagogical conditions should we provide for effective pedagogical actions in order to develop the given component of the general professional culture of the prospective skilled seafarers to sufficient levels?

For the solution of the given tasks the theoretical methods have been used (analysis of scientific resources, study of the normative documents requirements on the subject of the research, analysis of educational programs – in order to determine the state of the problem of the research and to define the directions of scientific search, comparison – in order to study various scientific approaches to the solution of the problems, analysis and synthesis – in order to establish cause-and-effect relationships between factors and conditions; empirical (observations, expert evaluations) – in order to determine the significance of factors, as well as methods of mathematical statistics (for summarizing the results obtained, their representation in tables and determining the coefficient of concordation).

Whereas the foregoing statements the **purpose of the article** is to substantiate the pedagogical conditions of purposeful formation of the students' legal culture at the Vocational Education Institutions of the maritime profile.

Results and discussions. Scientists unanimously admit that the legal culture, legal awareness, legal behavior of prospective skilled seafarers in particular, should be purposefully formed, developed. In order to provide the necessary scientific and methodological support for the given process, it is necessary to determine and theoretically substantiate the leading determinants that must be considered and provided first of all. The point is, first of all, about factors (circumstances, factors, causes, etc.), which we must determine with the results of scientific research.

It would not be out of place to point out that in psychological and pedagogical studies there is no unity of thoughts among scientists about the essence of such concepts as "factor", "condition", as their researchers often do not distinguish them. Such approaches can be found not only in scientific and pedagogical works, but in reference literature as well. In particular, in the "Great Explanatory Dictionary of Contemporary Ukrainian Language" (Bousel, ed., 2009), the "condition" is interpreted as a necessary circumstance that makes possible the implementation, creation, formation of something or facilitates for some reason. In turn, the notion of "factor" is defined as a condition, the driving force of any process, phenomenon; factor.

In our study, following P. Luzan (2004), V. Kruchek (2003), I. Mosya (2013), we determine factors and conditions in such way: pedagogical factors as the driving forces of the formation of the legal culture of the individual, having potential opportunities, become the driving forces of the process due to the created conditions (circumstances), which ensure their effectiveness by appropriate means.

At the first stage of the experimental work, the task was set: to determine the totality of factors that most significantly influenced the formation of the legal

culture of future skilled seafarers in the conditions of the educational process of the professional (vocational) education schools by means of a broad pilot study. For this purpose, the questionnaire was proposed to the respondents (pedagogical personnel of the professional (vocational) education schools of maritime profile, 29 participants), which suggested to indicate the factors of active, effective formation of the students' legal culture. In addition, we maintained that the instructions given to the respondents contained the explanation of the essence of legal culture as a phenomenon, the main content components of this integrative characteristic of the prospective skilled seafarers were listed as well.

According to the results of the survey conducted among the pedagogical staff, 11 factors were most often identified by respondents, in particular: innovative pedagogical technologies; the content of the professional and legal training of the prospective skilled seafarers; modern means (including IT technologies) of vocational and legal training; informational and educational environment of the professional (vocational) education schools; pedagogical integration; self-educational, cognitive-legal activities of the student; effective methods of mastering legal knowledge and skills by the students; professional and pedagogical competence of the teachers involved in the training program for seafarers; experience of professional and legal behavior; students' motivation to master vocational-legal knowledge; diagnostics, evaluation and management of the students' legal culture formation.

It's significant, that in the given list, the teachers pointed out the factors that could potentially impact on effectiveness of the legal culture formation of future skilled seafarers. Naturally, among these determinants there are the main, the most significant ones, which we must consider primarily.

To determine the validity of these factors an expert evaluation was conducted. In the expert letter to the respondents (19 faculty experts) it was suggested that these factors had to be ranked according to their importance in shaping the legal culture of prospective skilled seafarers. It should be noted, that in order to determine the reliability of the results before the expert letter, a control factor "Self-educational cognitive-legal activity of the student" had been introduced. It is not difficult to notice that the informational and educational environment is somewhat correlated with the self-education activities of future seafarers, and therefore we should predict that providing the validity of the method, the sum of the ranks of these two factors should not differ significantly. Based on the results of the experts' ranking of the factors of the formation of the legal culture of prospectiveskilled seafarers, Table 1 was completed and the ranked sums of factors, their average values and places in the overall ranking system were determined.

It is worth noting that, as we hadpredicted, the factors "Self-educational cognitive-legal activities of the student" and "Information and educational environment of the professional (vocational) education schools" scored approximately the same sum of ranks – 94.0 and 93.5 respectively. This is evidence of the objectivity and reliability of the research results.

Table 1

Results of experts' ranking of factors forming the legal culture of prospective seafarers

№	Factor	Validity of factor		
		Sum of ranks	Average rank	Place
1	Innovative pedagogical technologies	45,5	2,34	II
2	Self-educational cognitive-legal activities of a student.	94,0	4,94	V
3	Modern means (including IT technologies) of vocational and legal training	203	10,68	XI
4	Informational and educational environment of the professional (vocational) education schools	93,5	4,92	IV
5	Pedagogical integration	170,5	8,97	X
6	Content of the professional and legal training of the prospective seafarers	144	7,57	VIII
7	Effective methods of mastering legal knowledge and skills by the students	61,5	3,23	III
8	Professional and pedagogical competence of the teachers involved in the training program for seafarers.	106,5	5,60	VI
9	Experience of professional and legal behavior	140,5	7,39	VII
10	Students' motivation to master professional-legal knowledge	36,5	1,92	I
11	Diagnostics, evaluation and management of the students' legal culture formation	158,5	8,34	IX

To elaborate objective conclusions based on the results of an expert evaluation of the factors shaping the legal culture of the prospective skilled seafarers, it was necessary to find out information about the unity of opinions of the expert group members. We see that such a procedure in conjunction with the verification of the accuracy of the matrix filling determines the validity of both the devices and the method of expert evaluation.

For this purpose, the coefficient of concordation , proposed by M. Candell and B. Smith, was used. Without going into the description of the known method of determining the coefficient of concordation, we state that in our research it is equal to 0.59 (at a significance level of 0.05, determined by the Pearson statistical criterion) (Glass, Stanley, 1976).

Thus, the performed statistical calculations confirm the consistency of experts' opinions in determining the validity of factors and the reliability of the results of experts' evaluation.

Relying on the results of the statistical analysis, we can state that the most influential pedagogical factors in the formation of the students' legal culture are: motivation to master the professional and legal knowledge; innovative pedagogical technologies; effective methods of mastering legal knowledge and skills; informational and educational environment of the professional (vocational) education schools; self-educational, cognitive-legal activities of the student; diagnostics, evaluation and management of the students' legal culture development; professional and pedagogical competence of the teachers involved in the training program for seafarers.

Applying the inductive method of establishing cause-and-effect relationships, we define the main pedagogical conditions that can transform experimentally determined factors into real causes of the formation of the legal culture of future skilled seafarers.

It's remarkable that the motivation of students to master professional and legal knowledge is determined by experts as a factor that primarily affects the formation of the students' legal culture. The scientists, and not coincidently, associate the motivation with the activity of the individual, with the driving forces of individual's behavior and activities.

First of all, it is about motives and needs as psychological content, which stimulates the students' aspiration for mastering knowledge, skills, experience and legal information in particular. At the same time, we define the motives as impulsive cause of the person's actions and behavior (the one that pushes for action); the need is interpreted as "the state of a living organism, a human individual, a social group or society as a whole, which expresses the need for something ... and is the driving force of their activity ... The pedagogical value of needs derives from their role in the development of personality" (Goncharenko, 1997, p. 226).

It should be stated that classical psychology has proved a close connection of needs and motives: the motives of behavior and activity arise from the realization of needs. At the same time, stimulation plays an extremely important role in the first initial stages of studying. It should be considered that we explain the stimulus as the internal or external factor causing the reaction, the action of a person (encouragement, perspective, game, ritual, tradition, didactic method, positive example, etc.). The mechanism of the development of the studying motive can be modeled as follows: the needs of a student "are encountered"with stimuli (the "objectivation"of the needs through the stimulus is being carried out) – transfiguration, transformation of the need into a motive and its awareness – further development of needs and motives at the expense of learning – the development of cognitive activity of the individual.

In our opinion, future proficient seafarers mastering professional and legal knowledge must be initiated with pedagogical stimulation, which later should be deliberately replaced by motives-interests arising on the basis of students' intellectual satisfaction with positive results. In the future, for the development of students' cognitive-legal interests, it will be necessary to implement the following methodical techniques: the creation of problem situations; involvement in the project activity; demonstration of examples vital for a seafarer, especially by Internet means – which require students' productive-creative and cognitive actions.

On the basis of the foregoing, we define the first pedagogical condition for the formation of the legal culture of future skilled seafarers: *the purposeful formation of the students' need for professional and legal knowledge.*

It's reasonable that the formation of professional-legal knowledge, moral and legal characteristics, motivational-value orientations of the individual is carried out on the background of the implementation of the competent approach to the training of seafarers.

The indicated methodological educational conception envisages the achievement of the goals of competence-oriented training by means of pedagogical technologies. Pedagogical technologies can be determined as one of the directions of pedagogical science, developed to ensure the achievement of planned tasks, to increase the effectiveness of pedagogical interaction, to guarantee a high level of educational results.

Among modern pedagogical technologies, researchers single out the following varieties: problem learning; gaming; differentiated teaching; informational personally oriented training; developing training; collective learning method; development of

critical thinking; program training; interactive learning; modular training; collective creative education; distance learning, etc.

Both traditional and innovative teaching methods are used in pedagogical practice. It's reasonable, that traditional as well as innovative teaching methods have some advantages and disadvantages. It is appropriate to distinguish such advantages of traditional teaching methods as: organizational accuracy of the pedagogical process; constant, purposeful ideological and emotional influence of the teacher's personality on the students; optimal resources distribution at total training; arranged, logically structured presentation of teaching material; orientation on the development of the mental processes of the student's personality (memory, thinking, attention, imagination, etc.); availability of instructional content; taking into account age and individual characteristics of students; the thoroughly planned ("bookish") students' knowledge, etc.

Disadvantages include: predominance of reproductive, algorithmic teaching methods; dominance of theoretical knowledge in the structure of graduates' qualification; improper orientation of the educational process to the development of the student's personality creative potential; domination of frontal forms of the training organization to the detriment of a person-oriented approach; predominance of subject-object relationships in pedagogical interaction, etc.

Innovative pedagogical technologies significantly eliminate the disadvantages of the customary educational process organization. They are purposeful, systematic and consistent practical implementing original, innovative methods, methods of pedagogical actions and means for changing the style of thinking and behavior of participants in pedagogical interaction, motivating students to self-improvement, self-development, and therefore contribute to improving the quality and effectiveness of the educational process.

It is worth agreeing with the scholars that the following are relevant today: pedagogical technology of critical thinking; teaching methods as a research; integral pedagogical technology; technology of developmental training; technology of forming a creative personality; case technology; project technology; group training technology, etc. To complete the coverage of this aspect, we establish that innovation activity is specific and rather complex, requiring special knowledge, skills and abilities. Therefore, the implementation of innovations is impossible without a teacher-researcher who has systemic thinking, developed ability to creative work, formed and conscious readiness not only to be involved in innovation processes, but also to be their initiator.

Thus, *the implementation of innovative pedagogical technologies in the professional legal training of seafarers we distinguish by the second pedagogical condition for the purposeful formation of* the legal culture of prospective skilled seafarers.

Regarding the intensity of technological changes, dynamic innovation processes and constant information updating in all spheres of public life and production, it is evident that no institution of professional (vocational) education can provide students with the knowledge sufficient for an effective activity in professional life.

Considering the aforesaid, there is a need for creating and implementing in professional (vocational) education schools the mechanisms of development of students' ability to effective self-education enabling them to work with different sources of knowledge and continuously develop their own intellectual potential, since under current conditions experienced worker must constantly improve his/her professional level and gain new knowledge and skills. It's a prerequisite for maintaining an adequate level of own competitiveness at the labor market, where the professional requirements to the specialists are constantly increasing. Therefore, one of the foreground tasks of modern education is to develop students' independence, ability to self-organization, self-development and self-education.

Most scholars (N.Bukhlova, B.Vovk, N.Kubrakova, I.Mosya, N.Polovnikova, V.Sknar, A.Trofimenko, etc.) demonstrate the unity of thoughts stating that self-education is acquired in the process of independent work without systematic course of study at an educational institution. Self-education is an integral part of systematic study, it promotes the deepening, expansion and strengthening of mastering the programme knowledge.

While researching, we concluded that the driving force of self-education is the internal motivation of the student. Self-education activities can be considered as the upper level of personality's development as a subject of educational and cognitive activities. At the same time, the effectiveness and results of the implementation of self-education are more important in the personal and social sense.

According to our study, the effectiveness of students' self-education activity depends on the correctness of its organization at the professional (vocational) education schools. It is precisely the systematic work of the teacher aimed at organizing an effective students' self-education activity and developing their self-educational competence, contributes to the education of a personality ready for self-education through life, able to solve independently his/her personal as well as global problems, capable of creativity, self-development and self-realization.

Based on the foregoing, we define the third pedagogical condition for the purposeful formation of the legal culture of prospective skilled seafarers: *organizing students' productive self-educational cognitive and legal activities.*

Legislative regulations, particularly in the field of maritime law, are constantly changing, new regulations, requirements and procedures are emerging. That is why it is extremely important to update constantly the teaching materials, providing the content of education with modern knowledge that they could implement in their professional activities from the first days of their work. Unfortunately, curricula and programs don't respond to ongoing changes in the current legislation, therefore, there is a need to implement additional forms of study into the educational process.

Currently, special workshops, studies, special courses, electives have increased the efficiency of educational activities due to individualization, wide variation in the content of education, are becoming increasingly popular. For example, electives has occupied an important place in the modern educational process, since they positively influence the formation of students' interests, cognitive activity, and facilitate the development of their creative attitude to independent work.

In our opinion, some scientists (N.Ostroverkha, S.Palchevsky, M.Fitsula, V.Chaika, L.Yakimenko, etc.) emphasize rightly that elective courses are aimed at enhancing the students' substantive knowledge of the courses, sections or themes of the subject taking into account their interests and desires. This is one of the effective forms of differentiated teaching intended for improving students' cognitive interests, intellectual abilities and forming students' vocational guidance. Compared with classroom studies, elective courses provide a high level of students' creative abilities. Search and research methods of teaching, project method in particular, heuristic method, etc. can be applied more widely and effectively.

Taking the above-mentioned into account, we must conclude that the implementation of the elective course "Contemporary Seafarer's Legal Culture" into training of the prospective skilled seafarers, firstly, will ensure the ability to resolve successfully the tasks: to supplement and deepen the legal knowledge that students acquire mastering legal disciplines, thereby expanding their basic legal competence; to increase students' professionally oriented interest for the future professional activities; to expand students' interdisciplinary skills and interests through the integration of legal knowledge with the knowledge of professional-theoretical and vocational-practical training; to complete practice-oriented subject competence and career orientation.

Secondly, the implementation of such additional form of professional and legal training for future proficient seafarers makes it possible to apply a complex of productive methods of mastering legal knowledge, extends the content of legal disciplines to the modern knowledge component, and should contribute to the effective development of the students' legal awareness.

Consequently, the implementation of the elective course "Contemporary Seafarer's Legal Culture" into the educational process of the Institution of Professional (Vocational) Education is determined as the third pedagogical condition for the purposeful formation of the prospective proficient seafarers' legal culture.

Conclusions. For the effective formation of the prospective seafarers' legal culture in the educational process of professional (vocational) education schools, it is necessary to ensure the following conditions: the purposeful development of the students' need for professional and legal knowledge; application of innovative pedagogical technologies in professional legal training of seafarers; organization of effective students' self-educational cognitive-legal activities; implementation of the elective course "Contemporary Seafarer's Legal Culture" in the educational process of IofV(VT)E.

The prospects of further research are associated with the development of a structural model for the formation of the professional legal culture of future proficient seafarers in the professional (vocational) education schools of the marine profile.

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УДК 377:656.61]:008:34

Основні детермінанти формування правової культури майбутніх кваліфікованих моряків

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Реферат. У статті обґрунтовуються основні педагогічні умови цілеспрямованого формування правової культури майбутніх кваліфікованих робітників-моряків у закладах професійної (професійно-технічної) освіти (далі: ЗП(ПТ)О). Формування правової культури майбутніх робітників-моряків насамперед спрямоване на формування у них сучасних правових знань, зокрема міжнародного морського права, правосвідомості, умінь успішно розв'язувати в майбутньому професійно-правові ситуації, готовності постійно поповнювати обсяг правових знань у самоосвітній діяльності. Нині це особливо актуально для випускників закладів професійної освіти морського профілю: вітчизняне судноплавство істотно змінюється, міняються умови роботи плавскладу, зокрема й на міжнародних суднах.

Провідну ідею дослідження характеризує положення про те, що правову культуру, правосвідомість, правоповедінку, зокрема майбутніх кваліфікованих робітників-моряків, необхідно цілеспрямовано формувати, розвивати. У роботі засобами експертного оцінювання виявлено низку факторів, що найбільшою мірою впливають на формування правової культури майбутніх кваліфікованих робітників-моряків, зокрема: 1) інноваційні педагогічні технології; 2) зміст професійно-правової підготовки майбутніх робітників-моряків; 3) сучасні засоби (в тому числі ІТ-технології) професійно-правової підготовки; 4) інформаційно-освітнє середовище закладу професійної (професійно-технічної) освіти; 5) педагогічна інтеграція; 6) самоосвітня пізнавально-правова діяльність учня; 7) результативні методи опанування учнями правовими знаннями і вміннями; 8) професійно-педагогічна компетентність викладачів, задіяних до програми підготовки робітників-моряків; 9) досвід професійно-правової поведінки; 10) мотивація учнів в оволодінні професійно-правовими знаннями; 11) діагностика, оцінювання та управління процесом формування правової культури учнів.

За результатами факторного аналізу обґрунтовано такі основні педагогічні умови: цілеспрямоване формування потреби учнів у професійно-правових знаннях; застосування інноваційних педагогічних технологій у професійній правовій підготовці робітників-моряків; організація продуктивної самоосвітньої пізнавально-правової діяльності учнів; упровадження в освітній процес закладу професійної освіти факультативу "Правова культура сучасного моряка".

Ключові слова: *професійна освіта, правова культура, майбутній кваліфікований робітник-моряк, міжнародне морське право; правосвідомість.*

Received: 17 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.54-61

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 54-61

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

PROFESSIONAL TRAINING OF FUTURE SKILLED WORKERS OF THE MACHINE-BUILDING INDUSTRY BY DUAL FORM OF EDUCATION

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Abstract. The paper focuses on the necessity of substantiating the essence and structure of the professional training of future skilled workers by the dual form of education. In the context of the formulated goal, an analysis of the concepts of "essence", "structure" and "professional competence" is carried out. On the basis of the results of analysis and generalization of scientific researches, it has been established that the professional training of future skilled workers of the machine-building industry by the dual form of education should be assessed by motivational, cognitive, action-related and reflexive criteria. The structure of professional training of future skilled workers of the machine-building industry by the dual form of education is presented in the form of four interrelated components: valuable-motivational, innovational-cognitive, professional-action-related, reflexive-estimated. The model of the dual form of education in Germany is described. It has been determined that the interaction between vocational schools in Germany and employers at the individual and institutional level is considered to be one of the most effective tools for developing a system of vocational education. The author carries out a theoretical analysis of pedagogical sources of philosophical, educational, methodological, psychological, pedagogical literature and scientific works of domestic and foreign researchers, normative and legal documents; modeling (synthesis), comparison, classification, systematization and generalization of theoretical and experimental data. The peculiarities of updating the contents of vocational education, management of the system of vocational education, changes in the system of professional training of specialists of the machine-building industry, adaptation of the structure of vocational education of specialists of machine-building industry in conformity with the demand on the labor market and the requirements of employers are analyzed. The analysis of sources about the preconditions and features of updating the contents of vocational education, issues of management of the system of vocational education, relevant changes in the system of professional training of specialists of the engineering industry, adaptation of the structure of vocational education in line with the demand in the labor market and the requirements of employers are carried out. Attention is paid upon the formation of professionally important qualities of future specialists of the machine-building industry, which are manifested in psychological, theoretical and practical preparation for professional activity. The main reasons and disadvantages of the modern system of professional training are determined, directions of modernization of professional training of specialists of the machine-building industry at the institutions of vocational education (VET) are grounded.

Keywords: *vocational education, dual form of education, professional training, social partnership, skilled working personnel.*

Introduction. The country's industry remains one of the leading industries of management, and the level of development of machine-building is a significant indicator of the estimation of the state's economic growth and its innovative potential. Heavy industry forms more than 80% of the total value of sold products, in particular, machine-building accounts for 12-14% (Shapurov, 2009, p. 59). At the same time, the planned desire for import substitution and the establishment of new foreign economic relations indicates an increase in the demand for products of the machine-building system, increase of its quality, because the significant part of equipment and machines produced at Ukrainian enterprises do not fully meet

the world standards. These problems are solved by introduction of innovative technologies in production and increase of the qualification level of enterprises' personnel. This, in its turn, foresees an increase in the requirements of enterprises for the professional qualification of graduates of vocational (vocational education and training) institutions (hereinafter referred to as VET institutions), and, therefore, actualizes structural and informative changes in the professional training of future specialists of the machine-building industry in accordance with the current technical and technological modernization of production.

The Concept of the implementation of state policy in the field of vocational education "Modern vocational education" (for the period up to 2027) provides for a comprehensive and systematic solution of the tasks (education quality provision), decentralization of management and financing, and the creation of effective models of public-private partnership. The solution of these tasks necessitates the search for new forms of organization of educational activity of students, increase of their activity level in mastering the future speciality. Therefore, the study of the essence and structure of the preparedness of skilled workers of the machine-building industry for professional activities in conditions of high-tech production is relevant and is currently timely.

Materials. The processes of globalization of the country's economy, competitiveness increase, the exit of Ukrainian enterprises into international markets, actualize the need not only for skilled workers, but also for workers with a high intellectual level, creative abilities and creative thinking, with high responsibility and self-discipline. As evidenced by the results of the researches of scientists-economists of the scientific school of the Institute of Industry Economics of the National Academy of Pedagogical Sciences of Ukraine (Amosha et al., 2007, p. 95), it is necessary to have staff capable of innovative activity, which is characterized by high level of education and professional training, the appropriate level of creativity, the initiation of new ideas, culture and outlook, the propensity to innovate, the proper level of discipline and responsibility for the development of innovation and personnel potential at any enterprise. The most important qualities that need to be formed by future skilled workers include: readiness of staff to perceive technological innovations and systematic upgrading of the gained knowledge; the need to improve the level of education and qualification; mastering of modern production technologies; the presence of a creative component in the labor activities and the ability to adapt to technological changes in production (Amosha et al 2007, p. 100-101).

V. Radkevich (2012, p. 6) mentions that employers pay special attention to the ability of skilled workers to use knowledge and skills in non-standard situations, feel the need for constant professional growth, improvement of professionally important qualities. In this context, the main task of modern VET institution in the conditions of rapid changes occurring in the labor market, is the training of skilled workers capable of self-realization, rapid adaptation to the requirements of the workplace, active participation in social-economic and cultural processes of the country. Therefore, nowadays an interest increases greatly in educational technologies, models and innovations that can provide high quality training of skilled workers and the implementation of educational state standards and programs (Drozach, 2009, p. 73-79).

The theoretical basis for the solution of the mentioned problem is the works of domestic and foreign scientists: in the philosophy of modern education (V.Andrushenko, I.Zyazyun, V.Kremen, V.Lutai, V.Ognevyuk, etc.); lifelong vocational education (S. Batushev, O.Borodienko, L.Gerganov, P.Lusan, N.Nichkalo, V.Orlov, L.Pukhovska, V.Radkevich, S.Sisoyev, etc.), the introduction of a competent approach in vocational education (V. Zagvyazinsky, V. Lugovy, V. Yagupov, etc.); the introduction of innovative learning technologies (M.Prigodiy, G.Romanova, V.Slastonin, etc.), didactic and pedagogical aspects of project learning (L.Zazulina, N.Kulalaeva, O.Marinovska, E.Polat, etc.); professional training of specialists of machine-building (A.Lytvyn, O.Markovsky, V.Pardzhnitsky, L.Slipchyshyn, M.Fomina, etc.). According to the results of the analysis of the works of German researchers (A.Shelta, K.Stratman, etc.), the dual system ensures a close relationship between vocational training and the production sphere, the timely response to changes of production sphere's needs in the light of development trends (Henning and Petzold, p. 185). At the same time, the problem of the professional training of future skilled workers of the machine-building industry at the VET institutions by the dual form of education is not sufficiently studied.

The main provisions of the organization of the dual form of education as a practice-oriented one, distinguishing it from other forms, are as follows: where: the source of the goal setting is the request of the economic sphere (the core of "social practice") to qualified personnel of a certain level, profile and qualifications; developed mechanisms of public-private and social partnership are based on the involvement of interaction of the teaching staff of the VET institutions with the representatives of the economic sphere – the direct customers of the working personnel); the prevailing of practical forms (in

educational process) enables the formation of specific professional competencies.

In European countries, with the help of dual education, companies provide themselves with skilled staff that meets the specific requirements and demands of the employers. This allows to save money on the selection and adaptation of workers, bring up the young generation of workers in accordance with their requirements, working conditions, corporate culture of the enterprise, train the specialist who is able to join the work from the very first days and perform it at a high professional level.

The dual form promotes a greater integration of education, science and business and is widespread in Germany, Austria, and Switzerland. It focuses on the spatial and temporal combination according to the principle: 40% of studies – at the educational institution and 60% – internships at enterprises (dual education). In Germany, on average, almost 65% of young people study by the dual system of education, others – on a traditional basis (education takes place at the educational institutions). When, as a rule, our young people aspire to enter the institution of higher education after school (hereafter: HEI), more than half of the children in Germany go through vocational education, preferring to have a "real business" in their hands. 60% of young people with secondary education, having chosen a certain direction of vocational education and training, are going to study by the dual form. Currently, there are 450 main specialties (trades) in Germany, of which 344 are trained within the dual education system. Despite the fact, the entrepreneurs who participate in such a program, invest significant amounts and receive significant benefit from it. All funds invested by them for the professional training of the specialist are returned with profits in 9 months, and after maximum 2-3 years.

The results of research on modern models of vocational education and training in the EU countries indicate the existence of various types of financial support for dual education, including through the use of subsidies. In Austria, in particular, financial grants are provided both (during the employment of students, in accordance with the collective agreement in the first year of apprenticeship), and for each subsequent year of their stay in employment relationships within the framework of apprenticeship programs (Radkevich et al., 2018, p. 162).

The peculiarities of the dual education of specialists in Germany include those where colleges prepare specialists, collaborating with production. Curricula are designed so that during one or two days a week the student undergoes theoretical training, and during three or four days he works at the enterprise; the student receives wages, social privileges from the firm or factory; after finishing education the graduate passes the specific state examinations; the main expenses for vocational training are covered by the enterprise, and also compensates are paid to instructors who are diverted from the main work for mentoring; as a reward for the student (80% of the wage level of a skilled worker, ranging from 300 to 800 Euros a month); the state can stimulate the training of specialists in priority specialties, paying money for different types of state subsidies to enterprises; the final control of knowledge of students is carried out by independent commissions of Chambers of Commerce and Industry in order to prevent manipulations by educational institutions and enterprises; after taking exams the graduate receives three certificates at once: from the vocational school, from the enterprise and a state recognized specialty certificate from the Chamber of Commerce and Industry.

V. Radkevich (2017, p. 8) approves that trainers of production training (coaches) play a leading role in the dual system of vocational education in Germany. They, in accordance with the provision on the organization of professional training, are responsible for its quality. Their main task at the enterprise is to provide students with practical training in a particular specialty (trade).

Based on the approval of the German educator V. Grainert (1995), we distinguish a number of functional criteria of the dual system of vocational education: the need for the number of workers and students is regulated by the labor market; if enterprises offer certain professions and trades, they are guided by legitimate state norms; the carrier of vocational education is an enterprise, but the process of professional training is organized according to state legislative norms and is subject to direct or indirect state control; the quality of professional qualifications is ensured, first and foremost, in accordance with the requirements of the enterprise, as well as taking into account the requirements of the state, trade unions and the Union of specialists; funding for vocational education by the dual system is made mainly by enterprises, as well as by different funds and partial public funding; the level of systematization of professional training is determined by the needs of the state, society and it depends on financing.

Assessment of the International Institute for Labor Quality Monitoring shows that Germany is one of the leaders in terms of personnel qualifications. Such a form of vocational education has acted as a product of social partnership, which is built and supported by the general goal due to training of highly qualified personnel in accordance with the needs of the labor market through established mechanisms of close interaction between the state, educational institutions

and employers (Kozak, 2007). It is represented by three characters: the enterprise (employer), the institution of education and the Chamber of Commerce and Industry (an intermediary between the institution of education and the enterprise). Chamber of Commerce and Industry carries out the formation of an order for the training of skilled personnel.

Hence, the dual form of vocational education can be introduced as an infrastructure regional model that provides interconnection of systems: forecasting of needs in skilled personnel, professional self-determination, vocational education, assessment of professional qualifications, training and skills development of teaching staff, including tutors (instructors) in the workplace. Relations between the parties are characterized by flexible consensus, collegiate management system. Each system influences the development of another one, and one can not exist without the other one. The effectiveness of the dual form of education is provided by the integrity and simultaneous distribution of functions of the participants.

Methods. In order to solve these identified problems, traditional methods of pedagogical research were used, in particular: historical method (study of literary sources, normative-legal and educational-methodical documents, comparative analysis of domestic and foreign experience of training of workers of the machine-building industry); method of theoretical research (analysis and synthesis, modeling, generalization, systematization of theoretical data).

The aim of the paper is to substantiate the essence and structure of the professional training of future skilled workers of the machine-building industry by the dual form of education.

Results and discussions. The radical transformation of the social-cultural and economic spaces of Ukraine affects education inevitably, including vocational one. The new approach to the system of vocational (VET) education enables to provide high-quality training of highly skilled specialists of the future. Currently, VET institutions are in need of modernizing vocational education. The implementation of the system of dual training of working personnel opens up new additional prospects in raising the level of efficiency of vocational education.

Based on the research, we consider it necessary to clarify the meaning of the concept of "essence". The interpretation of this term is defined as the most important, main, a content, a basis. From a philosophical point of view, "essence" is defined as "the main thing that is decisive in an object and which is conditioned with deep links and development tendencies and is recognized at the level of theoretical thinking" (Busel, p. 14-17). The essence of modern vocational education is to create a qualitative educational environment in which graduates meet the demands of the labor market. Educational environment should be constantly improved taking into account modern technological processes. All this is possible under the condition of effective public-state partnership, one of the forms of which is the dual form of education.

In general, revealing the essence of the dual system of training, it should be noted that it strengthens its practical orientation by integrating a large volume of production practice into the educational process, which enhances the professional mobility of graduates greatly. At the same time, the introduction of the dual system involves a fundamental change in the organization of the educational process, based on a rational combination throughout the academic year of theoretical training with production training and practice at enterprises, organizations. Accordingly, the role of the principle of individualization of practical training and the approximation of its content to the real conditions of the enterprise, which manifests itself in the maximum practical orientation of tasks and diploma works on the demands of enterprises and organizations – future potential employment places for graduates, is actualized.

In the choice of the vector of scientific research of the stated topic of the paper, we proceed from the need to clarify the meaning of the notion of "structure", which is interpreted "as a way of a logical connection between the components of objects and the phenomena of nature and society, thinking and cognition, the set of essential connections between the allocated parts of the whole, which ensure its unity; the internal structure of something" (Shynkaruk, p. 611).

The dual form of education is the maximum practical oriented training, based on a social partnership, aimed at creating a new model of professional training for education researchers (with an innovative format) which have an extended range of competencies. As an invariant basis for the process of person-oriented learning, an ideal model of competence enables one to design a variety of specific learning options at all stages of the system of lifelong education. However, this is a general model, which, in principle, can not be unambiguous, since the competences that are formed by students are their multifaceted, multidisciplinary characteristics, which are influenced by a significant number of external and internal factors. They can not be interpreted as a set of subject knowledge and skills. Whereas the spectrum of properties and functions of this concept is quite broad, it is possible to construct several different models of this concept that form its general (system)

model. Then, each of the given below models, with appropriate interpretation, will reflect only certain aspects of the concept of "competence": cognitive, operational-technological, motivational, ethical, social, behavioral, and others. We restrict ourselves to considering professional competence as an informational-action-related category and present its model in the form of four interrelated components: valuable-motivational, innovation-cognitive, professional-action-related, reflexive-estimated (Khutorsky, pp. 60). Valuable-motivational component involves the ability of future skilled workers to determine goals (operational, tactical, strategic) in their professional activity, awareness of their own benefits from the economic, social, environmental benefits of work. Innovative-cognitive component covers a set of theoretical knowledge about the effective use of natural resources. Innovation is a must for theoretical knowledge, because renewal of its contents with information on modern technological processes (prospected from the point of view of ecological characteristics, resource and economic efficiency, technical methods, methods of preventing and reducing negative environmental impacts) is important for the formation of energy-efficient competence of future skilled workers. The Law of Ukraine "About Innovation Activity" (Ukrainian Legislation, 2002) also proclaims the necessity of reproduction of "scientific and technical potential of the country, production of competitive products" (in the content of theoretical knowledge). The professional-action-related component contains an effective, integrative application of practical skills. N. Nichkalo (2013, p. 87) defines professional competence as the sum of attributes (mobility of knowledge, possession of operational knowledge, flexibility, critical thinking, ability to choose among many solutions the most optimally). It should be noted that the development of professional competence of students takes place under the conditions of comprehension, comparison, comparative analysis of the obtained results and previous practical actions (operations), therefore the reflexive-estimated component is included into the structure of professional competence.

The diverse description of professional competence is based on the principle of unity of consciousness and activity. It contains a set of distinctive features that make up the contents of the named components. Taking into account that the highest level of attributes is taken as a criterion in the scientific literature, the formation of the professional competence of future skilled workers is coordinated with the selected components and determined by the motivational, cognitive, action-related and reflexive criteria (Glushchenko, 2017, p. 5).

Under current conditions, approaches to organizing the educational process in VET are changing. Organization of educational process is based on the peculiarities of the business process of the employer company, which includes all activities necessary for the performance of educational tasks. The business process involves receiving orders, scheduling, delegation of tasks, performance of own volume of work, documenting of the quality and cost of materials, as well as the transfer of finished product to the customer. The running of such a process is the ability to perform (plan, control) a concrete, typical task for a given profession, taking into account the organizational framework conditions. For the researcher of vocational education, a situation is created in which he uses and develops his knowledge and skills in the course of performing professional tasks.

Thus, after analyzing the essence and structure of the professional training of modern workers, the main tasks of the dual form of education include: strengthening and improvement of the practical component of the educational process and the preserved sufficient level of theoretical training that ensures compliance with educational standards; training of personnel that corresponds to the modern requirements of the labor market and employers; increase of the motivation of education researchers to acquire a specialty (trade), qualification and obtain employment opportunities; increase of professional mobility and competitiveness of the graduate in the labor market; provision of interconnection, interpenetration and mutual influence of different systems (science and education, science and production), which enable to change the education qualitatively; the adaptation of education researchers to the conditions of production.

Conclusions. The results of the analysis of domestic and foreign experience about the training of working personnel in the system of vocational education (VET) give us the opportunity to conclude that the introduction of elements of the dual form of education has a strategic significance for the formation of the country's labor potential.

The use of elements of the dual system in the educational process affects the increase of the attractiveness of the professions (specialties, trades) in the machine-building industry; provision of the growth of mobility and competitiveness of graduates of VET institutions at the labor market; security of opportunities for students and teachers to engage in the most up-to-date production technologies, which, in the end, will contribute to improving the quality of vocational and practical training of future skilled workers of the machine-building industry, and the level of interaction between the teaching staff of VET institutions and employers.

Specification of the essence and structure of the concept of "professional training of future skilled workers of the machine-building industry by the dual form of education" allows to actualize the relationship of the main components in the overall system model of the modern graduate. The identified specification is a prerequisite for the study of the current state of development of professional training of working personnel and the development of the appropriate pedagogical system for the training of working personnel of the machine-building industry.

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УДК 377.3:621]:37.091.31-022.215

Професійна підготовка майбутніх кваліфікованих робітників машинобудівної галузі за дуальною формою здобуття освіти

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Реферат: У статті зосереджено увагу на необхідності обґрунтування суті та структури професійної підготовки майбутніх кваліфікованих робітників за дуальною формою здобуття освіти. У контексті сформульованої мети здійснено аналіз понять "суть", "структура" та "професійна компетентність". На основі результатів аналізу й узагальнення наукових досліджень установлено, що професійна підготовка майбутніх кваліфікованих робітників машинобудівної галузі за дуальною формою здобуття освіти має оцінюватися за мотиваційним, когнітивним, діяльнісним і рефлексивним критеріями. Структура професійної підготовки майбутніх кваліфікованих робітників машинобудівної галузі за дуальною формою здобуття освіти представлена у вигляді чотирьох взаємопов'язаних компонентів: ціннісно-мотиваційного, інноваційно-когнітивного, професійно-діяльнісного, рефлексивно-оцінного. Охарактеризовано модель дуальної форми здобуття освіти в Німеччині. Визначено, що взаємодія професійних шкіл Німеччини та роботодавців на індивідуальному й інституційному рівні вважається одним з найдієвіших інструментів розбудови системи професійної освіти. Автором здійснено теоретичний аналіз педагогічних джерел філософської, навчально-методичної, психологічної, педагогічної літератури та наукових праць вітчизняних і зарубіжних дослідників, нормативно-правових документів; моделювання (синтез), порівняння, класифікація, сис-

тематизація й узагальнення теоретичних та експериментальних даних. Проаналізовано особливості оновлення змісту професійної освіти, управління системою професійної освіти, зміни в системі професійної підготовки фахівців машинобудівної галузі, приведення структури професійної освіти у відповідність до попиту на ринку праці та вимог роботодавців. Здійснено аналіз джерел щодо передумов та особливостей оновлення змісту професійної освіти, питань управління системою професійної освіти, відповідних змін у системі професійної підготовки фахівців машинобудівної галузі, приведення структури професійної освіти у відповідність до попиту на ринку праці та вимог роботодавців. Акцентовано увагу на формуванні в майбутніх фахівців машинобудівної галузі професійно важливих якостей, що проявляються у психологічній, теоретичній та практичній підготовленості до професійної діяльності. Визначено основні причини й недоліки сучасної системи професійної підготовки, обґрунтовано напрями модернізації професійної підготовки фахівців машинобудівної галузі в закладах професійної (професійно-технічної) освіти.

Ключові слова: *професійна освіта, дуальна форма здобуття освіти, професійна підготовка, соціальне партнерство, кваліфіковані робітничі кадри.*

Received: 10 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.62-66

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 62-66

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METHODOLOGICAL APPROACHES TO PROFESSIONAL TRAINING FOR FUTURE PHYSICAL THERAPY AND ERGOTHERAPY SPECIALISTS

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Abstract. The article reveals the essence of concept "approaches", envisages methodological basis for shaping the readiness of future physical therapy and ergotherapy specialists to use health and fitness technologies in professional activity. It is defined that the activity, system, axiology and competence-based approaches ground shaping the high-qualified, competent specialist in health protection sector where the health and fitness technologies are the key mean for professional activity. In the framework of our research the general science basis for shaping the readiness of future physical therapy and ergotherapy bachelors to use health and fitness technologies forms system and axiology approaches. That gave the possibility to set the aim, tasks and directions for readiness process shaping, open that essence and structure. The person approach orients the pedagogical influence on a person's professionally important skills development. The following approach also ground the theory and methods basis of our research. The activity approach directs the professional training to shaping the appropriate skills for future specialists, like organization-methodical, cognitive, communication and motofacient skills. The competence-based approach has become the basis for defining appropriate competences of future specialists' professional self-realisation.

Keywords: *professional training, methodological approach, physical therapy, ergotherapy, physical rehabilitation.*

Introduction. In Ukraine the speciality "physiatrics and ergotherapy" is a rather new branch of health care. Therefore, there is a significant scientific interest to its methodological system: purpose, content, technologies (methods, forms and means of training) and training outcomes.

The professional duties of a physical therapist or an ergotherapist include the disordered function identification and their functional restoration. Taking into account that the main means of future professional activity for these specialists are physical and healthy technologies, it is necessary to determine the methodological basis for solving the problem of forming their readiness to apply the appropriate physical and health technologies in future professional activity.

The **research aim** is to define and substantiate the methodological approaches to forming the readiness of future physical therapy and ergotherapy specialists for using physical and health technologies in future professional activity.

Methods. Analysis of scientific and methodological literature, compilation the research results of certain authors.

Results and discussions. We consider forming the readiness of future physical therapy and ergotherapy specialists to apply physical and health technologies in higher education institutions as a holistic process. It reflects development features of the professional activity sphere, the physical therapist's and ergotherapist's place and role, basic requirements for theoretical knowledge content and skills necessary for performing professional activities in efficient way (successful solving of professionally important tasks and performing professional functions). Taking into account the latest trends of higher physical education

development and transformation, it is important to formulate the efficient methodological approaches for future physical therapy and ergotherapy specialists training.

The methodology as a doctrine of research methods and techniques examines the essential characteristics of specific methods of cognition, those form the general direction of the research (Kuzmyna and Zymycheva ed., 2000)

The important task of the methodology is to develop the scientific approaches for investigate any science-studied phenomena.

In the philosophical dictionary the "approach" is interpreted "as a complex of paradigmatic, syntagmatic and pragmatic structures and mechanisms in cognition or practice; it characterizes the competing (or historically changing) strategies and programs in philosophy, science, politics, or in people life and activities organising" (Frolov ed., 1991).

According to N. Diusheieva's definition (2008, p.19), the methodological approach is a strategy based on the main provisions of relevant theory and defines research directions on the subject of the study.

The analysis of scientific and methodological materials indicates the possibility of applying a variety of approaches to create conditions for studying from different aspects of the phenomena under investigation on the basis of a separate aspect. This diversity allows scholars choosing the appropriate approach. However, given that, it is difficult to understand the subject of the research from the standpoint of only one approach. Scientists often rely on several approaches combination (Grytsay, 2017).

In our study we will consider methodological approaches to solving the problem of forming the readiness of future physical therapy and ergotherapy specialists for using physical and health technologies in future professional activity, namely: systemic, axiological, activity, personal, competence.

The system approach is the direction in the special methodology of science. Its task is to develop methods for research and designing complex objects organizing them as systems "(Honcharenko, 1997, p. 305). The theory of a systematic approach is a scientific foundation for studying the professional training for future physical therapy and ergotherapy specialists as a holistic process with interconnected and interrelated structural components. Its application in pedagogical researches is thoroughly represented in the scientific works by S. Arkhangelskyi, V. Bezpalko, B. Hershunskyi, V. Zagviazynskyi, A. Zhylina, V. Kraievskyi, V. Shadrikov and others.

The main principles of system approach are the following: integrity (simultaneous considering the system as a whole and at the same time as a subsystem for higher levels); structure hierarchy (elements subordination: lower to higher ones); structuring (analysing system elements and their relationship within a specific organizational structure); multiplicity (use of cybernetic, economic and mathematical models to describe individual elements and systems in general); systematic (the object's ability to posses all the signs of the system) (Novykov, 2013, p. 160).

Based on systematic approach, we identified the structural components of future physical therapy and ergotherapy bachelors' readiness for using physical and health technologies as well as connecting them by structure and functions. They are the motivational-value, cognitive-content, personality-active. That created the basis for modelling the training process for future physical therapy and ergotherapy bachelors to use fitness and health technologies in their future professional activities. In addition, the systematic approach promotes integration of scientific knowledge tool-set from other disciplines.

Axiology is a philosophical theory or doctrine of values, their essence and nature, types and values. It finds out the qualities and properties of objects, phenomena, processes to meet the needs, interests and desires of people (Bigun, 2004). The axiological approach realizes the possibility to direct the content, forms and methods of forming the future specialists' professional competence to an individual's values (Gavrylova, 2015, p. 13).

The standpoint of the axiological (value) approach foresees training for future physical therapy and ergotherapy bachelors to use physical and health technologies taking into account social and individual-individual value orientations. Given that the profession of a physical therapist relates to person-person activity. Its highest value is the person himself, his life and health. Thus, the activity character depends on the values system content to determine the individual's efficient attitude to the objects of his/her activity. Different objects can cause different activity, like emotional (sensory), cognitive, behavioural etc. (Belikova, 2014, p. 20).

Thus, the axiological approach in shaping the readiness of future physical therapy and ergotherapy bachelors to use physical and health technologies directs the process for developing a value relation to the subjects of their professional activity, their life and health, and humanist attitude to all rehabilitation participants regardless of age and their nosological group.

System and axiological approaches constitute the general scientific basis for training future physical therapy and ergotherapy bachelors to use physical and health technologies. Personality is the socio-psychological essence of a person. It is formed as a

result of assimilating the social experience of mankind (socialization) and self-consciousness forming. The personal approach is a theoretical and methodological basis for training future physical therapy and ergotherapy bachelors to use physical and health technologies. In terms of pedagogical process its essence is oriented on a person "as a goal, subject, result and the main criterion of its effectiveness"; the recognition of "an individual's uniqueness, his/her intellectual and moral freedom, the right for respect" (Slastionin et al., p. 100).

The decisive for an individual's development are his/her needs, interests, abilities and value orientations in light of his/her ability to manage their formation. Nowadays, it is the issue of considerable scientific interest. The professional training of future physical therapists and ergotherapists will be as efficient as possible if the learning process takes into account a student's individual characteristics, personal interests and needs.

Taking into account the above-mentioned, we note that training future physical therapy and ergotherapy bachelors to use physical and health technologies should take into account the personal approach. Thus, it is targeted at developing professionally important qualities of a person (social, volitional, intellectual and appropriate physical form). It will contribute to setting emotional and positive contact with the subjects of his/her professional activity, clear organization of various aspects his/her professional activity, gaining the higher level of professional knowledge, independence in selecting and justifying health technologies for rehabilitation purposes, implementing sports and recreation activities principles.

Personal development depends on the nature of activity structure. The activity is an expedient transformation of the surrounding reality by people where the initial form is labour, namely, labour activity. Human activity, influencing the surrounding world and transforming it, is a mean for satisfying its various needs and simultaneously the factor of its physical, intellectual, mental and spiritual formation as a socially useful personality. In this case, the structure of activity should include the unity of purpose, needs and motives and their relation, activity and operational component (Kovinko, 2015, p. 110).

By its essence and content, the concept of "activity approach" is a complex and multifaceted entity. It includes the analysis of a person's formation, self-actualisation, self-development as a subject of activity (Ivaniuk and Sichkar, 2015, p. 127). The theoretical substantiation of the activity approach is highlighted in researches by G. Atanov, I. Bekh, N. Guzia, L. Zaytseva, G. Ivaniuk, V. Lozova, T. Sevustianenko, M. Shut and others. The key value of the following system the activity. Therefore, from the standpoint of the activity approach, its content and functions, the process of professional training are oriented on a student's personal and professional potential development, shaping his/her vision of the activity subject. It increases motivation to master theoretical and methodological knowledge and skills and practice in practicing physical and health technologies, as well as independent thinking in solving professional problems.

Consequently, the activity approach in our study has become an important methodological basis for identifying methods, technologies and forms of organising students' activities aimed at shaping professionally important skills and practical use of physical and health technologies in future professional activities. In particular, organizational and methodological (managing own activities and behaviour, planning and implementing individual and group programs of fitness, rehabilitation and collecting direction in accordance with patients/clients' functional state, physical development and health, selecting the optimal methods, means for solving the set goal etc.), cognitive (the ability to creatively reconsider and apply special knowledge in various professional activities, carry out a prognostic analysis based on the result and the functional assessment and assessment of physical development, performance, features of the method of using physical exercises, etc.), communicative (ability to establish contacts, prevent conflicts, to establish productive interaction, etc.), motofacient skills (technically correct demonstration of motion, reproduction of the most accurate image of the motor actions through demonstration and verbal explanation, etc.).

The competence-based approach is considered by scholars as the basis for determining learning outcomes in the form of competence (competencies). The problem of the competence approach in education was studied by V. Baidenko, V. Bolotov, F. Honobolin, B. Yelkonin, E. Zeier, I. Zymnia, I. Ziazun, V. Kraievskyi, N. Kuzmina, A. Markova, A. Novikov, O. Ovcharuk, T. Ordzhi, J. Raven, E. Rogov, B. Serikov, L. Parashchenko, Yu. Tatour, L. Tarkhan, V. Tusheva, S. Trubachova, G. Freiman, M. Holsted, A. Khutorskyi, V. Shadrykov and others. Implementing main provisions of the competence-based approach directs the professional training process for physical therapy and ergotherapy bachelors to eliminate the disadvantages of pedagogical education content. They are in shifting the emphasis on students' quantitative assimilation of theoretical information to skills development for their practical implementation in professional activities to solve complex professional tasks. The crucial role in this case is played by the practical direction of future specialists training.

According to this approach, the professional training of future physical therapy and ergotherapy specialists for using physical and health technologies in professional activities should be aimed at forming appropriate competencies necessary for future specialist's professional self-realisation, in particular: integral (the ability to solve complex professional tasks of functions recovery using physical and recreational technologies), general (the ability to evaluate the results of own actions and improving the quality of providing physical and health services, observance of the general ethical norms in professional communication) and special (the ability to understand theory and methodology basis for practicing physical and health technologies, conduct rehabilitation examination, plan and implement rehab programs by means of physical and health technologies respectively to patient's/client's functional state and physical capacity level etc.). The activity and competence-based approaches in terms of our research lead to a practical basis for forming the readiness of future physical therapy and ergotherapy bachelors to practice physical and health activities.

Conclusions. Thus, the following methodological approaches play a leading role in shaping the professional readiness of future physical therapy and ergotherapy specialists to apply physical and health technologies in future professional activities: systemic, activity, competence, axiological, personal. The system approach determines the pedagogical process integrity with corresponding structure, hierarchy of its components; the axiological approach contributes to shaping students' professional and personal values, visions and motives; the personal approach involves creating the necessary conditions for developing a student's professionally important individual qualities; the competence-based approach directs the professional training on forming a competent specialist by means of practice-based training; the priority value of the activity approach is an individual's activity when he/she develops and improves the range of his/her competences.

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УДК 37.02:[378:615.8]

Методологічні підходи до професійної підготовки майбутніх фахівців фізичної терапії та ерготерапії

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Реферат. У статті висвітлено суть поняття "підходи", розглянуто питання методологічного підґрунтя формування готовності майбутніх фахівців з фізичної терапії та ерготерапії до використання фізкультурно-оздоровчих технологій у майбутній професійній діяльності. Визначено, що діяльнісний, особистісний, системний, аксіологічний та компетентнісний підходи є ґрунтовною основою для формування висококваліфікованого, конкурентоспроможного фахівця у сфері охорони здоров'я, де фізкультурно-оздоровчі технології являються основним засобом майбутньої професійної діяльності. У рамках нашої роботи загальнонаукове підґрунтя формування готовності майбутніх бакалаврів з фізичної терапії, ерготерапії до застосування фізкультурно-оздоровчих технологій складають системний та аксіологічний підходи, що дали змогу визначити мету, завдання і спрямування процесу формування готовності, розкрити її суть та структуру. Особистісний підхід спрямовує педагогічний вплив на розвиток професійно важливих якостей особистості і становить теоретико-методичну основу нашого дослідження. Діяльнісний підхід націлює професійну підготовку на формування відповідних умінь та навичок майбутнього фахівця, серед яких – організаційно-методичні, пізнавальні, комунікативні та рухові уміння. Компетентістний підхід став базовою основою для визначення відповідних компетентностей, необхідних для професійної самореалізації майбутніх фахівців.

Ключові слова: *професійна підготовка, методологічний підхід, фізична терапія, ерготерапія, фізична реабілітація.*

Received: 21 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.67-74

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 67-74

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

DIGITALISATION OF PROFESSIONAL (VOCATIONAL) AND PRE-HIGH TERTIARY EDUCATION OF UKRAINE: PROBLEMS AND PROSPECTS

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Abstract. The national professional (vocational) and pre-high tertiary education are represented based on the analisys national legislation, the materials of Ukrainian and foreign mass-media, scientific articles on reforming education system issues, statistic data of Ministry of Education and Science of Ukraine, State Statistics Service of Ukraine, State Employment Service, the Internet-sources (HeadHanter, UNESCO Database, Approved Event (UFI), Eurostat Educational Statistics), VET schools and colleges web-sites, analytical materials the Institute of vocational education of the National academy of educational sciences of Ukraine (NAES), Institute of information technologies and learning tools of NAES of Ukraine.

Common problems of professional (vocational) and pre-high tertiary education digitalisationare the following: education development lagging (content, training forms and methods, technical equipment) in comparison with digital technologies development pace: outdated occupations; education program content and labour market requirements disbalance; conservative training methods and forms for future specialists training and the teaching staff upskilling, VET schools outdated material and technical basis; low digital competence level of most VET schools managers and teaching employees; poor communication of business, IT companies and education establishments. The professional (vocational) and pre-high tertiary education digitalisation prospects are identified in the context of digital society building and digital economy development: public-private partnership strengthening; dual form of education introduction; distance and mixed learning (blended learning) organization; inclusive education introduction; competence-based approach in the educational process; scientific and educational on-line platforms creation; individual education pathways building at educational institutions for employment in "digital workplaces"; the introduction of new forms and methods for educators digital competence improving the (digital workshops, barcamps, virtual laboratories).

Keywords: *IT education, education digitalisation, digital competence, digital culture, professional (vocational) and pre-high tertiary education.*

Introduction. In the early 2000 all around the world the share of the traditional economy is decreasing and, at the same time, the digital one is rapidly increasing. The analytical materials of the World Economic Forum in Davos (2019) identified a list of the most promising digital technologies, including mobile, cloud, biometric, blockchain, virtualization, augmented reality, additive (3D-printing), identification, digital intelligence. Among the priority issues of the world community is the search for new tarining forms and methods to provide vocational education and training (VET) schools leavers with skills for life and work under the conditions of Industry 4.0.

The forum noted that 10 trillion dollars are being spent to train 1.5 billion children in the world At the same time, it was stressed that mostly these investments are for the "curricula and subjects not been changed for 150 years" (Kornienko, 2019). This problem is completely crucial for VET and pre-high tertiary education (pHTE) in Ukraine when the digital economy is a new and unusual development paradigm.

The first step towards the domestic digital economy development was made by the Ordinance of the

Cabinet of Ministers of Ukraine in 2018 "On approval the concept for developing the digital economy and society of Ukraine 2018-2020 and adopting the plan of implementation activities" (Ukrainian Legislation, 2018). The Concept focuses on developing the digital competences for all Ukrainian citizens, implementing the concepts on digital jobs, real sector of economy digitization and forming the thorough national policy for degitalisation the education sector. Therefore, the analysis of the national VET main problems and perspectives in the context of digital society and economy development and the enderpinned need to solve the government's priority tasks on education process digitalization is an urgent problem for modern professional and pre-high tertiary education.

Materials. By and large the attention of modern researchers is focused on the problems of general secondary education informatization in Ukraine, ICT use in school education, theoretical and methodological principles for computer science teachers training etc. At the same time, some aspects of national professional (vocational) education (P(V)E) and pHTE systems digitalization are represented in papers by O. V. Baseliuk, V. Yu. Bykov, O. D. Humenniy, A. M. Gurzhiy, A. G. Kononenko, N. V. Morse, L. M. Petrenko, V. O. Radkevych, O. M. Spirin and others. Among the recent studies, the following works should be noted: O. V. Baseliuk (2019, p. 5), where VET digitalization is represented as a global socio-natural process; A. G. Kononenko (2016, pp. 61-64) – devoted to various aspects of informational and educational environment creation in VET schools; O. D. Humenniy and V. O. Radkevych (2016, pp. 11-19) on studying SMART-complexes for educational subjects in VET schools and the information culture of managers (Humenniy, 2013, pp. 84-89), M.-O. Ershov (2018, pp. 79) outlining the role of Ukrainian IT education in the global market for information products and services. At the same time, the issue of continuity coverage in the domestic IT education development and generalizing main trends on modern VET and pHTE digitalization are still crucial.

