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The third issue contains articles by scientists from different countries, prepared on the basis of their scientific work. It is designed for university teachers, graduate students, undergraduates, practitioners in pedagogy and education management.

CONTENTS

CHAPTER 1
GENERAL PEDAGOGY AND HISTORY OF PEDAGOGY

A CASE FOR THE SOCIAL SCIENCES AND SOCIAL CAPITAL IN THE HIGHER EDUCATIONAL SYSTEM AND ECONOMY OF UKRAINE

Dennis Soltys[1]

[1]*Ph.D. (Comparative Politics), KIMEP University, Kazakhstan, University of Toronto, Canada, e-mail: dsoltys@kimep.kz*

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Abstract. *The article is devoted to the study of social sciences and social capital in the system of higher education and economy of Ukraine. The article aims to solve two tasks: The first - is to discuss the, not simple, relationship between the natural and social sciences in stimulating technological innovations; The second - is to show how the new concepts of social and cultural capital are connected to economic development. The main results of the article are presented in a study of scientific works devoted to the relationship between the social and natural sciences and how this relationship relates to educational and economic development. The methodological basis of the research is the methods of comparative analysis of scientific research in the field of social and natural sciences, the authors of which investigated human, social and cultural capital. The article also examines the main scientific discussions on the role of social and cultural capital. These are relatively new topics that are increasingly recognized as important components of development. It is stated that the humanities and social sciences should occupy a prominent place in education because, paradoxically, these subjects stimulate technological innovation and economic growth in modern knowledge economies. This view coincides with the school of New Institutional Economics (New Institutional Economics) and the school of "human relations" (human relations) in the field of management, which emphasize social and cultural factors for the effective functioning of organizations and economic development. The technocratic or scientific management paradigm has reached the limits of its usefulness in education, innovation, and economic progress. This paradigm now needs to be supplemented by more open educational systems and organizations, whose functioning is enhanced by cultural and social capital.*

Keywords**:** *knowledge economy, STEM, social sciences, social capital, welfare state.*

JEL Classification: B 10, I 18, L 88, O 31

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Introduction. In a globalizing world, many countries are increasingly concerned with their economic competitiveness. Accordingly, there is a common view that educational establishments should increase the STEM (science, technology, engineering, mathematics) weight within education and reduce the amount of social sciences. However, this view is an oversimplification. The humanities and social sciences retain (and perhaps even increase) their importance within the modern economy. A new paradigm of scientific innovation and economic development holds

that social capital and culture-bound characteristics of human organizations are essential components of economic development.

Literature review. There is a fundamental difference of approach to management, education, and economic innovation between technocratic "scientific management" and the more person-centred "human relations approach." The first emphasizes the STEM subjects in education; the second argues for the relevance of the humanities and social sciences.

A classic description of technocratic organizational and economic behaviour in the Soviet context was offered by Berliner [1], who observed a tendency to "innovation avoidance" and lack of incentive for innovation under central planning. More recently in this vein, Beissinger [2] similarly noted that Soviet industrialists believed excessively in technocratic or elitist management techniques in both scientific innovation and deployment of labour resources.

This technocratic frame of mind – characteristic both of Soviet practitioners and Western neo-liberals – is challenged by Allen [3], who asserts that advocates of technocratism and scientific management are misguided in their under-estimation of a humanities and social sciences component within education and innovation. Gulbrandsen and Aanstad [4] likewise argue that the efficacy of scientific management is over-estimated, while Stehr [5] notes that a wide combination of technological, managerial, economic, and human factors is necessary for a successful knowledge economy. This accords with the New Institutional Economics paradigm of economic development articulated by Nobel prize-winning economist Douglass North [6] and popularized by Acemoglu and Robinson [7], who emphasize the centrality of sound institutions and a supportive culture for economic progress.

A major scholar of social and cultural capital is Bourdieu [8], who describes how these two concepts may be used or abused within the educational system of a country. All of the above theories put together have contributed to the current ruling paradigm in educational and labour resource management called "human relations," well described by Daft [9], Mullins [10], and Brown [11]. Conceptual and practical variants in the economics of education and national development are surveyed in depth by Cohn and Geske [12].

Aims. The first purpose of this article is to discuss the, not simple, relation between the natural and social sciences in stimulating technological innovations. The second purpose is to show how the newer concepts of social and cultural capital are connected to economic development.

Methodology. The methodological basis of the research is the methods of comparative analysis of scientific research in the field of social and natural sciences, the authors of which investigated human, social and cultural capital.

Results. I suggest looking at humanities and social sciences versus STEM and human, social and cultural capital

1. The humanities and social sciences versus STEM

Ukrainian officials should be careful in choosing the sources for their policy ideas. Some ideas seem universal; some are old enough to seem national; but often the origins of ideas can be traced to the habits and justifications obtaining in the

USSR. The USSR was a country that placed an uncritical belief in the ability of managerialism and the natural sciences to solve socioeconomic problems. A case in point is the old debate over the right balance in education between the humanities and social sciences (HSS) on the one side and vocational-technical courses on the other.

This debate has its counterpoint in Western countries, where it is abetted by the ideology of economic neo-liberalism. Consequently, many countries have adopted narrowly techno-economic policies in their secondary and higher education [4, 13,]. In this view, a HSS educational component is considered, if not irrelevant to the modern world, then at least an expensive luxury that detracts public investment from education in the STEM sectors thought to be more necessary for technological innovation in a competitive world economy [3].

A contrasting view is that the HSS are central to technological innovation. The reason is that the realization of innovation is fundamentally a *social* process [3], and that a HSS component in education improves the organizational functioning within which innovation is achieved. In support of this reasoning, other authors assert that there is a "flawed belief" that scientific results are the primary input into innovation processes. In particular, commercialization of academic science through patenting, licensing, and creation of spin-off companies is an activity that receives too much attention compared to its volume and significance [14]. Similarly, Gulbrandsen and Aanstad [4] assert that general education and training of a nation's future workforce are more important for innovation than natural sciences research. However, the contribution of education and training to innovation is *indirect*; that is, general knowledge enables secondary and scientific school graduates to be more creative in scientific work. The authors note also that the main challenge of innovation processes "is rarely a lack of [natural] science ideas (they tend to proliferate) but the corresponding ability to put [innovations] into practice … through good user linkages." Consequently, educational courses focused excessively on the STEM fields may have little economic impact.

Furthermore, innovation – defined simply as "something new that is put into practical use" – is commonly found in low-technology and service industries [4]. For example, traditionally low-technology industries such as agriculture, transport, and logistics have vast potential for the application of known computer technologies. Therefore the emphasis should be to encourage not only STEM, but also to encourage the social sciences, which improve the functioning of social institutions and help diffuse the technological discoveries already at hand.

Unfortunately, vocationalist policy trends intensify in a weak economy, and result in a narrowly technical sort of education that creates a labour force that is passive at work and inactive civically [15]. As the economy declines because of misconceived educational and labour policies, this causes a downward spiral that seems to justify yet more vocationalism. This is what graphically occurred with the Soviet All-Union educational reforms of 1958, 1984, and 1988. The decline in the vigour of Soviet general and science education, and in economic performance, was accompanied by the vocational policy triumph and then stagnation of the Khrushchev-Brezhnev-Gorbachev education measures [16].

Essentially, Soviet policymakers lost their courage and opted for a "small" view of education and human abilities. Soviet budgets and institutional efforts retreated from fundamental scientific research to applied research, and from general secondary education to a more narrowly vocational one. At the same time, the Soviet economy failed to make the transition from a primarily commodities-based and steel-making profile to a services- and knowledge-based profile. Accordingly there was no inter-sectoral shift of labour and investment in the 1970s and 1980s from commodities and steelmaking industries to more modern electronics and service industries [17]. There was also a downward shift of students away from intellectually more-demanding general and science education towards vocational education, creating less intellectual value-added. That is, the talents of youths which could have been realized in more ambitious, knowledge-based professions were wasted by a misconceived vocational-technocratic policy of inducing youths into downward professional mobility and under-employment. And, as we witness today, the Russian economy lags technologically and remains undiversified.

It is well known that Soviet spending and efforts in research and development (5% of GDP) significantly underperformed; and only very late did Soviet policymakers understand that the economy was hindered by an under-developed service sector – a sector that comprises about 70% of the labour force in the most advanced Western economies. Most of the reason for poor innovation was the rigidities and disincentives caused by central planning, but also poor organizational functioning and the proverbial "waiting for instructions from above" by passive junior managers and workers. The underperformance of Soviet research and development and of a labour force trained for deference to authority underlines the importance for innovation of personal initiative and creativity, which a HSS education encourages.

Accordingly, Allen [3] takes issue with what he calls "techism" – the view that a country's prosperity requires a redirection of resources towards more technical education. He states that techism comes in two forms. "Highbrow techism" emphasizes the need for highly educated scientists and engineers to promote the expansion of manufacturing and related businesses. "Lowbrow techism" accents the need for the technical skills taught in one- and two-year college programs. Allen says that while it is true that the demand for technically trained workers is growing, the same is true for graduates in teaching, the humanities, and social sciences. These latter fields, he says further, are in demand because the widespread utilization of computers and information technology has revolutionized the organization of business and government. The new-style organizations put a premium on employees who can work independently and relate models to real situations, work well with other members of a management team or with clients, and who can speak and write effectively. These skills are developed in HSS programs. Techism, which concentrates on the production of new technologies and on the small details of their operation, misses the organizational revolutions that accompany the adoption of new technologies.