Therefore, **the research aim** is to identify and analyse main problems and perspectives of digitalization the modern professional (vocational) and pre-high tertiary education in Ukraine.

To achieve the stated goal, the **methods** of analysis, systematization and synthesis of the elaborated sources are used, among them: natioanl legislative documents, materials of Ukrainian and foreign mass media, scientific publications on education system reforming in Ukraine, statistics of the Ministry of Education and Science of Ukraine, State Statistics Service of Ukraine, State Employment Service, the Internet-sources (HeadHanter, UNESCO Database, Approved Event (UFI), Eurostat Educational Statistics), analytical materials and reports of the Institute of vocational education of the National academy of educational sciences of Ukraine (NAES), Institute of information technologies and learning tools of NAES of Ukraine, etc.

Results and discussions. "The Concept on development the digital economy and society of Ukraine 2018-2020" is focused on important economic and social trends that can be taken into account in the process of national VET and pHTE systems reforming. Among them there are the digital competencies development for all citizens of Ukraine, the real sector of economy digitalization and the concept on digital jobs impelmentation (Ukrainian Legislation, 2018).

Despite the outlined tasks prolongation on the long run, the Concept authors deliberately limited the validity of the document for a three-year term (2018-2021) (Dubrovik-Rokhova, 2018). According to the Moore Act (Moore, Gordon E., Cramming more components on integrated circuits, Electronics, Vol. 32, No. 8, April 19, 1965), the speed and development of digital technology should double each year. So, three years study at the educational institution for the digital world means six. Even taking into account the fact that the Moore Act was limited in time (DLOG MIT, 2017), nowadays it is increasingly being discussed changing the high-speed paradigm of digital technology development, thanks to its intensive logistics development in various spheres of activity. In particular, engineers and businesses made operating plans and computer vendors could predict the vanishing and forthcoming generations of machines.

At the World Economic Forum in Davos (2019), the problem of the education development lag comparative to digital technologies development movement was called the global challenge of our age. Forum participants admitted that mostly educational investment was directed at curricula and subjects not been undergone the significant changes for long time. The post-Soviet VET system turned out to be too cumbersome and awkward to meet the ever-increasing economy and society needs of a changing digital era. Already traditional VET system critical gap with society and economy demands, those being digitalised much faster, is explained by digital technologies rapid development pace. At the same time, there are some other reasons.

For example, VET digitalization problems are also related to the teachers' digital competence level and the outdated material and technical base of a large number of VET schools. In lots of VET schools managers and educators still prefer a printed book and chalk, rather than electronic educational resources, SMART complexes, distance learning forms, virtual labs, etc. This is confirmed by the results of an experimental study of VET schools managers' and

pedagogical staff's readiness to develop and use SMART complexes for skilled worker staining. The experiment was conducted by IVET of NAES of Ukraine in 2018 (Prihody, 2018). As a part of the study the hypothesis on teaching employees' readiness to develop and use SMART-complexes is capable to be developed while increasing their SMART-technologies awareness level was put forward. Therefore, the attention was focused on the following levels identification. It was found that only one third of the interviewed VET managers has a high level of SMART-technologies awareness. In addition, it was found that 79% of interviewed VET managers use the uncomputerised information sources for their work, and only 21% the computerized ones.

It is also established that the overwhelming majority of managers can not conduct research using virtual reality systems, use arrays of information stored in it, and construct managerial situations models of information-analytical and psychology-pedagogical nature. It is found that 52% of teachers those asked of general and specialist disciplines do not understand how the subject SMART complex can contribute to improving teaching quality. Moreover, for the experienced educators (of more than twenty years) this tendency is more vivid. This can be explained by the fact that this category of teachers did not receive proper informational education in his/her time and during his/her next professional activity he/she himself/herself was not able to master digital skills at sufficient level for of modern vocational training efficient organization. It is obvious that such low digital-skills of VET schools managerial and pedagogical staff are seriously hampering P(V)E digitalization processes. Thus, the problem of increasing the digital competence level (a set of knowledge and skills necessary for using ICT and digital media in pedagogical activities) and digital culture (value system, digital competence, ethical behaviour in the field of digital relations, critical thinking and creativity) is outlined (Baseliuk, 2018, pp. 83-84). The traditional system of teachers advanced evelopment cannot out-do this problem independently. Obviously, it needs to be solved with employers, civic organizations, and IT companies. In particular, BarCamps – informal democratic open interactive meetings of educators, researchers, IT specialists, business representatives, non-governmental organizations, and government officials – have proved to be an effective form of teachers digital culture and competence increasing. These are conferences of open discussions, trainings, presentations form where the informal atmosphere motivates participants for self-education and self-development.

The low pace of VET digitalisation is also attributable to very weak links of VET and business. It is known, for example, that in the second half of XIX century the attention of businessmen to their children's education level became steadily increasing. If in the 1860's their educational level reached a commercial school or a real college, then since the 1890's it went up to a prestigious university or a higher technical institution. At the end of XIX century for the entrepreneurial class, education became not only the element of prestige, but also a reason for financial security of the merchant dynasties (Yershova, 2015, p. 117). That was explained by the fact that the head of the family inherited not only his acquired capital but also a special economic way of thinking, where the education of workers was a condition for creating a stable social environment for the expansion of entrepreneurial activity. The intensively growing demand of the economy in educated specialists helped entrepreneurs to realize the need for modern professional education not only for their workers, but also for raising the general educational level of the population. That motivated the commercial and industrial elite to establish and maintain modern educational institutions – commercial, technical, and artisan (Yershova, 2018, p. 158).

Unfortunately, nowadays business structures are only beginning to show an active interest in taking part in completing the order for workers training and updating VET content in accordance with digital economy requirements. This is reflected in the Concept of development the digital economy and society of Ukraine 2018-2020, where the "human capital, ie knowledge, talents, skills, experience, people's intelligence" was recognized as the driving force (Ukrainian Legislation, 2018, p. 5). At the same time, the Concept in the part "Education", first of all, emphasizes the conditions of improvement the general secondary education digitalization without direct focus on the corresponding problems of VET and pHTE. However, the text of the document adresses not only to pupils but also to students and can serve as evidence of the Concept provisions extension on VET and pHTE also.

In particular, the Concept refers to the need to digitize the agricultural sector and the competitiveness of domestic farmers as well. That is, a new stage in the agrosphere development will require the ability of modern specialists to use geoinformation systems, on-board computers, smart equipment, to implement innovative ways of cultivating plants and soils, fertilizing and chemical melioration, plant protection products, servicing soil scanners, vertical greenhouses and drones, helicopters-sprayers, etc. According to well-known McKinsey Global Institute research, the leader in replacing manual labour will be the agriculture sector where the largest number of workers

is emploed (Today, 2017). Thus, there is a need to prepare VET and pHTE graduates for "digital agriculture" introduction, called "precise agriculture" in mass-media. In agro professions top of near future, those are already in the scope of interests of leading agrocompanies of Ukraine, there is an engineer of precision farming systems, a digital agronomist, an agri data analyst, an innovator. These professions those can be successfully mastered by pHTE graduates in terms of quality digitalisation.

For example, vacancies of precision farming engineers in the media are called "vacancy of dreams" for today's young mechanics, machine operators, and service center engineers (Approved Event (UFI), 2018). These specialists are expected to become "universal soldiers" of the agrarian sector, able to cope with microprocessors, innovative GIS-systems and monitoring systems. It is also forecasted that in several years the agronomists' digital-skills to operate drones, plan agro-operations with the help of a single farm platform (farm-management) and digital maps (farm-management) – will form the basis for hard-skills formation and successful professional career building.

To form those skills, only classroom work in educational institutions is obviously not enough. It requires permanent practice and self-education. If modern educational institutions can not provide that, their bankruptcy will only be a matter of time. International exhibitions of agricultural machinery and equipment, taking place in Kyiv, prove that by demonstrating rapid agriculture sector digitization. In addition, the Annual Young Specialists Days, called "Career fair" (UFI), 2018), also confirm the fact that at the following occupations are already vacancies in many agro-companies of Ukraine (Eridon, LLC "Agrobudnevny alliance" Astra "AMACO Ukraine LLC", "Agrosem Ltd.", "Agrotek" Ltd., "Ukravtozapchastna" LLC, TM Khlibodar, Timac Agro Ukraine LLC, Cygnet Agrocompany, TERRA FUD Group, LLC "Food DEVELOPMENT", LLC "Bison" -Import ", Ltd. AVD YU avd-ua.com, PrAT Volodymyr-Volynsky poultry farm" Epicurus ", Kernel, UKRAVIT Group of Companies).

Rapid digitization tendency in agro-sector will increase the interest of modern agribusiness in using digital technologies not only in the field, but also in the household and workers' homes. In essence, at present the agricultural sector digitization is the only real way to stop the disruption to rural community, reducing the rural population incomes and their migration to cities. Hence, agriculture sector digitization is a dialectical chance to regain the prestige of agroprofessions that already occurred in Ukrainian villages in the 50s of the last century, when a tractor driver and an agronomist were the most prestigious professions in society.

The same thing happens in industry sector oriented on Industry-4.0. A serious challenge for modern VET and pHTE systems has become a powerful wave of advanced technologies (cloud, mobile, paperless, unmanned, additive, biometric, quantum, through, block, supercomputer, identification, open source), as well as the Internet of things , "big data, "predictive analytics", fuzzy calculations, robotics, artificial intelligence, etc. (Yanenkova, 2017, pp. 182-183). No doubts, there is a need to bring together digital industry and industry representatives to develop new products and services, create "road maps" of digital transformations for the search, digitalization initiatives development and implementation in the industry. It also requires skilled workers and professionals of a new quality capable to work with Industry 4.0 technologies. That is, the modern VET schools and colleges have to train prepare their graduates to perform their professional functions in terms of "digital workplace".

In the draft of the Strategy of Ukraine for the industrial complex development up to 2025, the shortage of skilled workforce for industry needs was recognized as the second of the eight key problems of domestic industry development (Ministry of Economic Development and Trade of Ukraine, 2018). The situation in Ukraine with an insufficient number of skilled workforces is alleged to be aggravated. For example, at the end of 2017, the demand of employers for skilled workers with the tool was almost 24% of the total economic number of vacancies. The demand of employers for technical staff, operators of technological equipment and machines doubled. The situation deterioration is due to the mass outflow of skilled workforce abroad. According to Eurostat (2016), the number of visas issued to the Ukrainians for residence in EU countries more than doubled. Moreover, 75% of the permits received were related to employment. Since 2009, the number of the Ukrainians who went abroad to study abroad has increased by 129% as well. According to IVET (2017), the survey of VET students regarding the choice of the country for their further professional career development also suggest that 43% of the respondents (sample – 1680 students) see that outside Ukraine, and 24% were not determined on this issue (Yershova, 2018, pp. 166).

The unsatisfactory position of modern vocational education is conditioned by its outdated material and technical base, low wages of teachers and masters of industrial training, low level of their readiness to use ICT in educational process, training methods and forms disbalance with LM and economy needs, low communication level between industry, education and IT companies. To overcome the educational crisis, the mere declaration of the country's course on the

digitization of the economy and society is obviously not enough. The leading economists of Ukraine emphasize that any state will be able to maximize the return on the digitization of its economy only if the money is constantly invested in the education system (Yanenkova, 2017, p. 179).

Thus, one of the important directions of the Strategy of Ukraine for the industrial complex development up to 2025 implementation is to provide professional staff training in accordance with industry needs. To this end, it is proposed: to popularize and distribute the system of dual education; practice work-based learning (WBL); support training centers setting and development at industrial enterprises; organize seminars and training courses to build new staffing competencies in industry with a view to introducing digital technologies and ensuring effective communication between industry and education; to modernize professional standards of industrial specialties; systematically supplement the list of new professions, determined by digital competencies, and add them to the State Classification of Professions (Ministry of Economic Development and Trade of Ukraine, 2018). The offered measures analisys of the Strategy draft confirms the readiness of the state to support their implementation not only within formal education, but also directly in production. Therefore, if the system of formal vocational education is not quickly upgraded taking into account all modern challenges, then there are high risks for the loss educational services monopoly.

The course of Ukraine to create a digital economy puts the society and the state face-to-face with the problem of choosing the priority of technology development or use. Obviously, business, manufacturing, state, and citizens are the best consumers of the technologies designed and adapted to the needs of the mass consumer of digital technology. On the other hand, it is logical that fundamental and applied sciences, entrepreneurs-innovators, startup communities, in the first place, should focus on new technologies and products creation. However, Ukraine, where IT specialists, as the media wrote, "has already digitized the half of the world (Dubrovik-Rochova, 2018), has only now officially embarked on the digital economy development and recognized the need for training specialists capable to create their own innovative technologies. In light of this, the digital education system is intended to prepare not only a mass digital technologies consumer but also a creative person capable to produce new ideas and products under certain conditions.

Hence – there is a problem of appropriate methods selection, training means and forms for a professional innovator training. It requires: distance education development; broadband access to the Internet for trainees and students; digital platforms creation with interactive and multimedia content support for the general access of institutions and educational entities, tools for automating main working processes of an educational institution; introduction of innovative computer, multimedia, computer-based learning tools, high-tech equipment for creating a digital educational environment (mixed learning classes, multimedia and inclusive classes, research STEM centers, virtual laboratories); the study of computer science with emphasis on teamwork and creativity; games-based learning to develop critical thinking.

The ignoting by formal education system managers these obvious tendencies and needs will only lead to the qualified personnel's attention switching to the system of informal and non-formational education. Its perspectives are quite clearly formulated in many government documents.

Conclusions. The general problems of national VET and pHTE digitalization were identified and characterized, namely: the development of education from the pace of development of digital technologies; curricula content and LM needs disbalance; low communication level of business, IT companies and educational institutions; obsolete specialties, according to which VET schools train specialists; low level of VET schools managers' and teaching staff digital competence; conservative training methods and forms for future specialists and teachers upskilling; outdated Vet schools material and technical base.

The prospects of digitalization VET and pHTE in the context of digital society and economy development are defined: public-private partnership strengthening; dual form of education introduction; distance and mixed learning (blended learning) organization; inclusive education introduction; competence-based approach in the educational process; scientific and educational on-line platforms creation; individual education pathways building at educational institutions for employment in "digital workplaces"; the introduction of new forms and methods for educators digital competence improving the (digital workshops, barcamps, virtual laboratories).

The prospective areas for further researches are the study of informal and informational IT education development peculiarities in Ukraine.

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УДК 377/378:004

Цифровізація професійної та фахової передвищої освіти України: проблеми і перспективи

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Реферат. Проблеми і перспективи цифровізації вітчизняної професійної (професійно-технічної) та фахової передвищої освіти висвітлено на основі узагальнення аналізу вітчизняних законодавчих документів, матеріалів українських і зарубіжних ЗМІ, наукових публікацій з питань реформування системи освіти України, статистичних матеріалів МОН України, Держстату України, Державної служби зайнятості, інтернет-ресурсів (HeadHanter, UNESCO Database, Approved Event (UFI), Eurostat Educational Statistics), сайтів закладів професійної (професійно-технічної) освіти (далі: ЗП(ПТ)О) та фахової передвищої, аналітичних матеріалів та звітів Інституту професійно-технічної освіти НАПН України, Інституту інформаційних технологій і засобів навчання НАПН України.

Виявлено й охарактеризовано загальні проблеми цифровізації вітчизняної професійної (професійно-технічної) та фахової передвищої освіти, а саме: відставання темпів розвитку освіти (зміст, форми й методи навчання, технічне оснащення) від темпів розвитку цифрових технологій; застарілість спеціальностей, за якими заклади ЗП(ПТ)О готують фахівців; неузгодженість змісту навчальних програм із потребами ринку праці; консервативні методи і форми навчання майбутніх фахівців та підвищення кваліфікації педагогів; відстала матеріально-технічна база закладів освіти; недостатній рівень цифрової компетентності багатьох керівників закладів освіти та педагогічних працівників; низький рівень комунікації між бізнесом, ІТ-компаніями та закладами освіти. Визначено перспективи цифровізації професійної (професійно-технічної) та фахової передвищої освіти в контексті розбудови цифрового суспільства та розвитку цифрової економіки: зміцнення публічно-приватного партнерства; впровадження дуальної форми навчання; запровадження інклюзивного навчання; використання в освітньому процесі компетентнісного підходу; організація дистанційного та змішаного навчання (blended learning); створення науково-освітніх on-line платформ; вибудовування у закладах освіти індивідуальних освітніх траєкторій для працевлаштування на "цифрових робочих місцях"; запровадження нових форм і методів підвищення цифрової компетентності педагогів (цифрові майстерні, баркемпи, віртуальні лабораторії).

Ключові слова: *ІТ-освіта, цифровізація (діджиталізація) освіти, цифрова компетентність, цифрова культура, професійна та фахова передвища освіта.*

Received: 04 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.75-81

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 75-81

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

GNOSEOLOGICAL AND AXIOLOGICAL UNDERSTANDING OF PEDAGOGICAL WORKERS' LEGAL CULTURE IN PROFESSIONAL (VOCATIONAL) EDUCATION INSTITUTIONS

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Abstract. The article deals with the epistemological and axiological essence of the legal culture of pedagogical workers of professional (vocational) education (P(V)E) institutions. The concept of culture as a way and result of human activity is revealed. The attention is paid to epistemological understanding of culture, philosophical approaches to the definition of legal culture, issues of a modern teacher's legal culture development etc.

The normative consolidation of culture in the legislation of Ukraine is highlighted. It is established that culture is a social determinant: material achievements, spiritual and social values of a man/society while being; social rules and traditions expressed in the individuals' and society's behaviour; human characteristics in the context of good and evil social perception paradigm. The focus is on the P(V)E institutions teaching staff's legal culture as an important element of the system on establishing the rule of law in all spheres of public life, freedom, implementation of various spheres and of implementation forms for the national social and legal reform. The epistemological and axiological component of the legal culture is revealed. The broad and narrow decennial sense interpretation of legal culture is established. The attention is paid to determining the goal on pedagogical workers' legal culture forming as a system of legal knowledge and skills in combination with the personal and value component of vocational and pedagogical activities. It has been established that the epistemological and axiological essence of legal culture is considered as the legal consciousness of P(V)E institutions pedagogical workers. That is manifested through their attitude to personal interests, social values and norms of law.

Keywords: *axiological, epistemology, culture, right, legal culture, pedagogical workers, professional (vocational) education institutions.*

Introduction. Development of P(V)E institutions pedagogical workers' legal culture under current conditions becomes an integral part of their professional activity content, forms and methods. According to the results of conducted surveys among P(V)E institutions teachers, the share of legal nihilism in the pedagogical sphere is quite high and constitutes 63%. Teachers do not have enough knowledge of educational legislation, as well as labour, civil, administrative and criminal law. After all, in many situations of the specified spheres they should take into account the right for written dispositive and imperative norms while their vocational and pedagogical activities. It is about the educators' use of legal norms while shaping the personality of future specialists by demonstrating their own value orientations, legal culture and life experience. In this context, the legal experience of a teacher covers his/her legal consciousness, behaviour and activities.

From the point of view of pluralism, it is important to consider the legal culture of the P(V)E institutions teaching staff in the epistemological and axiological context. Indeed, such a context of understanding the legal culture is directly related to the spheres of human

life where it is applied. At the same time, in each case there are differences in the understanding its components content due to the specifics of social roles.

Epistemological feature of the legal culture is its temporal boundaries, that is, the legal culture may belong in a certain epic, and may go beyond its limits; such a transition in the time frame is an ideal culture. Given the axiological understanding of legal culture, it is disclosed through legal values as certain social and legal phenomena, means and mechanisms of functioning.

Materials. The theoretical foundations of the study of gonoseologi -axiological understanding of P(V)E institutions pedagogical workers' legal culture are the works of domestic and foreign scholars on the following issues: philosophy of culture (P. Gurevich, A. Mogylny, M. Kagan, etc.), philosophy of law Golovchenko, O. Skakun, S. Stanik, etc.), philosophy of education (V. Andrushchenko, V. Kremen, V. Lutai, V. Ognevyuk, etc.).

An epistemological understanding of culture was studied by scientists through the relation of "culture-nature" (M. Maksyuta, L. Sarakun, D. Pivovarov, T. Eliot), "natural-artificial" (K. Kyrylenko, P. Gurevich, etc.), "culture -civilization "(K. Zuev, O. Litvinov, O. Maltsev, etc.).

Philosophical approaches to the definition of the legal culture were substantiated by I. Nadolny, R. Serbin, V. Shishkin, I. Kovalenko, S. Slivka, G. Klimov, M. Kostytsky, V. Golovchenko, I. Sukhin, H. Solomchak and others.

The question of forming pedagogical workers' legal culture was investigated by N. Voplenko, M. Gorodysky, I. Dmitriyenko, V. Dubrovsky, V. Kopeychikov, V. Kotyuk, A. Morozov, M. Podberezsky and others. The components of the legal culture of a professional and, in particular, the content indicators of legal culture were the subject of the study of M. Keyserov, V. Kotyuk, V. Kryger, V. Oksamytnogo, A. Stakankov, V. Tyshchenko, M. Tsvika, V. Bezchastnogo, S. Goncharova and others.

Methodological, scientific and theoretical positions and stages of the pedagogical process of forming the legal culture are grounded by M. Gorodinsky, G. Yermoshin, O. Ihumnov, P. Musinov, S. Smirnov, S. Kruk, R. Klunko and others.

According to M. Gorodinsky (1999, p. 36), legal culture as a system of value orientations becomes the part of a person's general culture. To the content of legal culture, the scientist refers to the basic knowledge, new skills, emotional and value attitude to the facts, events and phenomena.

The axiological understanding of the legal culture is the guarantee of human rights and freedoms by the state. The inviolability of its life, health, honour and dignity are recognized as the highest social value (Official Bulletin of Ukraine, 2010, p.15).

A more profound understanding of the legal culture in the legal sense is formulated by O. Skakun (2005, p.743-745), revealing its structure, the scientist distinguishes four of its components: 1) legal consciousness; 2) legal behaviour and legal activity of citizens; 3) legal activity (legal practice). It includes: a) law-making activities and the state of law; b) judicial, law enforcement and other law-enforcement activities: 4) the state of law and order.

Focusing on the interpretation of legal culture in the legal sense is important to review the scientific approaches M. Sokolov (2004, p.389). He argues that it is unreasonable to consider the attribution of illegal behaviour (activities) to the elements of legal culture. Legal culture takes place when there is a systematic reproduction of the unity of legal knowledge, beliefs, values and practical activities with their implementation in the norm of behaviour, which became the general rule. That is why the deviation in behaviour from the requirements of law cannot be recognized as the content of legal culture. A. Oliynyk (2002, c.121) argues that the legal culture is "deep knowledge and understanding of law, the thorough fulfilment of its requirements as a conscious necessity and internal conviction." One must admit that not only rights but also human duties are an essential component of the legal culture of a person (Demin, 2006, p. 40).

Supplementing the definitive interpretation of scientists. S. Maksimov (2007, p.11) believes that legal culture can be regarded as a certain semantic unity, which consists of legal concepts, sources of law, legal methodology and legal argumentation, legitimisation of law. In turn, O. Demin (2005, p.74) argues that: "... in domestic law though the actual process of studying the problems of legal culture was actualized, but the latter works are of a narrowly applied nature, mainly connected with professional aspects of the legal category itself ".

A more generalized understanding of legal culture is presented by N. Godun (2015, p.14), as due to all social, spiritual, political and economic development, a qualitative state of the legal life of society, expressed in the level of legal activity, legal laws, legal awareness, legal development the subject (a person, different groups, the whole population) development, as well as the degree of guarantee by the state and civil society of human rights and freedoms.

The research aim is to substantiate the epistemological and axiological foundations of understanding the P(V)E institutions pedagogical workers' legal culture.

Methods: theoretical: theoretical analysis, study of scientific literature, legislation – to find out the state

of problem development and to determine the directions of scientific research; comparison – in order to study various scientific approaches to problem solving; analysis and synthesis – to substantiate the epistemological and axiological foundations of understanding the legal culture.

Results and discussions. The study of the epistemological and axiological nature of the legal culture is based on scientific approaches to the definition of the definition of "culture".

The important understanding of culture origin is the comprehension of its original source, namely, its epistemology. From the first person, the idea of man-centeredness began to emerge. Subsequently, the concept "I am the universe and the universe in the middle of me" developed.

The development of culture took place in the light of general postulates: language as a system of signs for the preservation, transformation and transmission of information; values; norms as an example of behaviour; knowledge and beliefs that reflect the natural and social nature of reality (Verbec, Sabbath and Christyuk 2009, p.241-242).

Let us turn to the epistemological component of culture. Thus, the notion "culture" has long been interpreted as the purposeful influence of man on nature (cultivation of land), as well as the education and training of the person himself (Dimokhkina, 2012, p.140. That manifests the desire of a man for comprehensive control and influence on both natural and human factors. Based on this, V. Voropaev (2013, p.253) argues that culture reflects a certain historical level of development of society and a man. It is revealed in the types and forms of organization of people life and activity, as well as in the material and spiritual values created by them.

L. Petruchak (2009, p.32), believes that the very concept of "culture" is an "axiological phenomenon", which involves "a deep awareness of the person and society in cultural and historical values," combining the numerous properties of culture around the notion of "value". That is defined from the inside, from the depths of an individual and social life. It is called the culture of the people and society.

Let us pay attention to the unification, categories of culture reflecting its properties. In the first case, the culture must understand all that was created by humanity in the process of its practical and spiritual activity; in the second – culture reflects the development of social abilities and qualities of people, the level and nature of mastering the best qualities on the basis of all social and personal experience (Salnikov, 1980, p.6). By combining these definitions, V. Borodin (1989, p.14), formed four groups of understanding of the social role, nature and content of culture. The first group is made up of definitions in which the culture is considered as a collection of organic for its substantive characteristics. The second group of definitions concentrates on the properties of culture to produce, distribute and use spiritual values (in this group the main factor is the social activity of man). The third, conventionally called technological, group of definitions explains culture as a system of methods and means, techniques, procedures and norms of human activity. The fourth group focuses on socio-historical experience.

The top of public acceptance of culture and its scientific understanding is the normative setting in the law or any legislation document. It is recognized at the state and territorial level. In the Law of Ukraine "On Culture" (2011) this definition is defined as – a set of material and spiritual assets of a particular human community (ethnos, nation), accumulated, enshrined and enriched over a long period, passed from generation to generation, includes all kinds of art, cultural heritage, cultural values, science, education and reflects the level of development of this community. Given this definition, it can be argued that it is universal and not person-specific. That is a look at the culture in its original holistic-anthropomorphic sense.

Note that, in accordance with Clause 4, Article 1 of this Law (2011), the activities in the field of culture include creative, economic, scientific, library, information, museum, educational, cultural-entertainment and entertaining activities, are defined. Thus, the legislator identified all the spectra of possible use of culture in the state and indicated that culture is aimed at satisfying the citizens' cultural needs. On the basis of this, one can understand that culture occupies an important place in the formation of a personality as a citizen and a professional in all its possible manifestations. Given that disciplinary, civil, administrative and criminal liability it is foreseen for breach cultural legislation where the understanding of its importance is. Thus, culture is a social determinant: material achievements, spiritual and social values of man / society in the process of being; social rules and traditions expressed in the behaviour of individuals and society; human characteristics in the context of the good and evil social perception paradigm.

The culture also understands the level of education, and the education of a person, and the level of mastering a certain branch of knowledge or activity (culture of production, culture of labour, language culture, legal, moral, aesthetic culture, culture of life, etc.) (Radkevych, 2010, p.108).

The important role in the professional activity of P(V)E institutions teaching staff is legal culture. Legal culture is an important part of the process on

establishing the rule of law in all spheres of social life, freedom, implementation of various spheres and forms, and the implementation of a correct national socio-legal reform. Sustainable development of public perception and understanding the legal culture. It is an efficient mechanism for its observance functions and is the main, effective condition for the formation of democratic principles. Note that, according to the main principle of democracy, "power is in the people", legal culture in society should be based on legal experience, intellectual development, ideological and value system, legal world outlook and modern ideas of legal culture.

Legal culture has a strong epistemological (cognitive) basis, since it is intended to reveal the laws of legal knowledge. Under these conditions, epistemology of law appears as a connecting chain between a certain legal theory, its method and the fundamental philosophical and ontological principles on which they are based (Kozlovsky, 2005, p. 32).

Note that understanding the essence of the concept of legal culture is revealed within the axiological approach. So, O. Demin (2007, p.12-13) notes that legal culture is a multi-valued characteristic of one of the most important aspects of society's life, an integral part of its general culture with legal values and norms in the legal sphere of public life.

Axiological foundations of legal culture are represented by their own values of law in the practical life of people (guarantee of rights, freedoms, equality, justice); fundamental, natural human rights, basic democratic legal principles; special legal means and mechanisms (legal instruments) that provide the value of the right; institutions that express the optimum balance of normative and individual regulation, etc. (Polisuk, 2013, p.75-81).

The legal culture can be considered both broadly and narrowly. In the broad sense, the notion of legal culture can be understood: first, as a value, where the legal culture reflects the value-legal, ideological and legal state of society at a certain historical stage. It characterises the level of legal consciousness, understanding of law and respect for the law. There are several indicators of legal culture level. They are the level of legal opinions development, the guarantee of rights, the law enforcement activities level and the legal education and upbringing level. Secondly, this is a competent approach where the mandatory condition is the rejection of traditional normative guidance in favor of a value-based approach to law, from legal dogmatism to legal mechanisms active development and means of action. These requirements derive, first of all, from the practical value of legal knowledge for a citizen (Romanova, 2008, p.32).

In the narrow sense, the legal culture can be defined as a system of legal concepts and views, knowledge and expectations, skills and behavioural practices, legal values and social norms, evaluative judgments of social actors regarding the state of legal reality. They are socialised and entering the network socially -legal relations via that reality. They reveal civil-law activity, carry out the lawful conduct ensured by the legal coordination of personal (or group) and public interests (Ogarenko, 2013, c.13).

The purpose of P(V)E institutions pedagogical workers' legal culture is: firstly, purposeful mastering of legal knowledge; and secondly, the formation of emotional and value relation to legal values, moral norms, principles, ideals; thirdly, the formation of legal norms and principles of personal behaviour. The content of socio-cultural orientation includes social tolerance and cultural cooperation, stipulating legal activity and legitimate behaviour; fourth, the development of the ability to independently apply value knowledge, beliefs and principles in professional activities (Rem, 2012, p.70).

The content of P(V)E institutions pedagogical workers' legal culture development should also include the system of legal knowledge and skills in combination with the personal and value component of vocational and pedagogical activities, as well as knowledge of the principles of legal regulation of information in modern information and telecommunication networks, the Internet (Radkevych, 2012, p.436 -443). Note that when a person acquires a body of legal knowledge in a person, a categorical apparatus is made. It regulates both the actions of the person and people. That in turn serves as a dynamic factor for common legal culture development.

P(V)E institutions teachers should be aware of the issues of jurisdictional and non-jurisdictional copyright and related rights protection for educational and methodological products created in the process of their vocational and pedagogical activities. Consequently, the pedagogical staff is expedient to improve knowledge and skills for copyright and related rights protecting by: right and void act recognition, offending right termination, restorating the situation existed prior to the violation, forced execution of the obligation in kind, legal relationship change, relationship termination, compensation, etc. (Radkevych, 2015, p.4).

In view of the above, the epistemological and axiological essence of legal culture is considered as the P(V)E institutions pedagogical workers' legal consciousness. It is manifested through their relation to personal interests, social values and norms of law. The special place is occupied by rights and freedoms determined by the state, when clear distinction is made between prohibited and non-prohibited types of vocational and pedagogical activities.

Conclusions. Consequently, the epistemological and axiological understanding of P(V)E institutions pedagogical workers' legal culture the legal culture is based on certain cultures as social determinants for the people/society material achievements, spiritual and social values function in the process of being; social rules and traditions expressed in the individuals' and society's behaviour; human characteristics in the context of the good and bad social perception paradigm.

Therefore, legal culture is considered as a system of legal values reflecting the state of individual freedom, social values, legal knowledge and skills in combination with the personal and value component of vocational and pedagogical activity, the legal awareness of P(V)E institutions teaching staff. It is revealed through their relation to personal interests, social values and norms of law. The content of legal culture development should include social norms, tolerance, cultural cooperation and pedagogical interaction, lawful behaviour, legal knowledge, skills and principles use in vocational and pedagogical activities.

To this end, in further developments, the overview of the scientific approaches to P(V)E institutions teaching personnel's legal culture development should be conducted to improve the quality of their professional and pedagogical activities.

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УДК 377.011.3-051:[008:34]

Гносеологічно-аксіологічне розуміння правової культури педагогічних працівників закладів професійної (професійно-технічної) освіти

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Реферат. У статті висвітлено гносеологічно-аксіологічну суть правової культури педагогічних працівників закладів професійної (професійно-технічної) освіти. Розкрито поняття культури як способу та результату людської діяльності. Приділено увагу гносеологічному розумінню культури, філософським підходам до визначення правової культури, питанням розвитку правової культури сучасного педагога тощо.

Висвітлено нормативне закріплення культури в законодавстві України. Встановлено, що культура являє собою соціальну детермінанту: матеріальні досягнення, духовні і соціальні цінності людини / суспільства у процесі буття; суспільні правила і традиції, виражені у поведінці осіб і суспільства; характеристики людини в контексті парадигми соціального сприйняття добра і зла. Зосереджено увагу на правовій культурі педагогічних працівників закладів професійної (професійно-технічної) освіти як важливому елементу системи утвердження верховенства права у всіх сферах суспільного життя, свободи, реалізації різних сфер і форм здійснення національної соціально-правової реформи. Розкрито гносеологічно-аксіологічну складову правової культури, в ході чого встановлено дефеніціальне трактування правової культури в широкому та вузькому розумінні. Приділено увагу визначенню мети формування правової культури педагогічних працівників як системи правових знань і вмінь у поєднанні з особисто-ціннісним компонентом професійно-педагогічної діяльності. Встановлено, що гносеологічно-аксіологічна суть правової культури розглядається як правосвідомість педагогічних працівників закладів професійної (професійно-технічної) освіти, що виявляється через їх відношення до особистих інтересів, суспільних цінностей та норм права.

Ключові слова: *аксіологія, гносеологія, культура, право, правова культура, педагогічні працівники, заклади професійної (професійно-технічної) освіти.*

Received: 28 May 2019
Accepted: 10 June 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.82-88

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 82-88

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

ESSENCE AND CONTENTS OF PROFESSIONAL COMPETENCE OF LABOR PROTECTION SPECIALISTS

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Abstract. The paper is devoted to the problem of professional competence formation in educational practice. The author emphasizes the relevance and necessity of training labor protection specialists, who should have such qualities as: professionalism, responsibility, communication skills, moral stamina, self-organization and impartiality in the modern labor market.

The purpose of the paper is to substantiate the essence of the concept "professional competence of the specialist in the field of labor protection", the definition of the main types of professional competence of the specialist in the field of labor protection and their contents.

The following types of scientific research are used in the work: analysis of scientific and pedagogical, psychological literature on the research problem, classification and systematization of scientific works, practical experience, questionnaire, statistical method of ranking, expert assessment.

The paper presents the theoretical analysis of scientists' views on the problem of competence-based approach in education. The results of studies on the definitions of "competence", "competency", "professional competence" are presented. The concept "professional competence of the specialist in the field of labor protection" has had further development. The types of professional competence of the specialist in the field of labor protection are determined empirically: legal, organizational and managerial, information-analytical, monitoring, expert, labor protection, communication, pedagogical. The substantial characteristic of the specified types of competences is presented.

The suggested approach will be of interest to instructors of higher educational institutions in the field of labor protection and life safety. The study does not exhaust all aspects of the problem of forming professional competence of future specialists in the field of labor protection. The prospect of further research requires the development of the model that provides the principles, approaches, forms and methods for the formation of professional competence among future specialists in the field of labor protection.

Keywords: *competence, professional competence, competency, labor protection, training of specialists in the field of labor protection.*

Introduction. The Convention on Occupational Health Service, No. 161, adopted by the International Labor Organization in Geneva in 1985, defines the broad responsibilities of labour protection specialists (Article 5), namely: the identification and assessment of the risk from the effects of hazardous health factors which arise in the workplace; observation of the factors of the production environment and production operations that can negatively affect the health of workers; counseling on planning and organization of work; participation in the analysis of accidents at work and occupational diseases, etc. In view of this, the high level of safety requirements is provided for labor protection specialists who are responsible for the protection of the lives and health of workers. So, today, the labor protection specialist must have professionalism, responsibility, sociability, moral stability, self-organization, impartiality. The above-mentioned interpretation actualizes the problem of formation of professional competence of future specialists in the field of labor protection.

Materials and methods. The analysis of recent publications shows an increased interest of scientists in the problem of competence formation. The results of researches of V.Bolotov, E.Zeyer, I.Zimnya, A.Markova, G.Selevko, V.Serikov, A.Khutorskoy, G.Tsukerman and others. show that the existing problem develops in the following areas: the definition of the essence and features of the competence approach in education; clarification of the concepts of "competence" and "competency"; definition of the structure and contents of competence; development of a model of competence formation; creation of innovative methods of competence formation. In addition, among contemporary scholars (O. Kovalenko, V. Lugovy, P. Luzan, M. Mikhnyuk, N. Nichkalo, V. Radkevich, L. Tarkhan, V. Yagupov, etc.) attention is paid to the question of the classification of professional competence. Despite the existing research in pedagogical science in the field of competent approach to solving educational problems, the problem of the formation of professional competence of future specialists in the field of occupational safety requires a more in-depth analysis.

The aim of the paper is to clarify the essence of the concept of "professional competence of the specialist in the field of occupational safety", to identify and characterize the main types of professional competence of the specialist in the field of occupational safety.

Results and discussion. The results of the analysis of scientific and pedagogical literature on the problem of the competent approach in education (Zimnya, 2013; Radkevich, 2012) make it possible to conclude that the professional competence of the future specialist in the field of occupational safety is his ability to perform functional responsibilities within the framework of engineering activities, in particular – to ensure the development, implementation and effective use of the system of management of labor protection at the enterprise, organizations, institutions (on the basis of the formed set of knowledge, skills on issues of labour protection, professional qualities of the personality and professional experience). Structural elements of the professional competence of the specialist in the field of occupational safety are competencies (knowledge, skills, ways of action) in various fields of knowledge that he must master for the qualitative implementation of the professional activity. Concerning the organization and labour safety, some scientists use the term "professional competence in ensuring the labour safety", which is considered as the possession of professional knowledge (requirements of rules, norms, instructions on labour safety), skills (from the safe performance of certain industrial operations), and the presence of personal qualities of labour safety (understanding the priority of labour safety, the desire to work safely, the desire to work without accidents, care for the health of workers nearby, search for new, safer work methods and techniques) that allow you to save the lives and health of workers.

In modern theory and practice of vocational education there is a steady interest in the problem of classification of professional competence. Researchers distinguish different types of competences of the future specialist: communicative, technological, pedagogical, didactic, ecological, informational-analytical, reflexive, cognitive.

In the context of state educational standards for higher professional education I. Zimnya (2013, pp. 12-13) proposed three main groups of social competences for graduates of the institution of higher education. In the first group, she distinguished competences related to the person as a personality, subject of activity (competencies of health preservation, competencies of valuable-semantic orientation in the world, competencies in the integration of knowledge, competencies of citizenship, competencies of self-improvement, self-regulation, self-development, personal and objective reflection). The second group includes competencies related to the social interaction of man and the social sphere (competence of social interaction, competence in learning). The third group includes competencies related to human activity (competencies of cognitive activity, competencies of professional activity, competencies of information technologies). For the professional activity of future labour protection specialists to be humanistically oriented, V. Radkevich (2012) proposes to form the following types of key competencies of specialists: valuable-semantic, general-cultural, educational-cognitive, informational, communicative, social-labor, personal self-improvement.

V. Slastonin (2004, pp. 34-35) believes that the professional competence of a specialist of any profile should include the following types: practical (special); social psychological; informational; ecological valeological. Investigating the problems of the theoretical and historical aspects of school educational practice, G. Selevko (2004) identifies the following key supercompetences: mathematical; communicative; informational; autonomous; social productive; moral

In our study, attention was paid to the search for scientific works devoted to the formation of different types of competences for future engineers, engineers-educators (teachers). Thus, L. Tarkhan (2011, p. 86) emphasizes that it is essential to develop technological competence for the formation of design and technological knowledge and skills of engineers-educators (teachers).

In the modern world, in the conditions of widespread use of information technology, various

types of appliances, household electrical devices, the problem of energy conservation is very acute. In this regard, E. Zeyer (2014, p. 59) and a group of his co-authors introduce the concept of "energy-saving competence". Since the activity of the specialist in the field of occupational safety is related to the normative provision of the system of management of labor protection, V. Yakovlev (2015) singles out the legal competence. At the same time, N. Yakovenko and I. Komov (2016) substantiate the necessity of forming informational and analytical competence for future ecologists-engineers. Abolina (2012, p. 140) believes that the formation and development of communicative competence is relevant for the modern person, and I. Shmigirilova (2014, p. 142) introduces the concept of "cognitive competence".

In order to establish the types of professional competence of the specialist in the field of occupational safety, and, also. to identify experts' opinions on the mentioned problem, we conducted a questionnaire in which 25 specialists on labor safety of leading enterprises and organizations of Crimea participated. When selecting experts, the following criteria were taken into account: qualification; work experience; frequency of familiarization with legislative and normative-legal acts on labor protection; knowledge in the field of occupational safety; participation in seminars, conferences devoted to issues of labor protection. Experts were asked to arrange the presented types of competence in order of their importance: The first rank was assigned to the most important type of competence, the last one – to the the least influential one. An analysis of the results of the expert assessment made it possible to determine the following set of competences, which are part of the structure of professional competence of specialists in the field of occupational safety (Figure 1). We draw attention to the fact that the sequence of location of the type of competence corresponds to its rating, set by experts.

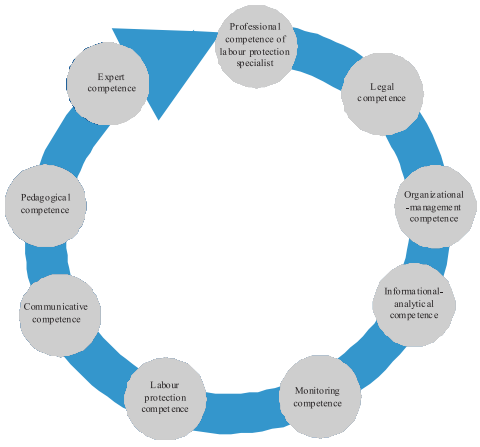

Fig.1 Types of professional competence of the specialist in the field of occupational safety (labour protection)

The legal competence takes the first place in significance. It should be noted that the activity of the specialist in the field of occupational safety is related to the development of enterprise policy in the field of occupational safety and other local regulatory legal acts of the organization. In addition, the specialist in the field of occupational safety should control over the workers' observance of laws and other regulations on labor protection, collective agreement, labor protection agreements, and other local regulations of the organization. Taking into account the above mentioned provisions, the issue of legal competence is acute. V. Yakovlev (2015, pp. 180) characterizes legal competence as a component of professional competence, aimed at: providing the necessary level of systematized knowledge of law, the process of its application in legal reality; development of legal interests, legal culture, legal thinking and consciousness, legal feelings, cognitive and practical skills; formation of the scientific legal world outlook and other related qualities – moral, aesthetic ones, etc.; the formation of the ability to legal self-education, the need for skills in improving the legal knowledge. It is also important for the occupational safety specialists to be aware of approaches to jurisdictional and non-jurisdictional protection of copyright and related rights to models and products created in the process of professional activity (Radkevich, 2015, p. 4).

In our study, the legal competence of the specialist in the field of occupational safety is considered as an integral characteristic, which is expressed in the ability and readiness of the specialist in the field of labor protection to apply legislative and regulatory acts on labor protection; to carry out normative activity on development of local normative acts of an enterprise, institution, organization; to make managerial decisions in the framework of the existing legislation.

The second place, according to experts, belongs to organizational and managerial competence. Intergovernmental Standard of the International Labor Organization' ILO-OSH 2001 "Guidelines for Occupational Safety and Health Management Systems (ILO-OSH 2001), proclaims a systematic approach to forming a system for managing occupational safety in the organization, the main elements of which are: policy, organization, planning and implementation, assessment and improvement actions. The occupational safety specialist, as a manager of this system, as a manager, should have an imagination about the organization's principles and basic management functions. In this regard, the organizational and managerial competence of the specialist in the field of occupational safety is represented as a personality characteristic, which is expressed in the ability to develop policies in the field of occupational safety; to carry out the organization of work on the provision of

labor protection; implement planning activities, apply and implement labour protection management systems; analyze the effectiveness of labour protection policies and measures; motivate and stimulate employees to achieve a high level of occupational safety. This competence is expressed in the readiness of the specialist in the field of occupational safety to organize the work of the team and workers, taking into account the necessary requirements of occupational safety; in the ability of the workforce to distribute functions, duties and powers of labor protection; in readiness to choose, substantiate, accept and implement managerial decisions concerning improvement of working conditions, prevention of occupational injuries and occupational diseases.

The next type of competence, which ranked the third place in the rating of experts, is informational and analytical. The activity of the specialist in the field of occupational safety involves the processing and preparation of a large amount of information related to the accounting and analysis of the state and causes of occupational injuries, compilation of reports on occupational safety and working conditions. One of the labor functions is the drafting of documents on: issues of training in occupational safety, investigation and analysis of accidents at work and occupational diseases, medical examinations, provision of workers with personal protective equipment, and exploitation of high-risk objects. For successful performance of professional activity, the specialist in the field of occupational safety must be able to navigate without difficulty in the flow of information, have certain skills in the search for the necessary information, work with computer technology efficiently, use modern information technologies and various software products skillfully. Therefore, we believe that informational and analytical competence is the level of knowledge, skills and personal qualities of the specialist in the field of occupational safety, which enables him to navigate in the informational space quickly, take an active part in its formation. It is also the experience of searching, collecting, processing, analyzing, evaluating, designing and communicating information about the state of labor protection, the level of occupational injuries, possible occupational risks through the use of information and communication technologies and various management means.

According to experts, an important type of professional competence of the specialist in labour protection is a monitoring competence. In the protection of labor, monitoring involves a comprehensive assessment of the factors of the production environment and labor process, as well as the state of conditions and labor protection. The monitoring includes the control over the implementation of programs to improve working conditions and prevention of occupational injuries, timely testing of equipment, organization of training in occupational safety, medical examinations, and the provision of personal protective equipment. On the basis of the above-mentioned provisions, the monitoring competence of the specialist in the field of occupational safety is considered ato be a set of continuous control actions aimed at assessing the state of occupational safety, the effectiveness of the functioning of the labor protection management system and developing appropriate measures to improve working conditions. Formation of the mentioned competence is possible due to the accumulation of experience in conducting various types of labor safety control, including: the ongoing control over the implementation of planned occupational safety measures; constant monitoring of the state of the production environment; multi-level control of working conditions in the workplace; verification of organization's readiness for work in the autumn-winter period; internal audit of the management system, etc.

In our study, the key component of the professional competence of the specialist in the field of occupational safety is an occupational competence, which is based on the concept of "culture of safety". Statistical data on occupational injuries testify about the overwhelming role of the human factor in creating the preconditions for life-threatening situations. For example, the International Nuclear Safety Advisory Group of the International Atomic Energy Agency concluded that the main cause of the Chernobyl accident was determined by the influence of the human factor. Such factors as inadequate training of operational personnel and industrial negligence led to serious consequences. The number of accidents caused by fatigue, neuropsychiatric overload, stress, depression, monotony of labor, unhealthy psychological state of the worker, unfavorable psychological climate in the team has increased lately. There are a number of psychological factors related to the low level of responsibility of the employee, the adaptation or habituation of a person to danger, the deliberate neglect of the employee safety rules, risk aversion, impunity for creating dangerous working conditions. The occupational safety specialist, as an official, who is responsible for the health and life of workers in the course of their labour duties, must be able to foresee and warn about the danger of a personality character, the source of which the person may be. Thus, the formation of a culture of security (as a key element of labor protection competence, an integral personality-professional quality of a person) is characterized by a high degree of responsibility and expressed in the person's conscious attitude to the

preservation of life and health in the process of labor activity, understanding of the need for compliance with and ensuring the regulatory requirements of occupational safety, the conviction of the priority of prevention of accidents at work and occupational diseases.

To fulfill the tasks of professional activity, future specialists need to know the peculiarities of the communicative environment, the principles of business communication and business ethics, the rules of documentation. In this regard, it is important to form the communicative competence for specialists in the field of labor protection, which takes the sixth place in the ranking of the expert group. In pedagogical science, communication is characterized as a form of active interaction between people through oral and written messages, speeches of body movements and language parameters. According to N. Abolin and O. Akimov (2012, p. 140), communicative competence is a system of internal resources necessary for constructing the effective communication in a certain range of variations of personal interaction. Conventional means of formal communication are written and spoken speech. This is the main mechanism by which human thinking is realized, its experience, thoughts and feelings are transmitted, the character is manifested. Without the ability to use the word to organize the mental process, man can neither develop nor think or socialize. In order to choose the verbal means correctly to create the necessary communication system of relations, according to the situation, it is necessary to know their semantics, understand their contents well. The communicative competence is expressed in the ability of the specialist in the field of occupational safety to form a business communicative interaction with state security supervisory authorities, public labour protection management bodies, government officials, who make decisions, workforce for optimizing conditions and occupational safety, the employer, and also for the purpose of propaganda for labor protection issues.

In accordance with the legislation on labor protection, all employees of organizations, including officials, must undergo training and examination of knowledge on occupational safety requirements, as well as instructions on occupational safety issues. The specialist in the field of occupational safety is responsible for the organization of timely training; participates in the work of the commission on verification of knowledge on occupational safety issues; develops training programs on labor protection, training programs for occupational safety issues; carries out the promotion of labor protection issues using information and communication technologies; provides methodical assistance to the heads of structural units in the development of instructions on occupational safety. Taking into account the above mentioned sayings, it is relevant for the specialist in the field of labor protection to have knowledge about the principles and patterns of education, methods, forms and means of teaching occupational issues; possession of pedagogical skills. All this brings us to the need for the formation of pedagogical competence, which, according to experts, is part of the professional competence of the specialist in the field of occupational safety. In our study, the pedagogical competence of the specialist in the field of occupational safety is defined as the willingness and the ability to use his potential (knowledge, skills, experience and personal qualities) for the effective implementation of professional activities aimed at conducting training and verification of knowledge on occupational safety issues among employees of an enterprise, organization; as well as the development of methodological provision of training and verification of knowledge on occupational safety issues, registration of relevant documents.

The activity of any specialist should have the opportunity of professional growth, development and self-improvement. The prospect of a career development of the specialist in the field of occupational safety is considered by us through the work in public administration, state supervision of labor protection. It should be noted that the term "security expertise" is widely used in labor protection, which includes a state examination of working conditions, industrial safety expertise, environmental expertise, sanitary and epidemiological expertise. The occupational safety specialist can realize himself as an expert on conducting a special assessment of working conditions, a security expert. In view of this, an important aspect of professional competence is an expert competence. On the basis of the analysis of scientific works, technical literature, legislative and normative documents, we defined the contents of the concept of "expert competence", which implies the presence of profound knowledge, skills, extensive experience of professional activity and professional experience of the specialists in the field of labor protection, which contributes to the implementation of expert labor safety research.

Conclusions. On the basis of the analysis of scientific and pedagogical literature on the problem of competence approach in education, the professional competence of the future specialist in the field of occupational safety as the ability to perform functional duties within the framework of engineering activities is determined: to ensure the development, implementation and effective use of the system of management of occupational safety at the enterprise,

organizations, institutions on the basis of the developed complex of knowledge, skills on occupational safety, professional qualities of the individual and experience of professional activity. On the basis of the conducted questionnaire, the main types of professional competence of specialists in the field of occupational safety are defined and characterized, namely: legal, organizational and managerial, informational-analytical, monitoring, law enforcement, communicative, pedagogical, expert.

The study does not exhaust all aspects of the problem of the formation of professional competence of future specialists in the field of occupational safety. The prospect of further research is determined by the necessity of developing a model that will define the principles, approaches, forms and methods for the formation of professional competence of future specialists in the field of occupational safety.

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УДК 378:371.134:331.4

Суть і зміст професійної компетентності спеціалістів з охорони праці

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Реферат. Стаття присвячена проблемі формування професійної компетентності в освітній практиці. Підкреслено актуальність і необхідність підготовки фахівців у галузі охорони праці, які на сучасному ринку праці повинні якісно володіти професіоналізмом, відповідальністю, комунікабельністю, моральною стійкістю, самоорганізацією, неупередженістю.

Метою статті є обгрунтування суті поняття "професійна компетентність фахівця в галузі охорони праці", визначення основних її видів та змісту.

У роботі застосовано такі види наукового дослідження: аналіз науково-педагогічної, психологічної літератури з проблеми дослідження, класифікація та систематизація наукових робіт, практичний досвід, анкетування, статистичний метод ранжування, експертне оцінювання.

Наведено теоретичний аналіз поглядів учених з проблеми компетентнісного підходу в освіті. Представлено результати досліджень щодо визначення дефініцій "компетентність", "компетенція", "професійна компетентність". Подальшого розвитку набуло поняття "професійна компетентність фахівця в галузі охорони праці". Емпіричним шляхом визначено й охарактеризовано види його професійної компетентності, а це: правова, організаційно-управлінська, інформаційно-аналітична, моніторингова, експертна, працеохоронна, комунікативна, педагогічна.

Запропонований підхід буде цікавий викладачам вищих навчальних закладів у галузі охорони праці та безпеки життєдіяльності. Дослідження не вичерпує всіх аспектів проблеми формування професійної компетентності в майбутніх фахівців у галузі охорони праці. Перспектива подальшого дослідження потребує розробки моделі, котра передбачає принципи, підходи, форми і методи формування професійної компетентності в майбутніх фахівців у галузі охорони праці.

Ключові слова: *компетентність, професійна компетентність, компетенція, охорона праці, підготовка фахівців у галузі охорони праці.*

Received: 02 May 2019
Accepted: 10 June 2019

Part II

METHODOLOGICAL FUNDAMENTALS OF FUTURE SPECIALISTS PROFESSIONAL TRAINING

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/10.32835/2223-5752.2019.18.90-95

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 90-95

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

PREPARATION THE FUTURE DESIGNERS FOR PROFESSIONAL CAREER DEVELOPMENT: PEDAGOGIC EXPERIMENT RESULTS AND RESEARCH PROSPECTS

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Abstract. The problem of an individual's career development is getting crucial for modern pedagogy and is considered as wisely chosen way for reaching the top of his/her professional mastering, self-realisation and successful social status. Modern future designers training for their professional career development is based on the dialogue interaction with participative practices (involvement), facilitating technologies (group work), vitagene technologies (life experience actuality). Its important feature is ICT and tools use (social networks, "cloud" services, digital-communicative resources, multimedia programs, information-visual systems) organized in the one information-education environment. The appropriate training content development as the entire system should include the main three components: cognitive (knowledge), process (skills), personal (qualities, values, emotions) and active use of ICT (forming motivation for career development and its appropriate skills; self-education management on career development). They highly promoted increasing the future designer's readiness level for professional career development. The results of pedagogical experiment enforce the prospective ways for future designers training for their professional career development. They are the counseling system improvement and the appropriate information network creating, providing psychological and diagnostic services of professional guidance and defining the readiness level for professional career development; professional and career oriented education programs development; teachers training and upskilling improvement; ordering the government actions and developing the system of activities for solving the following problem.

Keywords: *professional career, information-analytic site, on-line counseling, information-communication tools, methods for life experience stimulating and updating.*

Introduction. The profession of a designer in Ukraine is becoming one of the most on-fire occupations. It is in the top vacancies at the labour market. This is proved by the report results of recruitment and consulting companies. At the same time, the number of students aspiring to become a designer in the Ukrainian professional (vocational), pre-tertiary vocational and high education institutions is increasing. It follows that the necessity of researching the mentioned issues is updated. It will promote the quality improvement of design (arts) education in accordance with an individual's abilities and capabilities, as well as the needs of society in highly educated, creative and career-oriented artistic professionals (Radkevych, 2010).

The research problem is harmonised with the modern concept on sustainable development for the society. It considerably extends the individual's possibilities to choose ways of life and active role in the society, gaining social independence, ensuring

effective professional interpersonal interaction, continuous skills improvement etc. For this reason, a professional career is considered as a consciously chosen way of achieving the peaks of the individual's professional self-realization, his/her successful genesis in the society.

Materials. The theoretical and practical principles of professional training for future designers were substantiated in works by I. Ryzhov, S. Chyrchyk, V. Tyomenko, V. Orlov, O. Fursa, I. Rozenson, A. Troshkin, T. Udod, O. Shvets. M. Zakharov, I. Zymnia, D. Normann, E. Pavliutenkov, M. Poddiachyi, M. Priazhnikov, Yu. Tatur, B. Fedoryshyn, A. Khutorskyi, S. Chystiakov and others studied scientific approaches to professional guidance organising, self-determination and the individual's professionalisation, in particular systemic, competence, managerial, informational etc. However, the issues related to future specialists' training for their professional careers development are not sufficiently highlighted. The relevance of the problem is evidenced by the recent research results. Namely, defining the concept of professional careers (L. Basyl, L. Ershova, B. Pochebut, L. Dolgikh, M. Suriakov, D. Zatatnov) makes it possible to determine the process as a consciously chosen way of reaching the professional perfection peaks, professional implementation, successful mastering the profession. L. Yershova (2017, 2018) studied the motivation peculiarities for choosing a profession and developing a professional career. In her studies, it is noted that the success and quality of mastering the specialty is observed when the choice is driven by motives related to significant value orientations and personality settings. It also indicates the need to form the internal motivation of the professional choice and the development of a professional career.

It is necessary to emphasise the importance of research results by V. Orlov (2015). The scientist argues that the successful designer in the modern world will be the one with formed career potential, not looking for a job but for opportunities for his/her creative ideas realisation, self-determination and self-realisation. In this context, the justified provision by V. Radkevych (2016) on the importance of step-by-step professionalization for future specialists' career, in particular the designers. It is realised from self-determination and professional development up to the continuous professional advancement.

L. Basyl (2018) emphasises the need for professional career counselling for future specialists. In her opinion, the career counselling is an important factor in future professionals' self-realisation. According to D. Zakatnov (2012), there is a waiver of traditional understanding the professional success of a specialist due to his/her position in favour to a person's status as an active developer of his/her own career. For these reasons, the professional career in design becomes an important indicator of the individual's social and professional achievements. It enables him/her to realize own abilities, needs, ambitious plans in the context of career development. As noted by V. Radkevych (2016), in such a career the dynamics of professional development is determined by the career cycles. They consist of mini-stages of professional development. The transition from one stage to another is accompanied by short but intensive training or advanced training terms.

Research aim. Based on analysis the empirical data of the experimental work, justify the training prospects for future designers in the line of their professional careers development.

Methods. Data statistical analysis (calculation Pearson, Student and Fisher criterion); Spierman's formula; variation series compilation; data correlation and factor analysis; calculating the confidence intervals of random size; using the table of "reasonably large numbers" to determine the number of observations; content analysis are used.

Results and discussions. The future designers' readiness for their professional career development will be efficient if it has the scientific-based theoretical and methodological foundations, reflecting the leading methodological approaches, didactic principles, as well as the pedagogical system. The system should cover the practice-oriented content, forms, methods, innovative technologies and the appropriate training approaches in the arts colleges. The introduction of the pedagogical system is based on dialectically interrelated components and elements implementation, providing optimal conditions for solving the tasks of getting the future designers ready for their professional career development.

The pedagogical system of getting the future designers ready for their professional career development combines components of a holistic pedagogical process – from goals to results – and focuses on a future designer's personality. He/She should use the technologies of professional development and be highly prepared for this process. The following system includes: priority goals, aimed at achieving the high level of professionalism for future designers; principles and contents, aimed at assimilating the components of training; career-oriented knowledge of skills and skills that are formed while studying the corresponding modules of educational disciplines, the author's training course; pedagogical conditions to ensure the effectiveness of realization the career orientation of design activity;

methods, forms, means, methods of control and correction and the result that characterizes the achieved changes in accordance with the objectives. Such a system reflects the structural and functional interaction of the motivational, cognitive, operational and technological components of vocational education and training (VET), the general and specific principles of training, the complexes of knowledge and skills that form the basis of the career competence of the future designer, the methodical component of preparation, a set of criteria and indicators of the formation of levels of preparedness before developing a professional career (initial, adaptive, high).

Increasing the level of future designers' readiness to develop their professional career contributes to the didactic structured content of such training as a holistic system that includes three main components: cognitive (knowledge), procedural (skills), personal (qualities, value orientations, emotional states).

The preparation of future designers for their professional career development is based on the principles of interactive interaction through the introduction of participatory practices (involvement), technologies of facilitation (group work), vita technology (actualization of life experience). The main methods are aimed at motivating students to studying and cognitive activity, contextual education, and stimulation methods – to update their life experience. To this end, the innovative training technologies were actively used, in particular: creating motivation for the professional career development; forming the future professional designers' knowledge and skills in their professional careers development; self-education activities managing for the professional career development etc.

The technology of forming motivation for the professional career development has made it possible to purposefully influence the personality. It focuses attention both on external motivation and on the internal one. The implementation of motivation technology was carried out in three stages. The first stage – the initial motivation – took place in the first year and is associated with the process of inducing future designers to studying and developing the professional career. The initial motivation is realized as an interest in new, interesting facts of career development by historical references of biographies of well-known designers, researches of modern career opportunities, trends of labour market development. That positively motivates students. The second stage was realized on 2-3 courses of study and is connected with the stage of motivation maintenance. At this stage, teaching methods are used to motivate students for achieving mental and practical activity: the recommended trainings, talk-shows, "brainstorming" are implemented. The third stage involves the 4th course students and is associated with the stage of final motivation. It requires creating the situation of success, the inclusion in collective design, project-based, research, discussion activities, managing team work and role playing games.

The important feature of getting the future designers ready for their professional career development is ICT use (social networks, cloud services, electronic communication resources, multimedia programs, information and visual systems). They should be organised as a single information and educational environment (Aleksieieva, 2015). Accordingly, that was carried out through information and training site, online counselling and online training. That provided the efficient solving the problem information presentation recency, to make the process interesting via its visualization and individualization (Aleksieieva, 2016).

The experimental research was carried out on the basis of colleges (Art College of Art Modelling and Design (Kyiv), KNUBA Vinnitsa College of Construction and Architecture, Zhytomyr College of Culture and Arts named after I. Ogienko, KNUTD College of Arts and Design (Kyiv). The estimation of future designers' readiness level for their professional careers development was carried out by motivational-emotional, cognitive-developmental, technological, personal-volitional criteria. Interpretation-theoretical and empirical research methods were used to solve those tasks.

Experimental and control groups were formed for conducting a parallel experiment (the number of students for each control group – 199 persons, experimental ones – 202 persons). According to the parallel experiment logic, the students training was based on the traditional training system. Thus, for the experimental groups they were changed. According to the indicators of incoming diagnosis, the difference in the results in the training did not exceed 2%. The homogeneity of the samples by qualitative composition makes it possible to obtain objective results at the end of the experiment. In addition, the experiment took place in the usual training environment. It allows taking into account and repeatedly reproducing the investigated phenomena.

The results of the diagnosis indicate a significant increase in the level of future designers' readiness for their professional careers development. For example, according to the motivational-emotional criterion, redistribution occurs due to the entry level. In particular, in the experimental group, the number

of students with the initial level of motivation formation to achieve the career success decreased by – 7,92% (from 14,36% to 6,44%); in the control group – by 5.53% (from 14.07% to 8.54%). The formative stage of the experiment has significantly changed the distribution of the entry level by the indicator of "interest in career activities." In the experimental group there was a decrease in the number of students with professionally significant technologies for planning career development at – 16.83% (from 18.81% to 1.98%), in the control group – by 2.51% (out of 18 , 09% on – 15.58%). Accordingly, we state that there is a redistribution and at the creative level. In the experimental groups there was an increase in the number of students capable to analyse specific professional situations by – 13.85% (from 48.03% to 61.88%); in the control group – by 4.52% (from 47.74% to 52.26%) (*Table 1*).

The graphic representation of the research results indicates the positive dynamics of future designers' readiness for their professional careers developing *(Fig. 1*).

The results of the given data give grounds to speak about the positive influence of the developed and scientifically substantiated pedagogical system for

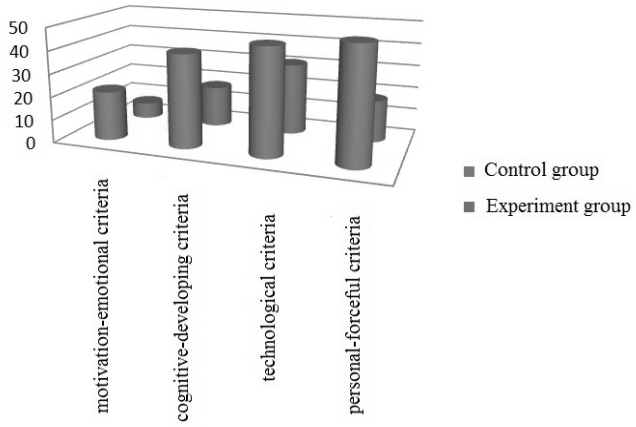

Fig. 1. Research results diagram on getting the future designers ready for their professional career development

increasing the level of future designers' readiness for their professional careers developing. Accordingly, in the future, it is envisaged to create the informational network of career counseling and diagnostic services for professional guidance and determination of the level of readiness for professional career development; improvement of educational programs focused on professional and career advancement.

Table 1

Comparing results for ascertaining and forming experiment stages

Experiment stages	Groups	Levels						χ^2
		Initial (insufficient)		Adaptive (sufficient)		High (creative)		
		%	EG-CG	%	EG-CG	%	EG-CG	
motivation-emotional criteria								
Ascertaining	CG	21,36	+0,3	35,30	-0,28	43,34	-0,02	0,035
	EG	21,66		35,02		43,32		
Forming	CG	16,59	-9,53	34,17	+1,47	49,24	+8	7,195
	EG	7,06		35,64		57,30		
cognitive-developing criteria								
Ascertaining	CG	40,50	+0,2	36,68	-0,35	22,82	+0,15	0, 217
	EG	40,70		36,33		22,97		
Forming	CG	35,98	-18,16	37,08	-0,73	26,94	+18,89	8,277
	EG	17,82		36,35		45,83		
technological criteria								
Ascertaining	CG	46,20	+0,53	36,45	-0,41	17,35	-0,12	0,196
	EG	46,73		36,04		17,23		
Forming	CG	41,70	-10,5	38,60	-0,3	19,70	+10,8	7,754
	EG	31,20		38,30		30,50		
personal-forceful criteria								
Ascertaining	CG	49,75	+0,55	33,57	-0,3	16,68	-0,25	0,142
	EG	50,30		33,27		16,43		
Forming	CG	45,02	-26,91	36,18	+3,43	18,80	+23,48	8,261
	EG	18,11		39,61		42,28		

Conclusions. Thus, the efficiency of getting the future designers ready for their professional career development as a general pedagogical phenomenon with the corresponding structure and content is ensured by the organic combination of traditional and innovative methods, forms, technologies and learning tools based on mutual complement and reinforcement. In the future, the direction of this study will be aimed at improving the counselling system on professional career development and encouraging the continuous career self-development for future specialists; improvement pedagogical workers training and retraining for the following process implementation; ordered management actions realisation and the a system of measures creation for solving the given problem.

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УДК 378:7.012]:005.96-027.561

Підготовка майбутніх дизайнерів до розвитку професійної кар'єри: результати педагогічного експерименту та перспективи досліджень

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Реферат. Проблема кар'єрного розвитку особистості стає актуальною в сучасній педагогіці та розглядається як свідомо обраний шлях досягнення вершин її професійної довершеності, самореалізації й успішного утвердження в суспільстві. Сучасна підготовка майбутніх дизайнерів до розвитку професійної кар'єри здійснюється на засадах діалогової взаємодії через упровадження партисипативних практик (причетності), технологій фасилітації (групової роботи), вітагенних технологій (актуалізація життєвого досвіду). Важливою особливістю підготовки майбутніх дизайнерів до розвитку професійної кар'єри стало використання інформаційно-комунікаційних технологій та засобів (соціальні мережі, "хмарні" сервіси, електронно-комунікативні ресурси, програми мультимедіа, інформаційно-візуальні системи), які організовано у вигляді єдиного інформаційно-освітнього середовища. Розроблення відповідного змісту підготовки як цілісної системи, що включає три основні компоненти: когнітивний (знання), процесуальний (уміння, навички), особистісний (особистісні якості, ціннісні орієнтації, емоційні стани) та активне використання інноваційних технологій (формування мотивації до розвитку професійної кар'єри; формування у майбутніх дизайнерів знань і вмінь із розвитку професійної кар'єри; організація самоосвітньої діяльності з розвитку професійної кар'єри) значно сприяло підвищенню рівня підготовленості майбутніх дизайнерів до розвитку професійної кар'єри. Результати педагогічного експерименту уможливлюють визначення перспективних напрямів підготовки майбутніх дизайнерів до розвитку професійної кар'єри, серед яких: удосконалення системи консультування з розвитку професійної кар'єри та створення відповідної інформаційної мережі, надання психологічних і діагностичних послуг із професійної орієнтації й визначення рівня підготовленості до розвитку професійної кар'єри; розроблення освітніх програм, зорієнтованих на професійний і кар'єрний розвиток; удосконалення підготовки і перепідготовки педагогічних працівників до здійснення цього процесу; упорядкування управлінських дій та розроблення системи заходів, спрямованих на розв'язання означеної проблеми.

Ключові слова: *професійна кар'єра; інформаційно-навчальний сайт; онлайн-консультування; інформаційно-комунікаційні засоби; методи стимулювання та актуалізації життєвого досвіду.*

Received: 15 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.96-101

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 96-101

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

ENTREPRENEURSHIP AS AN EDUCATION-PROFESSIONAL PATHWAY DIRECTION FOR PROFESSIONAL (VOCATIONAL) EDUCATION SCHOOLS STUDENTS

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Abstarct. The article reveals the state-of arts of the problem on professional (vocational) education (P(V)E) schools students training to choosing the entrepreneurship activity as the way for further professional career development. It is found that the entrepreneurship activity content in the legislation framework of Ukraine is limited with acts jure gestionis aimed at reaching the economy and social results and profit. That differs from the appropriate content in the EU countries where the entrepreneurship is defined as the ability to plan and manage projects with have cultural, social or commercial value. The analysis the pilot research empirical data and the experimental activity of the Institute of vocational education and training of the National academy of educational science of Ukraine (IVET NAES of Ukraine) proves that P(V)E schools students consider the entrepreneurship activity as a prospective vector for further education-professional rout realisation due to some indicators difference for urban and rural P(V)E schools students. Therefore, the students' vision of the entrepreneurship activity is mostly of abstract character but their training to that in P(V)E schools is provided only for some aspects. The entrepreneurship activity socio-economic value and attractiveness for the youth as a prospective vector for their education-professional routs are determined with the appropriate pedagogical system formation to assure students' preparation for the entrepreneurship activity.

Conforming to modern education paradigm it should be the competence-based system to assure the entrepreneurship competence forming for (P(V)E) schools students as their sustainable, integral and personal de novo synthesis. Main requirements to structure of that kind are defined and the scope of problems is outlined. Dealing the following factors will promote the quality increase on P(V)E schools students training for the entrepreneurship activity.

Keywords: *entrepreneur, entrepreneurship activity, system of preparation for entrepreneurship, educational-professional rout, professional (vocational) education.*

Introduction. Changes in the socioeconomic life of Ukraine testify to the irreversible transition to market conditions of economic activity, where one of the most significant features is entrepreneurship development as competitive economy basis. In this approach, further development of the state directly depends on the young people's willingness and ability to engage in entrepreneurial activity, that is, the youth preparation for entrepreneurship becomes a category of public-state significance, since its quality depends on both the economic market transformations success and the domestic economy efficient functioning. The need for the youth training in entrepreneurship in VET process of vocational education is emphasized in a number of international documents, for example – Action plan for implementing the Strategy for technical and vocational education and training for 2016-2021 (UNESCO, 2016) It defines the need for its transformations and increasing attractiveness as a vector for the youth employment and entrepreneurship

development. Under this approach, the problem of preparing students of professional (vocational) education (P(V)E) institutions to choose the entrepreneurial activities as a way of their further educational and professional realisation is a topical socio-pedagogical problem.

Materials and methods. The psycho-pedagogical aspects of students preparing to choosing the entrepreneurial activity as a professional line are covered in the works of O. Padalka, N. Pobirchenko, I. Prokopenko, I. Sasova, V. Drzhak, D. Zakatnova, N. Pasichnyk, M. Tyemenko, O. Topol and other researchers. The peculiarities of entrepreneurship training in vocational education institutions are disclosed in the publications of O. Bogonis, L. Kozachok, G. Matukova, V. Tkachenko and others. However, problems related to the training P(V)E students for further entrepreneurial activity, as well as their preparation for choosing the entrepreneurship as a direction for the implementation the promising educational-professional routs, are not adequately covered.

The **research aim** is based on the experimental work empirical data analysis to find out the state-of-arts of the problem on P(V)E students preparing to choose the entrepreneurship as a vector for educational-professional rout development.

Results and discussions. The article 42 of the Commercial Code of Ukraine defines the entrepreneurship as an independent, initiative, systematic, at its own risk, economic activity carried out by economic entities (entrepreneurs) in order to achieve economic and social results and profit. Although the entrepreneurial activity is related to social needs satisfaction, however, its main motive is the material interest – profit. Under this approach, an entrepreneur is a person who has: financial and other resources, a business inclination, ideas about business organization and the ability to take responsibility for the risk while setting up a new enterprise, the development of a new idea, product or type of service. The successful implementation of business involves not only relevant personal qualities, values and attitudes, but also the system of specific economic knowledge, skills acquired in the process of appropriate training.

The study of the P(V)E students' career plans makes it possible to conclude their prime relation to the chosen training direction, and, secondly, to some extent focused on the entrepreneurship field. In a poll carried out by the Institute of vocational education and training of the National academy of educational science of Ukraine (IVET NAES of Ukraine) of 2017-2018, more than 1,000 P(V)E students from the oblast centers (Vinnytsya, Khmelnytskyi) and rural areas (Volyn region) were covered. It should be noted that in P(V)E schools of Vinnytsia and Khmelnytskyi the poll was conducted to determine the state-of-arts of the problem, that is, it was a one-time event, and in P(V)E schools of Volyn region were carried out in terms of the all-Ukrainian level pedagogical experiment "Organizational and pedagogical conditions of the Centre for professional careers creating and functioning in a vocational school". Accordingly, the repeated polls were aimed at revealing the dynamics of the surveyed indicators. The pedagogical experiment envisaged the efficiency verification of P(V)E students' career counselling measures. They were carried out at the Centres of professional careers (Basil, 2018). One of the results on the experimental factors influence was predicted to form students' vision of a realistic educational and professional route, primarily aimed at the horizontal career implementation.

The experimental work had a longitudinal character and encompassed: at the stated stage the I-III courses students, at the forming one – the same students (already of II-IV courses). Tables 1 and 2 summarize the results of studying the students' career plans in urban and rural areas P(V)E schools (abbr.: G – girls, Y – young people, Av – average, HEI – institutions of higher education).

The listed empirical data (table 2) obtained from the experimental work demonstrates the following: firstly, rural P(V)E schools students have a more clearly expressed vector of educational-professional route associated with work in the specialty; secondly, the

Table 1

Students' career plans for the short-term (urban P(V)E schools, %)

Career plans	I course			II course			III course			Average		
	G	Y	Av	G	Y	Av	G	Y	Av	G	Y	Av
Work in the specialty	55,9	54,7	**55,4**	64,6	58,5	**61,3**	56,8	53,8	**55,4**	58,9	55,8	**57,4**
Change profession	21,5	21,7	**21,6**	17,3	16,3	**16,7**	23,7	21,0	**22,3**	21,0	19,5	**20,1**
Enter HEI	22,6	23,6	**23,0**	18,1	25,2	**22,0**	19,5	25,2	**22,3**	20,1	24,7	**22,5**

Thus, more than half of the respondents planned to work in the speciality after leaving P(V)E schools.

Table 2

Students' career plans for the short-term (rural P(V)E schools, %)

Career plans	I course			II course			III course			Average		
	G	Y	Av	G		G	Y	Av	G		G	Y
Experiment stated stage												
Work in the specialty	73,8	100	**85,4**	84,2	17,7	**58,1**	69,2	76,9	**74,4**	76,4	71,4	**73,9**
Change profession	4,4	0,0	**2,4**	0,0	15,7	**6,4**	23,1	7,7	**12,8**	7,2	7,2	**7,2**
Enter HEI	21,8	0,0	**12,2**	15,8	66,6	**35,5**	7,7	15,4	**12,8**	16,4	21,4	**18,9**
Experiment forming stage												
	I→II course			II→III course			III→IV course			Average		
Work in the specialty	86,9	100	**92,7**	84,2	75,0	**80,7**	81,8	100	**85,7**	85,0	90,9	**87,2**
Change profession	4.4	0,0	**2.4**	3,0	0,0	**0,0**	0,0	0,0	**0,0**	1,8	0,0	**1,2**
Enter HEI	8,7	0,0	**4,9**	15,8	25,0	**19,3**	18,2	0,0	**14,3**	13,2	9,1	**11,6**

Table 3

Entrepreneurship-oriented educational-professional route (%)

	I course			II course			III course			Average		
	G	Y	Av	G	G	Y	Av	G	G	Y	Av	G
Urban P(V)E schools	24,9	43,4	**33,8**	30,7	25,5	**27,9**	27,9	23,8	**25,8**	27,7	30,6	**29,2**
Rural P(V)E schools	19,6	52,8	**34,1**	9,1	16,7	**10,7**	10,5	8,3	**9,7**	14,2	33,3	**21,5**

desire to change the profession can be greatly neutralized by psychological and pedagogical influences from the Centres for professional careers. We also recorded a decrease from 18.9% to 11.6% the number of students planning to implement further educational and professional routs by studying in HEIs. It should be noted that according to the experiment observation results, there was a small difference in the number of students studying in urban and rural P(V)E schools and planning to continue their education in HEIs (respectively, 22.5% and 18.9%, i.e. the difference in 1.2 times). After the pedagogical experiment in rural P(V)E schools, the number of students planning to continue their studies in HEIs decreased by 7.3%, compared with urban P(V)E schools. The difference was 1.9 times.

In the process of the pilot study, the students' career plans for entrepreneurship were also studied. It should be noted that according to the pedagogical experiment results conducted in P(V)E schools (Volyn region), there were practically no significant changes in the number of students planning to implement educational and professional routs in the field of entrepreneurship, therefore, the data in Table 3 is based on the recording experiment results.

The results of the study have revealed several trends. First of all, the number of students planning to run a business has significantly decreased. This tendency is especially clear for rural P(V)E schools, where the number of pupils has decreased from 34.1% – in the first year and to 9.7% – in the third year, i.e. 3.5 times.

In our opinion, one of the factors is the lack of systematic economic, including entrepreneurship, training while basic secondary education acquisition. That causes formation the unsystematized, incomplete and idealized ideas on entrepreneurship of the 9th form graduates. The survey also testified that over 60% of respondents do not have a clear idea on entrepreneurial activity, and the overwhelming majority of respondents (about 70%) cannot define personal qualities important for entrepreneurial activity. It should be noted that such a picture was observed in 2018 (Tkachenko, 2018), ten and twenty five years ago (Zakatnov, 2007, Zakatnov and Tymenko, 1993, respectively).

Therefore, in the process of general vocational, professional-theoretical and vocational-practical training in P(V)E schools the 9th form graduates should acquire systematic knowledge on entrepreneurship to form the an objective vision of the activity. The tasks of the Centre for professional careers included the realistic "I-vision" formation of students. These factors help students to objectively assess their opportunities in related entrepreneurial activity and make the well-

considered decision on the future professional activities vector – to be hired or self-employed in terms of entrepreneurial activities.

At the same time, world experience shows that entrepreneurial activity is one of efficient means to increase the national economies productivity. That demands the systematic students training and preparation for entrepreneurial activity. In this case, there is a logical question: what should be the result of such training? The researchers of this problem (V. Drzhak, N. Pasichnyk, O. Topol and others), since the 1980's, operated the following categories: "readiness to choose business", "readiness for entrepreneurial activity", "interest in entrepreneurial activity", etc. Recently the national pedagogy has placed the main emphasis on the category of "competence". That determines the relevance to consider P(V)E schools students training right in the competent-based approach context (Radkevych, 2012, s. 10-11).

On January 17, 2018, the European Parliament and the Council of the European Union endorsed the Framework program to update the key competences for lifelong learning (European Union, 2018), in particular "employment", "personal capacity building" etc. This document contains the list of competencies somewhat different from the same list of the European Parliament and European Council Recommendations dated 18 December 2006 (European Parliament and Council of the European Union, 2006). If in the Recommendations of 2006 there were Communication in the mother tongue, Communication in foreign languages, Mathematical competence and basic competences in science and technology, Digital competence, Learning to learn, Social and civic competences, Sense of initiative and entrepreneurship, Cultural awareness and expression), then the list adopted in the Recommendations of 2018 consists of the following competences: Literacy competence, Languages competency, Mathematical competence and competence in science, technology and engineering, Digital competence), Personal, social and learning competence, Civic competence, Entrepreneurship competence, Cultural awareness and expression competence. This document defines the concept of "entrepreneurship" is as the ability to plan and manage projects that have cultural, social or commercial value, that is, it is not limited to economic activities only and differs from the interpretation of this definition in the legislation of Ukraine.

The analysis of psychological and pedagogical literature shows that some domestic researchers' attention is paid to the problem of entrepreneurial competence formation; however, it is mainly devoted to certain aspects of this process. In our view, solving the problem of P(V)E students training requires a system designing and implementation taking into account external and internal factors impact, its phasing, linking the economic and entrepreneurial training of the youth, pedagogical potential in general education, general vocational, professional and practical training, interaction with employers, etc.; representing theoretical basis for system functioning (purpose and subjects, theoretical foundations and principles of training for entrepreneur activities, professional and career theory of personality development, etc.). The system-forming element of that pedagogical system is its purpose. The analysis of modern competence-based P(V)E standards make possible to conclude that the entrepreneurial competence is a component of P(V)E schools graduates' general professional competence. Thus, the purpose of P(V)E schools students training system is the entrepreneurial competence formation.

Conclusions. Formation of students' entrepreneurial competence is a crucial socio-pedagogical problem, one of the ways to improve human capital quality, ensuring P(V)E schools graduates' professional mobility and competitiveness. This way of solving this problem is a pedagogical system designing and implementation providing the entrepreneurial activity to P(V)E schools students. The purpose of the system is to form the integral personal de novo synthesis for P(V)E schools students – the entrepreneurial competence. The solution of this problem requires the integrated study aimed at revealing the theoretical basis for the system establishment, internal and external factors interconnection and interdependence affecting students training for entrepreneurial activity, specifying the essence of "P(V)E schools students' entrepreneurial competence", studying the structure of the competence, indicators and formation criteria, functioning methodological and technological support, the an efficiency assessing algorithm development for the system of that kind realisation.

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УДК 377.011.3-052:005.342

Підприємницька діяльність як напрям освітньо-професійних траєкторій учнів закладів професійної (професійно-технічної) освіти

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Реферат. У статті висвітлено стан проблеми підготовки учнів закладів професійної (професійно-технічної) освіти (далі: ЗП(ПТ)О) до вибору підприємницької діяльності як напряму розвитку професійної кар'єри. Виявлено, що зміст підприємницької діяльності в нормативно-правовому полі України обмежується господарською діяльністю, спрямованою на досягнення економічних і соціальних результатів та одержання прибутку, на відміну від її змістовного наповнення в країнах ЄС, де підприємництво визначається як уміння планувати й управляти проектами, що

мають культурну, соціальну або комерційну цінність. Аналіз емпіричних результатів пілотного дослідження та експериментальної роботи Інституту професійно-технічної освіти НАПН України (далі: ІПТО НАПН України) засвідчив, що підприємницька діяльність розглядається учнями ЗП(ПТ)О як перспективний напрям реалізації подальшої освітньо-професійної траєкторії, хоча існує певна відмінність у відносних показниках орієнтації на таку діяльність в учнів ЗП(ПТ)О, розташованих у містах та сільській місцевості. Однак уявлення учнів стосовно підприємницької діяльності носять переважно абстрактний характер, а підготовка до підприємницької діяльності в ЗП(ПТ)О здійснюється переважно за її окремими аспектами. Соціально-економічна значущість підприємницької діяльності та її привабливість для молоді як перспективного вектора реалізації освітньо-професійних траєкторій зумовлюють доцільність проектування та реалізації в освітньому процесі ЗП(ПТ)О педагогічної системи підготовки учнів у галузі підприємницької діяльності.

Відповідно до сучасної освітньої парадигми, в основу такої системи доцільно покласти компетентнісний підхід, а метою її функціонування визначити формування в учнів ЗП(ПТ)О підприємницької компетентності як інтегрального особистісного стійкого новоутворення. Визначено основні вимоги стосовно структури такої системи та окреслено коло проблем, розв'язання яких сприятиме підвищенню ефективності підготовки учнів ЗП(ПТ) освіти до підприємницької діяльності.

Ключові слова: *підприємець, підприємницька діяльність, система підготовки до підприємницької діяльності, освітньо-професійна траєкторія, професійна (професійно-технічна) освіта.*

Received: 09 April 2019
Accepted: 19 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.102-108

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 102-108

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

MARKETING COMPETENCE OF DIRECTORS IN COMPETITIVENESS PROVISION OF VOCATIONAL TRAINING INSTITUTIONS AT THE EDUCATIONAL SERVICES MARKET

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Abstract. Vocational training institution is considered to be an open social and pedagogical system, a subject of market relations, which operates simultaneously at the market of educational services and the labor market, ensuring the identification and satisfaction of educational needs of consumers through the offer of educational services. It has been proved that the development of human capital achieves the best results in the favorable environment for economic growth, where decisions on the training of workers and specialists are made on the basis of social partnership at the local and regional levels. In this context, (the main ideas of implementation of monitoring mechanisms, better regulation and provision with vocational education quality, staff training in accordance with the current and future needs of the labor market in conditions of decentralization, enhanced cooperation between public administrations and employers, and the establishment of social partnership) are analyzed. The search for modern approaches to planning the activities of the educational institution, the quality improvement of educational services, effective training of specialists, in particular, marketing planning (main objective of which is to increase the competitiveness of institutions and their educational services) are of particular relevance.

The author considers the marketing approach to managing the competitiveness of the educational institution on the basis of studying the trends of the economy and the labor market, the needs and interests of consumers of educational services; he determines the criteria of competitiveness of the educational institution. It is determined that the creation of a scientific basis for the development of marketing competence of the directors is necessary for the adaptation provision of the educational proposal to the needs of the labor market, the introduction of modern information and analytical tools for the effective planning and management of vocational training institutions. The conceptual foundations of competence, systemic, adaptive, informational approaches are analyzed, which are the methodological substratum for determining the content and formation of the system of development of marketing competence of directors, search of ways to increase the efficiency of making managerial decisions on the activities and development of institutions of vocational education and training.

Keywords: ***vocational education and training, competitiveness of educational institution, marketing management, marketing competence of the director, market of educational services.***

Introduction. Modern processes of the development of the post-industrial society, the introduction of ideas of sustainable development and decentralization of management in Ukraine, dynamic social and economic transformations lead to changes in the functions of vocational education (vocational education and training) (hereinafter: VET) (Svistun et al., 2012). In accordance with the world educational trends, the transformation of the system of vocational education takes place, new development strategies are introduced, which take into account the need for its (VET) adaptation to democratic and market transformations in society, Ukraine's accession to the European and world informational and educational space.

The experience of the economically developed countries of the world shows that the development of human capital achieves the best results in the favorable environment for economic growth, and where decisions on the training of workers and specialists are taken on the basis of social partnership, in close cooperation between the Government, employers and representatives of hired employees, starting with local and regional levels (Palkevich, 2014).

The current stage of the development of VET in Ukraine is characterized by intensive searches of something new in the theory and practice of the activity of the vocational (education and training) institutions (hereinafter: VET institutions) on the basis of developing a strategy for long-term development in the conditions of the interaction between the labor market and educational market services. The establishment of vocational education as a subject of market relations, operates simultaneously at two markets: the market of educational services and the labor market, and this is the feature of its activity (Svistun et al., 2016, p. 9). The task of the institution of education in conditions of the market economy is to identify and satisfy the educational needs of consumers through the proposed educational services (Ryabova, 2010). The search for modern approaches to the planning of the activity of educational institution, the improved provision of educational services quality, effective training of specialists are of special actuality in the conditions of competition at the market of educational services, expansion of the autonomy of the activity of the VET institutions and the responsibility of directors for the results of training the working personnel, staffing, educational and methodological and economic support of the educational process One of the types of planning of economic activity of VET institutions is the planning of marketing activity, the main purpose of which is to increase competitiveness of institutions and their educational services (Anishchenko et al., 2008).

In that context, there exists an acute problem of the ability of directors of VET institutions to make effective management decisions on the formation of an educational proposal and interaction with social partners on the basis of market analysis of labor markets and educational services. In this regard, in order to introduce the significant changes in the existing system of formation of professional competence of directors of VET institutions, in particular the development of their marketing competence, it is necessary to provide this process with information-analytical character that will result in the introduction of monitoring, better regulation and provision of vocational education quality, training in accordance with the current and future needs of the labor market.

Materials and methods. The scientific and theoretical basis for the study of the mentioned problem is made up of the works of Ukrainian and foreign researchers whose subject of scientific research is the following: methodological and theoretical foundations of the development of vocational education in modern social and economic conditions (M. Artyushina, S. Artyukh, S. Batishev, M. Berulava, N. Bryukhanova, S. Goncharenko, R. Gurevich, G. Yelnikova, O. Kovalenko, P. Luzan, N. Nichkalo, V. Oliynyk, V. Orlov, V. Radkevich, G. Romanova, A. Shcherbak and others); modern world approaches in the field of marketing, marketing management and peculiarities of marketing activities in Ukraine (L. Balabanova, J. Blait, N. Butetenko, S. Harkavenko, D. Gobber, F. Kotler, T. Lukianets, Y. Petrunja, A. Starostina and others); theoretical and methodological principles of educational marketing and marketing activity in the system of higher education (V. Sargent, V. Poltorak, L. Karamushka, E. Golubkov); in the system of vocational education (Y. Palkevich, P. Pomaran, N. Protsenko, T. Rukavichka, Z. Riabov, V. Svistun, G. Chernobuk, etc.).

The aim of the paper is to analyze the approaches to increasing the competitiveness of vocational training institutions at the market of educational services by developing the marketing competence of directors of VET institutions.

Results and discussions. Development of the labor market and associated with it market of educational services in vocational education, contradictions and the crisis of the educational system determine the socio-economic, psychological-pedagogical and scientific-technical criteria in the management of educational and productive activity of the teaching staff of VET institutions. The new management development paradigm of the VET institutions contains the process of forming an organization, streamlining the subject-subject relations through coordination, alignment of positions and actions of managers and pedagogical workers (as the main subject of management), and the product of management activity is a diversely well-grounded strategy for the development of the educational institution (Solovy, Genyk and Solovyi, 2014, p. 19-20).

VET institution is an open social and pedagogical system with productive and economic functions, and as any complex object, that is the set of interconnected elements that exist in a dialectical relationship, have the same purpose, and which are marked by a certain degree ordering. The interrelation of VET institutions with the environment,(the factors of which cause changes in internal structural elements), testifies about their openness. Therefore, we consider it expedient to analyze the system of development of marketing

competence of directors, taking into account the methodological fundamentals of the system approach (V. Bespalko, Y. Konarzhevsky, N. Kuzmina, etc.), which allows to take into account the dialectical relationship between the labor market and the market of educational services, ensure consistency of decision making at all levels of management of educational institutions.

The internal factors of competitiveness of VET institutions are, in particular, the marketing competence of directors (headmaster, deputy director of educational and practical work, senior masters), the relevance of the educational proposal to the needs of the labor market, and high-quality information provision of the activity of the educational institution.

Conceptual principles for the development of marketing competence of directors of VET institutions, the main ideas for introducing monitoring mechanisms, better regulation and quality assurance of vocational education, staff training in accordance with current and promising needs of the labor market in conditions of decentralization, strengthening of cooperation between public administrations and employers, social partnership building are highlighted in the Concept of Vocational Education Reform in Ukraine "Modern Vocational Education" (2018), in the U-LEAD Project Reports (2018).

The main principles of the concept of competence approach are reflected in the writings of scientists: V. Baidenko, V. Kremen, V. Lugovoi and others. In particular, the concept of a competent approach in vocational education, according to V. Radkevich, aims at forming a personality of the professional with the positive outlook, valuable orientations, the ability to adapt quickly to traditional or new and unpredictable life and professional situations (Radkevich, 2012, p. 11). Scientific researches of G. Yelnikova, N. Nichkalo, V. Radkevich, V. Svistun, and others are devoted to the improvement of the management of VET institutions with regard to the trends in the development of the labor market. The problems of analyzing and implementing a competent approach are supported by modern scholars and practitioners, among which are O. Lokshina, O. Savchenko O. Ovcharuk et al. Significant studies were carried out thanks to the cooperation of the Ministry of Education and Science of Ukraine, the National Academy of Pedagogical Sciences of Ukraine and international organizations of the country on educational policy, due to which the main principles of the competence approach were highlighted.

Competence is defined by researchers as an integrated characteristic of personality quality, an efficient unit, formed through experience, knowledge, skills, attitudes, behavioral reactions. Competence is based on a combination of mutually relevant cognitive relationships and practical skills, values, emotions, behavioral components, knowledge and skills, everything that can be mobilized for the active action.

Analyzing the contents of marketing competence of directors in terms of competence approach, we conclude that the marketing competence of the director – is the ability to integrate knowledge and skills and use them effectively in conditions of the marketing environment that can be considered as a component of professional competence in modern conditions. The researcher I. Kushnir (2013, p. 100) interprets the marketing competence of directors as "professionalism, which includes knowledge of marketing theory; the ability to form and implement a marketing strategy, carry out effective communicative acts that promote the competitiveness of an educational institution, expressed in the ability to formulate the needs of the humanitarian order, satisfying the interests of the state, society and personality".

In the author's opinion, the adaptation of the directors of educational institutions is an important and significant component of professional competence in the conditions of a dynamic changing environment, the development of techniques and technologies, demands and requirements of employers, and competence is a complex synthesis of cognitive, subject-practical, and personal experience. Thus, the marketing competence of the director as a factor in the competitiveness of the institution of education is "a consequence of self-organization and generalization of action-related and personal experience" (Anishchenko et al., 2008, p. 26). In this context, it is reasonable and justified to apply the methodological principles of the adaptive approach (T. Borova, G. Yelnikova, G. Polyakova, Z. Ryabova, P. Tretyakov, etc.), which ensures the priority of development of the subjects of activity and is carried out through the processes of self-organization. The principle of self-organization involves the interaction of the subjects of the labor market, educational services, social partners, the public in the process of specifying the objectives, plans, training programs, strategies for the development of educational institutions. These processes are aimed at achieving a common goal, the main elements of which are the requirements of the environment (people, organizations, etc.) and the real situation consideration. That is, with the help of the adaptive approach, there is a mutual agreement between the subjects of labor markets and educational services.

Scientists V. Svistun, L. Petrenko, N. Protsenko (2016) paid attention to the study of marketing competence of directors, in terms of the informational approach, as a combination of methods of scientific

knowledge, principles, conditions "associated with the implementation of professional and research tasks that are provided by computer science and implemented in the process of information and analysis activity of the specialist. Marketing competence is a methodological basis for the management of vocational education marketing". The actuality of the use of the informational approach is conditioned with the introduction of market mechanisms for the development of vocational education and training, the improvement of the quality of skilled workers training and provision with the needs of the labor market (Ryabova, 2010, p. 15-19).

Thus, the effective activity of VET institutions in conditions of the market economy forseees the introduction of marketing management of VET institutions based on a complex system approach to solving the tasks of the educational institution, its competitiveness. Therefore, the system of development of marketing competence of directors should take into account the methodological principles of systemic, competent, informational and adaptive approaches, which will become the modern scientific basis of marketing management for the formation of a relevant educational proposal and qualitative information provision of the process of professional training of specialists in accordance with the requirements of the labor market.

The marketing management of the VET institutions covers all aspects of its activities, from the study of trends in the development of the economy and the labor market, the needs and interests of consumers of educational services, the organization of vocational guidance work – to the assurance of an exact cycle of training of working personnel, their employment and the creation of conditions for further professional and career growth of the population of the region (Svistun et al., 2012, p. 8-14). According to V. Radkevich, marketing approach to management activity in vocational training institutions is an important basis for the management of the quality of vocational education, unification of the efforts of administrative and teaching staff of VET institutions, which will contribute to satisfying the needs of the population, business entities and the state in educational services of a different nature. For this purpose, marketing services are being created in vocational training institutions (Radkevich, 2016, p. 17).

The basis of the methodology of marketing management of the competitiveness of the institution of education at the market of educational services by scientists and researchers is the idea about the integrity of the mechanisms of forecasting and planning of marketing research in VET institutions (Garkusha, Tsukova and Goroshanska, 2011; Lepa and Debela, 2007; Palkevich, 2014), the basis of which is a marketing program, a certain cycle of actions based on the analysis of the internal (resources) and the external environment of the educational institution, proposed by Z. Ryabova (2012).

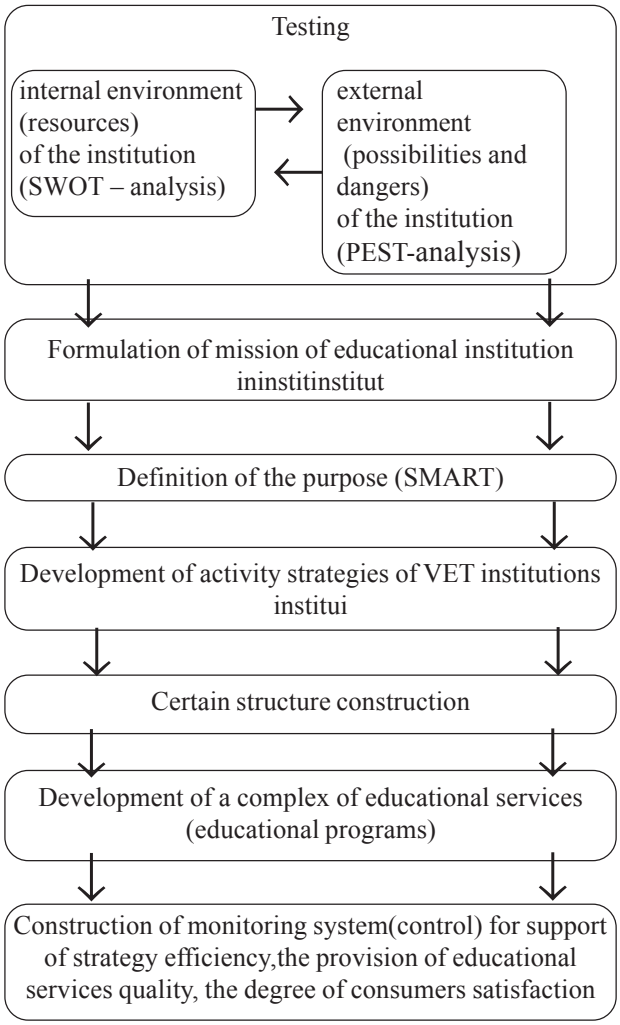

Fig. 1. Marketing program for studying the environment of educational institution.

The methodology is based on the targeted forecasting of the most probable condition, trends and peculiarities of the development of VET institutions in the perspective period on the basis of detection and proper assessment of stable connections and relationships between the criteria which characterize the external conditions of the functioning of VET institutions and the internal competitiveness potential of educational institutions. The results of forecasting are the scientific basis for the adoption and practical implementation of managerial decisions and the regulation of certain stages of planning. One of these stages is the development and implementation of the competitiveness criteria of VET institutions

(Palkevich, 2014). In particular, the criteria that determine the internal potential of the educational institution may be: the level of updating the material and technical base during the last three years, the percentage of employed graduates on the given profession, the availability and number of new educational services during the last three years, the payback period of new educational services, the level of personnel provision of the institution, number of sources of funding, systematic marketing research. The criteria that characterize the external conditions of the operation of the VET institutions are: the market segment, at which the service is oriented, the number of enterprises in the region for which workers are trained, the availability of vacancies at these enterprises, the prospects for the development of the corresponding industry, the effectiveness of social partnership, interaction with state regulatory bodies, etc.

The approximation of the labor market and the market of educational services, forecasting and planning of management of their development is a complex, continuous, multifactorial, interregional and inter-sectoral process. Despite the complex financial and economic conditions for the functioning of the system of VET institutions and the lack of workability of mechanisms for coordinating the labor market and correcting its fluctuations, the most important task is the close cooperation of these two markets in developing common methodological approaches to the creation of operational, tactical and strategic plans for the preparation and employment of graduates (Palkevich, 2014).

In this context, the present puts forward special requirements to the directors of the VET institutions who have to expand their professional competence and functions significantly, for satisfying the managerial needs in the system of vocational education and training.

Conclusions. Thus, orientation at the demands of the labor market, social partners, community demands, search and introduction of something new encourage scholars and practitioners to find modern approaches to management, create a scientific basis for educational management, form the director of the new generation, for which marketing competence becomes an important component of professional competence.

The modern director must have a thorough knowledge of the methods and techniques of management based on systematic marketing research. He must have progressive views, deep analytical and perspective thinking, understand that further improvement of the system of vocational education requires the establishment of mechanisms of cooperation between VET institutions and social partners, the formation (on this basis) of the educational proposal, the adaptation of educational content to the needs of employers, better quality education, etc. This will ensure the training of highly skilled workers, adapted to the current economic conditions and requirements of the labor market, and will help to increase the level of competitiveness of the educational institution at the market of educational services.

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УДК 377.091.113:339.138-047.22

Маркетингова компетентність керівників у забезпеченні конкурентоздатності закладів професійної (професійно-технічної) освіти на ринку освітніх послуг

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Реферат. Заклад професійної (професійно-технічної) освіти розглядається як відкрита соціально-педагогічна система, суб'єкт ринкових відносин, що функціонує одночасно на ринку освітніх послуг і ринку праці, забезпечуючи виявлення та задоволення освітніх потреб споживачів через пропозицію освітніх послуг. Доведено, що найкращих результатів розвиток людського капіталу досягає у сприятливому середовищі економічного зростання, де рішення щодо підготовки робітників і фахівців приймаються на основі соціального партнерства на місцевому та регіональному рівнях. У цьому контексті проаналізовано основні ідеї впровадження механізмів моніторингу, кращого регулювання та забезпечення якості професійної освіти, підготовки кадрів відповідно до поточних і перспективних потреб ринку праці в умовах децентралізації, посилення співпраці між публічними адміністраціями та роботодавцями, налагодження соціального партнерства. Особливої актуальності набуває пошук сучасних підходів до планування діяльності закладу освіти, підвищення якості надання освітніх послуг, ефективної підготовки фахівців, зокрема, планування маркетингової діяльності, основною метою якого є підвищення конкурентоспроможності закладів та їх освітніх послуг.

Автором розглянуто маркетинговий підхід до управління конкурентоздатністю закладу освіти на основі вивчення тенденцій розвитку економіки і ринку праці, потреб та інтересів споживачів освітніх послуг, визначено критерії конкурентоздатності закладу освіти. Встановлено, що для забезпечення адаптації освітньої пропозиції до потреб ринку праці, впровадження сучасних інформаційно-аналітичних інструментів ефективного планування і управління закладами професійної (професійно-технічної) освіти, необхідним є створення наукового підґрунтя розвитку маркетингової компетентності їх керівників. Проаналізовано концептуальні засади компетентнісного, системного, адаптивного, інформаційного підходів, які є методологічним підґрунтям визначення змісту та формування системи розвитку маркетингової компетентності керівників, пошуку шляхів підвищення ефективності прийняття управлінських рішень щодо діяльності і розвитку закладів професійної (професійно-технічної) освіти.

Ключові слова: *професійно-технічна освіта, конкурентоздатність закладу освіти, маркетингове управління, маркетингова компетентність керівника, ринок освітніх послуг.*

Received: 28 March 2019
Accepted: 19 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.109-115

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 109-115

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PROFESSIONAL ORIENTATION OF MATHEMATICAL TRAINING OF THE BACHELOR IN NAVIGATION

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Abstract. The article discusses the competences in Mathematics of a prospective Bachelor in Navigation. Mathematical competence is defined as a function of competencies: general and subject-specific. It's manifested that mathematics acts as a fundamental discipline for the further mastering of specialized disciplines. The article suggests the competence approach to mathematical education based on the analysis of professional requirements as the methodology of the research. These requirements determine the priority of the competencies required for professional activities of a bachelor in navigation.

The article states the principal provisions of the competence approach in terms of the Tuning methodology; classification of the general and subject-specific competencies of the Bachelor in navigation required for successful professional activities; analysis of the structure and content of the mathematical training of the prospective Bachelor in Navigation in some Higher Maritime Educational Institutions in Ukraine and Europe. In accordance with the IMO (International Maritime Organization, 2014) standards, the requirements for teaching mathematics to the undergraduate students are presented; the relationships between the tasks of vocational orientation and the corresponding blocks of Higher Mathematics discipline are investigated. The analysis of the determined tasks as well as cooperation with the lecturers of the specialized disciplines allows to formulate the content of the Higher Mathematics course paying sufficient attention to those sections of mathematics that are necessary for vocational training of the navigators; examples of types of the mathematical competence formation control are given; the contribution of the mathematical competence to the integral, general and special competencies indicated in the profile of a higher educational institution is manifested; the significance of Mathematics in programme training outcomes is stated.

The article suggests that the tools and approaches of the Tuning project provide effective monitoring, evaluation and improvement of the curriculum for achieving the object and making pertinent changes in the relevant subject areas.

Keywords: *mathematical competence, Bachelor in Navigation, IMO standards, programme training outcomes, Mathematics.*

Introduction. The urgency of the issue of mathematical competences development of the prospective Bachelor in Navigation is determined by the changes of the educational paradigm in higher education, rapid updating of information technologies, and integration of Ukrainian higher education into the common European educational environment. Development of the skilled specialist's vocational competence, first of all, is performed in the educational process of the Higher Education

Institutions (HEI). Contemporary society makes ever increasing demands on the HEI in responding to needs in training the competitive specialists with the established competencies in various fields, including mathematical ones.

We consider mathematical competence to be the system of mastered mathematical knowledge and methods, and also the ability to apply them for solving professional tasks. The acquired knowledge of the higher mathematics' theoretical foundation and the proficiency in mathematical tools are the basis for mastering the disciplines of the vocational cycle.

Materials. Issues concerning the modernization of professional education based on a competence approach have been developed in the researches of foreign (N. Talizina, A. Khutorsky, N. Khodireva, L. Ustinova and others) and Ukrainian (M.Pratzovytyi, V.Shvets, V.Klochko, M. Shkil and others) scholars. For example, A. Khutorsky (A. Khutorsky, 2005) considers competence as the form of a pre-formulated requirement for educational training of the subject expressed by a set of knowledge, skills and models of activities necessary for the effective performance in a particular field. Under the professional mathematical competence Y. Stelmakh (Stelmakh, 2011, p.2). understands the integrative ability of the individual, which provides preparedness for applying mathematical tools independently in accordance with the tasks of vocational activities.

The aim of the paper. The objective of the study is to determine the content of the Bachelor in navigation holders' mathematical competence.

Methods. For this purpose, a number of methods have been applied, namely *theoretical ones* (studying the normative documents and training programmes in the Higher Education Institutions (HEI) of maritime profile, in particular, the National University "Odessa Maritime Academy" and some maritime higher education institutions of European countries) and *practical* (results of foreign internships as well as teaching experience).

Results and discussions. Developing the Higher Mathematics (HM) course content we followed the Tuning methodology (translated from English: *the action or process of tuning something; setting, regulation, harmonization)* (TUNING Educational Structures in Europe, 1999) in our research. This methodology investigates the competence approach, which, in turn, is based on the analysis of professional requirements that determine the priority of the competencies required in a particular area of professional activities. The Tuning project is aimed at bringing educational structures closer to the countries participating in the Bologna process, including Ukraine.

Curriculum development aimed at educational outcomes facilitates a significant flexibility of the process. Unlike the conventional one, the module system has a number of advantages: it makes the training process more standardized and transparent relating to a certain specialty; provides the opportunity to obtain comparative results in different periods of study; assures student mobility through simplified students transfer system based on learning outcomes to move from one IHE to another, and with the ability to participate in Erasmus + Student Exchange Programs (2014).

The concept of outcomes compatibility preserves the autonomy of educational institutions and ensures diversity through the modules composing.

Under the Tuning project, the European Credit Transfer System (ECTS) (Rashkevich, 2014, pp. 46-63) has been developed: credits reflect the volume, and the learning outcomes manifest the content of this process. The number of credits determines the time required for achieving learning outcomes by an average student in accordance with the specifics of the educational institution and the training tradition.

The Tuning project comprises educational outcomes, which are expected indicators of student's abilities and skills determining what the student must know, understand, and be able to perform having completed the training process. The suggested results are formed by teachers. The student's acquired training outcomes are defined within certain competencies.

We define the following general competences to be acquired by a student while studying mathematical disciplines (TUNING Educational Structures in Europe, 1999): the ability to analyze and synthesize; basic knowledge in the main field of study, as well as in related fields; ability to solve problems and tasks; ability to apply knowledge in practice; perception of ideas from other subject areas; elementary computer skills; quantitative thinking; obtaining qualitative information from quantitative data; research skills; ability to adapt to new situations; creativity.

Revising the general list of subject-specific competencies (TUNING Educational Structures in Europe, 1999), we have identified exactly those which the prospective Bachelors in navigation should acquire while learning mathematical disciplines. They are: profound knowledge of the main sections of elementary mathematics (school course); the ability to solve mathematical problems and tasks, similar to previously studied but of a higher complexity level; the ability to transcode into the mathematical system the simplest problems posed in the formulation of other subject fields and to take advantage of this reformulation for further solution; the ability to construct mathematical models for the description and further study of non-mathematical processes; the ability to correctly interpret received mathematical

results in non-mathematical contexts; knowledge of software and its application for mathematical problems solving and obtaining additional information; ability to read and analyze educational and scientific mathematical literature, including published in a foreign language; the ability to represent and prove mathematical statements, to identify, to state clearly and solve problems that are understandable to the professional audience in written and oral form.

Having applied theoretical and practical methods, we can state the obtained research findings.

I. Having got the access to the websites of certain maritime institutions of higher education in Europe, an analysis of the teaching mathematical disciplines have been carried out in accordance with the indicated parameters: in which semester (or semesters) are these disciplines studied; what amount of credits is provided for mastering the discipline; as well as the content of the defined disciplines' study programmes.

Table 1 summarizes the outcomes of the study.

The given results prove it possible to draw the following conclusions: from 9 to 13 credits are assigned for mastering the required knowledge and skills in mathematics for the Bachelors in Navigation; the content of the curriculum in mathematics is determined by the IMO and national standards.

Taking into account the requirements of the IMO for training the prospective Bachelor in navigation contained in sections A-II / 1 and A-II / 2 of the STCW (Standards of Training, Certification and Watchkeeping for Seafarers) for every officer in charge of a navigational watch or master serving on seagoing ship of 500 gross tonnage or more, particularly concerning the problem of mastering knowledge and skills in "Mathematics", there appeared to be the need to reflect the structure and content of mathematics in compliance with the IMO standards (IMO 7.03 module course Appendix 1. Mathematics (2014). In this structure, sections of mathematics are definitely determined with the recommended amount of hours per lectures and practical training. Thus, we present the summary table as follows:

1) Algebra: lectures – 3, practice – 3;
2) Graphs: lectures – 3, practice – 3;
3) Proportions, interpolation: lectures – 3, practice – 5;
4) Geometry: lectures – 4, practice – 6;
5) Trigonometry: lectures – 2, practice – 4;
6) Measurements: lectures – 1, practice – 5;
7) Spherical triangles: lectures – 5, practice – 11;
8) Vectors: lectures – 2, practice – 4;
9) Circle, ellipse, hyperbole: lectures – 2, practice – 2;
10) Statistics: lectures – 3, practice – 1.