Another writer, Neuman [18], describes what occurs *intellectually* as children and youths read and study in the HSS. She argues that the HSS prepare people for many skills such as contextualization, creativity, ability to imagine alternatives, empathy, understanding of foreign cultures, problem-solving, and other skills that are useful for the economy, particularly the fluid and globalized economy of the present day. Holding to this view, the top universities – the Harvards, Stanfords, and Oxfords – have resisted the vocationalism and commodification of education currently advocated by neo-liberals, that threaten to submerge less prestigious universities. The most prestigious universities have survived decreased neo-liberal state budgets and increased "quality assurance" bureaucracies, because even the detractors of HSS have recognized that these universities produce intellectual value that more regulated and vocationalized universities may no longer be able to do well [19].

In a similar vein, Allen's evidence shows that specific skills training, by itself, has little payoff in a knowledge-based economy; that is, specific skills are brought to life only if accompanied by general education. And as per Neuman's description of the intellectual process within HSS education, one of the outstanding features of the knowledge-based economy is the breadth of advanced education and the skills it requires. Thus the relevant issue is not whether an employee knows how to operate an Excel spreadsheet, but to deal effectively with customers and colleagues, write and speak clearly, and make informed judgements [3].

Information technology has cut the cost of information. Concomitantly, the falling cost of information has made the hierarchical organization of business inefficient. Expensive senior managers no longer have the time to deal with all the information that can be cheaply and usefully produced. Citing Herbert Simon, a Nobel Prize-winning economist, Allen observes that "The scarce resource is not information, it is the processing capacity to attend to information. Attention is the chief bottleneck in organizational activity, and the bottleneck becomes narrower and narrower as we move to the tops of organizations" [3]. Therefore, the most desired employees are those who can take initiative in decentralized organizations, where employee characteristics developed by the HSS come to advantage.

The result of the computer revolution has been threefold, relates Allen. First, as noted, there is an increased demand for people who can understand the information generated by computer systems and apply it to the real world. These kinds of general intellectual abilities are the kinds developed in HSS programs. Second, organizational structures have become flatter. Instead of multiple layers of managers doing routine information processing, there are fewer layers in the hierarchy and employees are charged with analyzing and acting on the greater volume of processed information available. There is greater demand for people who can take responsibility; and whose capacities are cultivated in HSS programs. And third, the new-style employees need greater interpersonal and communication skills, both to deal with customers of the firms and to work together in self-directing teams. Once more, a HSS background makes employees more effective. In sum, the evidence

produced by Allen contradicts the lowbrow and highbrow technik vision of the emerging modern economy.

Consequently the techist, neo-liberal paradigm of education and labour training is losing some of its persuasiveness [20]. In any case policy should be informed by empiricism and not driven by ideology or stereotype. Thus it would be an error for Ukrainian policymakers to repeat the techist mistakes of Khrushchev and subsequent Soviet leaders. Policymakers should avoid what Evans [19] calls the "overmanagement of knowledge" and should not try to force the national economy into areas it does not need to go. Most of all, policymakers should not de-skill and de-intellectualize the young graduates of Ukraine, who have the ability for higher attainment than these policymakers might believe.

2. Human, social, and cultural capital

Following from the discussion above, it is evident that in conditions of a knowledge-based economy a focus only on human capital is insufficient; for countries also need to be more cognizant of social and cultural capital for maximizing educational opportunities and economic growth. This is especially true in a globalizing world in which individuals and organizations need to work with many people having different cultures and languages.

The concept of human capital is well known, being simply an arithmetical sum of the people in a country who have a certain number of years of education, vocational training, and work experience. But there is a need to understand how human capital relates to the newer concepts of social and cultural capital, and how an optimal combination of the three is desirable for a knowledge economy. A knowledge economy comprises a new developmental paradigm that links the economy to culture, and embraces economic, organizational, technological, and social aspects at both the macro and micro levels [21]. This implies the primacy of social inclusion and social and cultural factors in economic development. It also implies a culture of autonomy and openness of educational institutions [22]; and active participation within schools and universities by teachers and faculty, and by students who will become workers [23]. Furco [24] thus advocates an "engaged campus" that brings together multiple main stakeholders, where social and institutional processes, again, are central.

Social capital can be defined as the sum of trust among people in a society, that keeps people from conflict with each other and makes collective life possible and prosperous [25]. If citizens are willing to make sacrifices for the common good and obey the law though they could gain from dishonesty, they can be said to be living in a high social capital country. The transaction costs of doing business and of enforcement of laws and contracts are lower in high-trust countries, allowing society to invest its resources for more productive uses. Social capital is a seemingly intangible or qualitative concept, but nonetheless is greatly desirable for economic progress, because a trusting and peaceful society is more productive than one that wastes its substance on conflict and guarding. Social capital has consequences that are economically real [25].

Many authors assert that culture and social capital (stemming from history and subsequently expressed in institutions) are crucial for economic development. For example, Weber [26] argued that economic development was more rapid in the Protestant than Catholic regions of Europe, because Protestantism encouraged an ethos of thrift and individual responsibility instead of conspicuous consumption and responsibility-avoiding communitarianism. Similarly, Moore [27] and Huntington [28] saw that broad cultural movements forced the demand for democratization in politics, with the result that public institutions and economies were modernized. Fukuyama [29] goes so far as to say that culture, with attendant social values, is *the* crucial instrument in human progress.

This train of thought leads to the school of New Institutional Economics, whose authors argue that particular kinds of culture and institutions are crucial for the good functioning of economic systems; but not all countries have fortunate historical legacies that enable this. That is, a society must be able to set in place and enforce a transparent set of rules and laws, undergirded by social capital, within which an economy may develop. Without fair and enforceable laws and good institutional functioning, the economic field is left to exploitive monopolists and political authoritarians, who are usually one and the same [6, 7]. Thus, culture-based institutions embodying social capital are at the centre of economic progress. Without good institutions, the economy cannot grow well.

Further, this paradigm is informed by a related "human relations" or "open systems" paradigm of organizational functioning. This is a paradigm that is person-centred rather than elitist and emphasizes how the aspirations of individuals should be encouraged and aligned with broader institutional goals. The human relations paradigm emphasizes the empowerment and incentivization of individuals, instead of coercion and close supervision, which are holdovers from the old "scientific management" characteristic of Taylorism and Fordism, which had a counterpart in the USSR [2].

As for cultural capital, this concept owes much to Bourdieu [30], who considered cultural capital to be primarily a possession of individuals. This definition should not be confused with cultural capital as a feature of societies. In the case of individuals, cultural capital is considered to be such characteristics as ambition, materialism, confidence, and personal contacts, which help their possessors achieve upward economic and social mobility. Bourdieu asserted that cultural capital was closely connected to "socially useful knowledge," which tends to be stratified along lines of social class.

In Bourdieu's view, individual cultural capital and socially useful knowledge have the nature of "offensive weapons," used by the powerful and well-placed in society to forestall economic competition from the lower social classes. For example, knowledge of Ancient Greek and Latin, a possession of early-modern-era European youths from the upper classes, was necessary for social advancement at the expense of bright but indigent youths from the lower classes, even though Greek and Latin had no relation to technological and economic progress. More recently, French replaced Latin, and English is now replacing French as socially useful. Bourdieu's

point is that educational systems tend to be undemocratic and teach subjects that are not necessarily good either for citizens or for the economy. This occurs because established elites often try to use the educational system as a way to preserve their privileges, instead of opening society to the talents. In order to guard against ossification of the educational system, the system should continuously be imbued with a democratizing impulse.

The third type of capital, human capital, is both a private and a public good. It benefits the private person who has it; and it benefits the public because it contributes to economic competitiveness made possible by a skilled labour force. Consequently, both individuals and society have an interest in developing human capital. In practical policy terms, this means that individuals, taxpayers, corporations, and state officials can usually agree easily that human capital is a good thing. This view cuts across the ideological spectrum of socialists, liberals, and conservatives [31].

Thus it is usually easier to obtain financing for the kind of education that increases human capital than for other types of education, such as for citizenship, the arts, social justice, ethics, foreign languages and customs, or for social improvements such as the ecology or human rights. However, these are the subjects that help promote the growth of civic peace, social trust, and effective public institutions.

Human capital lies at the centre of an ongoing controversy concerning the extent to which education does or does not contribute to economic growth. And if so, then how? Some writers believe that education historically had little influence on economic growth. From this perspective it was factors other than education – natural resources, convenient transportation routes, organization, or the energy and ambition of individual inventors – that led to economic growth; and that education coincided with, but did not cause, economic growth. In this view, education is simply a luxury or consumption item. The opposite view holds that education and human capital are essential to economic development, especially in post-industrial economies. Consequently, any county that fails to spend enough on education will decline economically; and no country is rich that does not spend on education [32].

Authors Diebolt and Fontvieille [33] addressed this controversy in a long-run study of France and Germany from 1830 to 2000. The first observation the authors made is that, along with steady economic growth from the 1830s to 1945, there was also a steady upward trend in public expenditures on education. But they did not perceive that education had much to do with economic growth. Instead, they perceived the main causes of growth to be the presence of a large amount of finance capital and the better organization of labour and production. The educational institutions that existed at the time were not applied to the tasks of promoting economic growth, and these institutions did not conduct applied scientific research. This from the beginning of the industrial revolution until the interwar period of the 20^{th} century, the education and training systems of France and Germany developed on the fringe of the capitalist production system. The comparatively simple, mechanical technologies of that era did not require a particularly educated labour force to operate these technologies; instead, these technologies were enhanced by an obedient labour

force working on disciplined assembly lines supervised by professional bosses and managers.

All this, Diebolt and Fontvieille say, changed after 1945. The Second World War had disguised for a brief time the interwar economic depression, which had been marked by decreased returns of profit to finance capital. The authors make the interesting point that all the great advances of the welfare state occurred during or after each long depression; and that historically each depression was characterized by increased expenditures on human development, in both its social and human capital dimensions. The purpose of these measures was to improve the quality of the labour force, and in this way to increase the profit returned to finance capital. The increased public social expenditures in the first instance concerned education, but also covered the social welfare system, including child care, support for mothers, disability insurance, health, and reduced industrial accidents. The resulting higher social development then imposed itself as one of the driving forces of economic growth.

In the two authors' account, several other things happened after 1945. The first, just mentioned, was the maturing of the modern welfare state and workers' rights. Old assembly line techniques, based on obedient labour forces paid low wages, were not able to compete with modern labour forces that were better educated and enjoyed the productivity-enhancing social features of the welfare state. The second thing that happened is that the nature of technology itself had changed. The new main technologies were not based on simple mechanical engineering and metals and energy industries, but on more complex technologies such as chemistry and electrical engineering [33]. Figuratively speaking, one can place a poorly-educated metalworker on an assembly line, intimidate the worker, supervise closely, and force him or her to work; but this is not possible with a brain-worker. A brain-worker cannot be forced to think. The modern worker responds not to external threats but to internal incentives, and to working conditions that are not regimented but encourage the worker's initiative and creativity. These are things that come from within the worker and are controlled by the worker. This notion has its direct analogue in education, known by the term "student-centred learning."

To reiterate, these two trends put together – the welfare state, containing enhanced human rights and cultural and social capital, and the change in technology – in turn caused something else, namely that education and human capital had become as important for economic growth as had traditional financial and industrial capital earlier. This requires a qualitatively different kind of educational system, a different kind of worker, culture, and supporting institutions.

In this vein Diebolt and Fontvieille contrast economic efficiency in the pre-and post-1945 economic and industrial systems. The pre-1945 system economized labour by increasing productivity; and one way to increase labour productivity was to spend more money on industrial capital. Instead, the post-1945 system leads to efficiency not by making savings in labour, using fewer employees and working them harder, but by improving labour quality. In this scheme, production can be improved by incorporating more intelligence and knowledge into labour [5].

Conclusions. To conclude, it should be noted that human development is not opposed to efficiency, but in fact stimulates efficiency. In simpler words, the ideal labour force is not one that is technically competent while also disciplined, overworked, and poorly paid. Instead, a good labour force results from inclusive social policies and is healthy, secure, and well paid; at the same time that the personal aspirations of its members are aligned with organizational goals. The technocratic or scientific management paradigm has reached the limits of its usefulness in education, innovation, and economic progress. This paradigm now needs to be supplemented by more open educational systems and organizations, whose functioning is enhanced by cultural and social capital.

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FORMATION OF NATIONAL VALUES OF FUTURE TEACHERS

Nataliia Bezliudna[1]

[1]*Ph.D. (Pedagogy), Associate Professor, Department of Pedagogy and Educational Management, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: natashabezl@gmail.com, ORCID: https://orcid.org/0000-0002-1308-4448*

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Abstract. *The article examines the theoretical foundations of the formation of national values of future teachers in the conditions of martial law. The purpose of the article is the disclosure of the peculiarities of the formation of national values of future teachers in the conditions of martial law. In the process of solving the tasks, a number of general scientific and pedagogical methods were used: analysis, systematization, comparison of scientific approaches, provisions, definitions and generalization to clarify the essence of the main concepts of the study. The necessity of forming the civic consciousness of future teachers, confirming their convictions about national value priorities, about the value of language, history, and faith in strengthening the Ukrainian state is substantiated. It is substantiated that humanitarian training of future teachers is important in this context. It is proven that a modern institution of higher pedagogical education should not only provide quality educational services, but also become a kind of outpost for the formation of national-value orientations of future teachers, and ways of improving this process are given.Therefore, this educational definition in the conditions of martial law should be formed in the process of classroom and extracurricular work. The main task of higher education institutions is to popularize national consciousness and increase the level of patriotism among young people, to stimulate students to form national self-awareness, civic and national identity, ideals of freedom and equality, the newest ideological front, awareness of the value of human dignity, to build their own value system, in the hierarchy in which the main place will belong to the values of the highest spiritual level, namely, national values. We see the prospect of further research in the study of the mechanisms of formation of the national consciousness of educators, both during the war and in the post-war period.*

Keywords: *values; national values; national value orientations; formation of values; future teachers; martial law; educational process; institution of higher pedagogical education.*

JEL Classification: A22, H56

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 9

Introduction. In the conditions of a full-scale war launched by the Russian Federation against Ukraine on February 24, 2022, our state, society, and education faced new challenges. The significance of the spiritual and value orientations of national state-building has gained particular importance, since the war, first of all, is aimed at the destruction of the nation-building and state-building values of the Ukrainian people. By defending our own national values, we are, in fact, defending the state and spiritual sovereignty of Ukraine, protecting its national identity.

The guarantee of Ukraine's victory in this war, the preservation of its sovereignty and territorial integrity, is not only the development of a combat-ready Armed Forces of Ukraine, but also the preservation of the spiritual integrity of our society, national identity, the development of the economy, culture, science, and art. In accordance with such realities, a new social order has appeared - the formation of a

nationally conscious generation of Ukrainians with a highly developed system of values, among which the first place will belong to the values of the highest, spiritual level.

Literature review. The analysis of historical and pedagogical literature proves that the issue of the formation of professional and value orientations was addressed at different times by domestic thinkers and public figures (V. Antonovych, H. Vashchenko, M. Dragomanov, M. Kozlovets, M. Kostomarov, P. Kulish, I. Ogienko, O. Potebnia, G. Skovoroda, I. Franko, T. Shevchenko, P. Yurkevich, etc.); the problem of the values of the teaching profession is reflected in the studies of T. Butkivska, M. Vasylieva, V. Hrynyova, P. Ignatenko, V. Lozova, and other scientists.

A number of modern scientists investigate various aspects of the formation of professional value orientations of future teachers: O. Bazhanovska, T. Belan, I. Beh, M. Boryshevskyi, S. Yermakova, E. Stryga, I. Turchyk, E. Faustov, N. Shemygon, etc.

Aims. The purpose of the article is the disclosure of the peculiarities of the formation of national values of future teachers in the conditions of martial law.

Methodology. In the process of solving the tasks, a number of general scientific and pedagogical methods were used: analysis, systematization, comparison of scientific approaches, provisions, definitions and generalization to clarify the essence of the main concepts of the study.

Research results. The Concept of a new Ukrainian school emphasizes that the new "standard and its derivatives - educational and training programs, implement the understanding of human dignity as the main concept of a democratic school, which, on the one hand, expands the scope of the teacher's professional freedom and assigns him responsibility for the educational process, on the other hand, it gives students a wider choice (for example, through individual profiling in high school) and also obliges them to take responsibility for their own learning" [7].

According to the Constitution of Ukraine (Part 1, Article 3) "a person, his life and health, honor and dignity, inviolability and security are recognized as the highest social value in Ukraine. Human rights and freedoms and their guarantees determine the content and direction of state activity. The state is responsible to the people for its activities. Affirmation and provision of human rights and freedoms is the main duty of the state" [4]. According to this, as noted by V. Krysachenko, "a person becomes the highest national value, for which the entire system of regulatory relations is built both within the state and in its relations with external partners. A person as a national value appears mainly in three hierarchical dimensions: individuals, communities and the nation as a collective content of all citizens of the state.

Accordingly, there is a meaningful and volumetric load of national values at all three named levels, starting from personal-existential, interpersonal and intergroup and ending with synergistic requirements of security, development and prosperity" [6].

According to the Law of Ukraine "On Higher Education", "higher education is a set of systematized knowledge, abilities and practical skills, ways of thinking, professional, worldview and civic qualities, moral and ethical values, and other

competencies acquired in a higher education institution (scientific institution) in the relevant field of knowledge for a certain qualification at the levels of higher education, which are higher in complexity than the level of full general secondary education" [9].

Therefore, along with the acquisition of general, professional competences and program results of studies with a specialty, the future teacher is formed as a person, a patriot, a citizen with high national-value orientations, capable of forming an individual worldview in the younger generation.

The new Ukrainian school is aimed at forming values that are the key to a happy personal life and successful interaction with society. The educational process is an integral part of the entire educational process and will be aimed at the formation of universal human values in students, in particular, moral and ethical (honesty, dignity, justice, care, respect for oneself and other people, respect for life), socio-political (patriotism, national self-identity, freedom, democracy, cultural diversity, respect and respectful attitude to the native language and culture, to the environment, respect for the law and the Constitution, solidarity, responsibility).

Let's turn to the views of scientists on the meaning of the concept of "values". The famous modern scientist Ya. Hrytsak interprets the meaning of the concept of "values" as follows: "Values can be defined in different ways. If you want to know what your values are, ask yourself what you are willing to stay awake for a night or two, give away part of your scholarship or salary, if necessary, sacrifice your health and even your life." And here are some important clarifications from the researcher: "values can be not only positive, but also negative"; "values are not interests" [2].