Totally, for the course – 72 hours, lectures – 28; practical classes – 44.

It should be noted that the content and the number of hours assigned for the course remain unchanged, but the number of hours assigned for lectures and practical classes may vary at the teacher's discretion. Appendix 1 Mathematics provides a list of knowledge and skills of the Bachelor in navigation for each sections of mathematics in the IMO 7.03 modeling course given above.

We suggest exploring more closely the mentioned-above list on the example of the topic "Spherical Triangles". 16 hours are assigned for learning this issue. According to the requirements, the bachelor should know (we give only a small number of questions): definition of a large circle, small circle, pole; definition of a spherical triangle as a figure on the surface of a sphere formed by three intersecting pairs of arcs of large circles; know that the sum of the angles of the spherical triangle is greater than 180 but less than 540; for the given two elements of a rectangular spherical triangle, find other elements applying Neper's rules.

III. In the National University "Odessa Maritime Academy" Higher Mathematics discipline, which is

Table 1

Results of the study of teaching mathematical disciplines in certain maritime universities of Europe

HEI	Discipline	Semester	Credits
Lithuania. Lithuanian Maritime Academy (LMA) / Lietuvos aukstosios jureivystes mokyklos (LAJM) (2019)	Applied mathematics	1	4
	Mathematics for navigation	2	5
Germany. Jade-Hochschule (2019)	Mathematics	1	5
	Statistics	3	5
Germany. Hochschule Flensburgof Applied Sciences (2019)	Mathematics	2	5
	Mathematics	3	5
Ukraine. Nationa University "Odessa Maritime Academy" (2019)	Higher Mathematics	1	5
	Higher Mathematics	2	5
	Mathematics for navigation	3	3

taught in the first and second semesters, covers 10 credits (300 hours). These hours are distributed as follows: for a lecture course – 74, for practical classes – 66, for independent work – 160. The indicated discipline is the basis for the other disciplines being studied at the next courses. The main topics taught during the study are: linear algebra; vector algebra; analytic geometry; differential calculus of functions of one and many variables; integral number of a single variable function; ordinary differential equations and their systems; numerical and functional rows; operational calculus; Probability theory and mathematical statistics; spherical trigonometry.

IV. In the course of fundamental training of the Bachelor in navigation, the discipline "Mathematical Principles of Navigation" is taught. Knowledge gained during the study of "Higher Mathematics" and "Navigation and Loya" is the prerequisite for the discipline learning. The discipline programme covers mathematical foundations which are considered

Table 2

The relationship of disciplines with Higher Mathematics course

Task	Discipline	Block in "Higher mathematics" course
Calculation of the arc of a large circle (ALC)	Fundamental Mathematics for navigation	Spherical trigonometry
Determination of the ship's position with two positioning lines	Fundamental Mathematics for navigation	Algebra, trigonometry, differential calculus, construction of geometric figures
Processing of measurements of navigation parameters	Fundamental Mathematics for navigation	Probability theory and mathematical statistics
Assesment of the accuracy of observation by an ellipse error	Fundamental Mathematics for navigation	Probability theory and mathematical statistics, construction of geometric figures
Navigation information errors	Fundamental Mathematics for navigation	Probability theory and mathematical statistics
Measures to improve the safety of navigation	Fundamental Mathematics for navigation	Probability theory and mathematical statistics
Parallax light triangle	Nautical Astronomy	Spherical trigonometry
Calculation of buoyancy and stability	Theory of vessel structure	Defined integral. Integral calculus for area determination (approximate quadrature formulas)
Calculation of the stability of the vessel	Theory of vessel structure	Analytical geometry. The notion of curvature and evolution, the connection between the coordinates of evolution points and evolvents
Calculation of the roll of the vessel	Theory of vessel structure coefficients	Differential equations. Integration of aggregate linear differential equations with constant
Seaworthiness/navigability characteristics	Theory of vessel structure	Vector algebra. Actions with vectors
Formation and expansion of forces	Theoretical mechanics	Elements of vector algebra. Properties of triangles
Finding the moment of force relative to the point	Theoretical mechanics	Elements of analytic geometry
The solution of the first and second dynamics tasks	Theoretical mechanics	Fundamentals of differential calculus. Properties of defined integrals
Studies of free, fading and forced board fluctuations	Theoretical mechanics	Differential equations
The movement of the vessel in the area of the direct current (direct and inverse task)	Theoretical mechanics	Vector algebra. Properties of triangles
Divergence of vessels (direct and inverse task)	Theoretical mechanics	Vector algebra. Properties of triangles

important for the knowledge acquired in accordance with the various competences of Section A-II / 1 and Section A-II / 2 of the STCW Code for an officer in charge of a navigational watch or master serving on seagoing ships of 500 gross tonnage or more.

The study of the discipline "Mathematical Principles of Navigation" provides the Bachelor in Navigation with the following competencies: the ability to plan and navigate the voyage (SC2); the ability to navigate in any conditions using appropriate methods to obtain accurate positioning and optimally use all available navigational data for navigation (SC3).

The programme learning outcomes are: ability to solve general mathematical problems for performing navigational calculations; ability to process and analyze navigation information; understanding the connection between theorems of spherical trigonometry and the formulas of calculations of the arc of a large circle; ability to use computer technology for automation of calculations; knowledge of the principle of location of the ship; understanding the causes of errors in navigation information and their types.

We present the example of the total hours distribution of the discipline complying with the curriculum of specialty 271 "River and sea transport". Consequently, three ECTS credits corresponding to 90 hours are provided for the study of the above-mentioned discipline. Auditory hours: lectures – 20, practical classes – 20.

V. Table 2 below displays some tasks of a professional profile assured by different disciplines with indication of the corresponding blocks of "Higher Mathematics" course.

Thus, the programme of the "Higher Mathematic"" course, in our opinion, will assure acquiring the professional (special) competencies (SC) (Ministry of Education and Science of Ukraine, 2018), namely: the ability to plan and navigate the voyage (SC2); the ability to navigate in any conditions, applying appropriate methods, to obtain accurate positioning and optimally utilize all available navigational data for navigation (SC3); the ability to plan and provide safe loading, location, fixing, controlling during voyage as well as cargo unloading, including dangerous (SC11); knowledge and ability to control landing, stability and stress of the ship's hull, provide support for the vessel in the naval state (SC12); the ability to analyze and predict the processes and state of the navigation equipment in conditions of incomplete or limited information (SC 17).

The course programme will provide the following learning outcomes (results of study – RS):

1. Ability to maneuver and operate the ship in all conditions, determining the location by astronomical methods, as well as applying modern electronic radar equipment, paying particular attention to the knowledge of devices' working principles, limitations, sources of error and the ability to detect and correct improper displays and utilizing correction methods for obtaining a precise data of location; interconnection and optimal implication of all available navigational data for navigation (RS2).

2. Skills for assessing navigation information received from all sources, including radar, automated radar equipment and electronic navigational-information system complexes for decision-making purposes in order to avoid collision and control ship's safe navigation; navigation technique in conditions of the visibility absence (RS 4).

3. Knowledge and understanding of the impact of displacement tonnage, vessel's draught, trim, speed and the vessel's keel clearance reserve on maneuverability of the vessel; the influence of winds and current on navigation; sinking effect, shallow water impact, etc. (RP7).

4. Understanding the basic principles of ship structure, theory and factors affecting vessel's grounding and stability (RS 99).

The levels of students' acquired competencies may be different and determined by assesment. There is a wide range of methods for assessing students' learning outcomes(results of study): testing, performing calculations and graphic works, and passing exams. For example, in the National University "Odessa Maritime Academy" the planned forms of monitoring the "Higher Mathematics" learning results are: four calculations and graphic works (CGW) and two exams.

Table 3 lists the sections of the "Higher Mathematics" course for conducting CGW in semesters / courses.

Table 3

Parts of "Higher Mathematics" for Calculation and Graphic Works performance

Types of individual tasks	Full-time study	Correspondence study
CGW № 1. Linear algebra. Vector algebra. Elements of analytic geometry.	1 semester	1 year (course)
CGW № 2. Differential calculus of functions of jne and many variables. Integral calculus.	1 semester	
CGW № 3. Ordinary differential equations. Numerical and functional rows.	2 semester	2 year (course)
CGW № 4. Spherical trigonometry. Probability theory.	2 semester	

Here we give an example of a Card for testing knowledge in "Fundamental Mathematics for navigation". These are questions covering topic "Mathematical analysis and navigation information processing":

1. The accuracy (error) implies…..
2. Classification of errors by sources ...
3. Systematic errors are ...
4. Random mistakes are ...
5. Failures are ...
6. The navigation parameter is determined as…. (give the definition)
7. A prior assessment is ...
8. A posteriori assesment is ...
9. Gauss' formula (write)
10. Bessel's formula (write)
11. The formula of the QME (quadratic mean error,) in terms of the measurement results (write).

Conclusions. It has been found out that mathematics has proven to be the fundamental discipline for further mastering of specialized (profile) disciplines. In the study mathematical competence is determined as a function of general and subject-specific competencies. It has been argued that the content of the study programmes of mathematical disciplines should be continuously monitored and assessed in order to determine whether the objective has been achieved or whether it is still relevant in the context of changes in the relevant subject areas. Tuning project's tools and approaches facilitate effective monitoring, evaluation, and improvement of the curriculum. Thus, the Tuning project provides a way for enhancing the quality of education at the level of curricula. We suggest the study of the defined issue to be the perspective task for further research.

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УДК 37.015:51]:629.5.072.8

Професійна спрямованість математичної підготовки бакалавра судноводіння

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Реферат. У статті розглядається питання математичної компетентності майбутнього бакалавра судноводіння. Математична компетентність представлена як функція загальних та предметно-спеціальних компетенцій. Показано, що математика є фундаментальною дисципліною для подальшого засвоєння профільних дисциплін. Компетентнісний підхід до математичної освіти розглядається як методологія, що базується на аналізі професійних вимог, котрі визначають пріоритетність компетенцій, необхідних для професійної діяльності бакалавра судноводіння.

У статті: сформульовані основні положення компетентністного підходу в термінах методології Tuning; перераховані загальні та предметно-спеціальні компетенції, що необхідні бакалавру судноводіння для успішної професійної роботи; проаналізовано структуру та зміст математичної підготовки майбутнього бакалавра судноводіння в окремих морських закладах вищої освіти України та Європи; у відповідності до стандартів IMO (International Maritime Organization, 2014) представлені вимоги щодо викладання математики в бакалаврів; розглянуто зв'язок між завданнями професійної орієнтації та відповідними блоками дисципліни "Вища математика"; аналіз сформульованих завдань, а також співпраця з викладачами профільних дисциплін дали змогу сформувати зміст курсу "Вища математика", приділити достатню увагу тим її розділам, що необхідні для професійної освіти судноводія; наведено приклади видів контролю формування математичної компетентності; відображено місце математичної компетентності у переліку компетентностей, зазначених у профілі закладу вищої освіти; відображено роль математики в програмних результатах навчання.

Показано, що інструменти та підходи проекту Tuning дають змогу здійснити ефективний моніторинг, оцінку та вдосконалення навчальних програм для досягнення поставленої мети та внесення актуальних змін у відповідні предметні галузі.

Ключові слова: *математична компетентність, бакалавр судноводіння, стандарти IMO, програмні результати навчання, математика.*

Received: 03 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.116-124

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 116-124

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PEDAGOGICAL CONDITIONS OF THE FORMATION OF THE INDIVIDUAL STYLE OF PROFESSIONAL ACTIVITY OF FUTURE PHYSICAL CULTURE TEACHERS IN THE PROCESS OF PEDAGOGICAL PRACTICE

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Abstract. The scientific substantiation of the pedagogical conditions of the formation of the individual style of professional activity of future physical culture teachers in the process of pedagogical practice is outlined. This phenomenon is presented as a set of specially created circumstances that take into account the peculiarities of the professional training of future physical culture teachers and are realized in the institution of higher education; provide the solution of the problem, leading to innovative improvement of higher physical education. Internal positive motivation ensures encouraging attitude of students towards the development of an individual style of professional activity in the process of pedagogical practice and the improvement of the content of professional training – its content integrity. It has been found that the use of innovative technologies and techniques in the process of practical training contributes to the disclosure of individual and personal qualities, the development of cognitive and creative activity of future physical culture teachers in acquiring professional and pedagogical knowledge, skills and methods of healthcare-saving activity, determining their personal trajectory of professional growth. The development and implementation of a complex of search-situational tasks enables the gradual formation of the individual style of professional activity of future physical culture teachers, develops their non-standard, non-stereotypical thinking and promotes self-development of their individuality in practical activity through the system of original methodical techniques of the organization of physical culture and health, sports-mass and health-development process in educational institutions.

Keywords: *pedagogical conditions, individuality, an individual style of professional activity, a physical culture teacher, pedagogical practice.*

Introduction. The implementation of a modern educational paradigm depends to a large extent on the teacher. The modern school needs teachers who embody a bright creative personality and can provide the maximum realization of the student's creative potential.

The Laws of Ukraine "On Higher Education" (2014), "On Education" (2017), the National Strategy for the Development of Education for the period up to 2021 (2013), the Pedagogical Constitution of Europe, the Concept of the New Ukrainian School (2017), the Sectoral Concept for the Development of Continuous Pedagogical Education (2013) refer to enhancing the role of the teacher in compelling students to study, stimulating their initiative and autonomy, socialization, preserving their health, forming a readiness for conscious life and professional choice. The implementation of these tasks is possible due to the introduction of new, progressive models of various forms and innovative methods and techniques of training and education. In this context the issue of improving the professional training of future physical culture teachers in institutions of higher education, in particular, the formation of an individual style of professional activity in the process of pedagogical practice is actualized.

The importance of studying this issue is due to: the need to improve the training of future physical culture

teachers regarding their ability to form vital qualities of student youth, a stable motivation to study physical culture and sports against the background of decreased of physical activity; increase of the requirements for the professional activity of physical culture teachers, especially, regarding the organization of physical culture and health, sports-mass and health-development process in educational institutions, as well as professional development and self-realization in professional activity; an objective need for the search for innovative methods of training future physical culture teachers, in particular the formation of an individual style of professional activity in the process of pedagogical practice.

Materials and methods. Various aspects of the formation of the style of education, teaching, pedagogical leadership, pedagogical and professional activity have been studied by K. Abulkhanova-Slavska, O. Bodalov, N. Bordovska, L. Zimina, I. Zyazyun, Zh. Kovaliv, A. Markova, A. Rean and others. The study of the peculiarities of the individual style of activity have been carried out by C. Hilmanov, E. Klimov, V. Merlin, V. Nebylitsyn, A. Sannikova B. Teplov and others. The significance of pedagogical practice in the training of future teachers is disclosed in the works of Z. Abasov, M. Vorobyova, T. Mikhailova, L. Khomych and others. The thorough analysis of the professional training of future physical culture teachers has been performed by O. Azhippo, O. Atamas, E. Vilchkovsky, P. Dzhurinsky, M. Karchenko, T. Krusevich, Yu. Kurnyshev, M. Lyannoy L. Sushchenko, O. Tymoshenko, B. Shyyan and others.

However, the issue of substantiation of pedagogical conditions and ways of adjusting the existing individual style of professional activity (hereinafter ISPA) of future physical education teachers in the training, including the process of teaching practice, is insufficiently developed.

Research methods: theoretical analysis, comparison, generalization – with the aim of revealing and theoretical substantiation of the pedagogical conditions of the formation of the individual style of professional activity of future physical culture teachers in the process of pedagogical practice; the method of questioning and independent expert evaluation – to determine the most important pedagogical conditions.

The purpose of the research: to identify and scientifically substantiate the most effective pedagogical conditions of the formation of the individual style of professional activity of future physical culture teachers in the process of pedagogical practice.

Results and discussions. The pedagogical conditions of the formation of the professional qualities of future teachers are the subject of numerous scientific researches (Hrebenyuk O. and Hrebenyuk T., 2006; Tymoshenko 2008; Nychkalo, 2014; Radkevich, 2016; Kurnyshev, 2016; Bugaenko, 2018), but only a part of them takes into account the specifics of professional activity and peculiarities of educational training of the specialists of a particular branch.

The term "condition" is recognized a certain set of changing natural, social and internal actions that affect the physical, mental, moral development of a man, his behavior, education and training, the formation of personality (Dubasenyuk, 2006, p. 36). The derivative concept of the scientific category "condition" is the term "pedagogical conditions", the multiplicity of which is outlined by the numerous interpretations of scientists and projects a broad perspective for research. Some authors propose to consider them as external circumstances which ensure the functioning and development of a process that requires some sort of organization – (Karpychev, 2004). In other works the pedagogical conditions are positioned as external circumstances, factors that significantly influence the pedagogical process, designed by the teacher, as such that causes, but does not guarantee the desired results.

On this basis we consider the pedagogical conditions as a complex of means of effective implementation of the educational process; a set of objective possibilities of content, forms, methods, techniques, means of pedagogical activity. In determining the pedagogical conditions of the formation of the ISPA of future physical culture teachers in the process of pedagogical practice we take into account the essential characteristics of the investigated process and the requirements based on objectivity, systemacy, structuring, interdependence and specificity justified by methodologists.

The professional activity of physical culture teachers requires, on the one hand, the activation of individual properties and acquired professional qualities, and on the other hand – taking into account the objective professional qualification requirements. In this context we consider the arguments of the researchers that the pedagogical conditions determine the functioning of a special environment in which an individual style is formed, manifested and developed as a systemic personal formation, specified by a complex of intellectual, motivational, psychological properties and other qualities.

Studying and generalization of the scientific papers of N. Nychkalo, V. Radkevich, V. Rybalko, B. Semychenko, A. Tymoshenko, A. Tsosya, B. Shyyan and others testifies that internal and external factors are important in the formation of the individual style of future physical culture teachers. Among the internal factors the following are distinguished – personal qualities, individual peculiarities of the development of the psyche, the appearance of new formations in the existential, regulatory and emotional spheres,

which ensure the development of active philosophical positions and aspirations of future physical culture teachers to the choice of an individually peculiar set of the components of activity (goals, actions, operations), which are most consistent with their personal qualities and enable the most successful implementation of the tasks provided by the program of pedagogical practice. The external factors determine the factors related to the formation and implementation of the relations between the teacher and students, the organization and objective evaluation of the educational process; the place of the study, subject environment, equipment and others (Hrebenyuk and Hrebeniuk, 2006).

The pedagogical conditions of the formation of the ISPA of future physical culture teachers are characterized by the original content, the essence of which reflects the integration specificity of the professional activity of such specialists in the organization of physical culture and health, sports-mass and health-development process in educational institutions, as well as professional development and self-realization of professional activity. Therefore, to clarify the pedagogical conditions of the formation of the ISPA of future physical culture teachers, in addition to theoretical analysis and generalization, a method of questioning and independent expert evaluation has been used, in which 30 physical culture teachers of higher educational institutions and 65 physical culture teachers have participated. Each of the respondents was asked to name the factors that had a positive impact on the formation of the ISPA. Of the total number of the respondents' responses, 15 of the most frequently repeated variants of the formulation of the conditions which were summarized and graphically presented in *Table 1* were selected.

Table 1

The main factors influencing the formation of the individual style of professional activity of future physical culture teachers in the process of pedagogical practice (according to the survey results)

№ w/o	Generalized interpretative variants of the formulation of pedagogical conditions	Frequency response rate
1.	Accentuation of value-motivational, cognitive-content and operational-action activity	3,4
2.	Encouraging future physical culture teachers to manifest their own potential in the process of pedagogical practice in order to achieve success in further professional activity	14,5
3.	Harmonization of individual needs of teachers, professional interests of students with request of practice of physical education	3,1
4.	Purposeful self-actualization of the personality of the future teacher based on self-determination, self-development and the desire to develop an individual style of pedagogical activity	3,2
5.	Deepening of knowledge of future physical culture teachers about the mechanisms and ways of development of the ISPA on the basis of teaching special courses and variational educational disciplines	12,5
6.	Realization of the ideas of the individual approach in the educational and cognitive activity of future physical culture teachers during pedagogical practice	5,3
7.	The in-depth nature of practical activity provides the involvement of the students in the implementation of all types of professional activity of the physical culture teachers during the professional training process	11,6
8.	The priority of independent work with ensuring the possibility of free choice of strategies, methods and mechanisms for the implementation of individual plans and programs for professional activity and professional self-improvement	8,4
9.	Continuous diagnosis and correction of the state of the formation of an individual style of professional activity	3,2
10.	Psychological and pedagogical support of students' professional formation as individuals in the process of pedagogical practice	7,4
11.	Development and implementation of educational programs and algorithms for working out the individual style of activity	5,3
12.	The use of case studies and creative tasks with the possible gradual increase of the level of complexity in the process of pedagogical practice	6,3
13.	Methodical provision of practical implementation of the monitoring of the quality of the formation of the individual style of professional activity	4,2
14.	The use of various forms of organization of independent work of study with the purpose of development of students' creative abilities	5,3
15.	Functioning of a favorable educational and developing environment	6,3

In order to determine the most important pedagogical conditions for the formation of ISPA of future physical culture teachers, the method of independent expert evaluation has been used, according to which the source of information is the results of quantitative and qualitative processing of evaluative judgments of the experts of a particular phenomenon or process. The main functions of this method of cognition are diagnostic, prognostic, planning, designing (Novosad compl., 2009). Seven scientists from the National Academy of Pedagogical Sciences of Ukraine, seven professors from the higher educational institutions, in which the future physical education teachers are being trained, as well as seven physical culture teachers, have formed an expert group on the evaluation of the importance of the pedagogical conditions of the formation of the ISPA of future physical culture teachers in the process of pedagogical practice.

The generalized results of the conducted independent evaluation with the calculation of the average score, the significance of the pedagogical condition, its final place of the indicator in the process of training future physical culture teachers is presented in *Table 2*.

As the pedagogical conditions for accentuation of value-motivational, cognitive-content and operational-action activity, stimulation of future physical culture

Table 2

Pedagogical conditions of the formation of the individual style of professional activity of future physical culture teachers (on the basis of independent expert evaluation)

№ w/o	Pedagogical conditions of the formation of the individual style of professional activity of future physical culture teachers	Significance of the condition	Average score of the condition	Ranked place
1.	Accentuation of cognitive-content, operational-activity, value-motivational activity	10,3	0,9	12-15
2.	Encouraging of future physical culture teachers to manifest their own potential in the process of pedagogical practice in order to achieve success in further professional activity	1,0	8,6	1
3.	Harmonization of individual needs of the teachers, professional interests of the students with requests of practice of physical education	9,6	1,1	12-15
4.	Purposeful self-actualization of the personality of the future teacher based on self-determination, self-development and the desire to develop an individual style of pedagogical activity	9,8	1,6	12-15
5.	Deepening of knowledge of future physical culture teachers about the mechanisms and ways of development of the ISPA on the basis of teaching special courses and variational educational disciplines	1,2	8,3	2
6.	Realization of the ideas of the individual approach in the educational and cognitive activity of future physical culture teachers during pedagogical practice	9,1	3,5	8-10
7.	The in-depth nature of practical activity, which provides the involvement of the students in the implementation of all types of professional activity of physical education teachers during the process of professional training	1,8	7,6	3
8.	The priority of independent work with ensuring the possibility of free choice of the strategies, methods and mechanisms for the implementation of individual plans and programs for professional activity and professional self-improvement	3,6	4,9	4
9.	Continuous diagnosis and correction of the state of the formation of an individual style of professional activity	12,6	0,8	12-15
10.	Psychological and pedagogical support of the students' professional formation as individuals in the process of pedagogical practice	5,1	4,4	5
11.	Development and implementation of educational programs and algorithms for working out the individual style of activity	8,6	2,1	8-10
12.	The use of case studies and creative tasks with the possible gradual increase of the level of complexity in the process of pedagogical practice	7,0	3,9	6-7
13.	Methodical provision of practical implementation of the monitoring of the quality of the formation of the individual style of professional activity	9,4	1,7	11
14.	The use of various forms of organization of independent work of study with the purpose of development of students' creative abilities	8,1	2,6	8-10
15.	Functioning of a favorable educational and developing environment	7,2	3,6	6-7

teachers to the manifestation of their own potential in the process of pedagogical practice in order to achieve success in further professional activity are inherently interrelated and provide for the coordination of the individual needs of the teachers, the professional interests of the students with the demands of practice of physical education, as well as focused on self-actualization through self-determination, self-development and the desire to develop an individual style of pedagogical activity, then the pedagogical conditions with sequence numbers 1, 2, 3, 4 (see Table 2) are united into one, which is reflected in such an interpretation of the first condition: the formation of internal positive motivation to the development of an individual style of professional activity.

The scientific basis for determining the mechanisms for implementing this condition was the principles of humanistic psychology and pedagogy, described in the work of K. Rogers (1959): "it is important for a person to have her/his own perception of the surrounding world; a person aspires to self-knowledge and self-realization, he has an internal need for self-improvement". The professional activity of future physical culture teachers in the process of pedagogical practice is determined by the following groups of motives for the formation of the ISPA: socially significant (the desire to acquire new knowledge, skills and abilities to grow professionally, and, therefore, to promote social progress); professionally significant (love for children, physical culture and sport, creative nature of professional activity); self-education and authority (positive image among the students, parents, colleagues, high professional ideals, the desire to stand out, express oneself, self-realization and self-assertion, expansion of outlook).

The realization of the condition must be oriented towards the formation of a positive attitude towards the development of an individual style of professional activity of future physical culture teachers in the process of pedagogical practice, which influences their activity, purposefulness and persistence in mastering theoretical knowledge, acquire professional skills and skills in the organization of physical culture and health, sports-mass and health-development process in educational institutions.

The main mechanisms to ensuring this condition are the methods and techniques for updating individual value-motivational, cognitive-content and operational-action activity of the students regarding the assimilation of professional knowledge of the individual style of activity, professional development, the mechanisms of an individual style development and its manifestation in professional activity; acquisition and presentation of professional skills and skills in the organization of physical culture and health, sports-mass and health-development process in educational institutions, as well as critical thinking necessary for self-satisfaction in the profession, communicative interaction that occurs not only in teaching practice, but also during the training courses.

Continuous diagnosis and correction of the state of the formation of the individual style of professional activity of future physical culture teachers from the course to the course allows identifying and taking into account positive changes of the personal qualities that occur as a result of the external targeted effects in the conditions of specially created educational and developing environment. The empirical data obtained in the course of diagnosis make it possible to minimize the probable contradictions and mistakes in determining the levels of the formation of the ISPA. Referring to the results of the diagnosis allows revealing the qualities and characteristics of future physical culture teachers, on the development of which should work students and teachers.

During the pedagogical practice of future physical culture teachers, it is necessary to provide permanent psychological and pedagogical assistance in developing of an individual style of activity that would contribute to the successful implementation of professional tasks in the organization of physical culture and health, sports-mass and health-development process in educational institutions.

The content of psychological and pedagogical and methodological support is to provide students continuously with the assistance in solving their individual problems, identify, analyze critically and eliminate psychological barriers that complicate the interaction with the subjects of the educational process. In conducting the accompaniment it is important to adhere to the sequence in applying such techniques: approval, analysis of the errors and shortcomings, advice. Psychological and pedagogical help and stimulation of active actions of future physical culture teachers are considered as interrelated mechanisms of the formation of the individual style of professional activity. The purpose of stimulation is to create an atmosphere of creative learning of knowledge, the awakening of the desire to find new, the formation of the needs of the individual in the professional self-improvement. We support B. Shyyan's view that the identification of the creative potential of future teachers takes place during the active pedagogical interaction with the students in the process of pedagogical practice, which is specified using the original methods and techniques of activity (Shyyan, 2001).

In this regard we have reasons to assert that psychological and pedagogical support in the situations of the subject-subject interaction, oriented on the formation of an individual style of professional activity,

involves overcoming psychological barriers, promotes updating of value-motivational, cognitive-content and operational-action activity of practitioners, development of the positive feelings, the formation of own vision of the prospects for achievement professional success, beliefs about the correct choice of the style of professional activity.

The second pedagogical condition of the formation of the ISPA is indicated by the following formulation: improving the content of vocational training, taking into account the individualization of professional activity. In its content the pedagogical conditions with numbers 5, 6, 9, 11, which in their essence are oriented on the development of individuality and personal qualities of future physical education teachers, are integrated.

The practical realization of this condition is possible on the basis of the priority of subject-active and search-situational approaches to the organization of professional training and, first of all, the pedagogical practice of future physical culture teachers. Thus, the mechanisms for creating this condition are determined by understanding and perception of the peculiarity of pedagogical practice, during which future physical culture teachers may be in different subject areas: "the subject of study" (supervises the professional activity of the working physical education teacher, explores his style of activity, acquaints himself with the perspective pedagogical experience, distinguishes the acceptable forms, methods, techniques of work); "the subject of teaching" (uses various methods and techniques for the organization of health-improving educational process, health-saving technologies – for the formation of vital qualities of student youth, a stable motivation to study physical culture and sports). These positions include the student's perception of himself, the characterization of his existential sphere as dominant (the ability to self-awareness, self-esteem, comparison with other people). A common feature of the position is the integral "I – concept" (I am a student, I am a future teacher, I am a teacher, I am a professional).

Improvement of the content of vocational training taking into account the individualization of professional activity enables the content integrity of the formation of the individual style of professional activity, in particular: awareness of the future physical culture teachers the importance of the individual style of professional activity for self-realization, knowledge of the style, its varieties and components, the mechanisms of implementation and adjustment, promotes the formation of the ability to apply the acquired knowledge for the successful accomplishment of the tasks in the leading activities, in particular, the organization of physical culture and health, sports-mass and health-development process in educational institutions, which contributes to the integral formation of spiritual and physical strength of student youth.

Awareness of the importance of the formation of the ISPA of physical culture teachers is the basis for wider use of the latest technologies (informational, project, problem and others) that are intended to enhance the educational and cognitive activity of the students, increase the efficiency of their general scientific and professional training and are taken into account in the formulation of the t*hird pedagogical condition.* By its very nature, the specified condition synthesizes the content of the terms with numbers 7, 8, 10, 13, 14 (see *Table 2*).

The students' activity during the pedagogical practice is analogous to the professional work of the teacher, adequate to its content and structure, and is organized in the conditions of educational realities. In connection with this the motivating factor in the formation of the ISPA is the use of innovative techniques and technologies, in particular, conducting workshops, training sessions, discussions, the widespread use of interactive methods, namely: "method-press", "choose a position", "aquarium", "rotation triplets", "world cafe" and so on, which are described in details in a number of scientific works and methodical manuals. An important method of shaping the ISPA of future physical culture teachers is the research. Within the framework of its application students will be provided with mini-studies related to the study of the peculiarity of the professional activity of physical culture teachers and their stylistic manifestations and the compilation of the interpretive characteristics of the ISPA. Based on the application of the method, in the minds of future teachers the belief is formed that an effective individual style provides the greatest result at the minimum time and effort, as well as the fact that the formation of their own style, taking into account, first of all, the properties of the person itself, as well as the specifics of the requirements of activity contributes to the increase of productivity. At the same time a stable idea of the possibility of developing the ISPA is formed.

In order to optimize the methodological support of the formation of the ISPA of future physical culture teachers, it is important to carry out pedagogical quality monitoring. The implementation of the condition involves the use of a multi-level system of forward-looking improvement of pedagogical skills, which would take into account the conditions of the institutions of higher education, would be based on the capabilities, abilities and characteristics of each student-practitioner. The creation of such a system involves the changes in the organization of pedagogical practice in order to enhance the individuality and

practical orientation of the professional training of future physical culture teachers from the first to the last year of study. Such an approach is innovative in the training of future physical culture teachers, and therefore, in pedagogical practice as well. It is desirable that every student-practitioner, every physical culture teacher should appreciate positively, first of all, their personal qualities and capabilities and should define their own social role in the overall innovation process.

The fourth condition theoretically and methodologically grounded is the development and implementation of a complex of search and situational tasks, oriented towards the gradual formation of the individual style of professional activity of future physical culture teachers; involves the development of creative critical thinking, promotes self-development of a person's individuality in practical activity through the system of original methods of the organization of physical culture and health, sports-mass and health-development process in educational institutions. The need for solving such problems arises in certain pedagogical situations, which makes it possible to increase gradually their complexity in the process of pedagogical practice and, consequently, the gradual formation of the ISPA.

The provision of student-practitioners with a complex of search-situational tasks with a gradual increase of the level of their complexity in the process of pedagogical practice is conditioned by the absence of objective circumstances in the real educational space for the manifestation of the students' individuality. In the process of performing such tasks, students have the opportunity to choose their own individual way of pedagogical interaction, which will help to identify their own personality, manifestation of creativity and determination of the personal trajectory of professional growth.

Conclusions. The pedagogical conditions of the formation of an individual style are a set of specially created circumstances that take into account the peculiarities of the professional training of future physical culture teachers and are implemented in the institution of higher education; provide a solution to the scientific problem, leading to the innovative improvement of higher physical education. It is proved that the formation of the students' internal positive motivation provides a positive attitude towards the development of an individual style of professional activity in the process of pedagogical practice, affects their activity, purposefulness and persistence in mastering theoretical knowledge, acquiring professional skills and skills in the organization of physical culture and health, sports-mass and health-development process in educational institutions. Improvement of the content of vocational training taking into account the individualization of professional activity enables the content integrity of the formation of an individual style of professional activity, in particular: awareness of the future physical culture teachers the importance of the individual style of professional activity for self-realization, knowledge of the style, its varieties and components, the mechanisms of implementation and updating, promotes the formation of the ability to apply the acquired knowledge for the successful accomplishment of the tasks in the leading activities, in particular the organization of physical culture and health, sports-mass and health-development process in educational institutions, which contributes to the integral formation of the spiritual and physical strength of student youth. It has been found that the use of innovative technologies and techniques in the process of practical training contributes to the disclosure of individual and personal qualities, the development of cognitive and creative activity of future physical culture teachers in acquiring professional and pedagogical knowledge, skills and methods of healthcare-saving activity, determining their personal trajectory of professional growth. The development and implementation of a complex of search-situational tasks enables the gradual formation of the individual style of professional activity of future physical culture teachers, develops their non-standard, non-stereotypical thinking and promotes self-development of their individuality in practical activity through the system of original methodical techniques of the organization of physical culture and health, sports-mass and health-development process in educational institutions.

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УДК 378.147-027.22:[37.011.3-051:796

Педагогічні умови формування індивідуального стилю професійної діяльності майбутніх учителів фізичної культури у процесі педагогічної практики

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Реферат. Викладено наукове обґрунтування педагогічних умов формування індивідуального стилю професійної діяльності (далі: ІСПД) майбутніх учителів фізичної культури у процесі педагогічної практики. Цей феномен представлено як сукупність спеціально створених обставин, що враховують особливості професійної підготовки майбутніх учителів фізичної культури та реалізуються в умовах закладу вищої освіти, забезпечують розв'язання поставленої проблеми, зумовлюючи інноваційне вдосконалення вищої фізкультурної освіти. Внутрішня позити-

вна мотивація забезпечує позитивне ставлення студентів до вироблення індивідуального стилю професійної діяльності у процесі педагогічної практики, а вдосконалення змісту професійної підготовки – його змістову цілісність. З'ясовано, що використання інноваційних технологій і методик у процесі практичної підготовки сприяє розкриттю індивідуально-особистісних якостей, розвитку пізнавальної та творчої активності майбутніх учителів фізичної культури в набутті професійно-педагогічних знань, умінь і способів здоров'язбережувальної діяльності, визначенню ними особистісної траєкторії професійного зростання. Розроблення та впровадження комплексу пошуково-ситуативних завдань уможливлює поетапне формування індивідуального стилю професійної діяльності майбутніх учителів фізичної культури, розвиває в них нестандартність, нестереотипність мислення, сприяє самопрояву їхньої індивідуальності у практичній діяльності через систему оригінальних методичних прийомів організації фізкультурно-оздоровчого, спортивно-масового й оздоровчо-розвивального процесу в закладах освіти.

Ключові слова: *педагогічні умови, індивідуальність, індивідуальний стиль професійної діяльності, вчитель фізичної культури, педагогічна практика.*

Received: 28 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.125-130

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 125-130

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FORMATION OF THE READINESS OF FUTURE TEACHERS OF PHYSICAL CULTURE FOR PROFESSIONAL ACTIVITY

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Abstract. The theoretical study reveals professional training as a dynamic process in which the goals of education and the formation of competencies, application of the received social experience are realized. In this aspect, education involves the creation of a holistic system of lifelong learning, development and upbringing of a person that provides training in various spheres of educational activity in accordance with the educational needs of the subjects of the pedagogical process.

The training of the specialist, in particular a teacher, has its own peculiarities depending on the chosen specialty. Therefore, it is appropriate to consider the peculiarities of the preparation of the future teacher of physical culture at the pedagogical institution of higher education.

The contents of the preparation of the teacher of physical culture for professional activity in a comprehensive educational institution, that is, the implementation of the holistic pedagogical process of upbringing the physical culture of the person, is based on the expanded interpretation of the content of pedagogical education.

In the structure of readiness for the professional activity of the future teacher of physical education, we distinguish the motivational, theoretical and practical-creative components, each of which has specific target functions and in this sense relatively independent. This structure of the components of professional preparedness provides its containing basis, which determines the possibility of implementing various types of vocational and pedagogical activities in full.

The problem of substantiating the essential characteristics of the readiness of the teacher of physical culture for professional activity in the theory of special pedagogical education is not new, but there is no a single interpretation of it, and in many cases – it is identified with other categories. This identification expresses the totality of professionally determined requirements to work and the teacher's personality, namely: preparedness, competence, qualification, mastery, artfulness, professionalism.

The practical significance of the received results of the study is determined by the fact that its theoretical positions and conclusions create real prerequisites for the scientific provision of the training of the future teacher of physical culture and the implementation of a holistic pedagogical process of promoting the physical culture of the students' personality.

Keywords: *readiness for professional activity, components, future teacher of physical culture, personality.*

Introduction. The problem of substantiating the essential characteristics of the readiness of the teacher of physical culture for professional activity in the theory of special pedagogical education is not new, but there is not a single interpretation of it, and in many cases it is identified with some other categories.

Materials. The analysis of works devoted to the problem of training pedagogical staff at institutions of higher education, indicates the complexity of the concept of "training', the breadth and variety of its interpretations. For example, M. Skatkin (1986), V. Shadrikov (1996) and others determine the training as a process that realizes the goals of education and the formation of competencies, the application of the received social experience. In this aspect, education foresees the creation of a holistic system of lifelong learning, development and upbringing of the person, which provides training in various spheres of educational activities in accordance with the educational needs of subjects of the pedagogical process. M. Vilenskiy and R. Safin define professional training of the specialist as a set of general scientific and special knowledge and skills requirements for physical and mental, moral and personal qualities, development of pedagogical skills, possessed by which the specialist can successfully carry out his professional responsibilities (Vilenskiy and Safin, 1989) .

Summarizing the findings of scientists, it can be argued that the professional and pedagogical orientation of the future teacher of physical culture is an integral dynamic personality property, expressing the dominant conscious and unconscious attitudes (towards the teaching profession), which predetermine the preparation for the future activity and the success of its implementation.

The aim of the paper is to substantiate the features of training of future teachers of physical culture for professional activity.

Methods: theoretical analysis and generalization of data of scientific-methodical and special literature, study of documentary materials; observation; questionnaire.

Results and discussions. Scientific novelty of research results is in specification of indicators of the formation of readiness of future teachers of physical culture: motivational (valuable attitude, professional-cognitive interest in mastering the profession, motivational achievement).

The practical significance of the results of the study is determined by the fact that its theoretical provisions and conclusions create real prerequisites for the scientific support of training the future teacher of physical culture and the implementation of the holistic pedagogical process of promoting the physical culture of the personality of students. So, the readiness of the teacher of physical culture for professional activity, that is, the implementation of the holistic pedagogical process of promoting the physical culture of the personality of students, is disclosed as a complex qualitative, structural and dynamic unity characterized by a certain level of special theoretical, practical, motivational values acquired as a result of upbringing, education, integrated into the teacher's creative pedagogical activity. The central core of the readiness of the teacher of physical culture for professional activity is positive directives, motivation and mastered of values of physical culture and the teaching profession. The indicated readiness includes professionally important traits of character, pedagogical abilities, a set of professional-pedagogical knowledge, skills and a certain experience of their application in practice.

The term "training" is understood as a dynamic process, the ultimate goal of which is the formation of such professional qualities as "readiness". In other words, preparation for the profession is nothing more than the formation of readiness for it.

The problem of substantiation of the essential characteristics of the readiness of the teacher of physical culture for professional activity in the theory of special pedagogical education is not new, but there is not a single interpretation of it, and in many cases, it is identified with other categories, expressing the totality of the professionally conditioned requirements for the work and personality of the teacher, namely: preparedness, competence, qualification, mastery, artfulness, professionalism.

The term "readiness" reflects the quality of integrity, integral efficiency, solves the problem of fixing unity in the variety of (close-to-content, but multi-dimensional) concepts. Considering the readiness as the product of activity which is characterized by objectivity (at what it is directed), aspectality (a set of components and their properties), integrity, representativeness (representation of adequate specialties) and a measure, we reveal a series of relations between the marked characteristics of the same concepts, namely: readiness integrity; professionalism – objectivity; competence and competence aspectality; qualification representativeness; mastery measure.

Pedagogical studies of human readiness for professional activity are addressed, mainly, to its various aspects and on the basis of the holistic pedagogical process, taking into account its regularities, driving forces and contradictions. There is a tendency to consider the definition of "professional readiness" as a complicated complex formation of personality in three conditionally fixed aspects component, complex, integrated. Component aspect is associated with the study of separate components of professional readiness; complex one involves

consideration of the relations between separate components and their need in professional activity and in process of preparation for it; integrated one is connected with the study of all components, connections and relationships between them within a systematic approach to cognize essence of objects and phenomena.

G. Kodzhaspirova (2003) examines readiness as a complex personality formation, multifaceted and multi-layered system of qualities, properties, which enable subject to carry out his professional activity more or less successfully. B. Slastonin (1976) considers readiness for pedagogical activity as a unity of various types of readiness. Under psychological readiness, he understands the effective state of personality, expressed in the ability for productive realization of the perceived knowledge, skills and abilities, activization of the activity and the possibility to make an independent decision of complex professional tasks, quick orientation, productively implementation of making decision, the creation of the creative atmosphere.

A characteristic feature of the teacher's work is that he deals with both the object of activity (educational material) and the subject (a separate student and a team of students). Hence, the dual orientation of his activity follows: on one hand, mastery of educational material makes the teacher know his subject deep and thoroughly and work out the material in such a way that it will be scientific, accessible and interesting for students; and on the other hand, the teacher must know the age features, interests, abilities of the students. Ephimenko (2003) examines readiness as an integral personal formation, which includes the availability of certain knowledge, skills, and also a complex of individual psychological personality traits that condition the high efficiency of professional functioning in any field of practical activity and scientific research work.

Consequently, the analysis of scientific literature makes it possible to highlight something general in the interpretation of the concept "readiness". First of all, this is a personal form of interpretation of the contents of education, which can be considered as a system of integrated properties, qualities and experience of the individual, having the properties of general theoretical and methodological readiness for pedagogical work.

Motivational component of readiness.

Motivational readiness component is the form of mental proactive state of the individual and complex quality of the personality, a system of integrative personality traits. And in the first and second cases motivational readiness is a regulator of pedagogical activity, a prerequisite for its effectiveness.

In psychology, it is the accumulated experience of the allocation of fundamental integrative (holistic) characteristics of the individual. Under the holistic property of the personality of the teacher of physical culture, we understand qualities and properties that contribute to the direction of the whole vital activity and impose their mark on many other qualities, subordinate them to their nature, integrate and unite them into a single whole.

The problem of identifying the integrative holistic property of the person in psychology has not got an unambiguous solution: B.Ananiev defines it as a "spiritual center", L.Bozhovich "orientation", V. Myasishchev "relation", D. Uznadze "setting", T. Shibutani "motivational core" and so on. However, researchers agree that all aspects of personality closely interact with each other, but the dominant influence still remains on its social side – worldview and direction, expressing needs, interests, ideals, aspirations, moral and aesthetic qualities of the personality.

It should be noted that the general orientation of the individual is closely linked with professional orientation of the personality of the teacher, understood as selective positive attitude towards the teaching profession (N. Levitov, V. Slastonin, A. Shcherbakov and others); system of motives of professional pedagogical activity (P. Shavir et al.); interest in the profession of the teacher and a tendency to engage in it (N. Kuzmin, A. Chornykh, etc.).

B. Slastonin (2000) considers the professional and pedagogical orientation of the teacher's personality to be a decisive feature of his professional competence: "The most active form of it is the propensity to act as a need for pedagogical activity, as a driving force in the development of pedagogical abilities, as one of the prerequisites for the achievement of pedagogical mastery".

Summarizing the findings of scientists, it can be argued that the professional-pedagogical orientation of the future teacher of physical culture is an integral dynamic personality characteristic, expressing the dominant conscious and unconscious attitudes (towards the pedagogical profession), which predetermine preparation for future activity and the success of its implementation.

Theoretical component of readiness.

The theoretical component of readiness of the future teacher of physical culture for professional activity includes a system of knowledge (pedagogical, psychological, valeological , physiological, professional, etc.). The absorption of this knowledge is intended to equip the future teacher of physical culture with the correct methodological approach to recognize the pedagogical reality, use pedagogical technologies in the educational branch "Physical Culture", created on the basis of new pedagogical concepts. Naturally, the perfect possession of this

method will require specific psychological and pedagogical knowledge about the separate aspects of pedagogical phenomena.

Pedagogical consciousness, being the higher level of activity of the professional pedagogue, reflects pedagogical reality in the form of sensual and rational (imaginary) images, thus envisaging practical actions and giving them a purposeful character. The content of pedagogical consciousness also determines the nature of the transformation of pedagogical reality into the internal plan, the form of representations, thoughts, ideas and other components of the spiritual order, which, in the end, are expressed in knowledge and beliefs.

Consequently, the above considered point of view on the problem of professional pedagogical consciousness reveals the conditionality of the dynamics of readiness of the teacher of physical culture for the implementation of the holistic pedagogical process of promoting the physical culture of the student's personality by the level of the formation of his pedagogical consciousness and the style of scientific and pedagogical thinking. Developed pedagogical thinking, providing a profound understanding of the contents of pedagogical information, perceives knowledge and ways of activity through the prism of own individual experience and helps to gain the personal meaning of professional activity.

Practical-creative component of readiness.

The teacher of physical culture must fully own practical actions, consisting of a number of techniques and operations aimed at creating the necessary conditions for realization of the educational work with students (division of responsibilities of team members, determination of job placement of students, the sequence of the activities of students, the creation of conditions for self-control and intercontrol, the order of change of activities or stages of the tasks implementation). The indicated practical actions are the basis of practical and creative readiness of the teacher of physical culture.

Naturally, there is a question about the quality of knowledge. If we consider the quality of knowledge as the reflection properties of things (processes, events), processed in terms of human experience, then, depending on what cognitive processes are involved in reflection, knowledge can be scientific and empirical. Scientific knowledge is reflected in terms during the direct participation of abstract thinking. Therefore, Abdullin's (1990) statement on the essence of pedagogical skills as a form of the functioning of theoretical knowledge seems to be substantiated. In pedagogical skills "first of all, psychological and pedagogical knowledge, as well as theoretical knowledge of special and social-political disciplines" are resulted. So, determining the great importance of systematic and purposeful work on the training of future teachers of physical culture with special psychological and pedagogical knowledge, as well as sports-pedagogical, scientific one (theories and methods of training of motor skills), it is necessary to form a relation to them as to the cornerstone necessary for the development of pedagogical skills.

The practical readiness of the teacher of physical culture is manifested through constructive, communicative, organizational, research skills that have their own specifics, mastery of which is a necessary prerequisite for the formation of the physical culture of students. Practical preparedness as motivational and theoretical one, must be permeated with pedagogical consciousness and feelings. Besides, it should be approximated to the level of creative and pedagogical activity and the teacher's readiness for productive pedagogical work, creativity.

The selected stages of professional development of the personality of the teacher as a carrier of physical culture can serve as the theoretical basis of constructing a system of formation of creative readiness.

The creative personality is characterized by such features as: readiness for risk, independence of judgments, impulsivity, criticality of judgments, identity, courage of imagination and thought.

Conclusions. Thus, motivational, theoretical and practical-creative preparedness creative and the creativity of the teacher of physical culture (in the structure of his professional readiness to implement the holistic pedagogical process of promoting the physical culture of the student personality) are closely interrelated and interconnected. Unity of relatively independent types of readiness of the teacher of physical culture and, therefore, the integrity of his personality, depend on the level of development of professional selfconsciousness.

Peculiarities of preparedness of the modern teacher of physical culture involve not only mastering the skills that are directly related to the educational process (constructive, communicative, organizational, research, etc.), but also the skills to perform the following professional activities, the importance of which has improved greatly for today, namely: a diagnostic activity, which aims at providing a systematic study of the level of the physical development of analysis of each individual student and on the basis of the received data to predict further physical improvement, foreseeing of anticipation of possible consequences; rehabilitation activities, oriented at the restoration (in the process of work or intensive lessons) of other activities of the physical, mental, intellectual properties of students; the

development of methodological support and implementation of rehabilitation programs for students with poor health, therapeutic use of physical exercises to restore the damaged subsystems of the student's body; reproductive activity, which involves the creation of a social and cultural environment at the educational institution aimed at cultivating physical culture and sports among all subjects of the pedagogical process (students and their parents, teachers and other teachers) at the educational institution; sports activity that provides for the disclosure of the maximum possibilities of students, potential reserves, satisfaction of the need for competitive activity, the achievement of certain sports heights; educational – propaganda activity, including educational activity aimed at the assimilation of social and historical experience of mankind in the branch of fundamental theory and education about physical and human development, security of formation of rational separate fund of motor skills needed in life, and the educational activity, which is in the use of special physical exercises to form a physically, mentally and socially mature person; preventive activity (or activity of the formation of a healthy lifestyle), which is associated with security of the optimal development of human-specific physical qualities, and on their basis-improvement of physical development, and strengthening of the health of students.

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УДК 378:[37.011.3-051:796]:331-027.561

Формування готовності майбутніх учителів фізичної культури до професійної діяльності

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Реферат. У теоретичному дослідженні розкрито професійну підготовку як динамічний процес, в якому реалізуються цілі освіти й формування компетенцій, застосування отриманого соціального досвіду. У цьому аспекті освіта передбачає створення цілісної системи безперервного навчання, розвитку й виховання людини, що забезпечує підготовку в різних сферах навчальної діяльності відповідно до освітніх потреб суб'єктів педагогічного процесу.

У структурі готовності майбутнього вчителя фізичної культури до професійної діяльності виділяємо мотиваційний, теоретичний та практично-творчий компоненти, кожен з яких має специфічні цільові функції. Цей склад компонентів професійної готовності забезпечує її змістову базу, що визначає можливість здійснення різних видів професійно-педагогічної діяльності в повному обсязі.

Проблема обґрунтування істотних характеристик готовності вчителя фізичної культури до професійної діяльності в теорії спеціальної педагогічної освіти не нова, проте відсутнє єдине її тлумачення, а в багатьох випадках – у її ототожненні з іншими категоріями, що виражає сукупність професійно-зумовлених вимог до праці й особистості вчителя, а саме: підготовленість, компетентність, кваліфікація, майстерність, умілість, професіоналізм.

Практичне значення одержаних результатів дослідження визначається тим, що його теоретичні положення і висновки створюють реальні передумови для наукового забезпечення підготовки майбутнього вчителя фізичної культури до реалізації цілісного педагогічного процесу виховання фізичної культури особистості учнів.

Ключові слова: *готовність до професійної діяльності, компоненти, майбутній вчитель фізичної культури, особистість.*

Received: 08 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.131-136

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 131-136

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

AN INNOVATIVE EDUCATIONAL ENVIRONMENT FOR FORMING PROFESSIONAL COMPETENCY IN FUTURE SKILLED WORKERS

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Abstract. The article analyzes the essence of such a concept as "an innovative educational environment" and defines its content for vocational education institutions. It illustrates the work experience of teaching staff in educational institutions in creating an innovative educational environment and forming professional competency in future workers. It also describes the main approaches to creating an innovative educational environment in vocational education institutions for vocational training of future skilled workers. They include humanistic approaches (anthropocentrism, relationship harmony, forming intellectual culture); systemic approaches (improving an educational environment as a holistic developing system); informational approaches (a sufficient level of information culture); innovative approaches (creative interaction, forming readiness for future professional activity).

Based on the practical experience of vocational education institutions in Ukraine, pedagogical conditions for creating and maintaining an informational educational environment in educational institutions were singled out: partnership cooperation, respect and trust of all participants in the educational process; focus on development and self-development of every individual; creative activity; an effective use of scientific and methodological, material and technical capabilities and human resources of educational institutions; employment of personality-oriented innovative pedagogical technologies.

The emphasis is placed on the importance of implementing personality-oriented pedagogical technologies in the educational process. It is shown that vocational education teachers have different views on the approaches to creating an innovative educational environment. However, it is agreed that the process of creating an innovative educational environment significantly influences the processes of forming and developing professional skills in teachers, strengthening professional relations between them, facilitating pedagogical innovations.

Keywords: *innovative educational environment, professional competency, readiness of educators for innovation, experimental work.*

Introduction. The modern labour market requires that workers should be professionally competent, willing to continuously improve their professional results and personal qualities. The market economy highlights the need for qualified workers, who are competitive in the labour market and meet the modern requirements of employers. The modern system of vocational education in Ukraine should take into account globalization processes in society, constant changes in technology, the importance of effective interaction between education and the labour market, changes in the social life of the country and the need for continuing vocational education. It should contribute to regular update on educational content and vocational training of skilled competitive workers in accordance with the requirements of the national and regional labour markets. These objectives, in turn, require that the organization of work in vocational education institutions should be changed: it is essential to introduce new pedagogical ideas, pedagogical technologies, forms and methods of education, work organization and institution management. According to N. Nychkalo (2008, p. 176), "the innovative activity generates new models, pedagogical projects and

pedagogical technologies aimed at improving the quality of the educational process and all educational work".

Therefore, it is vital to create an innovative educational environment and use innovative pedagogical technologies to form professional competency in future workers in vocational education institutions.

Materials and methods. Innovative educational processes were studied by I. Bekh, N. Bibik, L. Danylenko, D. Puzikova, H. Shchekatunova and L. Vashchenko. The capacities of the educational environment in developing personality were investigated by N. Hontarovska, O. Humeniuk, A. Katushov, N. Krylova, K. Prykhodchenko, V. Stepanov et al. Some issues of forming educational environment were analyzed by L. Buiev, Yu. Manuilova, L. Novikov, V. Petrovskyi, N. Selivanova, I. Yakymanska, V. Yasvin et al. Such scholars as E. Bachynska, I. Frumin, S. Hershunskyi, V. Hynetsynskyi, B. Sierikov and B. Yelkonin explored the problems of creating an educational environment.

However, the existing findings do not sufficiently justify the aspects of forming professional competency in future workers within an innovative educational environment in vocational education institutions.

Research methods include *theoretical methods* (an analysis of scientific works by Ukrainian and foreign authors, legal documents, educational and methodical sources, educational activity of students and teachers, comparison, systematization and generalization of theoretical and experimental data); *empirical methods* (observation, modelling of educational situations, interviews, surveys, expert assessment, pedagogical experiment with quantitative and qualitative analysis of results); *statistical methods* (statistical criteria for verifying the significance of differences, computer tools for statistical processing of experimental data).

The research aims to reveal the essence of such a concept as "an innovative educational environment" in vocational education institutions, to determine its role in forming professional competency in future workers, analyze the experience of educational institutions in creating an innovative educational environment.

Results and discussions. Education is the most important factor in developing modern society since its content, quality and improvement contribute to solving thorny issues of humanity.

The Law of Ukraine "On Education" defines the following goals of vocational education: to form and develop professional competencies required for professional activity in a particular field and ensure the competitiveness of workers in the labour market, as well as their mobility and prospects of career growth throughout life (Zakonodavstvo Ukrainy, 2017).

Nowadays, the process of forming professional competency in a worker as a creative personality is possible only in an innovative educational environment. Innovative focus of pedagogical activity in vocational education institutions under modern conditions is caused by the need to update the content and organization of the educational process. In this context, the role of vocational education teachers, who provide vocational training for future skills workers, is growing significantly. Indeed, an innovative educational environment is a means of revealing their potential and forming professional competency, updating the content of education, creating and improving conditions for development, self-development and realization of creative powers.

The process of forming an innovative educational environment in vocational education institutions with the aim to provide vocational training of future skilled workers is based on such approaches as:

- ✓ humanistic approaches – they reflect anthropocentric principles of developing the modern society, ensuring relations harmony, forming an intellectual culture in future workers;
- ✓ systemic approaches – they are aimed at improving the educational process in vocational education institutions, establishing the links between its components and defining the educational environment as a coherent system, which ensures the development of future workers;
- ✓ informational approaches – they ensure a sufficient level of information culture in future workers in the use of modern computer technologies and effectively form their professional competency;
- ✓ innovative approaches – they promote creative interaction between the participants in the educational process and contribute to forming students' readiness for future professional activities.

Today, the society urges Ukrainian education to reconsider the very idea of education, coordinate its strategies with the innovative culture of teaching activity and create a new quality of an innovative environment (Vashchenko, 2012, p. 37).

The current research considers a concept of "an innovative educational environment" to identify the patterns of its influence on the development of professional competency. The analysis of the scientific literature shows that the educational environment as a set of values and examples of successfully solved life goals is a source for developing a personality. A. Katushov (2001) regards the concept of "an innovative educational environment" as a combination of intellectual and material conditions in an educational institution, which ensures self-development of a free and active personality and helps to realize the creative potential of students. He believes that an educational environment is a functional and spatial association of

all participants in the educational process between whom close and diverse relations are established; it is seen as a model of sociocultural space, where a personality is developed. N. Razina (2009) understands a concept of "an innovative educational environment" as a complex of interconnected conditions, which promote education, innovative and creative thinking and professionalism. O. Shapran (2010) defines an innovative educational environment as a well-organized pedagogical space of life activity, which contributes to developing an innovative resource of a personality; as an integrated means of accumulating and realizing the innovative potential of an educational institution. L. Vashchenko (2012, p. 39) indicates that an innovative environment incorporating innovative content and forms of the organization provides conditions for forming a new quality of professional, scientific, pedagogical and managerial activity and thus creates a powerful potential resource for developing the professional activity.

It must be noted that personality-oriented pedagogical technologies play an important role in the process of acquiring professional competency. H. Romanova (2014, p. 5) defines the following most significant features of these technologies: the priority of learners' personal and meaningful sphere, in particular motivation and values; the reorientation of the educational process towards formulating and solving educational (cognitive, research, project) tasks; the shift in the teacher's role – from an informant and controller to a coordinator and facilitator, who contributes to creating the conditions for self-development of students.

H. Shchekatunova (2013) understands "an innovative educational environment" as a system of influences and conditions for cultivating a personality based on a given model, as well as the opportunities for self-development in the social and thematic environment.

A. Kukh (2008) defines the following interconnected components of educational environment: participants, resources, facilities, ideas and technologies. He states that the participants and resources component identifies the participants in an educational environment and determines the conditions for implementing their subject-subject interaction; the facilities component provides an educational environment with relevant equipment; the ideas and technologies component singles out normative techniques and technologies to achieve the expected learning outcomes (Kukh, 2012, p. 74).

It is necessary to make the following steps so that the educational environment of vocational education institutions can be regarded as innovative:

- ✓ to create and improve facilities in accordance with the requirements of the labour market and standards relying on competency-based approach;
- ✓ to introduce information and communication technologies in the educational process;
- ✓ to create relevant pedagogical conditions for forming professional competency in accordance with the standard requirements of vocational education.

It must be noted that modern Ukrainian teachers of vocational education clearly understand the need to create an effective educational environment with the aim to form professional competency in future skilled workers. Every vocational education institution has its own special material and technical potential to create an innovative educational environment. Therefore, considerable attention is paid to the process of creating an informational educational environment and introducing the latest information technologies in vocational education.

In the framework of the All-Ukrainian experiment between 2014 and 2017 (the Order of the Ministry of Education and Science of Ukraine No 424 dated April 9, 2015), Odesa Higher Vocational School of Trade and Food Technologies established a mobile, dynamic and open structure of an informational and educational environment. It covers the following modules: a content library; a database of teaching materials; a reference and search engine; e-resources on general, socioeconomic and management courses; a depositary; electronic encyclopedias and reference books; a repository; an educational kit for designing personal informational and educational environment for teachers; a system of distance learning; other scientifically, methodically and didactically justified modules. The results obtained from the experiment show that the level of motivation, values and cognitive aspects of students' professional competency has increased significantly (up to 15%).

In the framework of the exhibitions, titled "Innovation in Modern Education" and "Modern Educational Institutions", vocational education institutions from different regions of Ukraine have submitted more than 150 works to be considered for the nomination "Innovative Educational Environment: New Challenges and Modern Solutions".

In 2018, Zhmerynka Higher Vocational School studied the experience in creating an innovative educational environment for vocational training of such workers as a train conductor, a ticket controller and an acceptance/delivery agent. This activity was mainly aimed at updating the organization of the educational process and education content; forming information and communication competency in students and teaching staff; improving professional competency of teaching staff due to mastering innovative teaching technologies and research activities. This involves the following practical activities: holding workshops, psychological and pedagogical seminars on innovative pedagogical technologies; creating personal websites,

using Prezzi.com. for interactive online presentations. The institution introduces profession-oriented educational and controlling computer programmes, modern methods and personal developing technologies to achieve the expected outcomes. All these measures make it possible to increase the level of professional competency up to 10-15%.

In Kyiv Higher Vocational School No 33, the main objectives of teaching staff are the following: to prepare successful workers, who are able to learn throughout life, set goals and achieve them, think critically, work in teams, interact with others and apply different professional skills. To fulfill these objectives, the teaching staff agreed on the need to create an innovative educational environment, whose structure should cover the development strategy, the tactics of forming innovative processes, defining innovation content, ensuring its implementation, predicting results. Between 2013 and 2018, the mentioned school implemented such projects as "The Road to Professional Growth", aimed at improving teachers' skills, enhancing their motivation and professional competencies; "Following Learning Trend", aimed at promoting the use of tablets and smartphones during the educational process, verifying their efficiency and accessibility, ensuring easy learning, enhancing students' motivation; "Virtual Reality as a Path to Real Virtuality", which included introducing new forms and methods in teaching, promoting critical thinking and learner autonomy, motivating students to struggle with digital dependence and use ICT skills to gain knowledge; "Practical Steps in Environmental Education of Students", intended to change the philosophy of students' environmental thinking: to pay attention to environmental problems, enhance creative and cognitive activity, form a habit of sorting out waste and show that joint actions and even small individual contribution can change the educational institution and the country in general; "Agents of Change: from Dream to Action", aimed at realizing such areas as education for all; accessible, desirable and informative education; an open way to the international information space.

The teaching staff also designed an e-manual on the course, titled "Cooking Technology and Basics of Commodity Research".

The implementation of these projects made it possible to accumulate certain relevant information and also significantly influence the participants in the educational process in the context of developing pedagogical innovative activities and forming professional competency in students. The main project principles are as follows: focus on cooperation; developing a personality of both teachers and students; combining theory and practice; incorporating the activity-based approach in learning. While working on the projects, students and teachers have improved their creativity and teamwork skills as the subjective parts of professional competency.

It must be noted that Berezivka Vocational School of Odesa National Polytechnic University implements an authentic and historical educational project, titled "The Keepers of Ukraine" as an effective pedagogical method of forming an innovative educational environment for vocational training of workers skilled in providing services. The project aims to create an authentic, historical and ethnographic collection of costumes. The main idea of the project is related to revealing themes of Ukrainian clothes, the concept of the national costume, discovering novel views on antiquity and preservation of spiritual values. The creative group identified historical, literary, ethnographic, folklore, artistic sources, whose analysis made it possible to create a new collection dedicated to the Ukrainian woman and keeper as a special world phenomenon. The peculiarity of such collections consists in innovative project-based activities of teachers and student accorded with curricula and programmes of vocational training for workers skilled in light industry.

Educational activities of Shostka Centre for Vocational Education are aimed at creating an innovative educational environment, which differs from the traditional content, organizational structure and management system. It involves using information and communication technologies, which prepare students for a fulfilling life in the information society and contribute to forming their critical thinking when working with vast arrays of information, learner autonomy, problem-solving skills, communication skills, analytical thinking, cooperation and collaboration skills. The main areas for implementing information and communication technologies are the following:

- ✓ using cloud technologies: applications; electronic journals and diaries; online services for the educational process, communication and testing; systems of distance learning; media library; file storage, shared access; videoconferences; an e-mail with a domain of the education institution;
- ✓ applying an educational kit for designing interactive tasks with LearningApps;
- ✓ employing services for creating and uploading presentations: Empress, Google Docs, Prezi, ZohoShow, SlideShare, VCASMO, Knoodle;
- ✓ incorporating computer tests for monitoring student knowledge with a master-test programme;
- ✓ elaborating e-textbooks.

The obtained results prove that an innovative educational environment ensures the continuity of vocational education in accordance with the latest

technologies; the openness and accessibility of education to meet the growing need of society for skilled workers; the achievement of an individual's success in the modern world and expected learning outcomes.

Conclusions. In Ukraine, vocational education teachers employ different approaches to creating an innovative educational environment. However, they all agree on the interconnection between positive results obtained from the process of forming professional competency in future workers and the conditions of its implementation. It was found that the process of creating an innovative educational environment significantly influenced the processes of forming and developing professional skills in teachers, promoting pedagogical innovations, increasing the potential of teachers. Pedagogical conditions for creating and maintaining an innovative educational environment in educational institutions were singled out. They are partnership cooperation, respect and trust of all participants in the educational process; focus on development and self-development of every individual; creative activity; effective use of scientific and methodological, material and technical capabilities and human resources of educational institutions; employment of personality-oriented innovative pedagogical technologies.

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УДК 377.3:005.336.2-027.561]:005.34

Інноваційне освітнє середовище формування професійної компетентності майбутніх кваліфікованих робітників

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Реферат. У статті здійснено аналіз суті поняття "інноваційне освітнє середовище", визначено його зміст для закладів професійної (професійно-технічної) освіти (далі: ЗП(ПТ)О). Висвітлено досвід роботи педагогічних колективів закладів освіти зі створення інноваційного освітнього середовища та формування професійної компетентності майбутніх робітників. Охарактеризовано основні підходи до створення інноваційного освітнього середовища ЗП(ПТ)О для професійної підготовки майбутніх кваліфікованих робітників: гуманістичного (людиноцентризм, гармонізація відносин, формування духовної культури); системного (вдосконалення освітнього середовища як цілісної розвиваючої системи); інформаційного (достатній рівень інформаційної культури); інноваційного (творча взаємодія, формування готовності до майбутньої професійної діяльності).

На основі практичного досвіду закладів професійної освіти України виокремлено педагогічні умови створення та функціонування інформаційного освітнього середовища закладу освіти: партнерське співробітництво, повага та довіра всіх учасників освітнього процесу; спрямування на розвиток і саморозвиток кожної особистості; робота в творчому пошуковому режимі; ефективне використання науково-методичних, матеріально-технічних та кадрових можливостей закладів освіти; застосування особистісно орієнтованих інноваційних педагогічних технологій.

Акцентовано увагу на важливості використання педагогами особистісно орієнтованих педагогічних технологій. Показано, що педагогічні колективи ЗП(ПТ)О мають різне бачення підходів до створення інноваційного освітнього середовища. Водночас усі погоджуються з тим, що створення інноваційного освітнього середовища має значний позитивний вплив на формування та розвиток професійної майстерності педагогів, розвиток педагогічної інноваційної діяльності, зміцнення педагогічного колективу.

Ключові слова: і*нноваційне освітнє середовище, професійна компетентність, готовність педагогів до інноваційної діяльності, експериментальна робота.*

Received: 06 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.137-142

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 137-142

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ANALYSIS OF THE STATE OF PEDAGOGICAL WORKERS TRAINING TO USE SMART TECHNOLOGIES IN THE EDUCATIONAL PROCESS

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Abstract. The article presents the characteristics of micro and macro levels of perception of SMART education. It is determined that SMART education is a purposeful cognitive activity of people for acquiring knowledge, skills and abilities, or their improvement using an integrated virtual environment for learning with educational content being developed, improved by all participants in the educational process. The content of the notion "SMART-complex" is defined as an interconnected set of normative and educational-methodical materials existing in the educational and educational environment of an educational institution and necessary for the effective formation of competencies as a programmed result of mastering the discipline. It is substantiated that this educational complex should be constructed on the basis of SMART-management. Based on the analysis, it is suggested: S (specification) – in accordance with the educational-professional program, clearly identify the professional and general competencies that need to be formed within the discipline and specify the program learning outcomes; M (measurability) – measure the result of the educational process on the basis of the existing knowledge and skills, the work performed (the creation of a material or ideal object); A (approachability) – to create a content library for educational discipline, a system of tasks for students in order to form individual trajectories for studying discipline, introduce elements of distance learning; R (relevance) – to reduce the time for the mastering of "secondary" information, to strengthen practical training in laboratories and workshops, to specify the content of training on the basis of a practice-oriented approach; T (time constraints) – set up intermediate stages of performance and protection of works, change time characteristics taking into account individual aspirations of students. It is revealed that due to the use of SMART-complexes, operational intervention in the structure of the work program with the consideration of the individual characteristics of participants in the educational process becomes possible. At the expense of what is achieved: improving the quality of methodological provision of the educational process; timely correction and improvement of educational and methodological materials; activating independent work of students on the basis of rationalization of time to study discipline.

Keywords: *SMART technology, SMART education, SMART complex, pedagogical worker, professional education.*

Introduction. The modern educational system is at a new stage in its development. For Ukrainian scientists, it was a challenge of time to ensure that the educational system conforms to the world economic and educational trends in order to meet the requirements of modern man, industry, employers and the state. The updating of a person-centered approach in education leads to a revision of the fundamental principles of learning. It becomes clear that it is necessary to abandon the impersonal attitude of students, to consider the study group / class as an integral unit and the transition to personalization of training, when each subject develops his own training program taking into account his individual peculiarities, which can be changed considering the changes of learning priorities and accomplished goals.

The introduction of information and communication technologies in the educational process promotes the wide application of the elements of distance learning. In particular, there is an increase in attention to the acquisition of theoretical material on a distance basis, with the strengthening of the practice-oriented approach. In the educational system, there are also ongoing searches for approaches to developing new-generation textbooks that could realize the full potential of modern technology and the global network.

It should be emphasized that more and more attention is attracted to a new generation of young people, whose children and adolescents have undergone in completely different conditions than previous generations. They are actively involved in virtual reality, which, in turn, leads to a transformation of the perception of the traditional educational process. These transformations in human life, caused by the active use of modern information and communication technologies, led to the need to find a new approach to the education of the information society. In particular, the issue of the introduction of SMART-education was actual. The theoretical foundations of this problem are only being built up, therefore, scientists have not yet formulated a unified approach. Let's analyze the main ones.

Materials. In Ukraine, July 12, 2012, the Order of the Ministry of Education, Science and Youth of Ukraine No. 812 was adopted on the approval of the Concept of the pilot project "Learning – SMART Training", the main principle of which is "smart learning". It was supposed to encourage the use of up-to-date teaching methods using modern computer technology, teacher training and the use of their own technological resources in the educational process. The project was designed for 2012-2013.

So, the first approach to smart education is revealed on the basis of the translation of the word "Smart" as a clever one.

For example, L. Didenko and V. Kondrashova-Didenko (2016), analyzing the foundations of SMART-education, emphasize that the term "SMART", by its ambiguity, sets new characteristics of SMART-education: 1) intelligence; 2) virtue; 3) wisdom; 4) fronesis (practical wisdom).

In this context, SMART-education, or wise learning, is seen as a flexible learning in the interactive educational environment with content from around the world that is freely accessible. The basis of SMART education is the broad availability of knowledge.

The second approach is defined by the mnemonic acronym used in management and project management to determine goals and assign tasks. For example, L. Korsunska (2013), analyzing the Korean concept of Smart Education, states that it involves flexible and active learning in an open information space, and the term SMART is an acronym for learning Self-directed, Motivated, Adaptive, Resource-enriched, with Technology embedded. Instead, A. Zavrazhin (2015) indicates that the foundation of SMART education consists of five principles: the specification of the purpose of learning (Specific); clear definition of tools and methods for measuring learning outcomes (Measurable); obligation of the final result in each task (Attainable); the relevance of the tasks and their professional orientation (Relevant); determination of the time frames for achieving the goal (Time-bound). It should be emphasized that, regardless of the approach to understanding the concept of "Smart / SMART-education" (word or abbreviation), its content is reduced to learning in the interactive educational space with the help of world-wide content that is freely accessible (Yermoshenko, 2016).

The level of perception of SMART education is also relevant, namely:

- ✓ at the micro level – SMART-education involves the use of technological innovations and the Internet, enabling students to acquire professional knowledge, skills and abilities on the basis of systematic and multidimensional vision and study of disciplines, taking into account the multidimensional and continuous updating of the content of learning (Semenikhina, 2013);
- ✓ at the macro level, SMART-education is a combination of educational institutions, teachers and students for the purpose of implementation joint educational activities on the Internet on the basis of common educational and scientific standards, the unified vision of the directions of education development in a modern society (M. Kolotylo, 2016).

Therefore, SMART-education is a purposeful cognitive activity of people for acquiring knowledge, skills and abilities or their improvement using an integrated virtual environment for learning with educational content, that is developed, improved by all participants in the educational process.

The purpose of the article is to analyze the training of pedagogical staff to use SMART-technologies in the educational process.

Research methods: analysis, synthesis – in order to determine the state and the level of development of the problem under study; generalization – to formulate conclusions and recommendations on the readiness of lecturers to use SMART-technologies; diagnostic (questionnaire, conversation) – for studying the information about the readiness of pedagogical staff to use SMART-technologies in the educational process.

Results and discussions. Traditionally, in the educational institutions, the development of educational and methodological disciplines is carried

out to ensure the systematic organization of the educational process. Educational-methodical complex of discipline is a set of normative and educational-methodical materials that are necessary for the effective implementation by students of the curriculum work program (Teaching and Methodological Complex of the Discipline, 2019). The main purpose of the creation of educational-methodical complexes is the organization and methodological support of students independent work for preparation for training classes of all their kinds, for conducting coursework, laboratory works, etc. (Regulations on educational and methodical complex of educational discipline, 2017). It can be stated that the teaching-methodical complex is used for defining goals, setting objectives and outlining effective ways to achieve the goals of the educational process in a specific discipline.

Management of educational activities is carried out through familiarization of students with: 1) working curriculum of discipline; 2) a summary of the lectures on the discipline; 3) methodical instructions (recommendations) for conducting laboratory, practical and seminar sessions; 4) the topics of term papers (projects), homework, etc., and methodical instructions (recommendations) regarding their implementation (if it is provided by the program); 5) methodical developments on the organization of independent work of students in the discipline (schedule, methodological recommendations, etc.); 6) individual tasks; 7) means of diagnostics from the discipline (exam papers, questions to the modular (stage-by-stage) control, test complex).

In fact, in the presence there is a clear plan of action with specific goals and objectives, the implementation of which leads to the result – enrollment of credits (hours) allocated for the study of the discipline. It should be emphasized that, regardless of the media on which the teaching-methodical complex is located (electronic or paper), the result is important – the formed competence of the future professional activity.

In accordance with the competence approach in education, as stated in the Laws of Ukraine: "On Education" (2017), "On Higher Education" (2014), "On Professional (Vocational) Education" (1998); According to the Resolution of the Cabinet of Ministers of Ukraine "On the National Framework of Qualifications" (2011), the educational process is aimed at the development of competences that are clearly outlined in the educational-professional program.

Educational disciplines and different practices are introduced in order not to master the fundamentals of science, but foresee the achievement of a certain programmed learning result, which is manifested in the competencies that students must master. Thus, the content, forms and means of learning may and must vary taking into account student`s individual training. Under such conditions, the teaching-methodical complex as a set of regulatory documents is a certain deterrent to the professional development of future specialists.

In order to solve this problem, the Laboratory of Electronic Educational Resources of the Institute of Vocational Education of the National Academy of Sciences of Ukraine launched a research work on the topic "Methodical bases for the development of SMART-complexes for the training of skilled workers in the agrarian, construction and engineering sectors". The problem of research is to create within the educational and informational environment institutions of vocational (vocational and technical) education (hereinafter: IV(VT)E) an unified system of normative and teaching materials necessary for the effective mastering of educational disciplines. A key element of such a system will be a training and methodological complex, built on the principles of SMART-management.

On the basis of the analysis, the following positions are proposed:

S (specification) – in accordance with the educational-professional program, clearly identify the professional and general competencies that need to be formed within the discipline and specify the program learning outcomes;

M (measurability) – measure the result of the educational process based on the knowledge and skills, work done (to analyze the creation of material or ideal objects);

A (attainability) – to create a content library for the educational discipline, a system of tasks for students in order to formulate individual trajectories for studying the discipline, introduce elements of distance learning;

R (relevance) – to reduce the time for the mastering of "secondary" information, to strengthen practical training in laboratories and workshops, to specify the content of training on the basis of a practice-oriented approach;

T (time-bound) – set up intermediate stages of performance and protection of works, change time characteristics taking into account individual aspirations of students.

Thus, the SMART-complex is an interconnected set of normative and teaching-methodological materials that exist in the information and educational environment of the educational institution and are necessary for the effective formation of competencies as a programmed result of mastering the discipline.

Thanks to the use of SMART-complexes, operational intervention in the structure of the work

program can be made considering the individual characteristics of participants in the educational process, which results in: improving the quality of methodological provision of the educational process; timely correction and improvement of educational and methodological materials; enhancing the independent work of students on the basis of streamlining time to study the discipline.

For the development of SMART-complexes for the training of future skilled workers in IV(VT)E, the level of readiness of the teaching staff as well as the level of their awareness with SMART-technologies was carried out. During the study, lecturers (117 persons) were asked questions to determine the effectiveness of using SMART-technologies in the educational process, the quality of existing electronic educational resources, identifying factors for creating new and improving existing SMART-complexes, identifying the reasons that hinder them introduction into the educational process (*Fig. 1*).

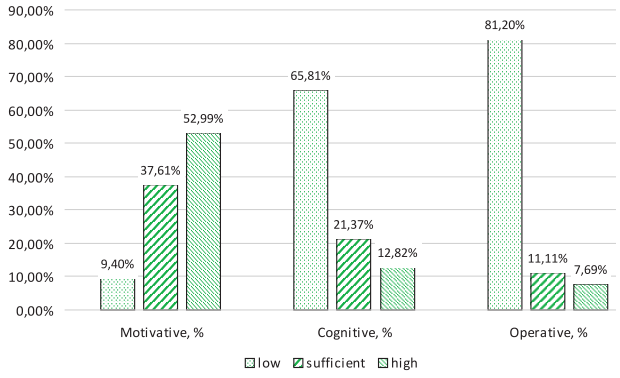

Fig. 1. Readiness of lecturers of IV (VT) E to develop SMART-complexes

The analysis of the data obtained during the questioning of pedagogical workers made it possible to conclude that their readiness (based on the motivational component) to develop SMART-complexes in IV(VT)E is rather high. The lowest level is noted for the operational and cognitive component of readiness, for the development of which it is necessary to intensify the activities of teaching staff, aimed at the student-recipient in the use of SMART-complexes in the educational process.

The average readiness of the teaching staff of IV(VT)E for the development of SMART-complexes is due to the fact that they do not possess the necessary technologies and do not have a clear algorithm of interaction with students within the educational and informational environment of the educational institution. Many lecturers believe that they need to be competent only in the subject field. It is possible to change this position by providing pedagogical workers with more information about the benefits of SMART-complexes and having formed the need for them to apply ICT (motivation component of readiness), which will serve as a platform for obtaining relevant competencies and meaningful practical application of theoretical knowledge about SMART-complexes (operational and cognitive components of readiness).

Conclusions. The existence of the problem of lack of organizational and methodological materials (theoretical, practical, test) in IV(VT)E based on the principles of interactivity and ensuring the proper quality of classroom and independent work of students as future skilled workers of the digital society has been proved. It was found that most of the polled lecturers do not understand how the SMART-complex of academic discipline can promote the quality of teaching disciplines. At the same time, the experiment showed that the majority of surveyed pedagogical workers recognize the prospects of using SMART-technologies to expand the lesson information base. The main difficulties in designing the SMART-complex of educational discipline lecturers mostly consider the lack of methodology and standards for its creation.

Prospects for further research are grounded in the methodology for the development of SMART-complexes for the training of skilled workers in IV(VT)E.

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УДК 378:37.015]:004:SMART

Аналіз стану підготовки педагогічних працівників до використання SMART-технологій в освітньому процесі

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Реферат. У статті наведено характеристики мікро– та макрорівнів сприйняття SMART-освіти. Визначено, що SMART-освіта є цілеспрямованою пізнавальною діяльністю людей з отримання знань, умінь та навичок, або їх вдосконалення з використанням інтегрованого віртуального середовища для навчання з освітнім контентом, що розробляється і вдосконалюється всіма учасниками освітнього процесу. Зміст поняття "SMART-комплекс" визначено як взаємозв'язана сукупність нормативних та навчально-методичних матеріалів, що існують в інформаційно-освітньому середовищі закладу освіти та необхідні для ефективного формування компетентностей як програ-

мованого результату засвоєння освітньої дисципліни. Обгрунтовано, що даний навчально-методичний комплекс повинен бути побудований на засадах SMART-управління. На основі проведеного аналізу запропоновано: відповідно до освітньо-професійної програми, чітко визначити фахові та загальні компетентності, що їх необхідно сформувати в межах дисципліни, та конкретизувати програмні результати навчання – конкретизація (S); виміряти результати освітнього процесу на основі сформованих знань і вмінь – вимірюваність (M); створити контент-бібліотеку з дисципліни, систему завдань для студентів з метою формування індивідуальних траєкторій вивчення дисципліни, запровадити елементи дистанційного навчання – досяжність (A); зменшити час на засвоєння "другорядної" інформації, посилити практичну підготовку в лабораторіях та майстернях, конкретизувати зміст навчання на засадах практико-орієнтованого підходу – актуальність (R); встановлювати проміжні етапи виконання та захисту робіт, змінювати часові характеристики з урахуванням індивідуальних прагнень студентів – обмеження в часі (T). З'ясовано, що завдяки використанню SMART-комплексів стає можливим оперативне втручання у структуру робочої програми з урахуванням індивідуальних особливостей учасників освітнього процесу, в результаті чого досягається: підвищення якості його методичного забезпечення. своєчасне коригування та вдосконалення навчально-методичних матеріалів; активізація самостійної роботи студентів на базі раціоналізації часу на вивчення дисципліни.

Ключові слова: *SMART-технології, SMART-освіта, SMART-комплекс, педагогічний працівник, професійна освіта.*

Received: 09 April 2019
Accepted: 19 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.143-147

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 143-147

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PECULIARITIES OF DIGITALIZED LEARNING PROCESS ORGANISATION IN THE LEARNING MANAGEMENT SYSTEMS

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Abstract: The author reviews the peculiarities of digitalized learning process organisation in the hardware and software environment of learning management systems in the context of vocational education and training. The author notes the complexity of the transition to the Industry 4.0 and mentions the risks connected with the named process in the vocational education and training. In such conditions it is important to develop effective models of public and private partnership, to decentralize administration and financing and, above all, to assure the vocational education and training quality. Using the software and hardware complexes of learning management systems is one of the means able to ensure the implementation of such tasks and to avoid risks in the sphere of vocational education and training. At the same time the learning process taking place in such an environment becomes digitalized, which, on the one hand, gives it additional advantages (easy access to training data regardless of time and place, individualisation of students' learning paths, broad multimedia resources, etc.) and, on the other hand, requires solving complex tasks in distance courses designing. The author focuses on the methodology of distance courses designing, so it is very important for vocational education and training institution to ensure the realisation of the following five main components: regulatory, financial, technical, personnel, teaching and methodological support. It is emphasised that distance course designing becomes the most important aspect of implementing the modern digitalized learning process. The structure of creative group in distance courses designing is grounded, which comprises: a specialist in the relevant vocational sphere, specialist in distance learning, technical specialist (system administrator or distance courses programmer) and digital content designer. It is underlined that assigning the task to design a distance course only to a teacher is unacceptable. At the same time, the process of learning digitalization in an education institution cannot be limited to introducing a learning management system.

Key words: *vocational education and training, digitalization, digitalized learning process, digital learning environment, learning management system, distance course.*

Introduction. The process of the world society transition to the Industry 4.0 has caused the need for fundamental modernization of all spheres of human life, including vocational education and training. At the same time researchers point out that there are a number of systemic problems in Ukraine which complicate this process greatly. Among the main problems researchers distinguish the following: low attractiveness and accessibility of vocational education and training; vocational education and training institutions' educational process provision with qualified and motivated teaching and other staff; disparity of training content with the modern requirements of labour market concerning the level of skilled workers' professional competency; creation of modern learning environment, the system of internal and external quality assurance of vocational education and training, etc. (Radkevych, et al, 2018).

The tasks of assuring the quality of education, decentralizing administration and financing, creating effective models of public and private partnership has appeared on the agenda (Ministry of Education and Science of Ukraine, 2018).

Materials. V. Bykov and A. Gurzhii works are dedicated to enlightening the conceptual bases of informatisation and digitalization of education. A wide range of problems concerning the use of modern electronic means in the learning process of vocational education and training institution are enlightened in the O. Spirin, A. Kalenskyi, M. Pryhodii works. Methodological aspects of distance vocational learning are disclosed in a number of works by L. Petrenko, S. Kravets. The use of electronic education resources and creating SMART-complexes for vocational education and training are revealed in the O. Humennyi, A. Kononenko, L. Lypska works.

The article aim is to ground the components of distance learning process in the digital environment of learning management system, in particular, the distance courses designing for vocational education and training.

Methods. The following methods were used to analyse the research phenomenon: comparison of scientific facts and generalisation of educational experience with extrapolation to the theory and methods of vocational education and training of the analysed research statements and empirical concepts; study of the documents and results of vocational teachers' activity, pedagogical and self-observation etc.

Results and discussion. One of the most important means that has great potential in solving these problems is the skilled workers' distance vocational learning, which is based on modern digital technologies, including specialized hardware and software complexes – learning management systems. However, the results of a large-scale fundamental study of the methodological foundations of the skilled workers' distance vocational learning conducted by the Laboratory of Distance Vocational Learning of the Institute of Vocational Education and Training of the National Academy of Educational Sciences of Ukraine (Radkevych and Artiushyna eds., 2017; Radkevych, 2018) showed that the major difficulties are the proper organization of the distance learning process, in particular, in terms of ensuring the interoperability among its various participants.

In accordance with the "Regulations on Distance Learning" (Order of the Ministry of Education and Science of Ukraine dated April 25, 2013 No 466), "subjects of distance learning are persons who study (pupil, student, listener), and those who provide the learning process in a distance mode (teaching staff, academic staff, methodists, etc.)" (Ministry of Education and Science of Ukraine, 2013). It is suggested that distance learning technologies in vocational education and training institutions can be used in organising the learning process in the initial vocational training, retraining or in-service training programs, as well as in studying the vocational theoretical disciplines (Ministry of Education and Science of Ukraine, 2013).

As mentioned above modern LMS are complex digital hardware and software complexes that can fully implement almost all aspects of the modern learning process, in particular: assessment of the process of professional competences acquiring by a student; statistics collection, analysing and saving concerning each aspect of the student's activity (group of students, institution as a whole) within the LMS; the ability to set up a complex analysis to ensure the quality of education (BigData basic level), etc.

Distance learning specifics in vocational education and training institution presupposes implementation of vocational and practical training "in a distance mode and/or full-time mode in the form of on-the-job training, different forms of practice, conducted at the workshops, polygons, simulators, racetracks, in education and production units, training enterprises, on the workplaces in the spheres of production and services, etc. or using the distance learning technologies if relevant web resources and access to them are available" (Ministry of Education and Science of Ukraine, 2013), i.e. in a mixed mode (blended learning).

So, learning management systems are not only a didactic tool, but also the core of digital learning environment of a vocational education and training institution. Such a powerful influence on all components of the leaning process transforms not only the ways of interaction between its participants, but, first of all, changes both the composition of participants and their functions. The list of subjects of distance learning process should be supplemented by engineering, technical and additional personnel (system administrators, programmers and other IT specialists, distance learning administrators, engineering and technical staff, etc.).

Involvement of these specialists enables implementation of organizational and pedagogical conditions for distance vocational learning, formulated by S. Kravets (2018). These conditions are grouped into three blocks taking into account regulatory, technical, pedagogical, personal and professional requirements for informatization of education:

– organizational and technical (availability of legal and regulatory support for distance vocational education; availability of a specialized learning management system),

– content and processual (designing and placing modern distance courses in the electronic environment; use of blended learning in the professional training of students and listeners),

– personal and professional (level of students' and listeners' mastering the IT technologies; continuous

development of teachers' readiness to introduce distance learning technologies).

In the following article we will focus on the content and processual block, because, as the results of our study showed, the greatest problem for vocational education and training institutions is the complexity of the process of distance courses designing and placing.

For learning management systems, for example, for the LMS Moodle, which is the most widespread in Ukraine, the main content unit is a distance course. Distance courses may consist of an unlimited number of topics, but topics themselves cannot exist independently outside the distance course (Bazeliuk, at al., 2018). It is possible to construct the controlled learning paths by configuring the access system to the distance course topics. Due to this, learning management system easily implements the mechanisms of the so-called "guided self-education of students".

It is important to implement the five main components – regulatory, financial, technical, personnel, teaching and methodological support – to accomplish the tasks of distance learning in the vocational education and training institution. All components of distance learning are interconnected and interdependent, and therefore mistakes or lack of implementation of one of the components will significantly affect not only the effectiveness of distance learning, but also the possibility of its functioning. For example, insufficient financial support significantly affects the technical component, complicates the development of teaching and methodological support for distance learning and the educational process as a whole. Problems with staffing will not allow to realize the possibilities of learning management systems to the fullest, which affect the quality of students' learning.

In the context of vocational education and training at the first stage, it is important to ensure a balanced implementation of the first three components, since the personnel, teaching and methodological support depends considerably on the selected learning management system. The peculiarities of choosing the learning management system for vocational education and training are described in detail in O. Bazeliuk article (2016).

As O. Spirin emphasizes "the use of ICT in education can take place in a variety of organizational forms: online courses, online counselling, online trainings, hackathons, webinars, the use of interactive electronic tutorials, electronic virtual laboratories, electronic social networks, visiting interactive science museums, creation of presentations, scientific platforms for communication, international scientific contests, virtual technology parks and others" (Bazeliuk, at al., 2018).

Each of these forms is realised within a concrete distance course. So, distance course is the main content unit in distance learning. Hence, the development of the distance course becomes very important aspect in implementing the distance learning process (Bazeliuk, at al., 2017).

The distance course, in its turn, has four main components: technical; educational and content; educational and processual; multimedia. Today, the task of distance courses designing lies on the teaching staff of the vocational education and training institutions, who independently select the training content, predict and build the students' learning paths, develop the digital content design and, finally, program it by themselves in the learning management system. Such a wide range of tasks cannot be implemented without loss of quality at each stage. It especially concerns the multimedia component that affects the visual design and is perceived by the students first, and the technical component, errors in which can lead to a complete stop of the learning process. Such an approach to distance courses designing is marked by a significant overload of teachers and the need to perform tasks beyond their competence.

Therefore, a group of specialists should be involved in ensuring the quality of distance course content and multimedia filling, the correct didactic organization of the process, the provision of a qualitative visual component, as well as the correct transfer and stable work of a distance course in the learning management system. Taking into account the specifics of the educational process in the vocational education and training institutions, we consider that this group of specialists should consist of: a specialist in the relevant vocational sphere, specialist in distance learning, technical specialist (system administrator or distance courses programmer) and digital content designer.

We consider that the proposed structure of creative group in distance courses designing is able to realize each of the components of the distance course on a high professional level and not only provide didactically correct learning process, but also further improve the distance course under the specific conditions of a vocational education and training institution, update the content, adapt it not only for different groups of students, but also to ensure the implementation of a student-centred approach to the learning process in a vocational education and training institution.

Conclusions. Digital distance learning technologies, in particular, in vocational education and training, are based on the principles of open

education, are the most advanced promising technologies of its organization and have a decisive impact on the nature and pace of digitalisation of the education system as a whole. The organization of the digital learning process in a vocational education and training institution should be carried out in the environment of learning management systems by a group of specialists consisting of: a specialist in the relevant vocational sphere, specialist in distance learning, technical specialist (system administrator or distance courses programmer) and digital content designer. We consider that it is unacceptable to require from vocational education and training institutions teaching staff to design distance courses without the participation of the proposed group of specialists. The process of learning digitalization in an institution cannot be limited only by introducing only learning management systems. The digitalisation of vocational education and training is not only filling it with modern electronic means, but, first of all, the appearance of new opportunities for its global structural analysis and the selection of vectors of development based on it, which either significantly accelerate the skilled workers training, or will enable students to acquire a higher level professional competence. Thus, in our opinion, research on the introduction of SMART technologies, electronic management systems and automated analytics in vocational education and training institutions becomes promising.

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УДК 37.018.43:004

Особливості організації цифровізованого освітнього процесу в системах дистанційного навчання

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Реферат. У статті автор розглядає особливості організації цифровізованого освітнього процесу в апаратно-програмному середовищі систем дистанційного навчання в контексті професійної освіти. Автор відзначає складність переходу до четвертого технологічного укладу та зазначає ризики, пов'язані з означеним процесом у професійній освіті. У таких умовах важливим стає вироблення ефективних моделей публічно-приватного партнерства, децентралізації управління та фінансування, а, головне, забезпечення якості професійної освіти. Одним із засобів, здатного забезпечити реалізацію таких завдань та уникнути ризиків у сфері професійної освіти, є використання програмно-апаратних комплексів систем дистанційного навчання (LMS). Водночас освітній процес, що відбувається в середовищі таких систем, стає цифровізованим, що, з одного боку, надає йому додаткових переваг (легкий доступ до навчальних даних незалежно від часу та простору, індивідуалізація освітніх траєкторій учнів, широкі мультимедійні можливості тощо), а з іншого – вимагає вирішення складних завдань зі створення дистанційних курсів. Автор статті зосереджується саме на методиці розробки дистанційних курсів, таким чином, закладу професійної (професійно-технічної) освіти вкрай важливо забезпечити реалізацію п'яти основних її складових: нормативно-правового забезпечення; фінансового забезпечення; технічного забезпечення; кадрового і навчально-методичного забезпечення. Підкреслюється, що розробка дистанційного курсу стає надзвичайно важливим аспектом здійснення сучасного цифровізованого освітнього процесу. Автором обґрунтовано структуру творчої групи зі створення дистанційних курсів, що складається з: фахівця відповідної галузі; фахівця з дистанційної освіти; технічного спеціаліста (адміністратора системи/програміста дистанційних курсів); дизайнера цифрового контенту. Підкреслено, що є неприпустимим покладати завдання створення дистанційного курсу лише на педагогічного працівника закладу професійної (професійно-технічної) освіти. Водночас процес цифровізації освітнього процесу в конкретному закладі не може бути обмежений лише введенням до нього систем дистанційного навчання.

Ключові слова: *професійна освіта, цифровізація, цифровізований освітній процес, цифрове освітнє середовище, система дистанційного навчання, дистанційний курс.*

Received: 16 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.148-155

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 148-155

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COMPETENCE-BASED EDUCATION CONTENT FORMING MODALITY FOR FUTURE JUNIOR SPECIALISTS OF CONSTRUCTION AND AUTO INDUSTRIES

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Abstract. The article is devoted to the formation method of the education content of future associate specialists in the construction and engineering fields in terms of competency that is indicated in the standard.

The goals of the professional training of a future associate specialist are defined in accordance with the outcome of the education process and are displayed in the education content. The general purpose of education, particularly professional is defined by the society, it is declared in educational standards and displayed in educational programs, curriculum, syllabuses of training programs, etc.

The formation of professional competence of a technical college graduate requires optimization of educational process taking into consideration initial vocational, educational, and personal potential, implementation of the most acceptable (scientifically based and didactically feasible) choice of education methods and technologies, as well as compliance with didactic laws and principles.

The article analyzes the requirements for designing of training content, the main components of the formation of the content of education, the principles of designing the content of competence-oriented training of future junior specialists.

The implementation basis of the competence approach is the usage of pedagogical techniques or methods that guarantees the achievement of the planned educational results (consequently, these planned results should be clearly and specifically reflected in the standards of education). Such technologies should envisage learning with action: students perform not artificial, but real practical tasks (projects), gain experience, learn both from teacher, and each other, solve puzzling production and technological cases.

The model of competency of a specialist should be a list of required competences which should graduate of an educational institution be able to use, what professional functions a graduate should be prepared for and what should be the level of his preparedness to performance of specific functions.

Today, it is not enough to implement a set of techniques and training methods, even interactive or creative-search, to achieve the goals that were set. The fact is that a new educational concept, which is based on a competent approach, requires genuine educational outcomes, a specific and approachable achievement of learning goals. The implementation of standards requirements by means of pedagogical techniques is the subject of the article.

Keywords: *education content, future associate specialists of the construction and engineering industries, competency approach, learning technologies.*

Introduction. The importance of professional advance education is the preparation of students for their participation in socio-cultural and professional activities, the formation of their philosophy, the development of a system of values and ideals that determine each individual's social position, attitude to the world and determination of his place in it.

The orientation of the educational process on the training of associate specialists who are capable of taking responsibility in the most difficult situations requires review and improvement, first of all, of process' content. In accordance with the main directions of modernization of education, the specialists content training must meet the requirements of a competent approach that ensures that a graduate will be able to implement all elements of his training in direct professional activity.

Materials. The study of the design of the content of education, of its effectiveness, relatively to the actual level of it and prospects of the development of society, the issues of modernization of the education content are reflected in the articles of V. Andrushchenko, V. Babak, O. Belova, A. Verbitsky, O. Kovalenko, Y. Fokin and others.

Requirements, principles, factors, criteria for selection of education content are offered by Yu. Babansky, N. Volkova, V. Voronov, O. Zheleznyakova, N. Moiseyuk, N. Nikitina, M. Petukhov, M. Fitsula, D. Chernilevsky and others.

But, the methodology of forming the education content for future associate specialists in the construction and engineering sectors that is accordingly indicated in the competence standard together with numerous researches, remained out of the zone of the scientists' attention.

The purpose of the article is to research the formation methodology of a content of a future associate specialists education according to competencies mentioned in the standard.

Methods. Such research methods were used accordingly to author's idea to reach the stated goal and to solve tasks, as theoretical – analysis of psychological and pedagogical literature relevant with the topic, for researching the status of the problem in pedagogical theory and practice; analysis, synthesis, abstraction, generalization for studying the formation methodology of a content of a future associate specialists education according to competencies mentioned in the standad.

Results and discussions. Main principles of the education content formation are the conformity of all its elements and of all levels of the society needs; the unity of the content and procedural aspects of learning; the structural unity of the education content at different levels of its formation in development from general to more specific and, finally, to the concrete forms of its implementation through the process of learning (Chernilevsky, 2008).

The foundation of the higher education standards of the new generation is the competence approach. The competent approach application to the development of the IED should lead to the creation of a new system of diagnostic tools with the transition from assessment of the graduate's knowledge to the evaluation of his competencies and the determination of the competence level in general (Methodological Recommendations for the Development of the Components of the Branch Standards for Higher Education (Competence Approach), 2013).

The determination of the volume and content of the obligatory knowledge of each discipline at a stated degree of learning, forms, methods and organization tools of assimilation and independent creative development in accordance with the list of competencies and learning outcomes that are specified in the standards will become the main tasks for the educational institutions in the process of designing the content of the pedagogical process.

The competence of associate construction and engineering specialists should cover elements of the functional and humanitarian direction of professional training, which determine the practical formation and development of the specialist's personality as a whole.

The vast majority of scientists considering the education content first-of-all highlight, the so-called key (over professional) competencies.

These competencies are supported by certain abilities, such as critical thinking, creativity, "European dimension" and active life attitude. Together, these abilities contribute to the development of a personality. In modern conditions the social significance of the profession and, therefore, an understanding of the position in the social relations and the ability for critical evaluation of life and professional experience, conscious choice of ways and improvement methods of personal and professional qualities should be of the greatest importance for graduates to understand.

The conformity of the quality of graduates' training with the requirements of the corresponding industry standard of the higher education should be determined with socio-personal, general scientific, instrumental and professional competencies.

Professional competencies are generally-professional and specialized-professional they may have a generalized character that is inherent to a professional, specialist or a certain class (subclass, group) of professions, and are also determined by the requirements of specific professional standards for a particular profession or (in their absence) by employers with their expertise, responsible for the development of the specified professional standards.

The formation of a professional competence of a graduate of a technical college who is an associate

construction specialist requires the optimization of the educational process, considering the initial vocational and personality potential, the implementation of the most acceptable (scientifically based and didactically feasible) choice of education methods and technologies, as well as compliance with didactic laws and principles.

The formation of a professional competence should be done considering knowledge, abilities, skills and professional qualities that already exist. The process of an active professional-personal development of associate construction specialists should be optimized at each stage of a professional training in a technical college.

The goals of the professional training of a future associate specialist are determined in accordance with the final results of the training and are reflected in the education content. The purpose of education, particularly professional, is determined by the society, it is declared in educational standards and reflected in educational programs, curriculum, syllabuses of training, etc.

The content design of the training of future associate specialists should take into account such requirements:

- ✓ content at all training stages should be aimed at the realization of the main goal of a specialist training and based on scientific principles;
- ✓ to comply with the logic and system that is inherent to one or another field of scientific knowledge;
- ✓ to consider the relationship between selected educational disciplines;
- ✓ to reflect the connection between the theory and the practice;
- ✓ to comply with age and psycho-physical capabilities of students;
- ✓ to promote the mastering of general-cultural and professional-pedagogical level of the preparation of an associate specialist;
- ✓ to be carried out on a fundamental, cultural and humanistic basis;
- ✓ to comply with modern didactic requirements;
- ✓ to be focused not only on the training of an associate specialist of the present but also of the future.

The main components of the building of the education content by N. Kovalenko (1995) are:

- ✓ content sources, social experience, which includes content and procedural components at each level of the society development;
- ✓ factors that influence the education content;
- ✓ principles of the education content selection as methodological elements of the guidance system in the content selection process;
- ✓ criteria as direct tools for determination of the specific content of the training material;
- ✓ methods of content selection for a subject that are inextricably linked to techniques of its building.

Main guiding principles that show what does need and what does not need to be included in the education content are the basis of the content designing for competence-oriented training of future associate specialists: the scientific principle; sequence and continuity principles; the diagnostic goal-setting principle, the principle of the accordance of education with the requirements of society, science, culture and personality; the principle of the unity of the content and procedural aspects of learning; the principle of the accessibility of the education content; the principle of the education content compliance with the goals of the chosen education model; the principle of fundamentalization of the education content; the principle of humanizing the education content; the principle of the structural unity of the education content at different levels of community and at the interdisciplinary level; the principle of taking into consideration the content and procedural aspects of learning during the formation and design of the content of educational material.

The implementation basis of the competence approach is the use of pedagogical techniques or techniques that guarantee the achievement of the planned educational outcomes (consequently, these planned results should be clearly and specifically reflected in the education standards). Such technologies should envisage learning with action: students perform not artificial, but real practical tasks (projects), gain experience, learn both from teacher, and each other, solve puzzling production and technological cases. (Luzan, 2018).

Scientists research the design of the education content at the following levels:

1) the level of higher education standard;
2) the level of educational and professional program;
3) the level of curriculum;
4) the level of the discipline programs;
5) the level of the training module;
6) the level of individual educational tasks.

Taking into account that the design of the content of educational programs, curriculum, discipline programs, training modules, individual educational tasks for students is deeply researched in scientific and pedagogical spheres, I will emphasize attention on the content design of the future associate specialists training according to the competencies that are specified in the standard.

The model of competency of a specialist should be a description of required competences which should graduate of an educational institution be able to use, what professional functions a graduate should be

prepared for and what should be the level of his preparedness to performance of specific functions.

According to the higher education standard in Ukraine on specialty 192 – "Construction and civil engineering" and specialty 133 – "Sectoral engineering", the list of graduate's competencies consists of three groups:

1) Integral – the ability to solve specialized cases and solve practical tasks in the field of construction and civil engineering, that is characterized with complex and systematic approach, on the basis of the application of basic theories and methods of fundamental and applied sciences.

2) General competencies.

3) Professional competencies of the specialty (PC).

Final, complex and integrative learning outcomes that determine the normative content of the training and correlate with the list of general and special competencies, mentioned above, are approached during the assimilation of the learning material.

Today, it is not enough to implement a set of techniques and training methods, even interactive or creative-search, to achieve the goals that were set. The fact is that a new educational concept, which is based on a competent approach, requires genuine educational outcomes, a specific and approachable achievement of learning goals. Therefore, today we should discuss the fulfillment of standards requirements with the help of pedagogical technologies. Let's briefly cite the main characteristics of this category.

In our work, speaking of the technology of learning, we understand the scientifically grounded, pre-designed stage-by-stage organization of the educational process that is being implemented into practice to achieve guaranteed educational results.

The pedagogical technology reflects the model of education and disciplinary processes of an educational institution and combines their content, forms and tools.

The choice of educational technology and the most complex elements of it is of the greatest importance. Verifying the choice, you must take into consideration that every technology is oriented to a specific range of didactic tasks.

It is necessary to evaluate reasonably and creatively the possibilities of specific learning technology, to know its strengths and weaknesses. On this basis, the optimal mesh of technologies relatively to the topic of the training subject and to a specific lesson should be chosen.

Choosing learning technology, following criteria should be considered (Koshuk, 2018):

- ✓ goals, tasks of studying topics, sections;
- ✓ content and character, sequence of mastering the disciplines of the educational program;
- ✓ level of methodological competence of the teacher (teachers);
- ✓ technical equipment of the educational process (means of training);
- ✓ level of educational and cognitive activity of students;
- ✓ external conditions (time, production, economic, etc.);
- ✓ the learning process complexity, ergonomic requirements;
- ✓ the complexity level of the training content.

The achievement levels of students' education should be considered in learning outcomes. The most common mean (tool) for structuring levels of thinking that determine the goals of learning, which is worldwide accepted in the international educational environment is the taxonomy by B. Bloom.

Let's take into consideration how the learning technologies, which are suitable to the specific purpose of studying a section or a topic, are selected.

1. If the goals of a study of a section or a topic do not exceed the level of assimilation, the reproductive learning technology will be appropriate to use. It includes:

- ✓ attentive listening to the teacher;
- ✓ student work with a textbook;
- ✓ observation of investigated objects, phenomena;
- ✓ implementation of practical actions with the instructions of the teacher.

2. If the purpose of the study of a section or a topic is the mastering of the major algorithms of activity, then the technology of training should be reproductive-algorithmic, it means:

- ✓ educational-cognitive activity, including the annotation of the educational material;
- ✓ speeches (reports);
- ✓ solving of typical tasks, participation in didactic games.

3. If goal of a section or a topic study are the development the search, heuristics activity, then it is necessary to choose heuristic teaching technologies, where didactic techniques dominate with using:

- ✓ problematic education;
- ✓ business games, real design;
- ✓ parsing of atypical production cases.

4. If goals of the section, the topic study include the formation of creative technological thinking, then creative learning technologies are necessary to be implemented, they are based on methods of mastering the experience of creative activity:

- ✓ situation of complicated conditions;
- ✓ group solving of creative tasks;
- ✓ group stimulation of creative search ("brainstorming", synectics, method of morphological

analysis and synthesis of technological decisions, functional and cost analysis, method "TSIT" – the theory of solution of inventive tasks, etc.).

5. If goals of studying a sector, or a topic are creation an informative culture of students, the ability to process information, then innovative information technologies should be applied: automated learning systems; interactive programs; multimedia technology; hypertext technologies; telecommunication projects, etc.

Naturally, the content features of different disciplines significantly differ, that results in the use of different learning technologies.

Let's consider the implementation of learning technology on the example of a studying a specific academic discipline. The major educational objective ("to calculate", "express", "demonstrate", "know", "interpret", "evaluate", "apply", "create") is regulated by the state standard of vocational education and is achieved when specific educational tasks are being performed by a student (Galuzyak, 2007, p. 190).

After assimilating the educational material, the student is being involved in the process of performing the tasks of the reproductive type, and after the diagnosing, if he demonstrates the necessary level of educational achievement, the implementation of more complex educational tasks is envisaged.

It is worth emphasizing that if the purpose of the training is to develop students' abilities to carry out tasks of a creative nature, then tasks of search character are being performed, and problematic or simulation games are being actioned, etc. After each technological stage learning outcomes are diagnosed and, during the thematic control, are compared with "optimistic expectations" it is the general purpose of learning.

For instance, according to the state standard of higher education preparation for a bachelor's degree in the field of Construction and Civil Engineering, the graduate must have "the ability to understand the major theoretical ideas, concepts and principles of mathematical and socio-economic sciences" (project). And, according to the state standard of higher education preparation for a bachelor's degree in the field of "Branch Engineering", the graduate must have "the ability to demonstrate knowledge and understanding of the major ideas of fundamental and engineering sciences that is the foundation of the sectoral engineering. The stated goal is focused on the students' level 1 assimilation of the educational material and does not require further solving of educational tasks.

In return, the formation of a future builder's ability to work with geodetic instruments and to use topographical materials in the design and construction of objects and engineering networks, the formation of a future branch engineering specialist's ability to work with the main sources of technical information, requires students to master the second level of mastering the material (not to imagine, to recognize, to orient, but to specifically work with geodetic instruments or systems of automatic control in mechanical engineering).

By analogy to the reproductive level of knowledge assimilation, the technology of problematic-developing learning provides students with the acquisition of productive, creative learning outcomes and, accordingly, ensures the development of their professional competence.

The methodology of preparation and conduction of the education forms that are part of the structure of problem-developing technology (different types of lessons, independent study, simulation games, project method, etc.), is deeply projected and written out in modern scientific and educational literature.

The application of design technology can provide the formation of the skills to search, to process and to analyze information from various oral, written and electronic sources (competence KZ07); the ability to work in a team, using interpersonal skills (competence KZ08); the ability to learn independently (competence KZ06); knowledge of manufacturing technology, technical characteristics of modern building materials, products and structures, the ability to effectively use them in the design and construction of construction objects (competence KS05) in future builder.

And, for instance, the competence of KS05 will ensure the formation of the ability to operate with physical terms and concepts by recognizing the physical basis of phenomena and processes arising during the operation of machine building products, to apply physical models and patterns in solving problems, to carry out research on physical phenomena and processes in a future mechanical engineering specialist.

For the formation of general competencies, it is necessary to choose such a technology of learning, in which time would be spent mostly independently and students would learn how to plan, organize, self-control and evaluate their actions and activities in general. One of these technologies is a modular approach, which is based on the active educational and cognitive activity of students, which makes it possible to individualize the pace of mastering knowledge.

A modular approach can be used to create general competencies and communication (communication skills and abilities); the ability to solve problems (the ability to plan and perform actions in order to get the expected result); cooperation (the ability to effectively co-operate in a team); self-development (the ability to organize activities, self-knowledge, self-esteem, critical and analytical thinking); compensation readiness (the ability and the skill to overcome the

difficulties that arise when studying new knowledge), entrepreneurship (ability to design their activities and activities of others); knowledge of information technologies (the ability not only to use well-known technical software information processing, but also the ability to self-development of new ones).

The main task of the teacher is to teach the activities to the learner. This is facilitated by the use of technology of collective mental activity(CMA). This technology is defined as "a continuous process of managing the development of the needs, abilities of those who study."

Methods of creative problem solving: brain attack, synectics, morphological analysis, method of analysis and synthesis of fantastic ideas, method of "garlands associations", strategy of sevenfold search, method of heuristic questions, inversion method, method of empathy (personal analogy), "snowball" method, method of "a carpet of ideas" and others.