According to Zh. Petrochko, "national values are the basis for the emergence and moral decision-making in the interests of the people, the nation, the state; the ultimate goal that a patriot strives for. In Ukraine, such national values are: unity, originality, dignity, will." [8, p. 149]. The scientist convincingly proves that such values are necessary for the life of the people, since it is on the basis of national values that the reproduction and enrichment of national culture, the establishment of personal guidelines, and the construction of the value-meaning system of the individual will take place. Such processes presuppose the readiness of the young generation to accept and popularize Ukrainian, the ability to distinguish acute social problems and respond to them from the position of a patriot citizen with a clearly formed system of national values.

We agree with the opinion of N. Dudnyk, who notes that "the main role in the implementation of these and other tasks will be played by the education system, and especially the higher pedagogical one, since the primary mission of the teacher is to educate patriotism in young Ukrainians, to form an active civic position, to contribute to the formation of the foundations of life and professional self-determination of the individual, to ensure the formation and development of his life competencies, to prepare a young person to defend his Motherland and to take care of the preservation of our national identity.

The solution of these and other tasks is possible thanks to the design of the content of higher pedagogical education in accordance with the demands of the state

and society, generated by the war. The solution to this problem involves the provision of high-quality educational services to students of higher pedagogical education, the content of which must first of all satisfy social requirements determined by the realities of today" [3].

It is undeniable that in wartime conditions, the formation of national consciousness, national identity, and national values acquires great relevance and takes place in fast conditions and, accordingly, requires from institutions of higher pedagogical education such specialists who have active citizenship and are ready to broadcast national values in educational institutions.

Therefore, a modern institution of higher pedagogical education should not only ensure the provision of quality educational services, but also become a kind of outpost for the formation of national and value orientations of future teachers. The main task for all educational institutions is to adapt the educational process to the conditions of war, to create such mechanisms of educational influence that would motivate the students of education to the formation of national consciousness, national identity, national dignity, and professional value orientations.

In this context, the humanitarian training of future teachers is important, in particular, in classes on the disciplines "Ukrainian language", "History of Ukraine", "Philosophy", "Ethics", "Sociology", "Cultural studies", the attention of students should be focused on issues that reveal the historical and mental dissimilarity and difference between Ukraine and Russia, help to understand the national and psychological characteristics of Ukrainians.

The teaching of these and other disciplines should also focus on such issues as: the philosophy of war, the concept of "human dignity" in the context of modern military realities in Ukraine, the value of human life in the 21st century, Ukrainian heroism as a national-historical phenomenon, etc. Popularization of the Ukrainian language, promotion of the development of the best features of the Ukrainian mentality and opposition to manifestations of national inferiority, confirmation of patriotic values, beliefs and respect for the cultural and historical past of Ukraine in the consciousness and feelings of the individual are undoubtedly effective ways of forming the professional and value orientations of future teachers. The renewal of the block of disciplines of psychological and pedagogical training has considerable potential in the formation of national-value orientations of students of higher pedagogical education in the process of professional training: "Introduction to the specialty", "Pedagogy", "History of pedagogy", "Pedagogy of partnership", "Psychology", "Methodology of educational work", etc. In our opinion, when studying these disciplines, it is worth emphasizing the use of pedagogical situations that will contribute to the formation of humanistic, national values, and will help further the formation of professional value orientations of future teachers.

In addition, active extracurricular work of future educators should be carried out within the institution of higher education in order to speed up the victory. As the practice of Uman State Pedagogical University named after Pavel Tychyna shows, the effective forms and methods of such work are the experience of volunteering, participation in public initiatives and other forms of charitable activities, which will

form future teachers a firm civic position, which is based on the highest fundamental universal and national values.

According to O. Kravchenko, dean of the Faculty of Social and Psychological Education of Uman State Pedagogical University named after Pavel Tychyna, the most scientific and practical centers and other professionally oriented units, on the basis of which temporary youth collectives are formed (National Patriotic Camp for Student Youth "Diya", Student Social and Psychological Service, Gender Center, Center for Psychological Diagnostics and of training technologies "Insite", Center for social and educational integration and inclusive rehabilitation and social tourism "Without barriers", Scientific and practical center of family education, Youth center "START") [5].

Many students of Uman State Pedagogical University named after Pavel Tychyna actively participate in the work of the Resource Center for Internally Displaced Persons. The purpose of the center is to provide educational services and carry out educational activities, social and psychological support, providing complex rehabilitation by types (psychological, social, professional and labor, sports, medical) and integration into the life of the Uman territorial community.

Our students have repeatedly received awards for their active participation in the All-Ukrainian project "Singing Action for Children". In order to support education seekers and employees of Uman State Pedagogical University named after Pavel Tychyna and other defenders who are defending and recapturing the occupied territories, students, teachers, university employees become organizers and join charity marathons, actions and concerts ("Volunteer: Ukraine is more expensive than life!", "National Anthem Day", "Let's unite souls with Kobzar's word", "Let's keep order"), etc.

In support of the soldiers who defend Ukraine, our students take an active part in numerous sports competitions, artistic events that contribute to the formation of the national consciousness of future teachers, a respectful attitude towards the inheritance of the spiritual and cultural values of the Ukrainian people.

The team of Uman State Pedagogical University named after Pavlo Tychyna received thanks for their active participation in maintaining the defense capability of our homeland, humanity, sensitivity, concern for the defenders of the Motherland, good deeds and promptly provided charitable assistance. As experience shows, these and other forms of extracurricular work are the most effective in shaping the national-value orientations of future teachers.

Conclusions. Therefore, this educational definition in the conditions of martial law should be formed in the process of classroom and extracurricular work. The main task of higher education institutions is to popularize national consciousness and increase the level of patriotism among young people, to stimulate students to form national self-awareness, civic and national identity, ideals of freedom and equality, the newest ideological front, awareness of the value of human dignity, to build their own value system, in the hierarchy in which the main place will belong to the values of the highest spiritual level, namely, national values. We see the prospect of further

research in the study of the mechanisms of formation of the national consciousness of educators, both during the war and in the post-war period.

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NATIONAL PATRIOTIC EDUCATION IS A PRIORITY DIRECTION OF THE EDUCATIONAL PROCESS IN EXTRACURRICULAR EDUCATION INSTITUTIONS

Andrii Maksiutov[1], Vitalii Honcharuk[2]

[1]PhD (Pedagogical Sciences), Associate Professor, Associate Professor of the Department of Geography and Methods of Teaching, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: andriy.maksyutov@udpu.edu.ua, ORCID: https://orcid.org/0000-0002-5486-634X

[2]Ph.D. (Pedagogical Sciences), Senior Lecturer at the Department of Chemistry, Ecology and Relevant Teaching Methodologies, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: gvitalii1975@gmail.com, ORCID: https://orcid.org/0000-0002-3977-3612

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Abstract. *The article theoretically substantiates the theoretical and methodological aspects of national-patriotic education of youth in extracurricular education institutions of Ukraine, which allows to determine the prospects of their use in the conditions of modernization of the education system and preservation of the best traditions and creation of modern standards of extracurricular education. It is established that in modern conditions the activity of extracurricular education institutions is an actual means of forming positive motives for the educational and cognitive activity of young people and national-patriotic education of young people. The aim of article is to determine the theoretical and methodological foundations of national and patriotic education of youth in extracurricular education institutions. To achieve the goal, theoretical analysis of scientific works, synthesis, comparison and generalization of approaches to the definition of theoretical aspects of national-patriotic education of youth in extracurricular education institutions were used. It has been proven that the national-patriotic education of children and youth is a complex systematic and purposeful activity of state authorities, public organizations, families, educational institutions, and other social institutions regarding the formation of a high patriotic consciousness, a sense of loyalty, love for the Ukraine in the young generation, concern for the well-being of their people, readiness to fulfill their civic and constitutional duty to protect the national interests, integrity, independence of Ukraine, and support its establishment as a legal, democratic, and social state. It has been proven that extracurricular work is an informal parallel education capable of quickly and mobility responding to changes in the social environment.*

Keywords: *national-patriotic education, patriotic consciousness, national identity, formation of an active civic position, education of the younger generation, extracurricular education institutions.*

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Introduction. In the conditions of huge changes in the social, economic and political life of Ukraine, the problem of radical restructuring in the field of education of the younger generation has become. The main goal of education is the transfer of social experience, the wealth of the nation's spiritual culture, its social mentality, and the uniqueness of its worldview to the younger generation. On this basis, the personal traits of a citizen – patriot of Ukraine are formed, which include national self-awareness, developed spirituality, moral, artistic and aesthetic, legal, labor, physical, ecological culture, development of individual abilities and talent.

The concept of national-patriotic education of children and youth emphasizes: "Among the educational directions, patriotic and civic education is the most relevant today, as the core and fundamental ones that meet both the urgent requirements and challenges of modern times, and lay the foundations for the formation of the consciousness of current and future generations" [10].

National-patriotic education of children and youth is a complex, systematic and purposeful activity of state authorities, public organizations, families, educational institutions, and other social institutions for the formation of a high patriotic consciousness, a sense of loyalty, love for the Ukraine, concern for the welfare of the young generation of its people, readiness to fulfill the civil and constitutional duty to protect the national interests, integrity, independence of Ukraine, and support its establishment as a legal, democratic, social state [4].

In our opinion, the most important priority of national-patriotic education is the formation of a valuable attitude of the individual towards the Ukrainian people, the Ukraine, the state, and the nation.

The relevance of national and patriotic education of citizens is determined by the need for consolidation and development of society, modern challenges (including military aggression by the Russian Federation), which are in front of Ukraine and demand constant improvement of national and patriotic education.