Conclusions. Thus, the methodology for designing the main forms of reflection of the content of training of associate specialists on the basis of a competent approach is aimed at achieving the ultimate goal: to select such a content of training, the acquisition of which will ensure graduates of vocational education and training institutions to be demanded and successful in the labor market.

Prospects for further research may be related to the search for psychological and pedagogical conditions for improving the effectiveness of meeting the standards of standards by means of pedagogical technologies.

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УДК 377.3:[621+69]:37.061]:005.336.2

Методика формування змісту освіти майбутніх молодших спеціалістів будівельної та машинобудівної галузей за компетентнісним підходом

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Реферат. Стаття присвячена методиці формування змісту освіти майбутніх молодших спеціалістів будівельної та машинобудівної галузей відповідно зазначеним у стандарті компетентностям.

Цілі професійної підготовки майбутнього молодшого спеціаліста визначаються у відповідності з кінцевим результатом навчання та відображаються у змісті освіти. Загальну мету освіти, зокрема фахової передвищої, визначає суспільство, вона задекларована в освітніх стандартах та відображається в освітніх програмах, навчальних планах, робочих навчальних програмах дисциплін тощо.

Формування професійної компетентності випускника технічного коледжу вимагає оптимізації освітнього процесу з урахуванням початкового професійно-освітнього та особистісного потенціалу, здійснення найбільш прийнятного (науково обґрунтованого і дидактично доцільного) вибору методів і технологій навчання, а також відповідності дидактичним закономірностям і принципам.

У статті проаналізовано вимоги проектування змісту підготовки, основні компоненти побудови змісту освіти, принципи проектування змісту компетентнісно орієнтованої підготовки майбутніх молодших спеціалістів.

Основою реалізації компетентнісного підходу є застосування педагогічних технологій або методик, які гарантують досягнення запланованих освітніх результатів (відповідно, ці заплановані результати мають чітко й конкретно відображатися в стандартах освіти). Такі технології повинні передбачати навчання дією: студенти виконують не штучні, а реальні практичні завдання (проекти), набувають досвіду, навчаються як у викладача, так і один в одного, розв'язують проблемні виробничо-технологічні ситуації.

Компетентнісна модель фахівця має являти собою опис того, яким набором компетентностей повинен володіти випускник навчального закладу, до виконання яких професійних функцій він повинен бути підготовлений і яка має бути ступінь його підготовленості для виконання конкретних функцій.

Щоб досягти поставлених цілей, на сьогодні недостатньо використати комплекс методів і прийомів навчання, хай навіть інтерактивних чи творчо-пошукових, оскільки нова освітня концепція, заснована на компетентнісному підході, вимагає достеменних освітніх результатів, конкретного і реального досягнення цілей навчання. У статті йде мова про виконання вимог стандартів засобами педагогічних технологій.

Ключові слова: *зміст освіти, майбутні молодші спеціалісти будівельної та машинобудівної галузей, компетентнісний підхід, технології навчання.*

Received: 15 May 2019
Accepted: 11 June 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.156-161

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 156-161

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PSYCHOSOCIAL SUPPORT OF EDUCATIONAL PROCESS PARTICIPANTS AT INSTITUTIONS OF VOCATIONAL EDUCATION

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Abstract. The article analyzes the scientific sources on the problem of psychosocial help to victims of traumatic events, identifies three main approaches to its implementation. The objective of psychosocial support of the educational process participants at the institutions of vocational education who have survived a crisis life event is formulated. It is to promote the preservation of a person in the status of a productive subject of activity, personality and individuality, capable of positive interaction with the world, people and himself. The defined goal is achieved by solving the following tasks: promoting the stabilization of the emotional state and rational perception of one's life situation; formation of constructive ways of solving the complex life situations; activization of processes of self-knowledge, self-perception, self-regulation and self-control; assisting in creation of a positive image of the future; assistance in taking responsibility for own future; development of social competence and social activity, mastering strategies of successful behavior; the formation of a focus on personal development and social realization. To achieve the identified goals and objectives, training programs for psychosocial support for students and teachers of vocational education institutions have been developed.

The training program for students "Reference Point" is aimed at forming their psychological stability in overcoming the consequences of crisis events, increasing the level of stress resistance, training methods for self-recovery. The program has three components: personal, social, practical.

The program for pedagogical workers consists of two modules. The first module is aimed at the formation of the competence of teachers in providing psychosocial support to students; the second one– to reduce their level of professional burnout. The indicated programs were piloted on the basis of five vocational education institutions of the Donetsk region.

Keywords: *vocational education institutions, psychosocial support, viability/stress resistance, training program.*

Introduction. The urgency of psychosocial support for the educational process participants at vocational education institutions is due to many factors. First of all, it is an armed conflict in the east of the state and the associated psychological traumatism for both adults and children. In addition, a significant part of the contingent of students of vocational education establishments is influenced by other psycho-traumatic circumstances: a certain percentage of them are children from families where parents are deprived of parental rights, pedagogically abandoned students, adolescents with manifestations of deviant and delinquent behavior. Therefore, it is important to develop modern methods and technologies of psychosocial support for the educational process participants at the vocational education institutions.

Materials. An analysis of the world practice of organizing psychosocial help for victims of traumatic

events and scientific research on the above-mentioned problem has made it possible to distinguish between three main directions that differ from each other by the fact that researchers focus their attention on the different effects of the traumatic event on the person.

Traumatic stress and mental disorders triggered by traumatic events are in the center of attention by the representatives of the first direction (A. Allen, A. Wenger, D. Johnson, V. Dubrovin, S. Ilyin, M. Mazur, I. Malkina-Pich, Yu. Semenov, D. Smith, I. Mamaychuk, N. Tarabrin, K. Horney, C. Fleck-Hopson, V. Fruy, etc.). Summarizing numerous studies in the field of traumatic stress, N. Tarabrin (2001, pp. 15-16) defines it as: stress becomes traumatic, when the result of its influence is a violation in the mental sphere, which occurs in analogy to physical disorders. This violates the structure of "self", the cognitive model of the world, the affective sphere, neurological mechanisms that control the learning process, the memory system, emotional learning pathways. Traumatic events – extreme crisis situations that have a potentially negative consequence, situations of life threatening for yourself or relatives are in the role of a stressor in such cases. Such events violate the individual's sense of security radically, causing the experience of traumatic stress, psychological consequences of which are diverse. The fact of experiencing traumatic stress for some people becomes a reason of their post-traumatic stress disorder emergence, in the future. Its authors define it as nonpsychotic delayed reaction to traumatic stress, that can cause mental disorders in any person.

Representatives of the second direction (S. Bogdanov, R. Gjstad, E. Diregrov, S. Perrin, G. Selye, P. Smith, A. Timchenko, V. Chornobrovkina, T. Yatsenko, etc.) focus on the ability of a person to resist action of stressors. In the framework of this trend, the concept of resilience was introduced in the studies of foreign scientists. In the psychological sense, resiliency is understood as the ability of a person to resist the actions of stressors without getting into a state associated with mental disorders (Bogdanov et al., 2017, pp. 12-15).

Representatives of the third direction focus their attention on those positive changes that arise in person as a result of crisis trials (L. Kalhoun, K. McGonigall V. Panok, R. Tedeschi, T. Titarenko, etc.). The concept of "posttraumatic growth" is due to its emergence of R. Tedeschi and L. Calhoun (Tedeschi and Calhoun, 2004). Researchers describe it as a situation in which the development of personality, at least in some areas, after a crisis life event exceeded the level that was before the crisis. That is, a person not only returned to the initial state, but also improved himself in some important areas.

The purpose of the paper is to determine the purpose and objectives of the psychosocial support of the educational process participants, who have survived crisis life events; provide training programs for psychosocial support for students and teachers of vocational education institutions.

Methods: theoretical and methodological analysis, systematization and generalization of psychological and pedagogical sources for determining the goals and objectives of psychosocial support for the educational process participants; questionnaires, interviews, expert pedagogical assessment, focused group interviews – to check the effectiveness of the developed training programs and to clarify the content of individual training lessons.

Results and discussions. The analysis of scientific sources and the generalization of the four-year experience of psychological service workers in providing psychosocial assistance to children who survived crisis life events allowed to determine the purpose and tasks of providing psychosocial assistance to children of the specified category in the conditions of an educational institution.

Consequently, the main purpose of the implementation of psychosocial assistance to a student who survived crisis life events, is to promote his preservation in the status of a productive subject of activity, personality and individuality, capable of positive interaction with the world, people and himself.

The defined goal is achieved by solving such problems in work with the students: (Tkachuk, 2018; Muzychenko and Tkachuk, 2017): promoting stabilization of the emotional state and rational perception of one's life situation; formation of constructive ways of solving complex life situations; activization of processes of self-knowledge, self-perception, self-regulation and self-control; assisting in building a positive image of the future; assistance in taking responsibility for own future; development of social competence and social activity, mastering strategies of successful behavior; the formation of a focus on personal development and social realization.

Psychosocial support for students who have survived a psychotrauma must be based on the principles tested by the experience of psychological assistance to victims of traumatic events, which are constantly updated and supplemented in accordance with the development of this area of psychological practice.

Basic principles are:

1. Principle of orientation to personal growth and development. The crisis situation in which there is a student, should be considered not as a disease or pathology, but as a normal reaction of the individual to abnormal circumstances. In addition, the crisis – a process of personal formation, and if it is to overcome

positively, then the person goes to a qualitatively new stage of development. Proceeding from this, psychosocial support can be considered as aiding the process of personal formation of the student.

2. Principle of unconditional positive attention. The basis for communicating with students should be mutual trust and respect. It is important that during the process of correction-development work, a safe atmosphere is created that is favorable for self-expression and disclosure of the student. It can be only achieved if you accept the personality as she is. If the circumstances require correction of the destructive behavior of the student, the behavior, deed is only evaluated (not his personality).

3. The principle of taking into account age characteristics. The specifics of the work should be differentiated according to the age-specific characteristics of the students (to be taken into account: psycho-physical development, the leading form of activity, the interests of the student).

4. Principle of community orientation. It is important to take into account the social environment when working with pupils' problems, and they should be considered as part of the overall situation. Thus, it is necessary to work not only with students, but also with their parents, relatives, teachers, etc.

5. Principle of multiplicity of work. Any corrective action should be oriented at all levels of student's functioning: behavior, skills, emotions, cognitive processes, system of values, system of beliefs, personal identity, "I-concept". Such a multiplicity and complex nature contribute to the full development of the process of constructive change.

6. Multidisciplinary principal. Based on a wide range of the identified tasks and objectives, work requires a multidisciplinary approach. To work with students who have survived a crisis, not only employees of the psychological service, but also other employees of the educational institution should be involved.

7. Principle of prolongation and sequence of work. Such work goals as overcoming traumatic experience, promoting psycho-physical development and ensuring the student's personal formation require a prolonged work (not less than one year) of work, rather than one-time interventions. During this time the student must pass a cycle of specially selected correction-development programs. Each subsequent program will deepen and enrich the learner's skills in the previous program, skills and experience.

8. Principle of integration with society. Rehabilitation intervention should be aimed at the formation of students as productive members of a society with an active civic position (Beberashvili, Javakhishvili, Mahashvili and Sargwelladze, 2001, p. 25).

In order to implement the defined content and performance of the planned tasks, the staff of the Ukrainian Scientific and Methodological Center of Practical Psychology and Social Work, in cooperation with the Danish Refugee Council in Ukraine, developed training programs for psychosocial support for the educational process participants of vocational education institutions.

The training program for students "Reference Point" is aimed at forming their psychological stability in overcoming the consequences of crisis events, increasing the level of stress resistance, training methods for self-recovery. The program has three interrelated and equivalent components: personal (understanding of oneself, strengths and weaknesses, familiarity with emotions and feelings, etc.), social (ability to live with others, resolve conflicts, etc.), practical (building life plans, etc.) .

Contents of the program of psychosocial support for students of vocational education institutions:

Session 1. Introduction. Acquaintance.

Session 2. Important life skills.

Session 3. Important life skills: the ability to say "no" in a risky situation.

Session 4. Important Life Skills: Understanding Conflict.

Session 5. Important life skills: we resolve conflicts taking into account the positions of the parties.

Session 6. Events and feelings.

Session 7. Feelings and emotions. Anger management.

Session 8. Who am I? Which am I?

Session 9. On the way to success.

Session 10. Team.

Session 11. Health is my treasure.

Session 12. Reference Point.

In order to clarify the content of individual lessons of the proposed program in 2016, a number of focused group interviews were conducted at vocational education institutions of the Donetsk region. An analysis of the results of group interviews made it possible to draw a number of conclusions.

The ability to manage own emotions is an important life skill, defined by students. They rated independently the level of their formation as low one, because it is the most difficult for them to restrain anger, aggression, rage Most of the respondents can not, actually, identify and name their feelings in a particular situation. In addition, it is difficult for them to "read" the emotions of another person, which negatively affects the establishment of constructive relationships. Young people (15-19 years old) often overcome the consequences of stress and negative situations by destructive ways – using alcohol.

Students also mentioned that they would like to have conflict resolution skills. In their responses, they

confirmed quite frequent cases of conflicts with parents, in training groups, dormitories, and so on.

Another important life skill is the ability of students to overcome obstacles and difficulties. However, about half of respondents said that in the face of problems, they usually avoid solving such situations.

Defining the necessity and usefulness of a healthy lifestyle, more than half of the participants in the focus group noted that they care for their health badly. In determining the causes of irresponsible attitude to health, students demonstrated the asymmetry of the attributive style in favor of external, independent circumstances (eg, ecology, etc.), in contrast to their activity in overcoming complications and obstacles.

Among the life goals, students point out: good work, high salary, a strong family, a career, self-realization. Unfortunately, the interviewed students do not see any prospects for employment in their place of residence. A certain number says about going abroad for this purpose. Among the skills to organize their own leisure, the respondents indicated their work at the computer, watching TV. Skills of self-presentation, writing a resume, conducting interviews with potential employers are not well developed.

The skills of farming, cleaning, maintaining lifestyle are also poorly developed. The vast majority of them are not able to search and interact with certain utilities (energy, water supply, gas, etc.), fill in receipts and pay bills. Almost all agreed that they are not able to plan a budget and spend their money wisely.

The proposed training program was tested on the basis of five pilot vocational education institutions of the Donetsk region. An analysis of the results of the input / output survey of the participants of the program allows us to make a conclusion about the increase of their stress tolerance, improvement of mood and wellbeing, in general. Participants noted positive changes in peer relationships in educational groups, with teachers and parents. The fact of the motivation changes to participate in the training is also interesting. If at the beginning we had to explain the participants, in detail, what the training is to be for and what will happen, then, in the course of the work of the training groups, the number of people willing to take part into the program has increased dramatically. It may also indicate an increase in confidence in adults, including teachers. Based on the recommendations of the participants, the training program has been expanded. In particular, the theme "Health" was developed in addition and the number of hours for the "Conflict" topic was increased.

The training program of psychosocial support for teachers of vocational education establishments consists of two modules: the formation of competencies regarding the provision of psychosocial support to students and their parents; psychosocial support of pedagogical workers in conditions of the educational institution, aimed at reducing the level of professional burnout.

The content of the first module involves the inclusion of such issues for working with educators: how children react to a crisis event; the role of a teacher in supporting psychosocial well-being of students; how to discuss issues of crisis (events) with students; the actions of pedagogical workers aimed at the rehabilitation of students; management of changeable behavior and support of positive discipline; identification and support of children in need of enhanced support.

The second module includes the following topics: "Psychosocial well-being and its components", "Ways of supporting the psychosocial well-being of teachers", "Methods of recovery and prevention", "Burnout: reasons, indicators, methods of recovery and prevention", "Conflict", "Support of psychosocial well-being of students" (Beberashvili, Javakhishvili, Mahashvili and Sargwelladze, 2001, p. 25 Kornienko, Lisovetska, Lutsenko Romanovska, 2017, pp. 125-152).

The indicated programs also went on piloting on the basis of five vocational education institutions of the Donetsk region and was discussed during the round table "Psychosocial support of participants in the educational process at the vocational institution" in June 2017. The program received positive reviews from its own trainers, heads of educational institutions, participants of the training course. The introduction of the training provided an assessment of its effectiveness by comparing the results of the input / output survey of the participants. At the start of the stage, the following reactions were observed in pedagogical staff: tightness, misunderstanding of the essence of the new format of work, comments about active colleagues, low motivation to participate in the training, etc. However, in the process of work there were significant changes in the level of motivation of teaching staff to participate in the training, their activity at the classes, as well as the degree of inclusion into the training process. The dynamics of changes in the degree of inclusion of pedagogical staff of vocational education pilot institutions into the training process is illustrated in *Table 1*

The trainers noted that this dynamics became visible from the third meeting: teachers began to talk about themselves, and not just about students, showed openness in discussing the individual topics, ways to react to events related to the military conflict, shared practical ways to self-renewal in crisis / stress situation. The topic of professional burnout and methods of its prevention became particularly interesting for the teachers.

Table 1

The dynamics of changes in the degree of inclusion of teaching staff of pilot vocational education institutions into the training process (amount / interest.)

Levels of inclusion of teaching staff into the training process	The total amount of teaching staff, who took part in the training program		
	Input survey	Output survey	Dynamics
High	8/9%	42/49%	+40%
Medium	29/34%	25/29%	-5%
Low	49/57%	19/22%	-35%

Conclusions. It is determined that the problem of psychosocial support of the educational process participants at vocational education institutions is relevant, especially in the eastern regions of the country, which are close to the zone of combat operations. Its purpose is to promote the preservation of a person in the status of a productive subject of activity, personality and individuality, capable of positive interaction with the world, people and himself. In order to organize the psychosocial support of educational process participants at the institutions of vocational education, a training program for students was developed and tested. The program is aimed at forming their psychological stability in overcoming the consequences of crisis events, increasing the level of stress resistance, training ways to self-recovery. It is shown that the program has three interrelated and equivalent components: personal (understanding of oneself, strengths and weaknesses, familiarity with emotions and feelings, etc.), social (the ability to live with others, solve conflicts, etc.), practical (creation of life plans, etc.).

The program for pedagogical workers consists of two modules. The first module is aimed at educating pedagogical staff in providing psychosocial support to students; the second – to reduce their level of professional burnout.

The presented program does not exhaust all the necessary aspects of psychosocial support for the educational process participants at the vocational education institutions. Further research requires the creation of a technology for psychosocial support for the educational process participants, which involves co-operation and coordination of efforts of teachers, parents and all institutions involved in the organization to help people in crisis situations.

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УДК 377-05:[364:159.9|

Психосоціальна підтримка учасників освітнього процесу в закладах професійної освіти

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Реферат. У статті проаналізовано наукові джерела з проблеми психосоціальної допомоги постраждалим від травматичних подій, виділено три основних підходи до здійснення такої. Сформульована мета психосоціальної підтримки учасників освітнього процесу в закладах професійної освіти, що пережили кризову життєву подію. Вона полягає у сприянні збереженню людини в статусі продуктивного суб'єкта діяльності, особистості та індивідуальності, здатної до позитивної взаємодії зі світом, людьми і собою. Визначена мета досягається шляхом вирішення таких завдань: сприяння стабілізації емоційного стану та раціональному сприйняттю своєї життєвої ситуації; формування конструктивних способів вирішення складних життєвих ситуацій; активізація процесів самопізнання, самоприйняття, саморегуляції і самоконтролю; надання допомоги в побудові позитивного образу майбутнього; сприяння прийняттю на себе відповідальності за власне майбутнє; розвиток соціальної компетентності та соціальної активності, оволодіння стратегіями успішної поведінки; формування спрямованості на особистісний розвиток і соціальну реалізацію. Для досягнення визначених мети й завдань розроблено тренінгові програмі психосоціальної підтримки учнів та педагогічних працівників закладів професійної освіти.

Тренінгова програма для учнів "Точка відліку" спрямована на формування в них психологічної стійкості у подоланні наслідків кризових подій, підвищення рівня стресостійкості, навчання способам самовідновлення. Програма має три складники: особистісний, соціальний, практичний.

Програма для педагогічних працівників складається з двох модулів. Перший модуль спрямований на формування у педагогів компетентностей щодо надання психосоціальної підтримки учням; другий – на зниження в них рівня професійного вигорання. Вказані програми пройшли пілотування на базі п'яти закладів професійної освіти Донецької області.

Ключові слова: *заклади професійної освіти, психосоціальна підтримка, життєстійкість / стресостійкість, тренінгова програма.*

Received: 24 May 2019
Accepted: 06 June 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.162-168

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/ 1(18)'2019, pp. 162–168

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WORK-BASED LEARNING INVOLVING THE DUAL EDUCATION ELEMENTS

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Abstract. The article analyses the dual education capacity for implementing work-based learning (WBL) for future skilled workers in order to improve the quality and enhance their professional training practice orientation. It is emphasised on information accumulating in the national scientific-pedagogical dimension on dual education elements introducing into future skilled workers professional training. Therefore, the appropriate issues on relevance, expediency, perspective and necessity are actively studied. It is noted that dual education applying is to create real production situations, assure cooperation of students and experienced mentors from enterprises, and demonstrate students' autonomy and initiative in the workplace. It also represents the students' involvement into professional culture and their professional identity, recruitment possibility for the youth of appropriate qualification, strengthening the practical component of professional (vocational) education (P(V)E) system, etc.

It provides characteristics for WBL activities and its main forms: work experience, traineeship, work-shadowing, mentoring, apprenticeship, cooperative learning, partnership-based learning, internship or work placement.

The article envisages WBL opportunities in terms of dual education elements implementing. They are the following: 11) vocational training as a means of achieving economic, social and individual goals; 2) vocational training as a task to be carried out in partnership between the government and the business community; 3) joint funding of vocational training; 4) social acceptance of vocational training, the main objective of vocational training; 5) to produce skilled workers with flexible qualifications who are mobile and capable of working in their chosen fields; 6) alternating learning situations in accordance with the dual principle; 7) qualifications of teachers and training personnel; 8) codifying quality standards; 9) balance between standardization and flexibility; 10) complementary programs run by schools or non-business entities; 11) creating a solid basis for decisions and design.

Keywords: *work-based learning, dual education elements, professional (vocational) education schools, professional training, future qualified workers.*

Introduction. The change of Ukraine's social-economic development conditions in the framework of Eurointegration, demography, foreign affairs and domestic processes causes the range of transformations in all spheres of sovial life, especially education and industrial ones. The modern professional (vocational) education (P(V)E) system reforming is aimed to force its practice orientation, promotes innovative education-industrial environment creation in P(V)E institutions and active involvement of social partners – the workforce orders. Corresponding, studying the foreign experience on vocational education and training (VET) development and best practices implementing are becoming crucial. The most efficient and productive is the dual form of VET (Denmark, the Netherlands, Germany, Norway, Singapore etc.). Additionally to organisation conditions optimisation, responsibilities sharing it creates the positive circumstances for using all forms of work-based learning (WBL). It is actively promoted in the EU. Thus, taking into account the EU

countries' national VET systems specifics and gained experience on dual education use, there is a need to implement its elements into education practice of certain countries for strengthening their practice-oriented component of VET. Ukraine is not the exception that is why the following problem is crucial but not enough developed in the Ukrainian dimension.

Materials and methods. It is worth to mention the lack of fundamental scientific works on dual education implementing in qualified workers professional training. The processes of gaining the information of the topic is in place in the scientific and pedagogical sphere. Thus, the issues on up-to-datedness costs and benefits, prospects and necessity in the ongoing dual system implementing in Ukraine is actively discussed. For instance, there is an idea that the dual form of education as an example of education-industrial integration, provides an opportunity to refresh training-practice bases at P(V)E schools, strengthen the teaching employees' professional competence (involving experienced tutors from an enterprise, upskilling P(V)E schools masters at enterprises) (Kushniretsk, Syniura-Rostun, 2017, p. 28). V. Doctorovych (2017, p. 37) emphasises that dual training form implementing in P(V)E schools can help to solve the range of P(V)E system problems, in particular: non-correspondence of vocational training and high-tech industries development; imperfection of models for social partnership mechanisms; law vocational training practice orientation for certain enterprises; inadequate condition of P(V)E schools facilities and resources etc. One of the classifications by German scientists on the elements of the dual training form, suitable for import into VET systems of other countries, together with the SWOT-analysis of their implementation in professional training for future skilled workers of Ukraine were reperesented by N. Kulalaieva (2018). Those elements were also investigated and interpreted via the British and domestic contexts by S. Leu (2018). I. Boychevskaya (2009) summed up the social significance of their introduction for skilled workers professional training. She believes that the well-being of the entire society depends on the way the balance of interests between the employers' needs in new workers and their offer is found.

The research aim is in the analysis of dual form possibilities as the way for realisation the work-based learning for future skilled workers and increasing the quality and practice orientation of their professional training.

Results and discussions. In Ukraine, the interest to dual system has already passed the stage of its studying and is at the stage of its active implementing. In the Law of Ukraine "On Education" the dual form foresees combination of agreement-based at-schools, in-service and other types of training for gaining the qualification (the legislation of Ukraine, 2017). It promotes creating real in-service situations, students and experienced mentors cooperation, student's independence and initiative at their working places, student's perception of professional culture and professional identity, the possibility to fulfill the staff of an enterprise with young workers of appropriate qualification etc. It is important that in Ukraine the dual elements are being implemented into qualifued workers training since 2015. The for purpose implementation is provided for 49 professions (2017-2020) and in 211 P(V)E schools (MoES, 2017; 2018). It is necessary to mention that the Concept on training specialists upon dual form of education (2018) defines three realisation stages before 2023. Firstly, it is planned to develop the appropriate legislation basis (2018-2019), then typical models (2019-2020) and create clusters of dual education (2020-2023). Conversely, in the EU dimension strengthening the VET system practice component is actively promoted via implementing different forms of work-based learning (WBL), especially apprenticeship. The aim is to involve social partners, companies, chambers and VET providers, stimulate innovations and entrepreneurship (BIBB, 2016). In the domestic dimension WBL is interrupted as training for gaining knowledge and skills in terms of direct (modelled) professional activity; is grounded on practice-oriented approaches and helps student to obtain knowledge, skills, form crucial for their professional activity competences (Pukhovska and others, 2017).

The analysis of the EU countries' experience on WBL confirms the possibility to integrate that into the curriculum of general education and fulfil in close cooperation of a training institution and an enterprise or while in-service training. Thus, WBL is widely used for initial, further, advanced trainings or the re-skilling and upskilling ones etc.

In general, the WBL programs are flexible, adaptable and partnership-based. They provide the possibility to obtain complete, partial, additional short and long time courses of professional training. Nevertheless, the need in following courses is caused by the need of an enterprise at a certain stage. WBL assures a win-win situation when a student's needs and the demands of enterprises or sector demands are satisfied. There are several types of WBL.

Work experience covers any experience of a worker in certain sector or profession, mainly volunteer or the one that allows to "feel the professional environment". It is often used as an equivalent of traineeship in the American dimension.

Traineeship is an educational or training program that includes work experience and preparation of young people to their future professional activity with the purpose "to be ready for work". The following WBL

is perfect for 16-24 year young people to gain necessary skills and experience before starting their professional activity.

Work-shadowing or mentoring in general understanding means a trainee's support while his/her professional activity with detailed study or analysis. It is realised in some stages. The first one is work-shadowing and the next one (the higher one) is mentorship. In terms of mentorship the trainee's activity doesn't need permanent control, only observation. It is also used to accelerate the process of adapting the employee to new (changed) working conditions or tasks. The formula for mentoring success is "70/20/10", where: 70% – in-service training, 20% – learning from others and 10% – classroom education.

Apprenticeship is a systematic long-term study. It combines both in-service and classroom training. It provides for the student the possibility to enter into a contract with the employer and monetary reward. In turn, the employer is responsible for organization the training and ensuring the obtaining of a particular profession (Pukhovskaya, et al., 2016, p. 37). Until recently, it had a rather narrow-profile character and literally meant the kind of practical training that the British called simply "sitting near Tom". Today it is one of WBL leading types in the United Kingdom of Great Britain and Northern Ireland and a full-fledged equivalent of the VET (legislation, regulation, support, coordination and management body – the Institute for Apprenticeship and Technical Education, apprenticeship standards, the network of educational institutions, etc.) (Leu, 2018). In Germany, apprenticeship is one of the main types of practical training in the conditions of the dual VET system.

Cooperative training involves the accumulation of knowledge, skills, practical experience of all participants in the group and can be used both in an educational institution and in a company or other industrial or educational environment. In the conditions of cooperative education, the "competition of knowledge" is levelled out and the main attention is given to team-work algorithm development in order to achieve the goal.

Learning through partnership can be considered as the next step in cooperative learning. It involves not only the achievement of a common goal, but mutual learning, the development of new strategies and the adoption of common, compromise solutions, etc.

Internship or work placement is the most widespread form of WBL. It is widely used in schools of different types and levels of accreditation. The main purpose of manufacturing practice is to familiarize yourself with the production environment, develop or consolidate certain knowledge and skills in clearly defined terms and conditions. Often used as the equivalent of "work experience" and has a difference that manifests the trainee' decision.

Among the given concepts, the most commonly used are internship, traineeship and apprenticeship. These types of WBL are part of the European legal framework. They appear in national VET legislation, but are in different ways manifested in the organization and content of practical in-plant training (Bundesinstitut fur Berufsbilding, 2016). The practice of using dual education in the developed countries has shown that different types of training are actually implemented on the basis of productive activities. At the same time, the dual education elements are actively implemented into the training of future skilled workers in our country. They also provide opportunities for implementing WBL forms (Euler, 2013) (*Table 1*).

Table 1

Possibilities for WBL realisation in terms of dual education elements implementation

Dual education elements	Possibilities for WBL realisation
Broad objective: vocational training as a means of achieving economic, social and individual goals	Economic productivity and perspective planning of innovations in business Students' social integration and individual development
Vocational training as a task to be carried out in partnership between the government and the business community	Joint development of educational standards taking into account professional standards, harmonization of curricula and programs Independent employers' assessment of students' skills at exams and qualifications Providing students with jobs at modern leading enterprises Various social partners involvement in the educational process of educational institutions
Joint funding of vocational training	Dual training profitability for an enterprise Attraction of third-party funds (from interested enterprises and business spheres), creation of employers' and trade unions' sector funds in terms of collective agreements
Social acceptance of vocational training	Implementation of professional-practical training directly on the latest equipment of a modern enterprise Students' adaptation to the conditions of production and recognition of their professional identity Students' salaries and social package

Continuation of Table 1

Dual education elements	Possibilities for WBL realisation
The main objective of vocational training: to produce skilled workers with flexible qualifications who are mobile and capable of working in their chosen fields	Application of professional skills in a wide range of professional competences Vocational training at different enterprises Principle: a teacher and an examiner – different persons
Alternating learning situations in accordance with the dual principle	Use of interactive pedagogical technologies (case studies, simulation games, design, training, critical thinking development, etc.) A student's diary and continuous discussion of learning outcomes Skills training in educational and practical centres
Qualifications of teachers and training personnel	Coherence of students' professional activity content and approaches with changes in conditions and requirements of employers and updating of production technologies Improving the quality of pedagogical interaction between mentors and future specialists
Codifying quality standards	Simplifying their search and general understanding of the content Promoting greater coherence between employers and educational institutions in developing training and planning documentation
Balance between standardization and flexibility	Understanding the range of professional activities within a particular profession Ensuring the flexibility of students' individual educational trajectories Variety of education curricula and forms
Complementary programs run by schools or non-business entities	Harmonizing with LLL principles Independent and quick assessment of qualifications acquired by students with the participation of employers Systematic monitoring of the labour market
Creating a solid basis for decisions and design	VET quality monitoring Ensuring the compliance of future specialists' training with modern labour market requirements VET theory and methodology development

The data analysis results testify the possibility for WBL implementing in terms of dual education. They promote:

✓ improvement of pedagogical systems for future skilled workers professional training upon different profile;

✓ updating the goals, content, methods, technologies and means of professional training;

✓ designing innovative education and production environment for P(V)E schools;

✓ creation the mechanisms for public-private partnership in P(V)E schools;

✓ functioning of P(V)E schools as independent business entities in the labour market;

✓ formatting the common goals and interests for P(V)E schools and enterprises – applicants for blue-collar workers.

Conclusions Thus, WBL is seen as a powerful tool for on the job developing skills and increasing labour productivity. Its extremely high potential contributes to optimising time, effort and resources (human, material and financial). Understanding by educators of its kinds, their features and ways of realisation, in particular, through the introduction of dual education elements, promotes quality improvement and strengthening of the practical orientation for future skilled workers professional training.

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УДК: 377.3-022.215:[37.014.6:005.642.4

Навчання на засадах продуктивної діяльності з використанням елементів дуальної форми здобуття освіти

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Реферат. У статті проаналізовано можливості дуальної форми здобуття освіти як способу реалізації навчання на засадах продуктивної діяльності майбутніх кваліфікованих робітників для поліпшення якості та посилення практико орієнтованості їхньої професійної підготовки. Підкреслено, що у вітчизняному науково-педагогічному просторі відбувається накопичення інформації щодо впровадження елементів дуальної форми навчання в професійну підготовку майбутніх кваліфікованих робітників, а тому активно досліджуються питання актуальності, доцільності, перспективності та необхідності його запровадження. Зазначено, що важливість застосування дуальної форми здобуття освіти полягає у: створенні реальних виробничих ситуацій; співпраці учнів з досвідченими наставниками з підприємств; прояві учнями самостійності та ініціативності на робочому місці; долучені учнів до професійної культури та усвідомленні ними професійної ідентичності; можливості поповнення кадрового складу підприємств молодими робітниками відповідної кваліфікації; посиленні практичної складової системи професійної (професійно-технічної) освіти тощо.

Охарактеризовано особливості навчання на засадах продуктивної діяльності (work-based learning) та його основні види: досвід роботи (work experience); стажування (traineeship); наставництво (work-shadowing); менторство (mentoring

рідше mentorship); учнівство (apprenticeship); кооперативне навчання (co-operative); навчання через партнерство (partnership); виробнича практика/навчання (internship чи work-placement).

Показано можливості для реалізації навчання на засадах продуктивної діяльності (work-based learning) через упровадження таких елементів дуальної освіти, як: тривимірне призначення системи професійної освіти (економічні, соціальні, індивідуальні цілі); професійне навчання здійснюється в партнерстві між урядом і бізнес-спільнотою; багатоканальне фінансування; соціальне визнання професійної освіти; підготовка мобільних робітничих кадрів; навчання в реальних умовах робітничого середовища; систематичне підвищення кваліфікації педагогічних працівників навчальних закладів та наставників, інструкторів з підприємств; кодифікація стандартів професійної освіти; універсальність та оптимальний зміст стандартів; різноманітні додаткові програми для навчання за дуальною формою; організаційний, науковий та методичний супровід професійної освіти.

Ключові слова: *навчання на засадах продуктивної діяльності, елементи дуальної форми здобуття освіти, заклади професійної (професійно-технічної) освіти, професійна підготовка, майбутні кваліфіковані робітники.*

Received: 24 May 2019
Accepted: 10 June 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.169-174

Scientific herald of the Institute of vocational education and training of NAES of Ukraine. Professional Pedagogy/1(18)'2019, pp. 169-174

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MODERNIZATION OF TRAINING OF NAVAL SPECIALISTS AT HIGHER EDUCATIONAL INSTITUTIONS

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Absract. The article is devoted to the search for conceptual approaches to solving the problem of constructing a new model of training officer personnel for the fleet, adapted to the standards and principles of NATO. This article, based on the consideration of the training models of the naval specialist, where the external factor is the educational environment, which forms the request for content, quality and methodology of military education, determines the main factors that are the basis of a perspective model of training a military seaman. Using the method of comparing the study of the educational environment of the existing and prospective model of training a naval specialist testifies that consideration of this process is necessary from the standpoint of the system approach, considering that the future officer will have to act in the conditions of wars (military conflicts) of the fourth generation where the line between the troops and people erases intentionally, namely: the environment changes itself under the influence of social, political, cultural and historical factors. The main directions of modernization of educational environment are: generalization, systematization and comprehension of the experience of formation and development of the system of military education of the former member states of the Organization of Warsaw Pact; the study of the process of the transformation of theoretical and methodological approaches to create a modern system of military education, based on the best world and domestic educational traditions; the change of the mentality of all the subjects of the educational activity, rethinking of the need for changes in the educational process and the formation of strategic vision for the further development of the military education system in Ukraine.

Key words: *professional education, a naval specialist, system of military education, modernization of educational environment.*

Introduction. In the Strategy of the Naval Forces of the Armed Forces of Ukraine in 2035, presented in November last year by the Commander of the Naval Forces of the Armed Forces of Ukraine, a clear task has been set before educators and scientists to ensure the preparation of well-motivated, highly professional naval specialists who are determined to win.

The Armed Forces of Ukraine (hereinafter: AFU), in particular – the Naval Forces (hereinafter: NFU), stand on the verge of systemic educational transformations. It updates a number of tasks, including: a thorough study of the experience of organizing military education in Ukraine and NATO countries; assessment of the state of modern domestic military education; definition of the prospects of the state in this area; formation of a new generation of highly skilled, proactive servicemen with advanced leadership qualities (Poltorak, 2018).

The purpose of modernizing the training of highly qualified personnel for the Navy Forces should be to create an educational environment with certain characteristics, among which dynamism and flexibility

(for the rapid adaptation of the educational process to the conditions of mobile information dissemination in the world of information technology) and security (prevention of new threats and challenges that have a hidden (hybrid) character) are becoming particularly important.

Materials. The problems of the formation and development of military education in Ukraine were studied by M. Dragomirov (1956), L. Yershova (2015), S. Lipkevich (2006), M. Neshchadim (2004), V. Telelim (2011), S. Poltorak (2016; 2018), O. Panfilov and L. Petrova (2016) and other authors. In particular, the transformation of the ideal of an officer in the nineteenth and early twentieth centuries is highlighted in the monograph by L. Yershova (2015, pp. 312-315), where attention was focused on the causes of the failure of military education institutions of the Russian Empire to form the ideal of "a noble military layer" declared by the state education system and formed by "loyal and conscious servants of the Throne and Fatherland". Problems of training troops in peacetime are presented in detail in the studies of M. Dragomyryov (1956, pp. 603-684). Researchers of the current state of military education consider its main features to be conservative and dogmatic (as a consequence of the Soviet period of development). The authors also agree that the controllability of the system of military education depends on the mechanism of regulation of relations between teachers, collaborates, heads of specialized (military) institutions of higher education (hereinafter: HEI), authorities of government management and the customer of educational services (in our case, this is the Command of Navy Forces of the Armed Forces of Ukraine). At the same time, the researches devoted to the study of the peculiarities of the formation of the educational environment at the institutions of naval education in the leading countries of the world remain relevant.

The aim of the paper is to analyze the state and prospects of the formation of the educational environment at the naval institutions of higher education, adapted to the standards and principles of NATO.

Methods. To achieve the goal and solve the tasks, a number of theoretical methods were used: analysis and synthesis (for the identification of the scientific problem and the formulation of the research objectives), induction and deduction (for identifying the causative factors in the educational environment), comparison (for the study of transformation of educational environment in the Soviet and modern system of military specialists training for the fleet).

Results and discussion. Military education in the USSR was relatively well financed and provided with the necessary weapons and military equipment and other material and technical means and resources (Telelim, 2011; Lipkevich, 2006). This caused the formation of the training of military specialists (*Fig. 1*).

The world's system of that time was characterized by a military rivalry between the two superpowers (the USA and the USSR) that formed the corresponding foreign policy and two opposing models of development of society and economy: capitalist (market) and socialist (planned). The confrontation of the two military-political blocks took place in the form of the so-called "Cold War", which prompted rival countries to build up the continuous military potential

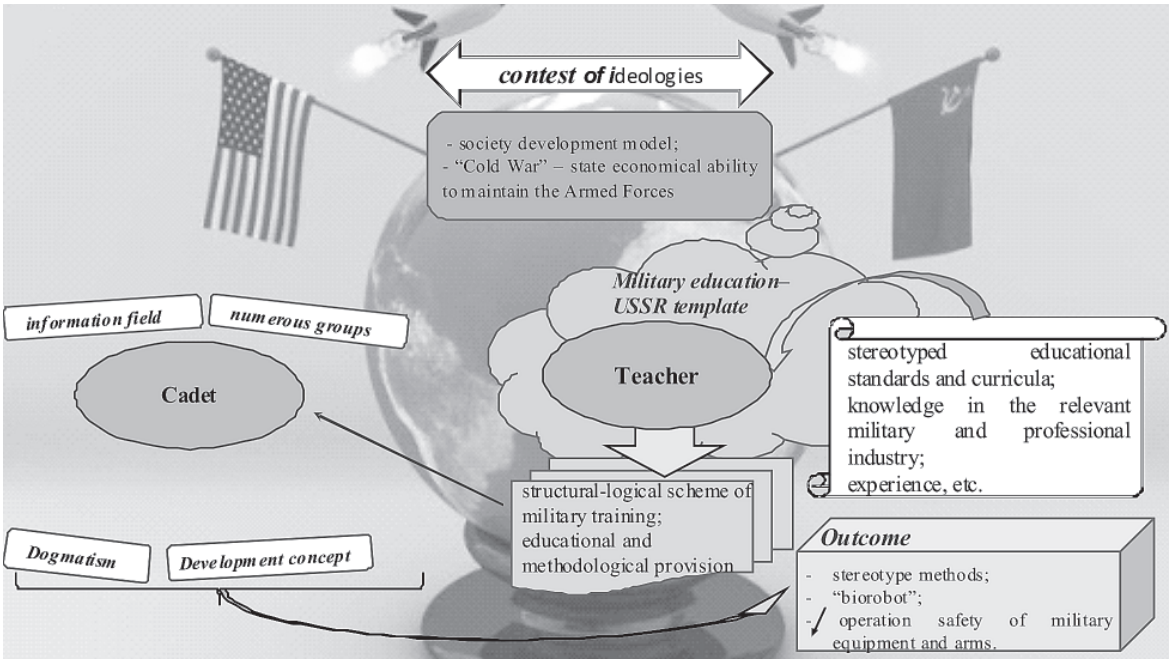

Fig. 1 Conditional scheme of educational environment at Soviet military educational institutions

and caused the devastating consequences of the arms races, which became a serious burden for the economies of their countries. It is known that during the defense planning, the USSR Government did not pay particular attention to balancing the needs of defense and the capacity of the country's economic potential. The distinctive feature of the Soviet system of naval education was the strict regulation and controllability of all its components. The main factors of Soviet-style military education, which determined the specifics of the professional training of a cadet, can be (Fig. 1): the information field formed by the funds of academic libraries and military-technical information bureau, educational films for a narrow circle of specialists; sufficiently numerous training groups; the dogmatic approach in education; lack of independence and autonomy in the educational environment; the program of development of armament and military equipment, and so on.

An analysis of the contemporary educational environment makes it possible to find out its characteristic features, namely:

- ✓ a template approach to the training of a military specialist (no alternative in the choice of forms, methods, disciplines, the idealization of the theoretical training of tactical level specialists, the lack of an individual approach to the development of the personal and professional career of the cadet, without taking into account his abilities and personal needs; low efficiency, which facilitated low percentage of competent military managers);
- ✓ preparation of so-called "biological robots" (creation of conditions for constant moral-psychological and ideological-propagandistic pressure on the consciousness of the future military specialist, restriction of his rights and freedoms, lack of proper conditions for the development of critical thinking, strict ideological direction of military training, the destruction of everything that could come into conflict with the dominant ideology);
- ✓ secondary priority of safety maintenance of the operation of armaments and military equipment (overload of cadets and junior officers with tasks not related to professional activities).

The collapse of totalitarian structures in Central and Eastern Europe allowed the countries of the former socialist camp to act more actively on the path of democratic transformations and, as noted by S. Lipkevich (2006), in these countries, a sense to distance themselves from the Soviet legacy appeared. On the other hand, the rapid development of events in the early 90's of the twentieth century led to the formation of a strategic vacuum, in particular, in the security sector, which could not but cause the worries in the leading countries of the world due to the development of the situation in Central and Eastern Europe. The remarkable event of the NATO summit in London (1990) was the appeal of the Heads of State and Government of NATO member states to the governments of the countries of the socialist camp with a proposal to establish permanent diplomatic ties with the Alliance and work on new relationships on the basis of cooperation. NATO's demands for new members were (and still remain) largely political: candidate countries should create a stable democratic system, adhere to market reforms, subordinate the army to civilian control, respect the rights of their own ethnic minorities and the sovereignty of neighboring countries. In addition, according to the NATO leadership, future Allies had to overcome their backwardness and dependence on Western standards of defense capabilities.

Returning to the Armed Forces of Ukraine, we will not focus our attention on the stages of their reforming (this is the subject of a separate study). Let us clarify that the analysis of the Soviet system of military education in Ukraine is sufficiently detailed (Nashchadim, 2004). It should also be emphasized that during the years of Ukraine's independence, changes in the formation of the educational environment did not become systematic as a result of the absence of a clear paradigm of development of the state and its Armed Forces. However, in 2014, the hybrid war against Ukraine, the annexation of Crimea by Russia and the occupation of part of Donetsk and Lugansk regions have become a powerful impetus for the active modernization of the educational environment of the Ukrainian institutions of naval higher education. The main factors of modernization include:

- ✓ peculiarities of the development of the global community (globalization, informatization, exacerbation of civilizational and ethnic contradictions, economic growth of the states of the Asia-Pacific region and Latin America, increase of the significance and role of high technologies, intellectual and informational resources, double standards in solving international political, economic, ethnic, interconfessional, military and other crisis phenomena and conflicts, expansion of activities of extremist, terrorist organizations, etc.);
- ✓ peculiarities of the development of the maritime industry (the growth of world trade and the role of shipping in it, the emergence of the problem of providing free shipping by international maritime routes, the search for economic and environmental technologies and business decisions for the future fleet and its assets) by the maritime industry;
- ✓ definition of strategic tasks of the Naval Forces of the Armed Forces of Ukraine (for the period up to 2035) due to phased and balanced development of their

combat potential (consists of three components – physical, conceptual and moral);

✓ increased influence of digital technologies (use of combat modules, drones, digital weapons, the possibility of using artificial intelligence in combat systems, provision of cyber security weapons and military equipment) on the system of naval education.

All this changes the environment that affects the modern and perspective models of training a military (naval) specialist of the future (*Fig. 2*). The environment in which there are both a teacher and a cadet now, is characterized by the fact that they live in the century of information that is formed through: active introduction of the latest information technologies into the educational process, the creation of modern academic libraries and electronic funds, which operate in the format 365/7/24 with the access to their resources from anywhere in the world (for cadets of the mentioned HEI), the introduction of e-Learning Concept into the training of a military specialist.

From the point of view on the modern educational environment and the system of work of the commander (chief), it can be stated that the concept of their relationship (aimed at effective work to achieve the best results of the military team, that is, work for victory) is changing. In terms of training a military specialist, this is a creative approach in the military education system, which should create a comfortable working environment for the teacher (eliminating his excessive overload of teaching disciplines during the academic year) and his work surrounded by like-minded people. A creative approach is necessary for organizing the training of the cadet himself, creating conditions for the effective acquisition of his knowledge, skills and abilities, as well as the comfortable environment in which he is during training. An important aspect is the low motivation of the students (listeners) on the background of unresolved issues of social and domestic maintenance of the future officer. On the other hand, due to low pay of the teacher work, the readiness for self-development as an educator and future scientist is not sufficiently motivated. The low pay of the teacher work leads to the outflow of young prospective cadets.

Another determinant of the formation of the educational environment can be called a slightly formal attitude of the state to the issues of combining the educational process with the conduct of scientific research. This is mainly due either to an outdated research and experimental base, or even to its absence, as well as to a certain financial independence of the HEI for the provision of this process. The creation of the Commission on issues of cooperation in the educational, scientific, technical and defense-industrial spheres, which involves the interaction between the Ministry of Education and Science, the Ministry of Defense and the State concern "Ukroboronprom", can be considered as a manifestation of the existence of something systematic. However, in practice, this interaction has never been realized.

Therefore, when creating a new model of training a naval specialist, being capable in a professional high-level to solve the tasks assigned to the Naval Forces of the Armed Forces of Ukraine in the conditions of the formation of a multipolar model of the world order,

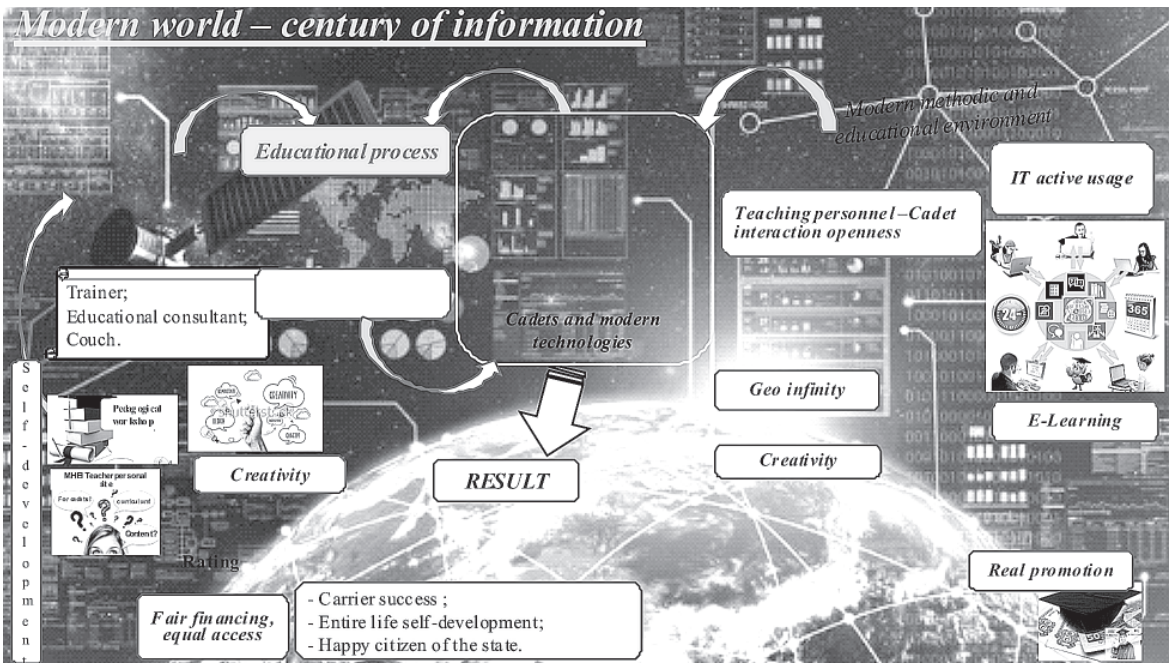

Fig. 2. The view of the authors on the modern environment that forms the military (naval) specialist of the future

strengthening of the influence of new centers of power, increase of the role of the financial and economic sphere in international relations, the resolution of unresolved conflicts near the state border, there is an urgent need to consider this process from the standpoint of a systematic approach. Application of the systematic approach to training a naval specialist will make it possible to adapt the military education system to the realities of today and future needs, implement the latest educational technologies, create conditions for the development of a person with developed leadership qualities, thereby enhancing the attractiveness of naval professions. One of the main results of the systematic approach to training a highly skilled specialist for the Navy Forces should be the competitiveness of the profession of military specialist in the Ukrainian labor market and hiss motivation.

Conclusions. The modern educational environment needs to be changed not only as a role of the teacher in the system of military education: from a classical teacher – to a kind of mentor, an educational consultant (in some cases, a coach), which helps the cadet to acquire new knowledge and get used to the changes of the educational process itself and the attitude of the cadet to it, that is, creating a peculiar basis for the future successful career (a happy citizen of the country) and self-development throughout his life.

Areas of further research of the modern educational environment for the training a naval specialist include: studying the experience of transforming military education systems of the countries of the former socialist camp into the implementation of European values and NATO standards; search for effective mechanisms for the implementation of tasks for the training future leaders-officers for the Naval Forces of the Armed Forces of Ukraine, motivated for professional success and continuous self-development; introduction of an effective system of recruiting into modern naval educational institutions; change of the mentality of scientific and pedagogical workers and modernization of the educational process.

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УДК 355.231.4-048.35

Модернізація підготовки військово-морських спеціалістів у закладах вищої освіти

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Реферат. Стаття присвячена пошуку концептуальних підходів до вирішення проблеми модернізації професійної підготовки офіцерських кадрів для флоту, адаптованої до стандартів і принципів НАТО. Проаналізовано значення освітнього середовища в підготовці військово-морських спеціалістів у закладах вищої освіти. Процес модернізації професійної підготовки майбутніх військово-морських спеціалістів пропонується розглядати з позицій історико-педагогічного, соціокультурного та системного підходів. Наголошується на необхідності врахування того, що випускникам сучасних військово-морських закладів доведеться діяти в умовах військових конфліктів четвертого покоління, де навмисно стирається межа між військом і народом, а саме: освітнє середовище постійно трансформується під дією історико-культурних, соціокультурних та соціально-політичних чинників. Визначено основні напрями модернізації освітнього середовища підготовки військо-морських спеціалістів: узагальнення, систематизація та переосмислення досвіду становлення й розвитку системи військової освіти колишніх країн-членів Організації Варшавського договору; дослідження процесу трансформації теоретико-методологічних підходів до створення в Україні сучасної системи військової освіти з опорою на найкращі світові й вітчизняні освітні традиції; зміна ментальності всіх суб'єктів освітньої діяльності; переосмислення необхідності змін освітнього процесу; формування стратегії подальшого розвитку системи військової освіти в Україні.

Ключові слова: *професійна освіта, система військової освіти, модернізація освітнього середовища, військово-морський спеціаліст*.

Received: 16 April 2019
Accepted: 11 June 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.175-179

Scientific herald of the Institute of vocational education and training of NAES of Ukraine. Professional Pedagogy/1(18)'2019, pp. 175-179

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RESEARCH ACTIVITIES OF FUTURE TEACHERS OF TECHNOLOGIES AT THE ELECTRICAL ENGINEERING CLASSES

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Abstract. The article proves that the formation of research competence of future technology teachers depends on the methodology and organization of educational, cognitive and research activity of students and on the formation of their educational and research skills. It is substantiated that the importance in the system of future technology teachers training belongs to laboratory, practical, laboratory-practical and individual occupations, as well as consultations with the teacher. At these classes, consolidation of theoretical knowledge, the formation of skills in the installation and operation of electrical equipment, the mastery of the apparatus and algorithms for scientific research. It is established that in the laboratory and practical classes it is necessary to focus the attention of future teachers on problem tasks for activating their search activity. Under such conditions, a situation arises when choosing the knowledge that enables the task to be properly resolved. Creative tasks encourage students to independently search for different ways of solving problems of educational and production character, assumptions, formulating hypotheses, implementing purposeful attempts to confirm them, rejecting some unsuccessful hypotheses, and replacing others with consistent considerations. It is noted that modern methodological and technical support of laboratory classes in different disciplines is designed for an abstract average student and does not always meet the requirements for organizing a developing, creative process. Significant potential for the formation of research competence of future technology teachers is concentrated in the system of laboratory classes in electrical engineering. It is proved that in order to stimulate the research activity of students, it is necessary to set the research objective in laboratory lessons, to introduce into the program of work the problem of creative character, which allows to direct laboratory work in the educational-research direction. The characteristic of criteria, indicators and levels of assessment of research competence of future technology teachers is revealed. The results of experimental research are presented.

Keywords: *research competence; electrical engineering; laboratory lesson; creative tasks, technology teacher.*

Introduction. State development depends on the effectiveness of preparing the younger generation for work. The modern labor market is, to a lesser degree, in need of simple executors and increasingly demands the worker as a creative, extraordinary person capable of searching for innovations and introducing them into their own professional activities.

The development of such abilities of the younger generation occurs in the system of general education under the guidance of teachers. An important role in this process belongs to the technology teacher, it is he who thoroughly prepares young people for future professional activities in the field of material production. But in order to develop a creative personality, the teacher must own by himself the basics of creative activity and scientific research. Thus, the problem of the inclusion of future technology teachers in the research system, the development of such

competencies, which allow solving professional problems by research, becomes a matter of particular importance. As a consequence, in the system of technological education, the research activity of students and the creative approach to solving their educational tasks are becoming more and more important.