National-patriotic education acquires the character of systematic and purposeful activity of state authorities, local self-government bodies, educational institutions, civil society organizations, citizens to form a high national-patriotic consciousness, a sense of devotion to one's state [5, p. 200].

The basis of the system of national-patriotic education is the idea of strengthening Ukrainian statehood as a consolidating factor in the development of society, the formation of patriotism, and the affirmation of national values.

The main components of national-patriotic education are: public-patriotic, military-patriotic, spiritual and moral education. The experience of state policy throughout all the years of Ukraine's independence shows the need to pay special attention to the field of national-patriotic education, which is an integral component of ensuring Ukraine's national security [6, p. 352].

Therefore, state policy in the field of national-patriotic education needs constant improvement, taking into account the needs and challenges facing society. A special place in the process of national-patriotic education of the younger generation belongs to the system of extracurricular education institutions of Ukraine.

In this regard, the following needs have become relevant at the current stage: implementation of an effective mechanism for the formation and implementation of state policy in the field of national and patriotic education; formation of the national linguistic and cultural space based on the approval of the state language, stability of its value base before external intervention; forming an active civic position, establishing the national identity of citizens based on the spiritual values of the Ukrainian people, national identity; promoting the creation, development, quality improvement, as well as popularization of the Ukrainian-language cultural and informational product and ensuring access to it; implementation of constant

communication with civil society on issues of national and patriotic education; development of spirituality and morality in society, affirmation of traditional family values; elimination of the influence of the aggressor state in information, educational and cultural spheres of Ukraine; prevention of transformation of the information space into a field of manipulation of public consciousness, production of value disorientation; harmonization of legislation and management practices in the field of formation of citizenship with the legislation and best practices of the states of the European Union and NATO member states, preserving national values and traditions as a basis; introduction of a unified methodical and terminological approach to the process of national-patriotic education; formation and implementation of uniform standards regarding processes, subjects, their competence and powers, quality of activity in the field of national-patriotic education [2, p. 38].

Therefore, the need for constant improvement of national-patriotic education in extracurricular education institutions, providing systematicity to this process, which is extremely important for the state, remains relevant. Preservation of the integrity of the state and its strengthening, the development of civic ties, and the development of civil society belong to the fundamental interests of Ukraine.

Literature review. Modern theoretical and methodological aspects of national-patriotic education of youth in extracurricular education institutions are highlighted in the works of: Verbytskyi V. V. (competency approach in the educational process of an extracurricular educational institution) [5]; Builova L. N. (higher education of Ukraine in the context of the transformation of society) [4]; Bykovska O. V. (additional education: history and modernity) [3]; Sushchenko T. I. (the content of the training of a teacher of an extracurricular education institution for the national-patriotic education of students) [13]; Kovbasenko L. I. (formation of pupils of extracurricular educational institutions basic competencies) [7]; Dem'ianiuk T. D. (educational and socio-pedagogical potential of extracurricular educational institutions) [6]; Barysheva O. I. (implementation of the competence approach in circles of scientific and technical and research and experimental areas of extracurricular education) [1]; Kuzyk O. Y. (effectiveness of activities of a single extracurricular space in the context of education modernization) [8]; Pustovit H. P. (extracurricular education and upbringing in Ukraine in the vectors of modern development) [11]; Syrotenko A. Y. (methodological foundations of the educational process in an extracurricular educational institution) [12]; Tykhenko L. V. (pedagogical principles of organizing children's and adolescents' leisure time in the system of extracurricular education in Ukraine) [14]; Naumenko R. A. (extracurricular pedagogy: theory, history, practice) [9]; Bereka V. Y. (the influence of education reforms on the development of extracurricular institutions in Ukraine) [2]; Tsvirova T. D. (extracurricular education: the problem of definition) [15] and others.

Aims. To determine the theoretical and methodological foundations of national and patriotic education of youth in extracurricular education institutions.

Methodology. To achieve the goal, theoretical analysis of scientific works, synthesis, comparison and generalization of approaches to the definition of

theoretical aspects of national-patriotic education of youth in extracurricular education institutions were used.

Results. The events currently taking place in Ukraine indisputably prove that the most pressing issue today is the education of patriotism and the formation of the national consciousness of the young generation. After all, it is the youth who will build the future of our country, defend and protect its interests. The feeling of patriotism is multifaceted in content. This is love for native places, and pride for one's people, and a sense of one's inseparability with the surrounding world, and a desire to preserve and multiply the wealth of one's country. Therefore, the primary task of teachers today is to educate children in love and affection for of one's family, home, street, village; formation of a careful attitude towards nature and all living things; education of respect for work; development of interest in folk traditions; formation of elementary knowledge about human rights; familiarization of children with state symbols: coat of arms, flag, anthem and understanding of their meaning and symbolism; development of a sense of responsibility and pride for the achievements of one's country; formation of tolerance, a sense of respect for other peoples, their traditions.

These tasks are implemented by extracurricular education institutions in all types of children's creative activities (in classes, on hikes and excursions, rehearsals and concerts, in games, at work, in everyday life), since children's relationships with adults and peers should be formed together with patriotic feelings. The entire educational process should be saturated with various aspects of national and patriotic education. In the arsenal of activities of teachers of extracurricular education institutions, there are many promising means and methods of work. However, the main thing is the inclusion of each individual in a specific activity for the sake of preserving, creating and multiplying the wealth and beauty of one's Motherland [3, p. 470].

We established that the goal of national-patriotic education is the education of a conscious citizen, a patriot, the acquisition by young people of social experience, a high culture of international relations, the formation of young people's needs and the ability to live in public society, spiritual and physical perfection, moral, artistic and aesthetic culture.

In the course of the research, we established that the methods and methods of work related to national-patriotic education in extracurricular education institutions are very diverse. National-patriotic education is a complex one pedagogical process. It is based on the development of moral feelings. Solving the task of patriotic education, each teacher constructs his work in accordance with local conditions, the direction of work of an after-school education institution and the characteristics of children, taking into account the principles of a differentiated approach to each child, maximum consideration of his opportunities and interests; a rational combination of different types of activities, adequate for age; children's activity, etc.

Methods of education are a component of the method, which ensures its application in certain conditions. The main techniques contributing to the formation of national-patriotic education are conviction and personal example. Conviction is

both an explanation and a proof of the necessity or inadmissibility of a certain behavior, act. Education in various extracurricular institutions takes place according to educational programs, and educational work, where educational and patriotic education is a priority, according to a monthly plan for different age categories [8, p. 34].

In preschool and primary school age, it is important to form a child's ability to know himself as a member of a family, a family, a children's group; as a student, city or village resident; to cultivate in her love for her native home, region, street, her country, its nature, native language, way of life, traditions. It is necessary to use specific examples to educate younger schoolchildren to love their native land and their Motherland, respect for national traditions and symbols of the Ukrainian people, respect for people of other nationalities, their customs and traditions, a sense of pride for famous people and defenders of Ukraine, a caring attitude towards values and assets of our countries [12, p. 8].

In our opinion, patriotism is the highest form of manifestation of spirituality, it is the moral foundation of the social and state building, the support of its viability. The criteria of patriotism are love, loyalty and service to the Motherland, concern for ensuring the integrity and sovereignty of Ukraine. In today's conditions of a threat to national security, patriotism is manifested in the readiness to serve Ukraine, stand up for its defense. These priorities achieve the greatest effect in extracurricular institutions and sports-technical clubs. An organic combination of educational, creative, developmental and educational work in groups educates the child's readiness for future military service, formed on the basis of special means, forms, methods of training and education.

The main goal of extracurricular education institutions is to help meet the educational and cultural needs of children, create conditions for their creative, intellectual, spiritual, and physical development, identify and support talented and gifted children, organize meaningful leisure time, improve educational work, and develop the extracurricular education system. Therefore, we can safely say that the work of the extracurricular education system contributes to:

– the development of creative character traits, namely purposefulness, demandingness, inquisitiveness, critical thinking, independence, perseverance, ingenuity, originality, diligence, decency, responsibility;

– the development of creative self-awareness, which is manifested in self-knowledge and adequate self-evaluation, self-organization, self-realization and self-improvement;

– the development of creative qualities of the intellect – logical, dialectical and holistic perception of reality, observability of the researcher, creative imagination and fantasy, intuition, attention and memory, which will form – the ability to define and solve life problems, develop creative projects, etc.;

– the constant growth of the potential of creative activity – the desire to systematically acquire new knowledge in a certain field, the ability to creatively use it, experiment, research, participate in the improvement of the surrounding environment [13, p. 332].

After all, creativity is a constant improvement of one's personality, thinking, consciousness, intelligence and a constant focus on doing something new, doing more and better than before. In creative activity, the child develops, gains social experience, reveals his natural gifts and abilities, satisfies interests and needs. The process of inspired activity requires the child enormous intellectual, emotional and volitional stress. Creative potentials are inherent and exist in every person, therefore, under favorable conditions, every child can express himself.

All the best human qualities develop themselves only where there is a creative attitude to life and adequate social conditions for self-motivation. Working with children, teachers reveal their natural abilities and prepare children for productive work. One of the most important aspects in the work of extracurricular education institutions is national-patriotic education. The national-patriotic upbringing of the younger generation has always been one of the most important tasks of education, after all, childhood and youth are the most auspicious time for cultivating a sense of love for the Motherland. In today's conditions, leaders of after-school clubs of extracurricular education institutions face many tasks related to the education of patriotism and the formation of national consciousness in their pupils [15, p. 22].