A broad field for organizing research activities of students is revealed at the lessons of "Electrical Engineering", since when studying it is necessary to operate both macro and micro objects, which can be observed directly (rotor speed, the motion of a contact pair, etc.) or you can only imagine (electric current, magnetic field, etc.). All these processes are clearly described by mathematical formulas.

Materials. In the institutions of higher education, there is a problem not only in raising the level of theoretical knowledge in educational disciplines, but also in the ability to use them for solving professional problems through research. B. Gershunskyi, N. Nychkalo, D. Chernylevskyi, H. Romanova and others emphasize this. Teachers and psychologists studied the problem of organizing the students' creative and research activities: H. Artemchuk, O. Berezan, M. Hlovin, H. Klovak, M. Kniazian, S. Kopelchak, P. Luzan, A. Nizovtsev, V. Sheiko, O. Rohozina, L. Romanov and others. The theoretical basis of the research is the works concerning: the issues of creativity of students (H. Altshuller, V. Andreev, D. Bogoiavlenskyi, L. Vyhotskyi, V. Druzhynin, Edvard de Bono, V. Nikitina, V. Razumovskyi, S. Rubinshtein, Y. Ponomarov); the formation of research skills in the professional training of specialists (S. Balashov, V. Borysov, I. Katashynska, V. Lytovchenko, N. Nedodatko, V. Sydorenko); the formation of professional skills and abilities (P. Halperin, V. Davydov, A. Leontev, N. Talyzina, A. Tykhomyrov, B. Likhachov, E. Millerian, M. Pryhodii, M. Skatkin, D. Tkhorzhevskyi). Recently, the attention of scholars is also emphasized on the emergence of an acute need for education, which will ensure the formation of research skills, the organization of educational, cognitive and research activities of students (L. Kondrashova, H. Hrannyk, E. Spitsyna, A. Usova). S. Arkhanhelskyi, E. Zlotnykov, M. Klarin, V. Moliako, V. Uspenskyi and others considered the use of various types of tasks as a means to achieve the goals of the educational process and the formation of research skills.

With the unconditional importance of these studies, it should be noted that the problem of forming the research competence of future technology teachers in the study of electrical engineering has not yet been adequately reflected in scientific researches. Therefore, there is a need for further analysis of the issues of organizing the research activities of future technology teachers at electrical engineering classes.

The purpose of the article is the substantiation and experimental verification of the theory of forming the research competence of future technology teachers in the study of electrical engineering.

Methods: analysis, synthesis – for studying educational normative documentation and psychological and pedagogical literature on the research problem; comparison, matching – to compare research approaches to solving the problem of forming of research competence; testing, questioning, observation, conversation – in order to determine the level of formation of research knowledge and skills of students; pedagogical experiment – for the experimental verification of the effectiveness of the developed theory of forming the research competence of future technology teachers; graphical – to illustrate and compare the results of the experiment in graphic forms.

Results and discussions. The presence of advanced research competence in future technology teachers is defined as complex, depending on the nature and conditions of teaching activity, multilevel personality characteristics, containing a system of motives, states, as well as special facilities, research knowledge, skills, which make it possible to substantially improve the quality of the educational process.

Formation of research competence of students depends on the methodic and organization of educational, cognitive and research activities, on the formation of their educational and research skills (Kniazian, 1998; Kopellchak, 1997; Spitsyn, 2003; Romanov, 2013).

Important value in the system of future technology teachers training belongs to laboratory, practical, laboratory-practical and individual occupations, as well as consultations with the lecturer. At these classes, consolidation of theoretical knowledge, the formation of skills and abilities in the installation and operation of electrical equipment, mastery of the apparatus and algorithms for conducting research take place (Pryhodii, 2009; Romanova, 2010; Kulalaeva, 2016, p. 71). In the analysis of studies devoted to the practical training of students, it has been established that in laboratory and practical classes it is necessary to focus the attention of future teachers on problem tasks for activating their search activity. Under such conditions, a situation arises when choosing the knowledge that enables the task to be properly resolved. Creative tasks encourage students to independently search for different ways of solving problems of educational and production character, assumptions, formulating hypotheses, carrying out purposeful attempts to confirm them, rejecting some unsuccessful hypotheses and replacing others for sequential thinking.

It was established that modern methodic and technical support of laboratory lessons from different disciplines is designed for an abstract average student

and does not always correspond to the requirements for organization of the developing, creative process. Significant potential for the formation of research competence of future technology teachers is concentrated in the system of laboratory classes in electrical engineering.

In order to intensify the research activity of students, it is necessary to establish a research objective in laboratory studies, to introduce a creative task into the program of work, which will make it possible to direct laboratory work in the educational-research course (Pavliuk and Pryhodii, 2016).

The central position of the experimental study is to determine the impact of the developed methodic of conducting laboratory and practical classes on electrical engineering on the formation level of research competence of future technology teachers. The experiment was carried out from 2017 to 2018 and covered more than two hundred students. At the beginning of the experiment, an experimental group (113 people) was created to determine the impact of the proposed methodic. Students of the other group acted as a control group (108 people).

At the ascertaining stage of the experimental study, a control section was conducted with the help of test assignments and a survey of students on the problem of organizing and conducting research activities within the institution of higher education.

Assessment of the research competence of future technology teachers was based on a three-component structure of the criteria and relevant indicators: cognitive (knowledge of the organization and conducting research work in the field of electrical engineering); active (ability to manage their own educational activities, ability to assess the suitability of the chosen methods of work tasks that arise in the process of learning); personal (interest in research as an important component of future professional training; interest in increasing research knowledge and skills in the field of electrical engineering under conditions of independent work).

Four levels of evaluation of the research competence of future technology teachers were used (Pavliuk and Pryhodii, 2016):

- ✓ low – the student has partial knowledge and some skills in planning and conducting research work, does not differentiate education and research work, perform research tasks under the direction of a lecturer, does not show interest in research activities;
- ✓ medium – the student has basic concepts of research activity, has basic concepts and has skills in planning and conducting research work, plans to perform research activities on standard algorithms, searches for additional information under the direction of a lecturer, accepts the need for research activities;
- ✓ sufficient – the student has the basic concepts of the requirements for research competence, carries out planning and conducting research work, is a member of problem circles, oriented to independent search for solutions to issues related to research activities.
- ✓ high – the student has knowledge of the specifics of research activities and understands the specifics of the activities of other students, carries out independent planning and research work on the basis of the search for objectively new methodic techniques for him, independently determines the actual issues of increasing his own research training and searches for the optimal ways of its development.

The obtained results of the verification (*Fig. 1*) made it possible to form a number of conclusions: firstly, the level of formation of research competence in the control and experimental groups is statistically the same; secondly, students of experimental and control groups in the overwhelming majority have a low level of research competence development; Thirdly, the main reason for the low level of research competence of students is the lack of mechanisms for their involvement in research activities in classes.

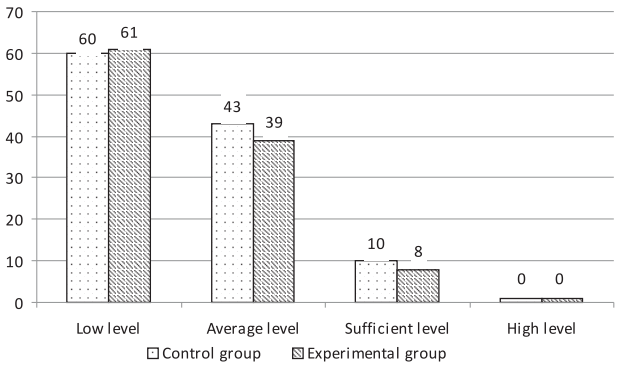

Fig. 1. Levels of development of research competence of future technology teachers (ascertaining stage)

At the formative stage, students of the experimental group became acquainted with the purpose of research activity at each laboratory and practical lesson; were involved in systematic solving of creative tasks and carrying out of search work at carrying out of laboratory works.

At the end of the experiment (after the final certification in the discipline "Electrical Engineering") a control slice was performed, which showed an improvement in the level of research competence in both the control and experimental groups. At the same time, the indicators in the experimental group are higher compared with the control one (*Fig. 2*).

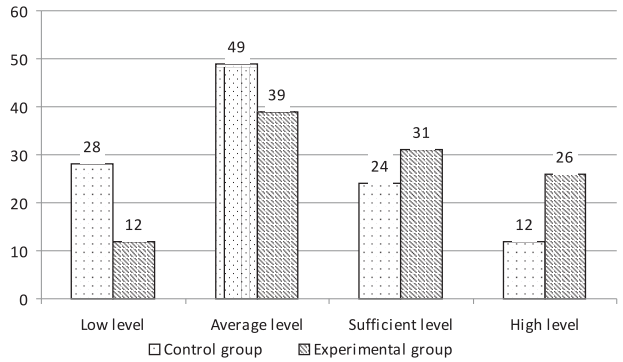

Fig. 2. Levels of research competence development of future technology teachers (forming stage)

Based on the determined indicators of the research competence formation of future technology teachers, the effectiveness of the substantiated methodic of conducting laboratory and practical classes in electrical engineering has been confirmed.

Conclusions. It is proved that the involvement of students in the solution of the system of creative tasks in the planning, control and implementation of search activities, serves as the main element of the formation of research competence. It is revealed that the performance of future technology teachers the laboratory research in electrical engineering is not only a test of theoretical training of students, but also serves as the basis for the formation of research competence. This is due to the fact that with the help of the experiment it is possible to prove the correctness of a previously justified hypothesis, to check the effectiveness of the developed algorithms for solving research problems, during the laboratory work it is necessary to update the research goal, use creative tasks with their subsequent analysis and discussion.

Prospects for further research are to substantiate the concept of developing the research competence of future technology teachers; adjustment the content and methods of student research activity in the context of integration processes in education.

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Дослідницька діяльність майбутніх учителів технологій на заняттях з електротехніки

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Реферат. У статті доведено, що формування дослідницької компетентності майбутніх учителів технологій залежить від методики та організації навчально-пізнавальної та науково-дослідницької діяльності студентів та від сформованості у них навчальних і дослідницьких умінь. Обгрунтовано, що важливе значення в системі підготовки майбутніх учителів технологій належить лабораторним, практичним, лабораторно-практичним та індивідуальним заняттям, а також консультаціям з викладачем. На цих заняттях відбувається закріплення теоретичних знань, формування умінь і навичок з монтажу та експлуатації електроустаткування, оволодіння апаратом та алгоритмами проведення наукових досліджень. Встановлено, що на лабораторних та практичних заняттях слід акцентувати увагу майбутніх учителів на проблемних завданнях для активізації їх пошукової діяльності. За таких умов виникає ситуація вибору тих знань, що дають можливість правильно розв'язати задачу. Творчі задачі спонукають студентів до самостійних пошуків різних способів розв'язання завдань навчально-виробничого характеру, висування припущень, формулювання гіпотез, здійснення цілеспрямованих спроб їх підтвердження, відкидання одних гіпотез, які не справдилися, і заміни іншими, до послідовного міркування. Зазначено, що сучасне методичне і технічне забезпечення лабораторних занять з різних дисциплін розраховано на абстрактного середнього студента і не завжди відповідає вимогам до організації розвиваючого, творчого процесу. Значний потенціал для формування дослідницької компетентності майбутніх учителів технологій зосереджений в системі лабораторних занять з електротехніки. Доведено, що для активізації дослідницької діяльності студентів слід на лабораторних заняттях встановлювати дослідницьку мету, вводити в програму роботи завдання творчого характеру, що дозволяє спрямовувати лабораторні роботи в навчально-дослідницький напрям. Розкрито характеристику критеріїв, показників та рівнів оцінювання дослідницької компетентності майбутніх учителів технологій. Наведено результати експериментального дослідження.

Ключові слова: *дослідницька компетентність; проектна діяльність, електротехніка; лабораторне заняття; творчі задачі, учитель технологій.*

Received: 09 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.180-186

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 180-186

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PRODUCTIVE ECONOMIC THINKING – THE BASIS OF FORMATION OF PROFESSIONAL COMPETENCES OF STUDENTS OF THE SPECIALTY "PROFESSIONAL EDUCATION (ECONOMICS)"

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Abstract. The paper is devoted to the methodical aspects of the development of economic thinking of future teachers of vocational education and specialists in economics, because its productivity ensures the success of the formation of professional competences of students who receive education by the educational-professional program "Professional Education (Economics)" at state higher educational institution – Kyiv National Economic University named after Vadym Hetman. Competency approach is the trend of modern educational space, and the process of thinking of the person is the center of the problem of personality development and formation of personal and professional competences, which, in turn, (due to uniqueness, originality and synergy) will ensure the competitive advantages of the future specialist in the labor market. The aim of the paper is to analyze the specifics of the economic thinking of students, receiving higher economic education by the program "Professional education (economics)"; formulate the main characteristics (features) of economic thinking that need to be developed in the process of economic education; prove the necessity and substantiate the methodological approaches to the development of productive economic thinking of students, which provides the formation of professional competences in order to stimulate the effectiveness of the professional activity. A wide range of research methods was used to carry out a successful scientific research, namely: analysis and synthesis, scientific substantiation, systematization and generalization, surveys, questionnaires and statistical processing of the results.

During the study, the following conclusions and results were received. The author reveals the specifics of economic thinking, its main features and manifestations in professional activity. Economic thinking is seen as a kind of practical thinking of the subjects of professional activity. This is, first and foremost, a process, and, consequently, it can be developed and improved. Researchers of the nature of the neurons (neurophysiologists) stated the fact that the possibilities of the human brain are limitless. In this perspective, it is necessary to solve the tasks of the methodical nature: how, with the help of which tools economic thinking can be developed as a whole, and in the process of economic training to form its specific characteristics: analyticity, criticism, consistency, constructiveness, predictability, balance, business efficiency, creativity and innovation. Studying these aspects, the author substantiates and systematizes the experience of applying the techniques and technologies of the development of personality thinking in the educational process (based on the example of the academic discipline "Methodology of teaching economic disciplines" and "Training of the development of economic thinking", which have an intersubjective character), taking into account the primary modality of students' thinking; the technologies and techniques for stimulating the development of the logical (left-sided), creative (right-sided) and balanced thinking in the learning process are highlighted separately; their influence on the modality and changes in the types of students' thinking, (which proves the necessity of implementation of specific methods of development of economic thinking in the process of preparation of specialists of the bachelor level on the specialization "Economic and Business Education" in order to stimulate productivity and effectiveness of thinking) is estimated. Under the productivity of economic thinking we understand the number of ideas and solutions developed by the personality due to the subject or scope of the study. The result of the

productive economic thinking will be alternatives in solving tasks/problems. And under the effectiveness of economic thinking, we understand the share of ideas and solutions that brought material or immaterial benefits to the personality. The result of the efficient economic thinking is a balanced decision, the adoption of which the received benefit will get over the efforts and resources which were spent on its development and implementation in practice. Horizontal or lateral (creative) thinking will contribute to the productivity of thinking, and vertical or logical thinking – to efficiency. Radiant (associative) thinking will examine decisions thoroughly, tat as a result, will enable you to develop a professional intelligence and on its basis-to create competence of the teacher of vocational training / specialist in economics.

Keywords: *economic thinking, productive economic thinking, modality of thinking, professional competence, techniques and methods of thinking development.*

Introduction. The system of education of independent Ukraine is in a state of constant reforms. Specialists-educators, scientists and officials, each with his own hand, are trying to build a functioning educational space for the preparation of a competitive expert and a citizen with an active social position. Modern transformations of the educational sector are focused on the issue of forming and the development of professional competence. This also concerns the system of economic education. It is interesting that, in 2015, 0.2% of the world population owned almost a quarter (21.4%) of global financial wealth and 20% of today's millionaires have no higher economic education (according to Forbes Ukraine's data). In 2017 – the number of billionaires increased by 233 persons, and their total assets grew by 1.19 trillion. dollars and amounted to 7.67 trillion dollars. The first 5 billionaires included Microsoft, Berkshire Hathaway, Amazon, Facebook, Bloomberg (Forbes, 2018).

According to the annual report of the World Wealth Report, Consulting Agency Capgemini determined the top three sectors in which by 2025 the largest number of millionaires will work: finance, technology and healthcare. Education took the 7th place (as wealth grows, more people seek to get an education that enables to increase wealth) (Forbes, 2018). Thus, economic specialties will continue to be in public demand.

So, at the moment of the high competitiveness of the labour market, society requires the possession of sufficiently large number of both professional and personal skills from the future specialists. It is not enough to have a high level of knowledge, abilities and skills of professional disciplines, foreign language skills or computer literacy and even a certain experience of the work. Employers pay more attention to the personal characteristics of the candidates, leadership, charisma, communication, responsibility, and especially on creativity and innovation of thinking. And the higher education system, in particular, economic education, has to respond to these challenges adequately.

Materials. The problem of development of economic thinking is interdisciplinary. That's why the author (in his academic searches) concentrates on the research result of domestic and foreign psychologists, educators and economists – representatives of various scientific schools and directions. Very valuable achievements in personal thinking are made by representatives of cognitive psychology (M. Eysenck, U. Niaser et al.), Gestalt psychology (M. Wertheimer, V. Keller, B. Zeigarnik), psychology of activity (L. Vygotsky, O. Leontiev, S. Rubinstein, P. Halperin et al.), neuropsychology (P. Sperry, Michael D. Politis, Richard D. Pelegrino), didactics (Yu. Babansky, V. Bezpalko, B. Matyunin, etc.), economics (A. Maslow, D. Kaneman, R. Thaler). The conclusions and concrete recommendations for the development of certain types and characteristics of thinking by E. de Bono and B. Byuzen have made a significant influence on our searches. Even in 2000, D. Halpern (2000, p. 19) noted that "we are depriving those learners who study the more important component of education – we do not educate the ability to think in them ... Such forms of the study that facilitate the productive thinking are particularly necessary".

But the majority of researches concerns the process of thinking or intelligence of the person, excluding features of his professional activity (eg. field of economics), which identified a range of issues which we try to answer. This work began under the guidance, and then in cooperation with the Candidate of Economic Sciences, Assistant Professor of Pedagogy and Psychology Department O. Aksenova by the support of Doctor of Pedagogy, Professor, Head of Education and Psychology Department of state higher educational institution Kyiv National Economic University named after Vadym Hetman, V. Kozakov even in 2000 and continues to this day.

The purpose of the paper is: to analyze the specifics of the economic thinking of students who receive higher education by the program "Professional Education (Economics)"; formulate the main characteristics (features) of economic thinking that

need to be developed in the process of economic education; prove the necessity and substantiate the methodological approaches to the development of productive economic thinking of students, which provides formation of professional competences in order to stimulate the effectiveness of the professional activity.

Methods. In order to implement effective scientific research used a wide range of research methods was used, namely: analysis and synthesis, scientific studies, systematization and generalization, polls, surveys and statistical processing of results.

Results and discussion. At the beginning of our work, we often heard the question: "And what is it, really, economic thinking?" – and we replied: "And when you choose what to buy in the store, what kind of thinking does it work?" It is not very polite to answer the question to the question, but, consider, why a very talented, for example, a musician rarely becomes wealthy without an impresario; and Sherlock Holmes did not make big money with music, although he was very talented with a violin?

At first, it will probably come to mind that this can be explained by motives and incentives of the activity. And if it is simpler with the incentive for economic activity, because it is always connected with the welfare and financial income, then it is more difficult for motives because they are a personal interest. So, firstly, Holmes was more interested in looking for thieves than performing concerts; and secondly, on what can we earn more, and more regularly?! We have to think, not to be mistaken. Paul Heine (1997, p.15) in his book, "The Economic Way of Thinking," noted that "if a person tried to think economically, he would never stop at the previous level, but would try to achieve more, and, consequently, develop himself".

His opinion is confirmed by the numerous results of the experiments of cognitivists, who argue that all cognitive processes are trained in order to stimulate their activity. And thinking is no exception. What do we mean by the term "economic thinking" as a kind of practical one in terms of opportunity to influence it in the process of economic education? From the point of neurophysiology, thinking, in general, is defined as a process of constant interaction between nerve cells (neurons), in the result of which patterns (style, template) are formed in the synoptic space of brain. The Russian scientist P. Anokhin concluded that: each of ten billion neurons calculated in the human brain, is capable of forming the relations, the number of which is equal to one with the 28 zeros. If you try to write it, you get a number one and 10.5 million kilometers zeros ... From this reasons we do not accept any pessimistic statements about the limited capacity of the human brain. They are limitless!" (Byuzen, 2003, p.30). This allows us to be optimistic about our own research.

In terms of psychology, thinking is a mental process of mediated and generalized reflection (in the human brain) of subjects of subjective reality in their substantial properties, relations and attitudes, and, as a result of which intelligence of personality is formed (Wikipedia, 2018). The process of thinking can be done in two ways: either as a combination of a certain number of images, or as "inner speech", which is like a conversation with yourself, when words are not spoken aloud (Halpern, 2000, p. 31). In our opinion, it will be fair that such a specificity of thinking will spread on the economic one, realized by the person in his professional economic activity, as well as in the process of the transfer of economic knowledge. And to ensure the success of the latest one in educational space, it is necessary to develop, form and promote specific skills and characteristics (or features) of economic thinking of the future specialist. Today we are trying to affect the development of such characteristics of the economic thinking of students:

- ✓ *analyticity and scientific substantiation* provide the deep analysis, accurate generalizations and conclusions, critical evaluation and effective solution; gives people the vision of the complex world of social production, etc.; enables them to understand the laws of development and functioning mechanisms, basic relations and dependence of the economy;
- ✓ *consistency* – provides a complex approach to solving economic problems;
- ✓ *constructiveness* – is directed at solving the economic tasks and ensures high and real results of economic activity;
- ✓ *prognostication* – the ability to solve economic situations widely, it provides an opportunity to predict the consequences of the decisions taken in various spheres;
- ✓ *balance* – the skill to apply the theoretical principles into practice effectively and efficiently, evaluate the different economic situation properly and make necessary fully-informed decisions;
- ✓ *efficiency* – is the ability to solve problems that arise vigorously and effectively, the ability to organize a certain matter, aspirations to perform own responsibilities faithfully, to prove the taken decisions to the full implementation;
- ✓ *creativity* – the ability to generate non-standard ideas, take into account unexpected circumstances, new phenomena and processes, determined with dynamics of the economy, scientific technological process, the mobility of the structure of production and the needs of society;
- ✓ *innovation* – the ability to embody new original solutions into practice of professional activity.

It would be also useful to pay attention to such intellectual properties as: independence, depth, flexibility, speed and curiosity.

Next, it is necessary to determine the methodological tools by which we can influence the development of the indicated characteristics, as well as to find out the direction where there is need for their perfection.

Using the results of R. Sperry about the specific capabilities of the hemispheres of brain, as well as the study of T. and B. Byuzen (2003, p. 33-34, 53), D. Halpern (2000, p. 35) about the modality of thinking, we study the dominance of the hemispheres (on the basis of the Elvin questionnaire) of students of the I-III years of economics and management faculties, as well as the marketing faculty of the state HEI "Kyiv National Economic University named after Vadym Hetman" during 2004-2018. The dynamics of the indicators of modality of thinking of students of the first year remains unchanged and does not depend on the direction of preparation. And most of them (from 5 0 to 60% of general number of respondents) are prone to logical way of thinking, that is they have a dominant left hemisphere of the brain. We could not but expect such results, because the whole system of Ukrainian education is aimed at the development of logics, language, operations with numbers, that is, on the mental capacities of the left hemisphere (Byuzen, 2003, p. 32), and the disciplines that develop the imagination, the perception of color, rhythm, gestalt, are considered secondary.

More significant fluctuations of indicators were observed in 2017-2018 academic year when diagnosing was conducted by third-year students of the Faculty of Personnel Management, Psychology and Sociology, field of study "Professional Education (Economics)", who receive dual education for the first time in the history of the activity of the department and the university. They had the opportunity to hear a great number of disciplines of psychological and pedagogical direction compared to other directions of training, to work with the creative team of the Department of Pedagogy and Psychology more time, the teachers of which concentrate on the development of creative abilities of students, and have passed training of development of economic thinking, which is the selective component of their training, under the supervision of the paper author. If the number of students with logical type of thinking did not differ from other specialties practically (52.4% vs. 56.9% of the number), there were fewer students with dominant creative thinking (19.0% vs. 31.4%) and much more – with equal opportunities for using logical and creative thinking (28.6% vs. 11.7%).

In our opinion, for a professional (in the field of economics and economic education) to have productive economic thinking, an effective intelligence and formed professional competence, he must have two lines of thinking, and, therefore, we need to develop a balanced, multi-directional productive economic thinking. With this aim, in the framework of educational discipline "Methods of teaching economic disciplines" and "training of economic thinking" (based on the results of research of modality of thinking of students, who get the qualification of teachers of professional training / expert in economics), selected and tested (during the educational process) technologies and techniques for the development of thinking are offered for the increase of productivity of thinking in particular:

- ✓ in order to stimulate the development of a logical type – "a water logics", according to E. de Bono, techniques developed on the basis of the theory of solving the inventive tasks of Henry Altshuler (TRIZ); the elements of techniques by E. de Bono regarding the improvement of the productivity of the brain work with actual data, various kinds of objective information, for example, "six thinking hats" – in the section of methods of thinking "in white, black and yellow hats", or "6 pairs of shoes of image of action" – in the section about "Thinking and actions in gray sneakers or brown shoes";
- ✓ to stimulate creative thinking – methods of non-standard and creative thinking by Edward de Bono, (eg. effective search of alternatives in the decision-making process, "lateral thinking"), techniques of creativity thinking development (eg. M. Mikalko and some others);
- ✓ to stimulate the development of the balanced modality, techniques are offered to all the students, because to mastery them, the use of mental abilities of both hemispheres of brain is a necessary prerequisite: methodology of critical thinking by D. Halpern and techniques for the development of critical thinking of other authors, methodology of development of radiant thinking and the creation of intelligence charts by T. and B. Byuzen, the techniques of "six hats of thinking" and "six pairs of shoes of the way of action" by E. de Bono and some others.

As you know, it is better to master the material that you are teaching yourself, and that's why during the training, students are offered to learn the technique of thinking by one of these techniques to adapt them to the problems of the study of economics and development of economic thinking based on specific economic issues and situations during conducting elements of training sessions or writing course projects, as well as realizing the developed training sessions while undergoing pedagogical practice in the process of teaching economic disciplines. We offer to assess the effectiveness of teaching methods by the method of "TRIZ" – Pedagogy by A. Gin and the analysis of conducted lessons -by methodology "Plus-Minus–

Interesting" E. de Bono, and, the evaluation occurs via both teachers and students. Effectiveness of author's approach in defining methodologies, their combinations and impact on the productivity of economic thinking are confirmed by the results of change of the modality of thinking of students and the increase of efficiency of intelligence as the ability to use the mind to answer the question creatively and solve practical problems (Pelehrino, 2003, p. 5) of economic and pedagogical nature. In general, during 2017/2018 academic year there was a growth rate of balanced modality of thinking of students by almost 17%, mainly, by reducing the number of students with the dominant creative thinking (-12.4%), and insignificant decrease in the number of students with dominant logical thinking (-4.5%).

Conclusions. In the modern world, it does not matter whether the future profession is related to the economic sphere, because we all need to make economic decisions constantly, engage, in a certain sense, in commerce, "selling" our professional competencies to the manager, obtaining banking services, choosing goods and services, etc., forecasting the consequences of the decisions taken and their impact on financial income and own welfare. According to the Ministry of Education and Science of Ukraine, in 2018, 292 higher educational establishments took in students on the economic specialty, that's 62.4% of all institutions of higher education in Ukraine (MES Ukraine, 2018) . Therefore, in conditions of such a high-level of competition, universities must seek new approaches to training specialists in economics. Competiveness of graduates of KNEU named after V. Hetman, except for the quality of providing educational services, which is confirmed by the university's ratings, can ensure the diversification of educational and professional programs. For example, an expert, who got a Bachelor by the educational professional program "Economic and Business Education", can carry out professional activities in two areas (KNEU, 2018):

– *pedagogical* – teaching of economics, training, coaching, social and educational activity, organizational, methodological and advisory work, project and public activity in the field of education;

– *economic* – administration, management, personnel training, consulting in business, sales of educational services, logistics, business, design and social activities in the business.

The presence of duality in training future professionals will encourage the development of specific interdisciplinary traits of economic thought, thus, promoting increase of it as efficiency and productivity. Under the productivity of economic thinking, we understand the number of ideas and decisions that a person has developed in relation to the subject or field of research. The result of productive economic thinking will be alternatives in economic thinking in solving these given problems. And under the effectiveness of economic thinking, we understand the share of ideas and solutions that brought of material or non-material benefits to the personality. The result of effective economic thinking is a balanced decision, with the adoption of which the received benefit will get over the efforts and resources greatly that were spent on its development and implementation into practice. Horizontal or lateral (creative) thinking will contribute to the performance of thinking, and vertical or logical thinking – to efficiency. Radiant (associative) thinking will help to explore solutions fully, that is, it will give the opportunity to develop a professional intelligence and create competence of the teacher of professional training / specialist in economics. At the same time, one can not forget about the implementation of the relevant disciplines in the curriculum and the introduction of techniques and technologies for the development of thinking in the process of economic education. For this purpose, the teachers should possess the following methods and imagine clearly what qualities and how to develop them and cultivate the educational space.

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УДК 378:33]-052:[159.955:33]:005.336.2-027.561

Продуктивне економічне мислення – основа формування фахових компетентностей студентів спеціальності "Професійна освіта (Економіка)"

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Реферат. Стаття присвячена методичним аспектам розвитку економічного мислення майбутніх педагогів професійного навчання та фахівців з економіки, оскільки його продуктивність забезпечує успішність формування професійних компетентностей студентів, які отримують освіту за освітньо-професійною програмою "Професійна освіта (Економіка)" у ДВНЗ "Київський національний економічний університет імені Вадима Гетьмана". Компетентнісний підхід – тренд сучасного освітнього простору, і процес мислення особистості є центром проблеми розвитку особистості та формування її як особистісних, так і професійних компетентностей, що, в свою чергу, завдяки унікальності, неповторності та синергетичності буде забезпечувати конкурентні переваги майбутнього фахівця на ринку праці. Метою статті є: проаналізувати специфіку економічного мислення студентів, які отримують вищу економічну освіту за програмою "Професійна освіта (Економіка)"; сформулювати основні характеристики (риси) економічного мислення, які необхідно розвивати в процесі економічного навчання; довести необхідність та обґрунтувати методичні підходи до розвитку продуктивного економічного мислення студентів, що забезпечить формування фахових компетентностей з метою стимулювання ефективності професійної діяльності. Задля здійснення результативного наукового пошуку було використано широкий спектр методів дослідження, а саме: аналіз та синтез, наукове обґрунтування, систематизація й узагальнення, опитування, анкетування і статистична обробка результатів.

У ході дослідження були отримані наступні висновки та результати. Автором розкривається специфіка економічного мислення, його основні риси та прояви у професійній діяльності. Економічне мислення розглядається як різновид практичного мислення суб'єкта професійної діяльності. Це, в першу чергу, процес, а, отже, його можна розвивати та вдосконалювати. Дослідники природи нейронів (нейрофізіологи) констатували той факт, що можливості людського мозку безмежні. У такому ракурсі потрібно вирішувати завдання методичного характеру: яким чином, за допомогою яких інструментів можна в цілому розвивати економічне мислення та в процесі економічного навчання формувати конкретні його характеристики: аналітичність, критичність, системність, конструктивність, прогностичність, зваженість, діловитість, креативність та інноваційність. Досліджуючи ці аспекти, автором обґрун-

товано та систематизовано досвід застосування технік і прийомів розвитку мислення особистості в освітньому процесі (на прикладі навчальних дисципліни "Методика викладання економічних дисциплін" і "Тренінг розвитку економічного мислення", яким притаманний міжпредметний характер), з урахуванням первинної модальності мислення студентів; окремо виділені техніки та прийоми стимулювання розвитку логічного (лівопівкульного), творчого (правопівкульного) та збалансованого мислення в процесі навчання; оцінено їх вплив на модальність та зміни у типах мислення студентів, що доводить необхідність імплементації конкретних методик розвитку економічного мислення у процес підготовки фахівців бакалаврського рівня за спеціалізацією "Економічна та бізнес-освіта" з метою стимулювання продуктивності та результативності мислення. Під продуктивністю економічного мислення ми розуміємо кількість ідей та рішень, що їх виробила особистість стосовно предмета або сфери дослідження. Результатом продуктивного економічного мислення будуть альтернативи у вирішенні поставлених завдань / проблем. А під ефективністю економічного мислення ми розуміємо частку ідей та рішень, що принесли особистості матеріальну чи нематеріальну користь. Результатом ефективного економічного мислення є зважене рішення, у підсумку прийняття якого отримана користь значно переважить зусилля та ресурси, затрачені на його розробку та впровадження у практику. Забезпеченню продуктивності мислення буде сприяти горизонтальне або латеральне (творче) мислення, а ефективності – вертикальне або логічне мислення. Радіантне (асоціативне) мислення допоможе всебічно дослідити рішення, що, в підсумку, дасть змогу розвинути професійний інтелект та на його основі сформувати компетентність педагога професійного навчання / фахівця з економіки.

Ключові слова: *економічне мислення, продуктивне економічне мислення, модальність мислення, професійна компетентність, техніки та прийоми розвитку мислення.*

Received: 12 May 2019
Accepted: 24 May 2019

Part III

FOREIGN AND HISTORICAL ASPECTS OF VOCATIONAL EDUCATION AND TRAINING DEVELOPMENT

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.188-194

Scientific herald of the Institute of vocational education and training of NAES of Ukraine. Professional Pedagogy/1(18)'2019, pp. 188-194

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

AN INDIVIDUAL'S COGNITIVE ACTIVITY PROBLEM IN HISTORY RETROSPECTIVE

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Abstarct. The article studies the aspects of cognitive activity and the activity in history retrospection.

The cognition and its study is not something unchanged, once and for all given, but is something that develops under certain laws. It has long history with the sources in the most ancient philosophy. At every stage of its development the knowledge is the result of the history of knowledge, the essence of all human activity forms.

Scientific knowledge has its historically altered morphology. Its historical path analysis makes it possible to argue its origin from ancient philosophical schools, philosophers of Ancient India, China, Egypt, the countries of Mesopotamia.

The phenomenon of an individual's cognitive activity is complex and multifaceted. Scientists argue that cognitive activity is a complicated process of transition from ignorance to knowledge, from inability to ability, from random observations to systematic knowledge of the material world, to mastering the scientific truths. At the same time, a man, mastering new knowledge, affects the world, which, in turn, changes human life.

The article analyses the influence of historical conditions on developing scientific thought about cognition, cognitive activity.

The effectiveness of studying students' educational and cognitive activity depends on how thoroughly the cognitive process is studied and the way its laws and features are used. The authors emphasise that taking into account the cognition theory possibilities, its Klondike was set in the Ancient world era and filled with new content rising to a new level in each generation, allows predicting the problem studying vector and put forward the hypothetical predictions of its solution.

Keywords: *cognition, an individual's cognitive activity, cognitive action.*

Introduction. Against the background of scientific-and-technological advance, when the subjective facilitation's role for building up our society is noticeably increasing, the problem of a person's activity formation is one of the most actual in pedagogical theory and practice of higher educational institutions. After all, an individual's purposeful conscious activity changes the environment, affecting economic, political, inner features of the society development. These processes determine a person's activity in learning, as his/her cognitive activity formation correlates to autonomy, initiative, integrity, willpower and other human traits development. Thus, while training a specialist in tax matters not only professional knowledge and skills shaping should be provided but also building up a true citizen of an independent Ukrainian state developing, shaping his/her cognitive needs and inducements for further independent knowledge acquisition and skills upgrading should be ensured.

Research aim is to study the aspects of cognitive activity in history retrospective.

Materials and methods. To achieve the aim and solve research tasks the appropriate, to the authors' opinion, methods are used. They are theoretical – psycho-pedagogic literature analysis to define the state-of-arts of the problem in pedagogy theory and practice; analysis, synthesis, abstracting, compilation for studying the cognitive action aspects, and its activity in the history retrospective. The researchers' works analysis proclaims the introduction of terms "knowledge", "cognitive strength", "cognitive activity" in pedagogical science while studying the phenomena of learning, training, training activities. The researchers of didactics problems, assuming that the learning process is the highest form of human activity, aimed at identifying new patterns nature and society movement, new knowledge on nature and social phenomena establishing, showed that in the training process the digestion of prior-gained knowledge about nature, society takes place. In this regard, new terms "cognitive activity" and "training activity" were introduced.

Results and discussions. It should be noted that the content of students' cognitive activity cannot be compared with the content of a scientist's cognitive activity. Therefore, on the one hand, to define the concepts of "cognitive activity" and "training activity", and on the other – to show their dialectical relationship we accept the concept of "training-and-cognitive activity" in the following study. Scientific studies are becoming more complex, more diverse, and their impact cannot depend on cognitive process thoroughness, its common factors and features use. "Guiding knowledge to yourself" inevitably extends epistemology and gnosiology possibilities (Pugach, 1985).

Scientific knowledge has its historically altered morphology. Its science's historical path analysis makes it possible to argue that its origins come from ancient philosophical schools, philosophers of Ancient India, China, Egypt, the countries of Mesopotamia. Understanding the world knowledge and ideas development is especially native to the epic of antiquity. In those times philosophers' doctrines (Heraclius Ephesus, Democrat, Confucius, Socrates, Plato, Aristotle) the orienting ideas for researchers in the most difficult life manifestations for following centuries were embraced. These manifestations – feelings, memory and imagination images, associations, passion and individual differences between people (temperament) – were deduced from the action of external objects on the organic body and from the material processes – in the middle of it.

Of particular importance was Aristotle theory. It combined determinism with systematicity principles and psychological knowledge categories. The approach, nowadays called systematic, determined the structure a great Greek's thinking. In his theory the determinism, systematicity and development are indivisible. So, despite the fact that the problem of cognitive activity in the ancient philosophers is not thoroughly covered, yet there are very interesting thoughts about its role in cognition in some scholars' works.

In the Middle Ages education the science was scholastic in nature and separated from life. Only in the Renaissance era, when new philosophical schools were formed, "a person became the first principle of being" (Galuzinskyi, 1995, p. 7), the humanitarian education began to develop rapidly. The bright representative of the humanists was Yan Amos Komenskyi. Based on his sensualist epistemology, he considered the main task of a teacher to develop a student's senses, speech and primary hands-on skills. At the same time, Komenskyi paid great attention to the disclosure of causative relationship between the surrounding world phenomena and taught the students to analyze them. In "Great didactics" he noted that a person should be a wise creature; she has "... to explore everything and name and count everything or know and be able to name and understand everything that exists in the world ..." (Komenskyi, 1982, p. 283).

An outstanding scientist, philosopher, founder of the New times experimental science was the Englishman Francis Bacon, who proclaimed the purpose and essence of studying of the laws of nature, understanding independent isolated things and their properties. Human knowledge, according to Bacon, is capable to reveal the secrets of nature and master it in that way. He was able to study the cognitive ability, its possibilities, proclaiming the experience as the only source of human knowledge. It is Bacon, studying the problems of cognitive activity, drew the attention to the subjective moments of knowledge and even tried to classify them (Pugach, 1985).

Bacon's follower, the English philosopher-materialist John Locke, developed the doctrine on experience-based knowledge origin. Locke, like other empirical philosophers, considered the activity of thinking limited. In this regard, the cognition method, developed by them, turned into a combination of methods for building a complex to a simple.

A similar approach to Bacon's and Locke's views is found in the theories of the French materialists Y. Lametry, D. Diderot, K. Helvetius, P. Gelbach. But among the materialists there were also rationalists who, in terms of developing the problem of cognitive activity, interpreted cognition as a reality reflection in human consciousness; while appreciating the role of sensory experience. Explaining the cognition as a

process that does not require a qualitative transformation of the source data, the rationalists did not consider the cognitive activity as a problem.

The impact to knowledge theory was made by idealist philosophers of the late XVIII and early XIX centuries. Kant, Fitch, Schelling, and Hegel opposed the old materialism, holding that against underestimating the cognition activity, in the contemplation drift. The cognition is interpreted by German philosophers much wider, it is studied not only in relation to natural subjects, but also in its links with social, ethical and aesthetic phenomena. It was I. Kant who first raised the issue of cognition activity as an epistemological problem. According to Kant, a person's cognitive abilities are manifested in the special forms that subordinate and organize the knowledge content:

Thus, if the old materialists had the dependence of thinking on feelings as the object of the study, then Kant focused his attention on sensory visual representations dependence form the "pure" priori forms of mind (Bendasiuk, 1997, p. 189).

In his works I. Fitkhe considered only the essence of knowledge. At the same time, he considered the feeling was not a reflection of reality, but a product of a subject's creativity. The cognition process is considered by Fitkhe as the process of creating reality and activity as the basis of knowledge (Kornilov, 1989).

The principle of knowledge activity and effectiveness was thoroughly investigated by G. Hegel. His "Absolute Idea" is not only about thinking, but about being. The cognition in Hegel's theory is represented as self-education (self-development) of "absolute idea". Comparing Kant and Fitkhe, the problem of cognitive activity is considered by Hegel more thoroughly. For the first time in history, he introduced the element of practice into cognition theory. Hegel analyzed the cognition as active human activity, introduced into the process of social history, in interrelation with other forms of activity (Bim-Bad, 1986).

The search for ways to overcome the difficulties in education system development in Ukraine makes us turn to the study and analysis the Ukrainian educators' heritage while formatting and strengthening the power of the Middle-Age East-Slavic state.

Domestic culture saving and development, education growth, people's national and religious interests protection as the directions of reformist ideology were incidental to cultural and educational centres of that time. The ideological struggle against theocracy of Catholic ideology was led by brotherhoods as centres for national culture and people's cultural values protection. Thanks to brethren schools network system the education and patriotic literature was growing, the Orthodoxy was strengthening as a means of fighting against the colonial policy of the Polish gentry and the Catholic clergy. The most significant contributions to these processes were made by Lviv, Kyiv and Lutsk brethren schools.

The prominent educators of that time were Professors Petro Mohyla, Joseph Kononovich-Gorbatskyi, Innocentiy Hisel, Ionikiy Galyatovskyi, Lazar Baranovych, Stefan Yavorskyi, Theophan Prokopovych, Georgy Shcherbytskyi, Heorhiy Konyskyi and others (Khyzhniak, 1988).

P. Mohyla, in his own works, preached ascetic ideals, self-knowledge, moral self-perfection, unity with God. The Professor of Philosophy I. Kononovych-Gorbatskyi acknowledged the objectivity of the world and its cognition, shared the basic doctrine of sensualism that knowledge began with experience and sensations. In his theory, the main role belongs to the human intelligence. The professor pointed out the path to the knowledge of God through the cognitive activity of mind. The theory of cognition by S. Yavorskyi is based on the principles of I. Hisel's doctrine. By approving sensational ideas, he admits the possibility of mind existence regardless sensory datum, brain, body, and believes that logic as science manages human mind actions, emphasizing the greatness, power, independence and activity of a man.

Explaining the theory of cognition for students, Professor H. Konyskyi emphasized the infinite possibilities of a man in learning the world and himself. At the heart of knowledge lies the mind: true only that which is proved and comprehended by reason. Professors of the Kyiv-Mohyla Academy made a significant contribution to the theory of knowledge, contributing to the development of scientific thought on the Ukrainian soil of medieval scholasticism, the Renaissance and Enlightenment.

Graduates from the Academy H. Skovoroda and M. Lomonosov were the speakers of advanced progressive ideas that contributed to the formation of a way of vision and comprehension of the world. Promoting the problem of self-knowledge of a man, H. Skovoroda emphasizes that knowing himself means to know the logic of the universe, to understand God in himself. The role of science and education, according to M. Lomonosov, is based on the materialist worldview, it was not a recipe for learning: in their synthesis, they were quite a logical, scientific, complete picture. Innovative pedagogical ideas of M. Lomonosov were designed to create favourable conditions for the formation and development of cognitive abilities of students. Educational significance of his legacy is in a progressive, democratic, humanistic approach to education (Prokofiev, 1986, p. 85).

One of the most famous thinkers of that time was Jacob Kozelskyi. The most important problems of epistemology, psychology, logic, social philosophy are represented in the original work "Philosophical sentences" (Shpet, 1989). Y. Kozelskyi believed that human knowledge begins with the senses; it is they who give an impression to the soul. At the highest level, knowledge is characterized by logical thinking, inherent only to a man. At the sensory level, certain properties of things are learned, at the highest – the essence of things, the process and patterns of their development.

The study of cognitive activity is devoted to a significant part of the scientific work of P. Lodia – professor of Lviv University. In addition to the adaptation of Western European educational ideas in the Ukrainian spiritual culture, he directed his efforts to study questions of the theory of cognition and logic (Gorskyi, 1996).

The philosophical credo of M. Hohol is romantic perception of the world. He considered the meaning of human life is in life itself. And there is no other purpose for a person than real existence (Philosophy, 1995). The essence of M. Hohol's creative quest was manifested in the rout to knowing the spiritual essence of a man. The idea of "education" of the soul, he contrasted with commitments to human intelligence improvement.

The nineteenth century was marked by enlightenment movement with the main feature to reach common literacy. K. Ushynskyi's knowledge doctrine grounds basis of materialist dialectics and the doctrine on feeling and will lays the basis of the materialist theory for upbringing (Ushynskiyi, 1945).

In the centre of Taras Shevchenko's ideas – a person, his/her life destiny, "... natural inalienable rights inherited from free and heroic ancestors, inseparability of labour and humanity, freedom and social justice" (Philosophy, 1995, p. 147). T. Shevchenko's achievements clearly testify to the high level of his inner needs, clearly defined ideological orientation, and high aesthetic qualities. T. Shevchenko's worldview ideas became crucial for his followers, inspiring them to civic service to Ukraine.

Kyiv is the most prominent centre for enlightenment in the mid-XIX century. Thinkers, striving to combine the ideas of enlightenment and romanticism, note the role of feelings, human experiences in the inner activity of a person. A famous figure among the Kyiv Philosophical School representatives was P. Yurkevych. His study was directed to morality area. Investigating the process of cognition, he believed that this process is carried out in three forms: 1) knowledge through representation; 2) knowledge through concepts; 3) knowledge through the idea.

Mykola Kostomarov, Panteleimon Kulish, Oleksandr Potebnia, Mykhaylo Drahomanov and other intellectuals of Ukraine made a significant contribution to new intellectual culture development based on reality comprehension, social and political life analysis. M. Kostomarov made a significant contribution to theoretical substantiation of the Ukrainian idea philosophy, according to which the main content and direction of the historical process is determined by the people.

At the heart of O. Potebnia's provisions on a person's cognitive activity there is language and thinking interrelation (Philosophy, 1995).

The creative legacy of the prominent philosopher, sociologist, historian, and publicist M. Drahomanov concerns a matter of Ukrainian cultural life various branches. The determinism he defines in the only reliable way to explain the phenomena. According to him, the highest value is a person, and the highest criterion is the idea of justice (Drahomanov, 1991).

The main direction of education development in Ukraine at the end of XIX and early XVIII centuries identified leading tendencies common to new generation of national conscious intellectuals. Prominent thinkers and socio-political figures of that time were Volodymyr Lysevych, Ivan Franko, Lesia Ukrainka, Volodymyr Vernadsky, Mykhailo Hrushevskyi, Volodymyr Vynnychenko and others.

Relying on positive knowledge, V. Lysevych's philosophy does not deny the active role of the subject while cognition. The main object of I. Franko's and Lesia Ukrainka's philosophy was a person in his/her unity with nature, the meaning of his/her life, his/her uniqueness, consciousness and dignity. The views of these artists are echoed in that the purpose of knowledge to come to the truth (veritas). The veritas, according to I. Franko, is the unity of cognition and practical activity methods. I. Franko's and Lesia Ukrainka's sense of global consciousness marked the peak of a person's philosophical comprehension of the world through the spiritual-figurative disclosure of social life contradictions (Philosophy, 1995.). Their artistic heritage, along with journalistic and scientific works, enriched the Ukrainian spiritual culture by its content, deepening the development of a person's cognitive activity problem as an independent component of educational thought.

As a thinker-scholar, V. Vernadskyi was in that advanced of his time that only now the one can appreciate the genius of his achievements and scientific predictions. The scholar initiated the holistic philosophy of the universe, was one of the anthropocosmism founders as a system that unites the harmonious whole of the natural-historical and socio-humanitarian tendencies of science development (Vernadskyi, 1988). At the heart of the thinker's

philosophical worldview is the belief in the power of a person's activity, in his/her mind.

Among of the Ukrainian intellectuals representatives in the first decades of the XX century the special place belongs to M. Hrushevskyi and V. Vynnychenko. M. Hrushevskyi's historical concept represented in 2000 scientific publications on problems of culture, history, education and based on the principles of systematicity, unity, consistency, historical and logical in knowledge. The basis of the scientist's approaches to the knowledge of the historical process – the requirement to follow not priori conclusions from the eternal and unchangeable principles of human thinking, but inductive search on the basis of factors that take into account the biological, economic and, above all, mental factors (Hrushevskyi, 1993).

From the position of development of the problem of cognitive activity V. Vynnychenko confessed that the direction of philosophical ideas should be based on searching human happiness (Vynnychenko, 1990). Conceptual approaches of the artist to society development testify that people are the main driving force.

The rise of spiritual life is celebrated in the 30s of XX century. Being in the market for "actual" questions of historical and dialectical materialism Ukrainian researchers work on the problems of sociology, logic, and psychology. Despite all the prohibitions the philosophical views of H. Skovoroda, professors of the Kyiv-Mohyla Academy, philosophical and socio-political ideas of the Cyril-Methodius Society, figures of the Ostroh Scientific and Educational Centre were studied. The early socialist period of Ukraine is characterized by constant discussions, polemics of scientists about methods and forms of understanding the world, its essence of historical development, main driving forces, and so on. There was real confrontation between the orientations of "Moscow" official institutions and the cognitive interests of Ukrainian researchers.

Modern scientific thought should redefine the scientific heritage of outstanding scholars, thinkers, and figures of this period: the M. Khvylovyi, M. Skrypnyk, D. Dontsov, A. Makarenko, V. Lypinskyi, V. Yurynets, D. Chizhevskyi, O Olzhych (Kandyba), I. Mirchuk, P. Kopin, V. Sukhomlynskyi and others, objectively shown their contribution to cognitive problems development, of spiritual revival issues for the Ukrainians.

During the 70's and 80's there is a change in the emphasis of philosophical searches vector; there is a step away the problems of dialectical materialism to expanding ideological themes. The new problems of worldview formation, its connection with scientific knowledge, a man and nature interaction, methodology, the world creation etc. are explored.

From the standpoint of modern philosophical approaches, the result of any knowledge is the image as an ideal generalization of an object's essential relations. There are sensory and rational cognition where the sensory knowledge is primary. There are three forms of sensory knowledge: sensation, perception and presentation. With the help of a person's senses only certain properties of objects, phenomena are known. On the basis of sensations perception is formed – the integral reproduction of the object. As a result of repeated perception of an object, the consciousness of a person can hold him in memory, and if necessary, reproduce a generalized image. Representation – a generalized image of an object, perceived before. In general, forms of sensory knowledge reproduce the object in a figurative form (Philosophy, 1995).

Rational knowledge, in contrast to the sensory, penetrates into the essence of objects, phenomena, processes. In the same way as forms of rational cognition, distinguish concepts, judgments and inference. Usually, concepts are defined as one of the main forms of reality reflection on the level of abstract thinking, they enable to distinguish those qualities of an object that cannot be pictured via an image.

Modern cognition theory considers judgment as a process where our knowledge is shaped, changed and evolved. The combination of several judgments forms an inference. This form of rational knowledge gives an indirect and generalized idea of reality and its reflection in human consciousness. The ability to make the inference is a sign of a person's intellectual growth. It is important for solving the activity problem the ability of making inferences is improved as a result of education and upbringing. Naturally, in cognitive practice, one cannot absolve sensory or rational forms of knowledge: only combination of these forms phenomena and processes essence knowledge can make for veritas.

Conclusions. Consequently, the effectiveness of studying students' educational and cognitive activity depends on how thoroughly the cognitive process is studied, the way its laws and features are used. Taking into account the possibilities of the cognition theory, its Klondike was set in the Ancient world era and filled with new content rising to a new level in each generation, allows to predict the problem studying vector and put forward the hypothetical predictions of its solution.

Prospects for further research may be related to psychological and pedagogical conditions studying for educational process improvement by means of activating students' cognitive activity.

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УДК 159.923:[316.621:162]|-029:9

Проблема пізнавальної активності особистості в історичній ретроспективі

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Реферат. У статті досліджуються аспекти пізнавальної діяльності, активності в історичній ретроспективі. Пізнання і його вивчення не є незмінним, раз і назавжди даним, а являє собою щось, що розвивається за визначеними законами. Воно має довгу історію, джерела якої ведуть у найдревнішу філософію. На кожному етапі свого розвитку знання – це підсумок історії пізнання, сутність всіх форм людської діяльності. Наукове пізнання має свою історично змінювану морфологію. Аналіз історичного шляху цієї науки дає можливість стверджувати, що її витоки беруть свій початок від стародавніх філософських шкіл, філософів Стародавньої Індії, Китаю, Єгипту, країн Месопотамії. Феномен пізнавальної активності особистості є складним і багатоаспектним. Учені стверджують, що пізнавальна діяльність являє собою складний процес переходу від незнання до знання, від невміння до вміння, від випадкових спостережень до систематизованого пізнання матеріального світу, до оволодіння науковими істинами. При цьому людина, опановуючи нові знання, впливає на світ, який, у свою чергу, змінює людське життя. У статті проведений аналіз впливу історичних умов на розвиток наукової думки про пізнання, пізнавальну активність. Результативність вивчення навчально-пізнавальної активності студентів залежить від того, наскільки ґрунтовно досліджено пізнавальний процес, як використовуються його закономірності й особливості. Автором акцентовано, що врахування можливостей теорії пізнання, невичерпні джерела якої започатковуються ще в епоху античності, наповнюються новим змістом та підносяться на новий рівень кожним поколінням, що дає змогу спрогнозувати напрям дослідження проблеми і висунути гіпотетичні передбачення її вирішення.

Ключові слова: *пізнання, пізнавальна активність, пізнавальна діяльність.*

Received: 16 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.195-201

Scientific herald of the Institute of vocational education and training of NAES of Ukraine. Professional Pedagogy/1(18)'2019, pp. 195-201

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

FORMATION AND DEVELOPMENT OF ADULT EDUCATION IN UKRAINE AND SLOVAK REPUBLIC: COMPARATIVE ANALYSIS

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Abstract. The article presents the results of the comparative analysis of the formation and development of adult education in Ukraine and the Slovak Republic. The general (globalization, democratization, individualization of adult education, and other) and specific (establishment of the legal framework, the introduction of an andragogical model of education in formal education institutions, and other) trends in the development of adult education in both countries.

It has been proved that the Slovak Republic as a member state of the European Union has a well-established tradition of adult education through legislative provision, an effective system of preparation of andragogues as adults in adult education, and didactic provision of adult education in formal and non-formal education institutions. In particular, the actual direction of using Slovak experience in the development of adult education in Ukraine is to promote the continuous professional development of adults through the advisory mechanism (poradenstvo) – personalized professional counseling. The analysis of the specialties that is training the personnel in the field of adult education in Ukraine has shown that andragogical counseling is tangent to such specialties as information management; management of personnel, organizations, socio-cultural activities, management of public organizations, public institutions, international educational projects, innovations in education, psychological counseling, etc. However, in Ukraine, unlike Slovakia, it does not have a clear focus on the andragogical aspect of counseling, but it has a clear focus on management. This makes it impossible for an interdisciplinary approach to the counseling system that we see it in the Slovak Republic, with a clear distinction between the andragogical context.

Keywords: *adult education, andragogical approach, andragogue, counseling.*

Introduction.Ukraine on the world map appears quite young and promising in its development by the state, the success of which is partly dependent on the productive extrapolation of foreign experience in the formation of effective social relations, in particular in the field of adult education. Following M. Borysova (2012, s.5), we believe that "the kingdom of adult education should take into account the specificity of the Ukrainian mentality, which is a given in the course of long development of national history and culture, and modern world experience". Therefore, it would be advisable to borrow certain assets in this field that work effectively in the education system of adult European Union countries, in particular the Slovak Republic.