To develop natural abilities for creative thinking during technical activities, group leaders must constantly create a situation of creative activity and success in the group. In order for children to begin to creatively apply the acquired knowledge, it is necessary that they feel the need for such activities. Or working with natural material, dough, fabrics, whether drawing and subsequent production of layouts and models with one's own hands - all this opens the way to self-expression, awakens imagination, develops taste, and spiritually enriches the child. An important task of technical creativity during group classes is not only to teach children the skills of high-quality production of products, but also to develop a sense of form, the ability to create and evaluate combinations of colors, compositions, harmony, symmetry.

Along with this, the teachers of the institution aim to attract the younger generation to the inexhaustible treasures of national culture, customs, and traditions. We can say with confidence that working in scientific and technical creative circles gives children the opportunity to deepen and expand their knowledge of the historical and spiritual heritage of their people, contributes to the education of patriotism and national consciousness [1, p. 20].

In the process of interesting and creative activities, which each child chooses according to his own preferences and inclinations, deep immersion in the material and spiritual culture of Ukraine can take place in the best possible way. Tourist and local history circles play a big role in fostering a sense of patriotism. Classes in these circles give pupils the opportunity to search for and study local history material, have access to documents and archives, enrich museum funds, popularize local history, engage in research work, as well as deepen their knowledge of the school curriculum on the history of Ukraine.

In our opinion, precisely today, when our country is going through difficult times, one of the leading directions of extracurricular education institutions is the national-patriotic education of children and adolescents, which begins with the

formation of universal human moral qualities, which is the family, therefore only in a common beginning interaction with the family can achieve a positive result in the education of a creative personality [11, p. 379].

The family is the foundation of the state. Family, kindred, pedigree, people are such a way of development of every person, formation of his national consciousness and civic maturity. The family is an environment for raising a child's national and patriotic consciousness. National-patriotic upbringing of children in the family is a complex and contradictory process, which is influenced by various factors: material and economic security, social status, level of education of parents, place of residence (city, village), customs and traditions in the family, number of family members, attitude to children, etc. Family upbringing is a natural and constantly functioning link of upbringing, which determines the development of a person at all stages of his life. Without radical improvement of family education cannot achieve significant changes in further civic education of the younger generation. The family lays the spiritual basis of the individual, his morality, identity, national worldview and worldview [14, p. 68].

Therefore, family upbringing is an important component of the formation of the national-patriotic consciousness of young people, which represents: the formation of moral, family and general human qualities; awareness of the importance of the family in a person's life; fostering love for loved ones and the desire to care, help, sympathize; bring joy to relatives and friends, take into account the mood, wishes, and feelings of all family members; respect for family traditions, a responsible attitude to one's family duties [9, p. 391].

Therefore, patriotic education, as an important phenomenon of social life, has long been a leading function of human society. Participation in the process of revival of the national education system is one of the leading goals of the work of extracurricular education institutions. The result of national-patriotic education is the transfer to students of social experience, the richness of the spiritual culture of the people, its national mentality, originality, worldview, the formation of personal traits of citizens of Ukraine, the development of individual abilities and talents of students.

Discussion. Extracurricular education is one of the main components of the education system and the development of national-patriotic feelings in the younger generation. In addition to clubs, an important role is played by participation in regional, city, district events with the aim of establishing patriotism, spirituality, morality and the formation of universal values of the people.

Activities of extracurricular educational institutions actively involve the younger generation in the study of traditions, rituals, culture, and history of their people, reveal the best achievements, national cultural and spiritual heritage, ensure the participation of children in all-Ukrainian events of a national and patriotic direction. Individually-oriented systems of national-patriotic education are being created in extracurricular education institutions, modern innovative technologies are being implemented to train the student as a citizen-patriot, ready to manifest the national guide nothing, to promote civil peace and harmony in society, to follow the examples

of devoted service to the Motherland, heroes of the Heavenly Court, defenders of Ukraine.

It is important that every extracurricular educational institution becomes for the child a center for the formation of a patriotic citizen, ready to take responsibility, to fully develop the country as a sovereign, independent, democratic, legal, state, to ensure its national security, to promote the unity of the Ukrainian political nation and the establishment of civil peace and harmony in the cycle.

Thus, actively immersing children in folk creative activities, improving their educational process aimed at fostering patriotism among young people, will contribute not only to the personal development of the child, but also significantly expand the opportunities and prospects for fostering patriotism in the younger generation. Each lesson, each educational event is a new step in the child's learning not only of his people, his country, but also of himself as a part of Ukraine. And first of all, it depends on the adults what this step will be, because the patriotism of the child is impossible without the patriotism of the adults who bring him up.

Conclusions. The formation of a patriotic citizen of Ukraine, prepared for life, with a high national consciousness, capable of building a civil society, based on which democracy, tolerance and respect for human rights are laid down and constantly implemented, is of particular importance today. Patriotism in the modern sense is the feeling that in my class, in my circle, in my city, in my country, everything concerns me, everything depends on me. In modern conditions, institutions of extracurricular education face the task of creating a sustainable the system of national-patriotic education of youth both in the educational process as a whole and in the classes of groups of various directions. They are the spiritual environment in which the worldview, aesthetic ideals, moral and labor values and national feelings of the individual are formed. National-patriotic upbringing in the conditions of an extracurricular education institution is a flexible self-regulating system that promptly responds to the national, educational-cultural, social and other needs of the child's personality. Each lesson in a group, each educational or educational event is a new step in the child's knowledge of not only his people, his country, but also himself as a part of Ukraine.

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FORMATION OF PATRIOTISM IN YOUNG GENERATION USING UKRAINIAN LITERATURE

Larysa Yovenko[1], Nataliia Osipenko[2]

[1]Doctor of Science (Pedagogy), Associate Professor, Professor of the Department of Ukrainian Literature, Ukrainian Studies and Methods of Teaching, Pavlo Tychyna Uman State Pedagogical University. Uman, Ukraine, e-mail: yovenko310@ukr.net, ORCID: https://orcid.org/0000-0003-1035-071X

[2]Ph.D. (Pedagogy), Associate Professor of the Department of Ukrainian Literature, Ukrainian Studies and Methods of Teaching, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: n.s.osipenko@udpu.edu.ua, ORCID: https://orcid.org/0000-0002-7542-7821

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Abstract. *The article is devoted to the search for ways of forming patriotism in the younger generation by means of Ukrainian literature. The necessity of implementing the experience of forming patriotism of previous historical periods was noted, which involved wide application in the educational process of the concept of a hero as an example for imitation, a means of forming patriotism, moral and ethical values of the Ukrainian nation. It has been proven that the national hero of the passionate type, devoid of ideological, colorless, denationalized Soviet-type patriotism, found vivid coverage in artistic works, has a special didactic, educational, methodical value today. The program for general educational institutions on Ukrainian literature for grades 5-9, aimed at forming a citizen - patriot of Ukraine, was analyzed. General didactic and specific requirements for a modern textbook on Ukrainian literature are considered. It has been established that the methodological apparatus of a modern textbook on Ukrainian literature should be aimed at forming the creative abilities of schoolchildren and their emotional and value sphere, which is facilitated by: the use of phonorecords of folk songs and examples of national and world classical music; reproductions of paintings and artistic illustrations; inclusion in textbooks of texts of high aesthetic and moral and ethical value, as well as tasks that involve the active involvement of schoolchildren in multifaceted analysis and interested discussion of the information contained in them; the organization of students' understanding of the life path, personal traits of the most outstanding figures of national and world history and culture; the use in textbooks of characters who bear an expressive exemplary and personal attitude to the surrounding world. Emphasis is placed on the urgency of developing a critical thinker in the younger generation, which is characterized by openness to doubt, independence and flexibility.*

Keywords: *young generation, patriotism, works of art, Ukrainian literature.*

JEL Classification: A22, H56

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 10

Introduction. Ukrainian literature is a vivid indicator of the high level of spiritual and cultural development of the nation, an expression of its national values, a powerful means of nurturing them in many generations of Ukrainians. Its study contributes to the formation of a creative, free, spiritually rich, independent thinking, highly moral personality with a clear civic position and a high level of patriotism. The art of speech is capable of affirming heroic-patriotic education that strengthens patriotic feelings, developing a deep understanding of civic duty, readiness to defend

the Motherland, using the example of literary works to foster pride in the heroic past of one's people.

Literatu rereview. According to L. Kostenko, literature is primarily intended to awaken from lethargy the peoples who have freed themselves from totalitarianism, despotism, etc. [3, p. 28]. According to the writer, "the state should have a deeply thought-out humanitarian policy, create mechanisms of effective influence, coordinate the efforts of its scientists and artists. ... in the transition period, it is vitally necessary to draw the noble outlines of one's culture" [3, p. 34].

Aims. The aim of article is to investigate the ways of formation of patriotism in the future generation by means of Ukrainian literature and to note the need to implement the experience of formation of patriotism of previous historical periods, which involved wide application in the educational process.

Methodology. To ensure the objectivity and comprehensiveness of the research, a complex of general scientific and pedagogical methods was used, including: analysis of the literature on the researched problem to determine the state of its development and research prospects; comparison to study the points of view of different scientists; systematization and generalization for conclusions; observation of the educational process.

Results. These words become especially relevant during the Russian-Ukrainian war, when it is urgent to popularize the exploits of the heroes, conduct Lessons of Courage and artistic events, thematic contests and actions, meetings with combatants, volunteers, etc.; conducting scientific conferences, round tables; promoting research, popularization, honoring the exploits of heroic figures.

The specified measures should be implemented in accordance with the Concept of national-patriotic education of children and youth and Methodical recommendations on national-patriotic education in general educational institutions. This once again convinces of the need to implement the experience of forming patriotism of previous historical periods, which involved wide application in the educational process of the concept of a hero as an example for imitation, a means of forming patriotism, moral and ethical values of the Ukrainian nation. The national hero of the passionate type, devoid of ideological, colorless, denationalized patriotism of the Soviet type, found vivid coverage in artistic works, has a special didactic, educational, methodical value today.

In 2017, the Order of the Ministry of Education and Science of Ukraine approved the Program for general educational institutions on Ukrainian literature for grades 5-9, developed in accordance with the requirements of the State Standard of Basic and Comprehensive General Secondary Education, approved by Resolution of the Cabinet of Ministers of Ukraine dated 23.11.2011 N 1392, ideas of "Conceptual foundations of the reform of the secondary school "New Ukrainian School"".

The program is aimed at forming a citizen - a patriot of Ukraine, "who knows its history; a carrier of Ukrainian culture who respects the culture of other nations; a competent speaker who communicates fluently in the state language, speaks one or more foreign languages, has the desire and ability to self-educate, shows activity and responsibility in public and personal life, is capable of entrepreneurship and initiative,

has an idea of the world structure, treats nature sparingly, safely and expediently uses the achievements of science and technology, adheres to a healthy lifestyle" [4].

For the first time, the program on Ukrainian literature is designed not for the accumulation of knowledge, but for the formation of a culture of reading, a competent reader who seeks self-development, self-knowledge. The analyzed program is oriented to the age of the students, according to which the works are distributed and to the formation of which qualities, virtues, abilities and skills they are aimed at. So, in the 5th - 7th grades, the proposed works are aimed at developing imagination, encourage schoolchildren to think and fantasize about the lives of the characters, their adventures, teach children to empathize and sympathize with the main characters.

Analysis of recent research. Students of grades 8-9 learn to reflect on the life conflicts of heroes, draw parallels with modern life, contribute to the formation of life and civic positions of students, teach environmental thinking, moral and ethical responsibility for one's own actions, tolerance, respect for other people's opinions, the ability to defend one's own point of view .

Therefore, schoolchildren learn not only to retell the content of what they read and the biography of the writer, they gain experience working with texts of various artistic styles, cultural and historical eras, understand and analyze the content of what they read in the context of the era and the present, formulate and express their own opinion, including a critical one .

The positive thing is that the program takes into account the gender characteristics of students and the peculiarities of emotional perception depending on gender, which, in turn, affects the formation of stereotypes of behavior.

It is very valuable that the analyzed document takes into account the modern demands of the educational process at school, the peculiarities of the information and communication space, national processes of state formation and globalization processes taking place in Ukraine and the world.

The course of Ukrainian literature is structured in such a way that the educational material represents interconnected thematic and problematic blocks, each of which fully represents the national specificity of the national art of speech, which contributes to the awareness of the national identity by the younger generations and performs an important moral and ethical function. The textbook must correspond to the current program that defines the activity of the teacher. The main functions of the textbook are to enrich literary knowledge, to teach the analysis of the work, to promote reflection on the problems of the work of art, to encourage creativity, etc.

Today, the textbook on Ukrainian literature plays a much smaller role in comparison with other educational disciplines, since the priority is not given to the educational, but to the artistic text, familiarization with which is aimed at its individual understanding. As B. Stepanyshyn notes, "the semi-fictional form of a school textbook on literature would ensure its readability. In addition to being scientific and truthful, it must be popular, exciting, written in the form of an imaginary literary journey, an associated story, a problem presentation or a series of essays" [6, p. 49].

H. Tokman singles out general didactic and specific requirements for a modern textbook on Ukrainian literature. General didactic requirements include:

- compliance of the content with the level of modern science;
- compliance of the content and form of the presentation with the age characteristics of the child;
- systematicity and sequence of presentation (to move from the known to the unknown, from simple to complex);
- stimulation of students' interest in knowledge, independent search;
- accuracy, simplicity, liveliness of speech;
- implementation of educational tasks.

Specific requirements for a textbook on literature are determined by the artistic essence of the subject of study and personal perception and interpretation of the work of art:

- the presence of a national idea, convincing students of the talent of the Ukrainian people, full-bloodedness, spirituality, and aesthetics of national literature;
- the selection of scientific information taking into account both the academic reading of the work and partly new interpretations of it, which will stimulate the independence of the student's own opinion;
- a dialogical review of the writer's biography and his works with the involvement of information from the history of cultural studies, philosophy, psychology;
- representation of each writer not as a canonized classic, but as an individual. The textbook should help the student to understand the artist in the conditions in which he was destined to create;
- reflection of the Ukrainian literary process as a whole, regardless of where the artists lived - in Ukraine or in exile;
- fictionalized, sketchy, associative, exciting style of presentation of educational material;
- high-quality illustration [9, p. 48–49].

Research analysis. Among the recommendations for the formation of the methodological apparatus of a modern textbook is to demonstrate the possibility of choice by presenting discussion materials: different interpretations and evaluations of a work of art by literary critics; various versions of the text created by the author himself; different positions of literary characters on the same issue; excerpts from the artistic text that need clarification, and historical documents consistent with them [9, p. 49].

According to modern methodical teachers, practicing teachers, the methodological apparatus of modern textbooks should be aimed at "forming the creative abilities of schoolchildren and their emotional and value spheres" [5, p. 7].

Personal schoolchildren contribute to the development of the emotional and value sphere:

- the use of phonorecords of folk songs and samples of national and world classical music is consistent with the content of the textbook; reproductions of paintings and artistic illustrations;

- inclusion in textbooks of texts of high aesthetic and moral and ethical value, as well as tasks that involve the active involvement of schoolchildren in multifaceted analysis and interested discussion of the information contained in them;

- organization of students' comprehension of the life path, personal traits of the most outstanding figures of national and world history and culture;

- the use in textbooks of characters who bear an expressive exemplary personal attitude to the surrounding world [5, p. 7].

The most necessary condition for the creation of new textbooks, according to modern experts, should be high-content artistic texts, which constitute real spiritual assets of the national culture, aesthetic and moral and ethical weight, contribute to the formation of a sense of patriotism. The analysis of the image-character is of great importance, since the emotional perception of the artistic image has a significant impact on the reader.

Research methods. The reform of modern secondary education is aimed at an innovative type of education, which is aimed at the assimilation of the existing achievements of civilization, "forms a personality capable of making innovative changes in the existing culture and environment, successfully solving life situations that arise both in front of an individual and in front of society in general" [1, p. 11]. A modern graduate of a general secondary education institution must possess the skills and abilities of critical thinking, be aware of life's problems and be able to solve them quickly and effectively, think creatively, be ready to take responsibility for one's own activities and decisions, not be afraid to take risks, constantly improve oneself, and therefore, to function as a comprehensively developed, integral personality, an innovator, a patriot of Ukraine with an active civic position.

This presupposes the implementation of an innovative type of education, which provides for the unity of personally oriented, activity-oriented and competence-based approaches to the learning process, as well as the improvement of the educational process taking into account the age-specific characteristics of the child's development, the optimization of secondary education institutions in accordance with the educational needs of the younger generation of Ukrainians [1, p. 2].

Today, the ability to process and use information is of particular value. Society has found itself in a situation where it is necessary to read, or at least view, thousands of pages in one day. In addition, the school curriculum is oversaturated with works, the number of which is so significant that the child is not able to fully grasp their content, understand the essence and, at least, read it not in an abridged version. Schoolchildren are not able to delve into the literary text, they extract only certain events from the work, leaving out the psychological, historical, political, national basis of the actions of the heroes.

This led to the emergence of the so-called "clip", "patchwork" thinking, which is becoming more and more common today. "Clip thinking" is defined as a product of our fast-moving time, one of the most effective components in the way of assimilation of a continuous flow of information, intended primarily for independent assimilation, but which requires competent use.

Along with the positives of this type of thinking, such as the speed of information processing and analysis, the formation of quick decision-making skills, the acquisition of basic knowledge of languages, general sciences, and culture, there are significant disadvantages. These include: superficial reading of texts (5 Shakespeare tragedies in 97 minutes, 1,500 years of the history of Kyivan Rus in 6,000 seconds, etc.), which leads to "swallowing" of books, lack of skills to delve into what is read, figurative analysis, reflections on the actions of the heroes. Thus, the opportunity to teach students the basics of communication on the basis of literary works, the formation of skills to predict the results of certain actions, etc. is lost, and in the end, the opportunity to obtain aesthetic pleasure from reading disappears, the educational influence of the art of words is not allowed.

We consider the active introduction (starting from elementary school) of electronic versions of books and textbooks to be a certain drawback. After all, when working with the electronic version of the book, students cannot emphasize (highlight) the author's thoughts that impressed them, or can be used by them during work on a creative task, writing a work, preparing an essay/report, etc. That is, they do not learn the skills of working with the text.

In the context of the above, studies related to the development of critical thinking among schoolchildren are extremely relevant. This type of thinking allows you to correctly solve problems in any field of activity - lawyer, teacher, scientist, artist, etc., in human relationships, in everyday life, etc.