Materials and methods. The problem of improving the adult education system in Ukraine with the use of progressive ideas of foreign experience is quite well represented in scientific pedagogical thought, in particular through coverage of the possibilities of applying the effective practices of Scandinavian (O.Ohiienko, A.Roliak) and English-speaking countries (N.Avsheniuk, T.Hryhorieva, S. Kovalenko), the USA and the Latin American countries (O.Zhyzhko, N. Kutova, N.Mukan, N.Terokhina, N.Chahrak), Canada (M.Borysova, M. Busko, L.Nos), Poland (O.Alpern, O.Serhieieva), France (O.Komar, V. Lashchykhina, Yu.Nesin), Germany (I. Sahun), Italian Republic (N. Postryhach, O.Chebotarova), Greece (O.Protsenko), China

(N.Paziura), Australia and New Zealand (O.Pulinets). Significant achievements of domestic scientists make it possible to carry out a comparative analysis of the peculiarities of the development of adult education in Ukraine in the Slovak context.

Methods of research: terminological analysis, which made it possible to study the terminology apparatus of the study; systematization and comparison of normative, educational and methodical literature, which made it possible to find out the peculiarities of genesis of adult education in Ukraine and Slovakia

The purpose of the study is to make a comparative analysis of the formation and development of adult education in Ukraine and Slovakia.

Results and discussions. In the course of our study, a comparative analysis (*Table 1*) of the formation and development of adult education in Ukraine and Slovakia was carried out according to the following criteria: the existence of a national and regional adult education strategy; the legislative provision of adult education, the creation of organizational and pedagogical bases of lifelong learning, the development of a legal and regulatory framework for the training of pedagogical staff in the field of adult education, the availability of an effective system for the implementation of adult education, the possibility of validation and certification of the results of non-formal and informal education of adults.

Accordingly, the purpose of the study is to make a comparative analysis of the formation and development of adult education in Ukraine and Slovakia.

This made it possible to consider the development of adult education in Ukraine on the macro (level of society), meso– (level of organizations) and micro levels (level of personality).

A comparative study of the peculiarities of the development of adult education in Ukraine and the Slovak Republic provides grounds for arguing that in our country there is a process of actualization of this problem on the basis of the dissemination of European educational policy.

Currently, in pedagogical science, the term "dissemination" is interpreted as a special way of disseminating and mastering an experience that is adequate to the specific needs of its recipients, which has the character of formation. E. Chernyshova (2009) believes that dissemination allows dissemination of advanced and innovative experience in the most massive practice of leadership, scientific and pedagogical and pedagogical workers.

In this connection, the signing of the Association Agreement with the EU, which opened the space for opportunities for Ukraine to the powerful development of adult education. In particular, this is confirmed by Art. 433 Agreements: "The Parties are studying the possibilities of developing cooperation in other spheres, in particular in the field of secondary education, distance education and life-long learning" (Угода про асоціацію з ЄС, 2015). The elaboration of previous years (the development of the Concepts of the Development of Distance Education in Ukraine (2000), the development of adult education in Ukraine (Сігаєва, 2009) and the Conceptual Provisions of the Education of Adults in Ukraine made it possible to amend the Law of Ukraine " About Education "(Article 18. Education of Adults) and the public discussion of the draft Law of Ukraine" About Adult Education".

In particular, it is legally stipulated that "adult education, which is a component of life-long education, is aimed at implementing the right of every adult to continuous education, taking into account his personal needs, priorities of social development and the needs of the economy" (Law of Ukraine "On Education").

The components of adult education include: postgraduate education; professional training of employees; retraining and / or advanced training courses; continuous professional development; any other components stipulated by the legislation proposed by the subject of educational activity or independently determined by the person.

A person has the right of free choice of educational institution, institution, organization, other subject of educational activity, types, forms, rate of education and educational program within the framework of adult education.

Postgraduate education involves acquiring new and improving competences previously acquired on the basis of the acquired higher professional (vocational) or professional advanced education and practical experience through:

– specialization – specialized training for the purpose of acquiring a person's ability to perform tasks and duties that have special features within the specialty;

– retraining – adult education aimed at vocational training with the aim of mastering another (other) profession;

– advanced training – the person acquiring new and / or improving previously acquired competencies within the professional activity or field of knowledge;

– Internship – acquiring a person's practical experience in the performance of tasks and responsibilities in a particular professional activity or field of knowledge.

Public authorities and local self-government bodies create conditions for formal, non-formal and informal education of adults, in particular through the public system (Ukrainian Association for the Education of Adults, public organizations of various levels in the

Table 1

Comparative analysis of the peculiarities of adult education development in Ukraine and in the Slovak Republic

Level	Criteria	Slovak Republic	Ukraine
Macro level	availability of national and regional adult education strategy	– National document of the Slovak Republic to the Memorandum on Continuing Education (2001) – Concept of education during the life of SR (2004) – Strategy for education during life and counseling – National ESF project "Establishing, developing and implementing a lifelong education system for labor market needs" (2007) – Strategy for life-long learning – 2011 – Program for the promotion of the concept of education throughout life (2011)	– Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their member states, on the other. Article 433 – Concept of development of distance education in Ukraine (2000) – development of "Concept of adult education development in Ukraine" (author L. Sihaieva) – presentation by the group of scientists of the Institute of Pedagogical Education and Adult Education of the Academy of Pedagogical Sciences (leader of the group – L. B. Lukianova). of the draft Conceptual Provisions on the Education of Adults in Ukraine in March 2009.
	legislative provision of adult education, creation of organizational and pedagogical bases for lifelong learning	– Law 386/1997 Z. z. "About Further Education" – Act 282/2008 Z. z. "On the Basic Principles of Youth Policy" and the corresponding amendments to the Laws "About Higher Education" 131/2002 Z. et al. – Law 568/2009 Z. z. "About life-long education" and changes to others. (2009)	– Law of Ukraine "About Education" Art. 18. Adult education – public discussion of the draft Law of Ukraine "About Adult Education"
	elaboration of the legal and regulatory framework for training pedagogical staff in the field of adult education	– Law 568/2009 Z. z. "About life-long education" and changes to others. (2009) – Law 386/1997 Z. z. "About Further Education" – Lifelong Education and Certification Program for Education throughout Life (2011)	Project of Change No. 8 to the the profession "Andragogue") Classifier of Professions entrusted with Code 2359.2
Meso level	the existence of an effective system for implementing adult education	The adult education system is represented by the public activities (Association of Adult Education Institutions in the Slovak Republic (AIVD SR), the Association of Third-Level Universities (ASUTV), the Association of Career Coaches and Consultants (ALKP), the Association of Employers and Professional Organizations of the Slovak Republic (AZZZ SR), The Platform for Non-Governmental Development Organizations (MVRO), the Slovak Employers' Association (RUZ), the Slovak Academic Lifelong Learning Association (SAACV), the Slovak Academic Association for International Cooperation (SAAIC), the Association Career Development and Advisory (ZPKPRK) and State (State Institute for Vocational Education (SAAIC), National Agency Erasmus +) organizations.	The adult education system is represented by the public activities (Ukrainian Association for the Education of Adults, public organizations of various levels in the field of cultural and educational development), and state organizations (Institute of Pedagogical Education and Adult Education of the National Academy of Pedagogical Sciences of Ukraine, National Agency Erasmus +) of organizations.

Continuation of Table 1

Comparative analysis of the peculiarities of adult education development in Ukraine and in the Slovak Republic

Level	Criteria	Slovak Republic	Ukraine
Micro level	the possibility of validation and certification of the results of non-formal and informal education of adults	Qualification System KOPLAT	– The Law of Ukraine "About Professional development of workers "(2012); Law of Ukraine "About Education" – Methodological recommendations on the criteria for evaluating professional knowledge, skills and abilities, the list of tools for measuring professional knowledge, skills and competences based on the results of non-formal vocational training (2015)

cultural and educational direction), and state institutions (Institute of Pedagogical Education and Adult Education of the National Academy of Pedagogical Sciences of Ukraine, National Agency Erasmus +) organizations.

Undoubtedly, the introduction to the Classifier of Professions of the specialty "Andargogue" (2018) is a powerful factor for the adoption of the Law "About the Education of Adults", which will form the basis for the formation of a scientific and methodological basis for the training of adults in adult education in Ukraine. In this context, the experience of the Slovak Republic for the national pedagogical practice is exemplary.

Another important trend in the use of Slovak experience in the development of adult education in Ukraine is the promotion of continuous professional development of adults through the advisory mechanism (poradenstvo) – personalized professional counseling. The term "poradenstvo" comes from the English word "to consult" – and means "(po) radit' (sa)" – to counsel, prompt, offer, admit, advise.

The functioning of an effective counseling system in Slovakia is provided by the Life Long Life Concept (2008), the Life Long Learning Strategy (2007) and Lifelong Life Advice (2007) and the Career Development and Advisory Association (ZPKPRK).

The concept of lifelong counseling defines counseling as a continuous process that helps adults shape skills, competences and interests, make decisions about education, training / retraining and employment, and build an individual development strategy in education, work and other areas of life where these skills and competences can be acquired and / or used.

The Life Strategy and Life Advice Strategy (2007) states that "counseling is a set of counseling services provided to adults in accordance with their inquiries to address education, career choices and career development at any stage of their life.

The program of the development of the Slovak Republic (2008) proclaims the need to create the necessary conditions for the introduction of a system of counseling in order to create equal opportunities for citizens to receive information not so much about the potential of adult education, but also about the prospects of applying the acquired knowledge, skills in the labor market, which will enable to properly direct adults in choosing the forms of study, will increase their ability to work and mobility in the labor market.

Slovak scholar L. Hloushkova (Hloušková, 2010) states that "counseling carries out a supporting function in life-long education, providing for the formation of individual competences for the management and planning of their professional growth and education. The scientist recognizes the two-sidedness of this process: life-long counseling through education will contribute to the overall development of an adult's personality. L. Shirova adds that "the concept of counseling should help adults to solve a number of important issues" (Šírová, 2010).

C. Mayer defines counseling as a systemic institution, a professional and comprehensive service whose purpose is to provide advice, information, and solutions in solving specific life problems (Mayer, 2017). We are talking about a specially organized professional orientation of the individual based on an analysis of its relevance, taking into account the physical and psychological individual characteristics, general and professional interests, inclinations and abilities, the level of education and training. In conducting the consultation also take into account the needs of the labor market, employment opportunities, professional growth, working conditions, etc. The author notes the close interaction between life-long education and counseling, which serves as a facilitator of lifelong learning, whose effectiveness is determined by the quality of the counseling process.

I. Pirohova implies such counseling as an andragogy – a specific form of assistance to an adult in problem situations through education and training (Pirohová, 2015). The psychological sense of counseling is to help adults resolve their own problems of professional life. Hence the main task of counseling is to reconcile the individual professional capabilities and needs of the client with the interests of the labor market, as a result of which professional self-determination of the individual takes place, her life and professional plans are formed or perfected, and productive changes are made in her professional activity and behavior.

The subject of andragogical counseling is defined by V. Prusakova as (Pruš̌aková, 2005):

✓ problem situations that can be solved through education and training, such as unemployment, career growth, career change, etc. Customers seek help from a consultant to assist in solving the situation, obtaining reliable information on the labor market and its needs;

✓ the issue of the effective use of leisure time (leisure), in particular by means of training;

✓ problems arising in the training of both the adult and the person who teaches them about the forms, methods, techniques and teaching techniques. For example, an adult does not know how to build his own learning strategy, how to combine work and education, where to get the appropriate education, etc. The consultant, along with the adult, makes an individual training schedule for the adult and helps in its implementation. On the other hand, in andragogy also there may be problems as to which techniques can be effective in adult learning. In this case, the counselor helps the andragogue in the selection of effective techniques.

Considering the subject of andragogical counseling, C. Mayer highlights two types of counseling – professional and career, which differ in the following: the first occurs predominantly at the beginning of the adult work and provides him with awareness of the professional orientations of the individual. Career guidance is effective if you meet the need for an adult career growth, when you select a career strategy advancement strategy. Such a division of andragogical counseling is due to the dynamic development of continuing education, the emergence of the need for education in life, the constant changes in the labor market in accordance with the economic transformation of society and the need for the acquisition of modern competencies by adults.

The subject "Andragogical advice" is obligatory for the students of the third year of bachelor's degree studying in the specialty "Andragogy" at the universities of Slovakia, in particular, at University of Prešov. Contents of the discipline are: the history of the development of andragogical counseling; scientific concepts of andragogical counseling; approaches to andragogical counseling and its types; the specifics of the consultation process and its stages; methodology of andragogical counseling; professional ethics and counseling (andragogický poradca); Emotional burnout syndrome and its prevention.

The analysis of the specialties that is training the personnel in the field of adult education in Ukraine has shown that andragogical counseling is tangent to such specialties as information management; management of personnel, organizations, socio-cultural activities, management of public organizations, public institutions, international educational projects, innovations in education, psychological counseling, etc. However, in Ukraine, unlike Slovakia, it does not have a clear focus on the andragogical aspect of counseling, but it has a clear focus on management. This makes it impossible for an interdisciplinary approach to the counseling system that we see it in the Slovak Republic, with a clear distinction between the andragogical context.

Conclusion. The presented analysis of trends in the development of adult education provides grounds for identifying a common and characteristic process for this process in Ukraine and in Slovakia. Thus, the general tendencies are: globalization, democratization, individualization of adult education, alternative ways of obtaining education, orientation of professional training of adults in adult education to ensure the competitiveness of the adult in the labor market.

Specific features of the development of adult education in Ukraine are: the establishment of a legal and regulatory framework; the introduction of an andragogical model of training in formal education institutions, professional training of andragogues as a separate area for the training of adults in adult education, and initiatives to create and disseminate the experience of creating innovative educational services for different categories of adult population.

The Slovak Republic as a member state of the European Union has a well-established tradition of adult education through legislative provision, an effective system of training andragogues as adults in adult education, and providing adult education in formal and non-formal education institutions. Ukraine is just beginning to climb on the path to the formation of an adult education system as a powerful sphere of social and economic development of the country. And the first step in this direction should be the adoption of the Law "About the Education of Adults", the project of which received serious support from the public.

The perspectives of further research include the analysis of the peculiarities of training specialists in the field of adult education in the Slovak Republic with the possibility of transferring positive European experience to the domestic educational practice of higher education institutions.

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УДК 374.7-027.1(437.6)(477)

Становлення та розвиток освіти дорослих в Україні та Словацькій республіці: порівняльний аналіз

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Реферат. Представлено результати порівняльного аналізу становлення та розвитку освіти дорослих в Україні та Словацькій республіці. Визначено тенденції розвитку освіти дорослих у обох країнах: загальні (глобалізація, демократизація, індивідуалізація навчання дорослих, спрямованість професійної підготовки фахівців у галузі освіти дорослих на забезпечення конкурентоспроможності дорослого на ринку праці та ін.) та специфічні (становлення нормативно-правової бази, професійної підготовки андрагогів як окремого напряму підготовки фахівців у галузі освіти дорослих та ін.).

Доведено, що Словацька республіка як країна-член Європейського Союзу має вже усталену традицію функціонування освіти дорослих через якісне законодавство, ефективну систему підготовки андрагогів як спеціалістів у галузі освіти дорослих, дидактичне забезпечення навчання дорослих у закладах формальної та неформальної освіти. Зокрема, актуальним напрямом використання словацького досвіду у розвитку освіти дорослих в Україні є сприяння безперервному професійному вдосконаленню дорослих через механізм порадництва (poradenstvo) – персонально орієнтованого професійного консультування. Аналіз спеціальностей, за якими ведеться підготовка персоналу в галузі освіти дорослих в Україні, показав, що андрагогічне порадництво дотичне до таких спеціальностей, як інформаційний менеджмент; менеджмент персоналу, організацій, соціокультурної діяльності, управління громадськими організаціями, закладами освіти, міжнародними освітніми проектами, інноваціями в освіті, психологічне консультування та ін. Утім в Україні, на відміну від Словаччини, воно не має чіткої спрямованості на андрагогічний аспект консультування, проте має чітку направленість на менеджмент. Це унеможливлює інтердисциплінарний підхід до системи порадництва, яким ми бачимо у Словацькій республіці, з чітким виділенням андрагогічного контексту.

Ключові слова: *освіта дорослих, андрагогічний підхід, андрагог, порадництво.*

Received: 03 May 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.202-209

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp.202-209

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

PROFESSIONAL AND PEDAGOGICAL TRAINING OF THE TEACHERS IN THE CONTEXT OF INTERNATIONALIZATION OF EDUCATIONAL SPACE IN GREAT BRITAIN

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Abstract. Using the comparative and content analysis of European and British normative documents and regulatory laws the main approaches to improving the professional training of the British teacher ready to work in the context of internationalization have been defined: namely, competence, modernization of the content of vocational training, practical-oriented.

The implementation of the competence approach involves the development of new standards for the professional teacher training of the British teacher based on European professional competences, including the following components: European identity, European knowledge, multiculturalism, European professionalism, European citizenship and European academic mobility of teachers.

The modernization of the content of vocational and pedagogical training of the British teacher is carried out through the introduction the international dimension into the basic professional disciplines and disciplines of the social and humanitarian cycle, the introduction of special courses of international orientation ("European space", "Pedagogy and European space in education").

The implementation of the practice-oriented approach to improving vocational and pedagogical training provides the performance of internships for teachers in higher educational institutions in Europe, organization of pedagogical practice of the students in one of the higher educational institutions of Europe or the world.

Keywords: *professional and pedagogical training of the teachers, internationalization, European educational space, professional competence, practical-oriented approach.*

Introduction. The problem of formation of pedagogical staff adapted to the modern conditions of a globalized society requires the improvement of the system of vocational and pedagogical teacher training for activities in the context of internationalization of the educational space. The strategic directions of the development of the educational system of Ukraine are to increase the quality of professional and pedagogical training of future teachers. The contemporary socio-economic conditions and dynamic transformations in education require a high level of teachers' professionalism, a creative approach to professional activity, social-professional activity and ability to lifelong learning. The new generation of teachers should have a high level of theoretical and practical training to meet the challenges of time, needs of a globalized society and the demands of modern educational reality.

Materials and methods. The Laws of Ukraine "On Higher Education" (2014), "On Education" (2017), the National Strategy for the Development of Education for the period up to 2021 (2013), the Concept of the New Ukrainian School (2017) and other regulatory documents have stressed the need for a comprehensive development of a personality, preparation of a competitive and qualified specialist, creation the favorable conditions for creative self-realization of every person. As the teaching staff is the driving force in reforming the education, there is a public need for initiative, comprehensively educated professionals

capable of further professional development. In these conditions the problem of improving the quality of education is actualized in educational institutions that train teachers. Studying the experience of European countries in the context of educational reforms and implementation of the progressive ideas of foreign experience in domestic practice will contribute to the improvement of Ukrainian vocational and pedagogical training system of future specialists.

The review of scientific literature has shown that various aspects of the above problem are the object of thorough study. The essence of professional formation and development of a personality as an integral process is considered by O. Asmolov, T. Bocharnikov, E. Zeier, P. Kosenko, A. Markov, N. Mukan and others. In contemporary scientific works theoretical aspects and practical solutions to the problems of professional development of the future specialist is highlighted in the context of the new personality oriented paradigm and subject-subject interaction of the participants of the educational process (I. Bech, O. Bondarevskaya, N. Borysko, A. Budarny, V. Hashimova, S. Podmasin, V. Serikov, M. Chobitko, I.Yakimanska, S. Yatsenko and others).

The theoretical and methodological principles for improving the professional training of British teachers are emphasized in the works of foreign researchers N. Annan, A. Byrne, S. Ball, J. Davies, B. Campos, A. Kelly, A. Ogg, S. Tomlinson, G. Whitty, C. Higginson and others. The analysis of the works of the mentioned authors testifies the correspondence of the modernization of vocational and pedagogical training of the British teacher to the requirements of the European policy of internationalization of educational space.

The process of integrating Ukrainian education into the European educational space predetermines the need for critical reflection and creative use of the positive experience of foreign countries, in particular of Great Britain, which has a rich history, traditions and heritage in the system of training future teachers. Training in Great Britain has suffered numerous changes and reforms. This country has survived the ups and downs, but nowadays it takes the first place in the world for the quality of higher education. That is why using the experience of this country will help to justify approaches for updating the system of training future teachers in Ukrainian institutions of higher education.

Research methods: comparative and content analysis of normative and regulatory documents – to determine the state of the development of the investigated problems, in particular problems of managing internationalization of higher education at European, national and institutional levels; analysis and synthesis – to identify the main approaches to improving the professional and pedagogical training of the British teacher; system analysis – to define the components of the internationalized curricular of the professional and pedagogical training of the British teachers.

The aim of the paper is to define and characterize the main approaches to improving the professional and pedagogical training of the British teacher to work in the conditions of internationalization of educational space: in particular, competence, modernization of the content of vocational training, practical-oriented.

Results and discussions. The detailed analysis of the European strategy for the development of vocational and pedagogical training and official documents of Great Britain on the outlined problem allows us to define the main approaches to improving the professional training of the British teacher to work in the context of internationalization of the educational space: in particular, competence, modernization of the content of vocational training, practical-oriented (Chernyakova, 2013).

The current stage of development of the European educational policy in the field of vocational teacher training is connected with the development of knowledge society and qualitatively new requirements for the professional qualification of a specialist, which becomes a productive force for increasing the competitiveness of the state. In the conditions of internationalization of the educational space the updating of vocational-pedagogical training is carried out through the introduction of key competences that a modern teacher must possess. The implementation of the competence approach involves the inclusion in the new standards of vocational and pedagogical training of the British teacher European professional competences containing such components as European identity, European knowledge, multiculturalism, European professionalism, European citizenship and European academic mobility.

The need for the introduction of new approaches to the practice of vocational teacher training for a European teacher was announced in May 2000 at a meeting of the European Commission in Lisbon and proclaimed by the program "Strategic Framework for Education and Training 2010" (Council Conclusions on a strategic framework for European cooperation in education and training, 2009). The Lisbon Strategy has identified priority areas for the development of the European Union's educational policy aimed at strengthening the EU's global competitiveness by means of the renewal of the economic and social spheres, in particular, of vocational education.

The main document of the Council of Ministers of Education of the EU, which specifies the Lisbon Strategy's task and identifies the prospects for the

development of vocational education in Europe, is the Concrete Future Objectives of Education Systems (2001). The analysis of the Concrete Future Objectives of Education Systems (2001) proposes that the first step in implementing the main ideas of the Lisbon Strategy is the coherence of the actions at the national (state), institutional (educational institution) and personal (student) levels in order to improve the quality of education and training in each of the EU member states (Communication from the Commission: Making a European Area of Lifelong Learning a Reality, 2001).

Thus, in the "Detailed Work Programme on the Follow-up of the Objectives of Education and Training Systems in Europe" (2002) the need for the formation of national educational priorities for the improvement of professional training of teachers in accordance with European requirements is emphasized. The evidence of the coherence of the national policy of internationalization of education in Great Britain with the European requirements is the initiative of the Ministry of Education and Science of the United Kingdom to implement the European dimension in the system of vocational and pedagogical training of future teachers by means of internationalization of the curriculum and the introduction of common professional qualifications (White Paper: Excellence in Schools, 1997). According to the new initiatives, teachers are responsible for forming the international competencies of the students that are necessary for life in a modern globalized society.

The next step in implementing the main principle of the Lisbon Strategy in Europe was the meeting of the Ministers of Education in Barcelona (2002) and the signing of the work program "Draft Strategy Paper on Key Competencies". The programme provides thirteen important vital goals and relevant indicators for the development of professional competencies and is aimed at:

- ✓ improving the quality and efficiency of vocational training (improving the professional and teacher training of teachers and methodists, increasing the number of young people involved in the field of scientific and technical research);
- ✓ the development of continuous and accessible education (ensuring the free access of every citizen of the EU to qualitative education and training, raising the level of foreign language competence of European citizens, the development of academic mobility and European cooperation) (Eurydice, Key Competences: A developing concept in general compulsory education, 2002).

It should be noted that the realization of the main provisions of the Lisbon Strategy has been implemented into practice in European indicators of the national plans for the development of vocational and educational training of the EU countries, primarily the United Kingdom(Europa Forum, Common European Principles for Teacher Competences and Qualifications, 2005).

In 2004 in a joint report of the Council and the EU Commission on the implementation of the goals of the Lisbon Strategy in the context of professional training, it was stated that "the motivation, skills and competences of the teachers, faculty, administration of the educational institution are key to achieving quality educational outcomes" (Council of the European Union, The Success of the Lisbon Strategy Hinges on Urgent Reform, 2004).

The problem of forming the teacher's European competences is highlighted in a number of educational normative and regulatory documents: "European Qualification Framework for the European Higher Education Area"; "Common European Principles for Teacher Competences and Qualifications"; "Teachers Matter: Attracting, Developing and Retailing Effective Teachers"; "Improving the Quality of Teacher Education" and others, the analysis of which indicates the relevance and dynamism of the investigated process, the existence of consistent changes that determine the nature of the transformations in the awareness and specification of European professional competences of the teacher.

Thus, within the framework of the "European Qualifications Framework for the European Higher Education Area" (2005), the main groups of professional competences of the modern teacher have been presented, namely:

- ✓ competences in the field of civic education of the students (readiness for life in a multicultural society, awareness of the European identity, knowledge of the specific features of cultures, traditions, religions of the people of the world, and the ability to impart such knowledge to the students);
- ✓ competences that promote the development of student learning skills needed for lifelong learning (motivation for learning, ability to use ICT in the educational process, communicative skills);
- ✓ interdisciplinary competencies (first of all, the ability to develop internationalized curricula) (Europa Forum. Common European Principles for Teacher Competences and Qualifications, 2005).

The key competences of a modern teacher are outlined in the European Commission's Directives "Common European Principles for Teacher Competences and Qualifications" (2005). In particular, the key competence is recognized as an ability to work with modern information technologies; presence of diplomatic abilities of the person (knowledge of the basics of psychology, tolerance, ability to work in a group), an ability to carry out an educational mission (preparing students for the role of active citizens of

the EU, respect and understanding of different cultures and their values) (Europa Forum. Common European Principles for Teacher Competences and Qualifications, 2005).

Further characterization of the competences of a modern European teacher is presented in a document "Teachers Matter: Attracting, Developing and Retailing Effective Teachers" (2005). The mentioned document outlines the newest requirements for the teacher's profession in accordance with the organizational, methodological and educational aspects of his activity (OECD, Teachers Matter: Attracting, Developing and Retailing Effective Teachers, 2005).

The systematization of the basic ideas of the analyzed position allows us to determine the complex of competences that a modern teacher must possess in the context of the internationalization of the educational space. This is, in particular, the availability of an appropriate level of education which corresponds to the international standards; the ability to perform professional duties in a multicultural environment, to use innovative educational technologies in the conditions of multicultural Europe; to teach in accordance with the cross-cultural transformations of the curriculum; an ability to international partnership through means of participation in international educational projects.

The comparison of competences recognized in the analyzed documents of vocational and pedagogical training of the teachers has allowed us to present the general characteristics of the profession of modern European teacher, in particular, the availability of a relevant document on education and professional qualifications, guaranteeing continuity in education (self-education and lifelong education), academic mobility (the desire to increase the personal qualification level in educational institutions of Europe), promotion of regional and international cooperation with the educational institutions of the country and the world that were presented in the document "Common European Principles for Teacher Competences and Qualifications" (Europa Forum, Common European Principles for Teacher Competences and Qualifications, 2005).

The implementation of a competent approach to improving the professional teacher training of a modern teacher involves the inclusion in the new standards of vocational and pedagogical training of the British teacher the European professional competencies, the main components of which are set out in the European Network (ENTEP) – "What is a "European Teacher" (2008). In particular, the following components have been established:

- ✓ European identity (awareness of a person of his national origin and belonging to the European community of people);
- ✓ European knowledge (teacher's awareness of the specifics of educational development in European countries and the peculiarities of the national education system);
- ✓ multiculturalism (knowledge of own national culture and understanding and respect for traditions, customs of the people in the world, fluency in teaching foreign subjects);
- ✓ European professionalism (the ability to teach educational material in accordance with the European requirements);
- ✓ European citizenship (awareness of educational, moral, legal, social values of Europe, ownership of the rights of a European citizen, fulfillment of civil obligations of a modern European);
- ✓ European academic mobility of teachers (improving their own qualifications abroad, intensive study of foreign languages, participation in international academic exchange programs (ENTEP, Schrats, 2006).

Within the framework of the competent approach to improving the teacher's professional and pedagogical training, a great deal of attention is paid to the formation of a teacher's foreign language competence, which, according to the "Council of Europe on Language Educational Policy" (2003), is recognized as readiness and ability of a person to the professional activity in a multicultural society; the ability to function in real conditions of foreign communication.

The professional teaching of the British teacher in the context of internationalization of educational space involves the process of covering the main stages of the professional activity of the teacher, which is the basis of continuous pedagogical education, namely:

- ✓ preparatory (ITE) – includes the professional formation of the future teacher, that is his studies at a higher educational institution during two years;
- ✓ induction (Induction)– the period of adaptation, or induction, which includes the year of study in a pedagogical institution and the year of internship at school (this stage is the introduction of a profession, the adaptation of a young specialist to a school, a pedagogical team and, especially, to pedagogical activity);
- ✓ basic (INSET) – a period of professional development and professional careers (Polishchuk 2011).

The next approach – modernization of the content of vocational and pedagogical training of a British teacher in the context of internationalization of educational space involves providing an international dimension to the basic professional disciplines, disciplines of the social-humanitarian cycle, the introduction of special courses of international orientation and takes place within the framework of training in higher educational institutions (preparatory stage).

There is a strengthening of the government's support for international transformations of the system of vocational training of the teacher, the introduction of state initiatives to increase the prestige of the pedagogical profession. According to the White Book "Success at Schools" (2008), the problem of modernization of the system of pedagogical education of the country becomes a priority (White Paper, Excellence in Schools, 1997).

Thus, Teacher Training Agency was created in the UK in 1995, which was the result of the reforms in the field of vocational and pedagogical teacher training. The priority directions of the agency's educational policy were the coordination of the actions in the system of continuous professional development of teachers through the definition of competencies, professional development of management personnel.

The Government's interest in improving vocational and educational training reflects the development of professional standards for elementary teacher education in 2009 with the support of the Department for Children, Schools and Families and the Agency for Preparation and Development of Schools in England. Such actions contributed to the increase of the prestige of the teaching profession in the country, which confirms the fact that the number of students in England has increased, who has received education in the specialty "Primary Teacher Education". So, according to the statistics in England in 2010, about 40,000 students were studying in the specialty "Primary Teacher Education" (Polishchuk 2011).

It should be noted that the Agency for Preparation and Development of Schools of England seeks to increase the number of students of higher educational institutions in the country in the field of "Pedagogical Sciences", which contributes to raising the national level of education in the state. According to the researcher G. Whitty the specific structure of the country's education system implies the variability of opportunities for primary teacher education through a centralized educational training. Leading consortia of schools or other educational institutions (higher pedagogical institutes, scientific associations, educational societies), in accordance with the specialty, develop a unified curriculum involving different schools. Upon completion of the course, the students or interns receive a diploma stating their qualifications, which gives them the right to continue their education in higher educational institutions (Whitty, 2000).

It is necessary to mention that for teachers of secondary schools of the country it is mandatory to increase professional qualification, professional self-improvement, which involves a purposeful two-year study under the national program "Teacher" (the first year – study according to the postgraduate education program for teachers, the second one – according to the international teacher training program), which ends with obtaining a certificate of postgraduate pedagogical education. In addition, each teacher has to deal with international activities, cooperate with partner educational institutions.

The scientific research of foreign works make it possible to state that the internationalization of British vocational education is carried out through the europeanization of its content and the ratification of EU professional qualifications (Buchberger, Campos, Kallos & Stephenson, 2000). The researchers assert that the formation of a united educational space requires the introduction of internationalized content in the system of pedagogical education, preparation of teachers for the teaching the newest educational disciplines, in particular, "Multiculturalism", "Citizenship".

Based on the analysis of the official website of Roehampton University, London, we have identified the directions of internationalization of vocational and pedagogical training of future teachers in the context of Europeanization of its content:

- ✓ enriching the international dimension of curricula (introduction of the special course "European Space");
- ✓ obligatory internship of teachers in one of the higher (pedagogical) educational institutions in Europe (from 2 weeks to 1 academic year);
- ✓ organization of pedagogical practice of the students in one of the higher (pedagogical) educational institutions of the world or Europe;
- ✓ development and introduction of the modular course "European Space", "Pedagogical Issues and European Space in Education" on the basis of the Faculty of Pedagogy (Postgraduate Courses. Roehampton University, 2019).

On the basis of the analysis of the site of the University of London, the Europeanisation curriculum changes of the professional training of future teachers, are aimed at introducing the subjects with an international dimension. In the context of the Europeanization of the content of vocational education, the course "Civil Education" has been enriched with an international dimension. First of all, the thematic plan of the course has introduced the following topics: "Democratic form of government in Europe and in the world", "The rights of European citizens", "Civil society – social freedom of the person" (Postgraduate Courses. Roehampton University, 2019).

Curricular changes are aimed at forming a citizen with a global and critical thinking capable of respecting different cultures and traditions, ready to accept innovations, mobile, able to play the role of the leaders in a multicultural society.

In the context of the internationalization of the content, international educational standards for the training of literature and language teachers include the study of classical, modern, ethnic literature, historical periods of the development of the culture of other countries; analysis and comparison of the social and cultural aspects of the texts with the presentation of the cultural region; development of communication skills in a multicultural environment (Postgraduate Courses. London Metropolitan University, 2019).

Thus, the modernization of the content of pedagogical education in the context of internationalization of educational space occurs through the introduction of internationalized curricula, programs, courses of professional and pedagogical preparation of British teachers.

The implementation of the practice-oriented approach to improving the professional teaching of the British teacher provides the introduction of internships in higher educational institutions in Europe, the organization of pedagogical practice of the students in one of the higher educational institutions of Europe or the world.

The comparative analysis of the sites of Cambridge and Oxford Universities and the London Institute of Education has allowed us to determine the specifics of the international programs for the training of future teachers in the above-mentioned institutions of higher education. For example, at Cambridge University the training of future Masters Teachers in the educational direction "Master of Education" is carried out under the program "PGCE". Education involves a compulsory stay (from two weeks to six months) in one of the partner regional schools in eastern England or in educational institutions in the USA, Germany and France. The main purpose of this program is to get practical experience working with the children's team, studying culture, traditions, and specific features of the language in different countries of the world. In addition, since 2010 the Cambridge University has a new program aimed at gaining pedagogical education and increasing the number of highly educated citizens in the state. After completing the course certified teachers have the opportunity to work in one of the country's partner schools. It should be noted that at the initiative of the government and supported by the Faculty of Education of Cambridge University of the Faculty of Pedagogy, partner schools have formed "The Cambridge Area Teaching Schools Alliance", whose activities contribute to increasing the number of masters in the country and activating the process of internationalization of educational space.

So, at Oxford University the training of future masters is carried out under the PGCE program, which involves close collaboration between the Oxford University School of Education, regional schools and educational institutions in Australia, France and Japan. This partnership allows changing the quality of teaching materials, improving the qualifications of teachers and gaining joint work skills between a higher education institution and a regional comprehensive educational institution in the country (Innovation and Partnership. Oxford University, 2019).

London Institute of Education offers master's programs for graduates from their home countries and foreign entrants from the European Union who want to become a teacher of a general education institution. It should be stressed that teaching at London Institute of Education involves a comprehensive training of the future teacher, namely: practical (assistant teacher of a comprehensive educational institution) and theoretical (comprehensive knowledge of specialty) (Postgraduate Courses. London Metropolitan University, 2001).

An important role in vocational teacher training is played by teachers "Thematic Network on Teacher Education in Europe" which brings together the ministries of education in Europe, national institutions, professional organizations, universities, training institutes of pedagogical staff. Distribution of distance learning contributes to the development of professional competences of an European teacher through the European Thematic Network for Teacher Education, the European School Network; at the national level – through the National Education Network in the UK, the Scottish Virtual Teaching Center, at the personal level – through multimedia programs, educational networks and so on.

Conclusions. The improvement of the professional training of the British teacher in the conditions of internationalization of educational space is carried out in accordance with the following approaches: competence, modernization of the content of education, practical-oriented. The implementation of the competence approach involves the development of new standards for the professional teacher training of the British teacher based on European professional competences, including the following components: European identity, European knowledge, multiculturalism, European professionalism, European citizenship and European academic mobility of teachers. The modernization of the content of vocational and pedagogical training of the British teacher is carried out through the introduction the international dimension into the basic professional disciplines and disciplines of the social and humanitarian cycle, the introduction of special courses of international orientation ("European space", "Pedagogy and European space in education"). The implementation of the practice-oriented approach to

improving vocational and pedagogical training provides the performance of internships for teachers in higher educational institutions in Europe, organization of pedagogical practice of the students in one of the higher educational institutions of Europe or the world.

Thus, the comparative analysis, systematization and summarizing of the progressive British experience in improvement the system of vocational and pedagogical teacher training make it possible to conclude that similar approaches to the transformation of the organization of Ukrainian vocational and pedagogical teacher training can be successfully used at the national, institutional and individual levels in order to support the European policy of internationalization of higher educational space.

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УДК 378-057.87:37]-045.32(410)

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Реферат. Аналіз професійно-педагогічної підготовки вчителів у Великій Британії довів, що трансформація освіти відбувається відповідно до вимог європейської політики інтернаціоналізації освітнього простору. На основі порівняльного та контентного аналізу європейських та британських нормативних документів та регуляторних законів визначено основні підходи до вдосконалення професійної підготовки британського вчителя, готового до роботи в контексті інтернаціоналізації: компетентісний, модернізації змісту професійної підготовки, практико-орієнтований.

Реалізація компетентнісного підходу передбачає розробку нових стандартів професійно-педагогічної підготовки британського вчителя на засадах європейських професійних компетентностей, що включають такі складові: європейська ідентичність, європейське знання, мультикультуралізм, європейський професіоналізм, європейська громадянськість, європейська академічна мобільність учителя.

Модернізація змісту професійно-педагогічної підготовки британського вчителя здійснюється через збагачення міжнародним виміром базових професійних дисциплін та дисциплін соціально-гуманітарного циклу, уведення спецкурсів міжнародного спрямування ("Європейський простір", "Питання педагогіки та Європейський простір в освіті").

Реалізація практико-орієнтованого підходу до удосконалення професійно-педагогічної підготовки полягає у запровадженні стажувань викладачів у вищих педагогічних закладах Європи, організації педагогічної практики студентів у одному з вищих педагогічних закладів Європи або світу.

Ключові слова: *професійно-педагогічна підготовка вчителя, інтернаціоналізація, європейський освітній простір, професійна компетентність, практико-орієнтований підхід.*

Received: 28 April 2019
Accepted: 24 May 2019

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)
https://doi.org/ 10.32835/2223-5752.2019.18.210-214

Scientific herald of the Institute of vocational education and training of NAES of Ukraine.
Professional Pedagogy/1(18)'2019, pp. 210-214

INSTITUTE OF VOCATIONAL EDUCATION AND TRAINING OF NAES OF UKRAINE

MONITORING OF EDUCATIONAL ATTAINMENT OF STUDENTS AT KHERSON MARITIME EDUCATIONAL INSTITUTIONS FROM THE 1970S TO THE 1990S OF THE 20TH CENTURY

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Abstract. The article highlights the characteristics of monitoring students' educational attainment in maritime education institutions during the reorganization of the Soviet system during the 1970s and the 1990s. It analyzes the orders, circulars, reports, protocols of meetings of methodical associations and pedagogical collections and other documents, whose content is related to educational activities of Kherson maritime educational institutions. The analysis of historical literature shows that Kherson maritime education institutions, as well as other educational institutions of that time, were dependent on education reforms and state policy. A significant part of the government's orders, resolutions, instructions, decisions on the issues of monitoring education quality was presented by legislative, officially political and regulatory documents of state authorities and the management of the Soviet Union. It is specified that internal monitoring was conducted based on constant monitoring, which included assessing the implementation of written control tasks, oral answers, etc. As evidenced by the analysis of the protocols of Admiral Ushakov Shipbuilding College, the constant orders for raising educational attainment in educational institutions led to the fact that the process of monitoring educational activities of maritime students in this context was fictitious; all results of educational activities were characterized by student progress, which differed from the existing situation. However, such a policy on monitoring educational attainment of students reflected the constant reforms of the Soviet Union, which were aimed at fictitious increasing of student progress in all sectors of education. It is found that the flow of mostly quantitative indicators did not take into account individual and personal features and abilities of students since the dynamics of their development could have shown the true results of their learning, education and development and the real state of maritime education. It is clarified that the period from the middle 1980s to the early 1990s involved active reforming of professional education. Therefore, the organization of monitoring educational activities significantly improved: the general principles of building a rating system were followed; compulsory monitoring of students' current activities was introduced, which was later reflected in the final assessment; different types of education quality monitoring were singled out.

Keywords: *reforms on professional education, maritime education institution, internal monitoring, progress monitoring, rating system.*

Introduction. Approaching the European and world integration, the state has focused its efforts on achieving world standards. This explains the relevance of studying general problems of education development in pedagogical theory and practice and its individual components. An analysis of state educational policy in different historical periods and an objective consideration of the accumulated experience will contribute to further developing the industry, including all branches of maritime education. The precise attention of the pedagogical community is paid to the issues of transforming the

education system in the 20th century, which are characterized by rapid changes in all spheres of life, which, in turn, have affected all branches, including maritime education. Given the education reforms during the 1970s and the 1990s, the issue of monitoring educational attainment in Kherson maritime education institutions remains relevant.

Materials and methods. Individual aspects of the problem under study were considered by many Ukrainian and foreign scholars. Thus, the studies on the history of pedagogy were conducted by V. Kuzmenko, A. Savchenko, N. Sliusarenko, O. Sukhomlynska, M. Yevtukh et al. The philosophical concepts of transforming the education systems were elaborated by such Ukrainian scholars as V. Andrushchenko, I. Ziaziun et al. Various aspects of the history of maritime education were explored by O. Chornyi (activities of maritime education institutions in the south of Ukraine), O. Tymofeieva (the history of maritime education in Ukraine in view of social and communicative competencies of future navigators), O. Chahaida (the characteristics of maritime education in Ukraine in the 20th century) et al. It is important to take into account archival documents since these are the primary materials of the State Archive of Kherson Region. The current research studies orders, circulars, official correspondence, relations, reports, protocols of meetings of methodical associations and pedagogical collections, reviews and responses of state qualification commissions for the defense of diplomas and other documents, whose content is related to educational activities of maritime education institutions in general and the monitoring of educational attainment in Kherson educational institutions. Given the educationreforms during the early 1970s and 1990s, however, the analysis of scientific works proves that the problem of monitoring educational attainment in Kherson maritime education institutions has not yet been properly investigated.

To achieve the set goal, the following methods were used: analysis, synthesis, generalization – to clarify the concepts of "monitoring", "monitoring educational attainment"; content analysis of archival sources of Kherson maritime education institutions – to characterize the organization of monitoring educational attainment.

The research aims to highlight the impact of education reforms on monitoring educational attainment in Kherson maritime education institutions during the early 1970s and 1990s based on the analysis of scientific works, archival and published documents.

Results and discussions. The analysis of historical literature shows that maritime education institutions were rather expanded and developed during the specified period. According to V. Khodakovskyi (2007), Kherson maritime education institutions, including Kherson Naval College of the Ministry of the Navy (1944-1970) and Lieutenant Schmidt Kherson Navy College (1970-1996), underwent 14 major reorganizations. In addition, the following educational institutions were operating in Kherson during this period: a vocational school preparing specialists in water transport; Admiral Ushakov Shipbuilding College.

Kherson maritime education institutions, like others, depended on education reforms and state policy during the specified period. A significant part of the government's orders, resolutions, instructions, decisions on the issues of monitoring education quality was presented by legislative, officially political and regulatory documents of state authorities and the management of the Soviet Union. They formulated an official position of the state on the policy on higher education development, outlined relevant measures for reforming higher education and updating the educational process. The educational process was based on the principle of concurrent teaching of general, special and professional non-related subjects. As a result, graduates were not given the opportunity to use a large part of their knowledge in future professional activities. As evidenced by the analysis of curricula of Lieutenant Schmidt Kherson Navy College, theoretical subjects, namely sociopolitical, military and medical ones, were of top priority, which were not connected with future professional activities. The process of training as a whole was conducted with the help of extensive methods. The amount of information needed to be acquired during the entire period of study steadily increased, as well as the number of classes. Internal monitoring was conducted based on constant monitoring, which included assessing the implementation of written control tasks, oral answers, etc. (Zvit pro navchalno-vykhovnu diialnist Khersonskoho morekhidnoho uchylyshcha im. leitenanta Shmidta, 1971 – 1972).

In this context, the current research pays considerable attention to government documents of the 1970s, which pointed out that research and educational institutions developed and solved important problems of education and professional focus of young people rather too slowly. For one, one should pay specific attention to the Resolution of the Central Committee of the Communist Party of the Soviet Union and the Council of Ministers of the USSR as of July 18, 1972 "On the Means of Improving Higher Education in the Country", which played a significant role in enhancing methods and organizational forms of teaching (Postanovlenie TsK KPSS. Pro sredstva usovershenstvovaniya vyisshego obrazovaniya v

strane, 1972). This resolution and similar orders, as evidenced by the analysis of the protocols of Lieutenant Schmidt Kherson Navy College, led to the fact that the process of monitoring educational activities of maritime students in this context was fictitious; all results of educational activities were characterized by student progress, which differed from the existing situation. However, such a policy on monitoring educational attainment of students reflected the constant reforms of the Soviet Union, which were aimed at fictitious increasing of student progress in all sectors of education. The flow of mostly quantitative indicators did not take into account individual and personal features and abilities of students since the dynamics of their development could have shown the true results of their learning, education and development and the real state of maritime education (Protokoly zasidan metodychnykh obiednan Khersonskoho sudnomekhanichnoho tekhnikumu im. admirala F. F. Ushakova, 1972 – 1973).

In the middle 1980s, general and professional education was being reformed. In Ukraine, higher education institutions (hereinafter "HEIs") significantly contributed to this process. The main measures aimed at solving the issues of reforming yielded some positive results: the quality of teaching in maritime education institutions significantly improved both in terms of student research training and monitoring of educational activities.

In this period, educational attainment was monitored through consolidated information on the progress by specialities; records of the hours skipped by students, principal's test papers, current test papers, etc. The first attempts to differentiate students are relevant for the current research, too. Based on transfer exams, all cadets were divided into two categories: the first category included cadets, who received at least 4 points from each subject, whereas all the others belonged to the second category. Based on the final exam, cadets were divided into three categories. The first category included cadets who received 5 points from all subjects; the second category included cadets who received 4 points from all subjects. All other cadets belonged to the third category. The cadets from the first and second categories were considered to have successfully graduated from an educational institution (Zvit pro navchalno-vykhovnu diialnist Khersonskoho morekhidnoho uchylyshcha im. leitenanta Shmidta, 1986 – 1987).

The Resolution of the Central Committee of the Communist Party of the Soviet Union "The Main Areas of Reforming Higher and Secondary Specialized Education in the Country" (1987), placed emphasis not only on the achievements of the Soviet system of higher education but also its problematic issues. For one, it indicated that, along with the leading universities of the country, there was the significant number of HEIs, which did not provide high-quality theoretical and practical training; the educational process was focused on increasing the amount of educational information rather than on developing independent creative thinking in students; little attention was paid to individual work of students; teachers' working hours exceeded the optimal amount, which led to a decrease in the quality of the educational process; the significant number of HEIs was not connected with production (Postanovlenie TsK KPSS. Osnovnyie napravleniya perestroyki vyisshego i srednego spetsialnogo obrazovaniya v strane, 1987).

The radical transformations in the content of higher education are related to designing and introducing new documents between 1988 and 1993, which implement a differentiated approach to training specialists for pedagogical, production and research activities. They have brought higher education closer to the requirements of society and education for a modern specialist, in particular, the adoption of the State National Programme "Education" ("Ukraine in the 21st Century") (1993) and the Law of Ukraine "On Education" (1991).

The process of reforming all educational branches has also affected the process of monitoring educational attainment of maritime students. The historical analysis of the protocols of Kherson Maritime College shows that the first attempts to build a rating system were initiated: compulsory monitoring of students' current activities, which were later reflected in the final assessment; various types of monitoring (tests), namely, initial, current, thematic and final ones, etc.; the results were often monitored at the end of semesters, as well as gradually and necessarily – for the entire period of study; the student educational rankings for a certain period was defined as the average of points from each subject (pass-fail tests or exams); the rankings were based on the accumulated points (Zvit pro navchalno-vykhovnu diialnist Khersonskoho morskoho koledzhu, 1991 – 1992).

Conclusions. Kherson maritime education institutions, like others, depended on education reforms and state policy during the 1970s and the 1990s. A significant part of the government's orders, resolutions, instructions, decisions on the issues of monitoring education quality was presented by legislative, officially political and regulatory documents of state authorities and the management of the Soviet Union. During the 1970s, the process of monitoring educational activities of maritime students in this context was fictitious and all results of educational activities were characterized by student progress, which differed from the existing

situation. In the middle 1980s, as a result of the introduced education reforms, the organization of monitoring educational activities significantly improved: the general principles of building a rating system were followed; compulsory monitoring of students' current activities was introduced, which was later reflected in the final assessment; different types of education quality monitoring were singled out. Further research should be aimed at studying the regulatory and legal basis for monitoring educational attainment of maritime students during the specified period.

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Моніторинг навчальних досягнень студентів у херсонських морських закладах освіти в 70 – 90 роках XX століття

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Реферат. У статті висвітлені особливості моніторингу навчальних досягнень студентів морських закладів освіти за часів перебудови радянської системи в 70 – 90 роках XX століття. Проаналізовано накази, звіти, протоколи засідань методичних об'єднань і педагогічних зібрань та інші документи, зміст яких пов'язаний із навчальною діяльністю Херсонських морських закладів освіти в цілому та їх моніторингом. Аналіз історичної літератури показав, що в означений період Херсонські морські заклади освіти, як і інші заклади того часу, були залежні від державної політики та освітніх реформ. Значна частина наказів постанов, інструкцій, рішень партії та уряду з питань контролю якості освіти була представлена директивними, офіційно-політичними й нормативно-розпорядчими документами вищих партійних та державних органів влади й управління Радянського Союзу. Внутрішній моніторинг здійснювався на основі постійного контролю, що передбачав оцінювання виконання письмових контрольних завдань, усних відповідей тощо. Як свідчить аналіз протоколів суднобудівного технікуму імені адмірала Ушакова, постійні накази про підвищення рівня навчання в закладах освіти призвели до того, що моніторинг навчальної діяльності студентів морських спеціальностей у такому контексті був фіктивним, усі результати навчальної діяльності характеризувалися високою успішністю студентів, що не відповідало реальній ситуації. Проте така політика щодо моніторингу навчальних досягнень студентів віддзеркалювала постійні реформи Радянського Союзу, спрямовані на фіктивне підвищення успішності студентів усіх галузей освіти. З'ясовано, що в потоці переважно кількісні показники, індивідуально-особистісних особливості та можливості студентів не враховувалися, оскільки динаміка їх розвитку могла б стати свідченням як справжніх результатів їхньої навченості, вихованості та розвиненості, так і реального стану морської освіти. Визначено, що в період із середини 80-х рр. до початку 90-х років XX століття активно проводилися реформи професійної школи. Тому помітно покращилась організація моніторингу навчальної діяльності: дотримуються загальні принципи побудови рейтингової системи; введено обов'язковий облік поточної роботи студентів, який потім відображено в підсумковій оцінці; передбачено різні види контролю якості навчання.

Ключові слова: *реформа професійної школи, морський заклад освіти, внутрішній моніторинг, контроль успішності, рейтингова система.*

Received: 03 May 2019
Accepted: 24 May 2019

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УДК 377/378(082)
https://doi.org/ 10.32835/2223-5752.2018.18.

У збірнику обгрунтовано теоретичні і практичні проблеми розвитку професійної, кар'єрної, підприємницької, маркетингової, самоосвітньої, цифрової та інших ключових компетентностей учнів/студентів у закладах професійної, фахової передвищої та вищої освіти. Висвітлено методичні аспекти формування в них професійно-етичної, правової та цифрової культури. Викладено результати аналізу сучасного стану підготовки педагогів до використання в освітньому процесі SMART-комплексів, інноваційних форм дослідницької діяльності, елементів дистанційного й дуального навчання фахівців для машинобудівної, аграрної, будівельної, морської галузей, а також фізичної культури і спорту, соціальної роботи та ін. Представлено історичні аспекти діяльності морських закладів освіти в Україні. Охарактеризовано особливості становлення і розвитку освіти дорослих у Словаччині, професійно-педагогічної підготовки вчителів у Великій Британії.

Для науковців, науково-педагогічних і педагогічних працівників закладів професійної (професійно-технічної), фахової передвищої та вищої освіти, структурних навчальних підрозділів підприємств, інститутів післядипломної педагогічної освіти, навчально (науково)-методичних центрів професійно-технічної освіти, аспірантів, докторантів.

Н 34 **Науковий вісник** Інституту професійно-технічної освіти НАПН України. Професійна педагогіка : зб. наук. праць : Вип. 18 / Інст-т проф.-тех. освіти НАПН України ; [Ред. кол.: В. О. Радкевич (голова) та ін.]. – ЖККГВ «Полісся» ЖОР., 2019. – 220 с. – Бібліогр. в кінці ст.
https://doi.org/10.32835/2223-5752.2019.18.

ISSN 2223-5752 (Print)
ISSN 2617-1759 (Online)

Scientific publication

Scientific Herald of the Institute of Vocational Education and Training of NAES of Ukraine:
collection of researches

Issue: 1(18)'2019

Executive editor – *Snizhana Leu*

Literary editor – *Lidiia Humenna*

Technical editor – *Vladyslav Belan*

Web-site scientific-technical editor – *Oleksandr Radkevych*

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The collection of scientific papers is in the List of scientific professional scientific publications of Ukraine for pedagogic sciences (Decree of MoES of Ukraine № 1411 as of 10.10.2013. Decree of MoES of Ukraine as of 15.01.2018).

Indexed: *scientometrical data base Index Copernicus International (12.07.2018); Google Scholar (since 2011)*
Added to the *database Ulrich's Periodicals Directory (25.08.2014)*
Reviewed: *Ukrainian abstract journal "Dzherelo" (the Source), abstract data base "Ukrainika naukova" (Scientific Ukrainika), sectoral abstract data base of V.O. Sukhomlynskyi State scientific and pedagogical library of Ukraine*

Archived *National library of Ukraine Vernadsky*

Represented *in digital catalogues of Yaroslav Mudryi National library of Ukraine, V. O. Sukhomlynskyi State scientific and pedagogical library of Ukraine*

Наукове видання

Науковий вісник Інституту професійно-технічної освіти Національної академії педагогічних наук України. Професійна педагогіка

Випуск 1(18)'2019

Відповідальний редактор – *Сніжана Леу*

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Збірник наукових праць включено до Переліку наукових фахових видань України в галузі педагогічних наук (Наказ МОН України № 1411 від 10.10.2013. Наказ МОН України від 15.01.2018).

Індексується: *наукометричною базою даних Index Copernicus International (12.07.2018); Google Scholar (з 2011)*

Внесено до бази даних *Ulrich's Periodicals Directory (25.08.2014)*

Реферується: *Українським реферативним журналом "Джерело", реферативною базою даних "Україніка наукова", галузевою реферативною базою ДНПБ ім. В.О. Сухомлинського*

Архівується *НБУ ім. В.І. Вернадського*

Представлений в електронних каталогах *Національної бібліотеки України імені Ярослава Мудрого, ДНПБ ім. В.О. Сухомлинського та ін.*

Approved for publication June 24, 2019
Format 60x84/8
Paper Lazer Copy. Printing Duplicator.
Headset Times New Roman.
The conditions printing. the arch 12
Order number 673

Prepared for printing and printed: Vyd."Polissia",
18A, Shevchenko str., Zhytomyr, 10008, Ukraine.
e-mail: polis333@ukr.net

A certificate of making a publishing business in the State Register
publishers, manufacturers and distributors of Ukrainian publishing products
Series ЖТ No 5, February 26, 2004