As S. Terno emphasizes, a critical thinker is characterized by openness to doubt (the student must be taught to doubt the information received and his own conclusions so that, as a result of a thorough comprehensive analysis, the young person comes to balanced and well-founded conclusions), independence and flexibility (it is necessary to teach children to work independently, looking for new information, methods of cognition and activity, without expecting help or the completion of their task by someone else, and also to be able to perceive a variety of information to which to respond quickly. Flexibility, in this case, is not equated with adaptability, cronyism), search for evidence, verification of the validity of acquired knowledge, creative search [8, p. 30].

Critical thinking researcher M. Lipman emphasizes that the educational process in the classroom should be oriented towards the process of scientific research [10]. Therefore, the study of Ukrainian literature must be organized in such a way that students get the experience of literary research, critical understanding of events, actions of heroes described in the work through the prism of historical events, solving problematic problems, solving psychological problems, etc.

Four main types of problems solved by the analysis of the heroes of a literary work are distinguished: motivated selection of key problems solved by the heroes of the works; establishing the degree of validity of literary, linguistic, cultural, historical assessments of the analyzed problem/issue; consideration of the versions proposed by students regarding their own behavior in a situation of the same type that is being analyzed or an alternative course of events in the interpretation and from the

perspective of schoolchildren; definition and analysis of problematic situations in which the hero of the work of art acts.

Discussion. Thus, the analysis of the literary work will be carried out on the basis of careful literary, linguistic, psychological, historical reading, as well as on the basis of a critical understanding of the historical realities of the work, while students learn to express their opinion boldly and well-founded. In our opinion, such a study of national literature will contribute to the formation of self-education skills, self-study, independent search and critical evaluation of information in schoolchildren, which, according to P. Griffin, are one of the fundamental abilities of the 21st century. [2].

That is why it is important today to teach children the culture of reading, to offer schoolchildren interesting works that meet the needs of modern youth. It is time to propose an idea of reading as a mandatory everyday socio-cultural practice, which is a guarantee of self-improvement and self-development of an individual throughout his life. In addition, it is necessary to form aesthetic and artistic satisfaction from the very process of reading, from communication with the characters, their psychological world, immersion in the historical era, etc.

Implementation of the experience of formation of patriotism of the young generation can be carried out on the example of studying the images of heroes with the help of the technology of developing critical thinking, which is used for the interpretive analysis of an artistic work.

For example, during the study of the folk tale "Truth and Wrong", the literary drama-tale of O. Oles "Mykyt Kozhumyak" or any other work in the 5th grade, which contains opposite images, in order to develop the ability to characterize the hero, as well as the education of moral and ethical values in students, it is worth applying the method "Teaching by opposites". Together with the schoolchildren, we determine that the images of Nikita Kozhumyaka and the Snake are opposites, and we explain that in order to describe the image of the work, it is necessary to find out who a certain character is, to describe his actions, appearance, behavior, attitude towards others, fate.

And although, at first glance, such an activity seems simple enough, the identification of the heroes of the works leads to reflection and causes controversy. According to the developers of the theory of technology for the development of critical thinking, "a conversation on the opposite can begin with heroes in literature, then continue with heroes in history and modern life" [8, p. 169].

Using this method of learning, students should offer the following questions for reflection: a) does what happens to the characters in the works have an embodiment in real life? b) what happens when a person does exactly that? c) what reaction does this or that action of the hero cause? d) what conclusions can we draw from this?

During the study of the creative work of P. Kulish in the 9th grade, in order to interest students in the topic and attract their attention, it is worth using such a method of developing critical thinking as "Structured review", announcing: "In the personality of P. Kulish, a talented writer, a literary critic, translator, teacher, ascetic in the name of the spiritual progress of the Ukrainian people".

Kulish's entire life path is a tireless search for the truth, the development of national culture in the field of fine writing and literary criticism, folkloristics and ethnography, history and historiosophy, journalism and pedagogy, linguistics and religion, journalism and publishing.

One can argue about one or another of P. Kulish's views, accept or not accept his extraordinary historiosophical ideas, but one cannot but admit that he sacrificially laid his entire conscious life on the altar of his enslaved native people for its cultural straightening and growth. After all, he had the opportunity to make a good career as an official or a scientist, to gain recognition from the Imperial Academy of Sciences or authoritative Russian universities. However, he neglected this, not even securing a pension for his old age. Instead, he kept his creative and human self, loyalty to himself, independence of thinking.

The assimilation of the topic continues in the process of applying tasks of anticipatory direction - reports on the following topics: "Black Council" by P. Kulish - encyclopedia of Ukrainian character studies", "Ukrainian national character of the heroes of P. Kulish's stories", "Girl's heart" as an idea of an organic combination of a person "natural" and educated".

Before summing up the lesson, you need to discuss with the students the information learned from the messages, which will ensure a more thorough understanding of the material: What was the artist like as a citizen? What is the significance of the activity of P. Kulish for our nation? What features of the characters of the writer's work do you consider perfect? Describe the national virtues of P. Kulish's heroes.

To systematize knowledge, develop schoolchildren's critical thinking, logic, ability to characterize the characters of works, as well as other literary competencies, we use the "Cluster" method, where the starting point is the concept of "P. Kulish", to which logical connections are established that summarize the educational material.

Conclusions. Therefore, the pedagogical potential of the positive hero of literary works can be used by applying innovative educational approaches. Methods and techniques of critical thinking development technology demonstrate effectiveness in teaching Ukrainian literature, contribute to conscious perception of educational material, evaluation of program works, heroes-characters, etc. Their implementation ensures a thorough study of the school course of Ukrainian literature by students, which is carried out in the process of their own discoveries and reasoning, collective discussion of problematic issues.

Thus, modern school literary education is focused on the formation of a citizen with developed patriotic virtues, a bearer of national culture, a competent speaker and reader engaged in self-education, active and responsible in public and personal life.

The study showed that in current textbooks on Ukrainian literature, the didactic-methodical apparatus is aimed at the emotional perception of the artistic image by the reader, better assimilation of the work, understanding of the features of the passionate character of the Ukrainian hero, who in the name of a high goal overcomes any obstacles, neglects the dangers for his own life, selflessly stands in defense of the Motherland, the people.

Orientation of students to social activity based on social skills, education of devotion in service to the Motherland, readiness to participate in state-building processes, ability to live together and cooperate in civil society was aimed at the subject-oriented elective course "Hero of a Personal Type in Literary Works of the 20th Century".

Implementation of the experience of formation of patriotism of the young generation can be carried out on the example of studying the images of heroes with the help of the technology of developing critical thinking, which is used for the interpretive analysis of an artistic work. The use of the methods "Teaching by opposites", "Structural review", "Cluster" contribute to a more thorough mastering of the school literature course, conscious perception of educational material, evaluation of program works, heroes-characters, etc.

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CHAPTER 2
INNOVATIONS IN THE MANAGEMENT OF EDUCATIONAL INSTITUTIONS

TEACHING-PEDAGOGICAL PRACTICE IN THE SYSTEM OF PROFESSIONAL TRAINING OF FUTURE PHYSICS TEACHERS

Volodymyr Mykolaiko[1]

[1]*Ph.D. (Pedagogy), Associate professor, Department of physics and integrative technologies of teaching natural sciences, of the department, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: v.mykolaiko@udpu.edu.ua, ORCID: https://orcid.org/0000-0002-0515-1241*

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Abstract. *The article is devoted to the analysis of some pressing questions of organization and conducting of pedagogical practice in the system of future teacher of physics professional preparation in the aspect of forming his professional culture and competence. The reform of higher pedagogical education in Ukraine is part of the ongoing educational system updates in European countries over the last twenty years. These reforms are driven by ideas of human-centeredness and democratization, recognizing the importance of knowledge as a catalyst for societal well-being and progress, and the creation of a unified educational space. These changes pertain to new educational standards, qualification models, and methodological systems for professional training at the "bachelor" and "master" levels, which are based on activity-based, personality-oriented, and competency-based approaches. These reforms also involve the implementation of educational innovations and new information technologies in teaching and learning. Society entrusts educators with its future and naturally expects them to employ the most effective teaching methods and forms to impart the fundamentals of science. The quality of youth education, their ability to thrive and work in an information-driven society, contribute to a knowledge-based economy, and gain competitive advantages, all hinge on the level of a teacher's professional competence. In today's context of tiered and specialized differentiation, variability in physics school curricula and textbooks, and the development of new information technologies in education, this thesis assumes special significance. In the professional training of future physics teachers, a special place is reserved for pedagogical practice, the main goal of which is for them to acquire initial professional experience in independent work under conditions that closely resemble their future profession. This practice aims to develop pedagogical thinking and professionally significant personal qualities, ultimately leading to the acquisition of professional competence.*

Keywords: *pedagogical practice, information-driven society, professional culture and competence, independent work, human-centeredness and democratization.*

JEL Classification: I 23, I 29

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Introduction. The analysis of scientific-methodical literature, specialized periodicals, and conference materials reveals a declining level of preparedness among students majoring in physics-related fields at pedagogical universities to address contemporary educational challenges in the process of teaching physics in secondary schools. Some of them encounter difficulties when independently applying their acquired knowledge to explain physical processes and phenomena, solve problems, and work with educational equipment. Many students struggle with performing methodological tasks related to calendar and thematic planning, selecting the content and scope of educational information in line with the lesson's topic, as well as choosing appropriate forms and methods for student-centered learning activities. Additionally, they face challenges in considering students' age and individual characteristics, drafting lesson plans, preparing extracurricular activities, conducting simple pedagogical experiments, and more.

This situation is not solely attributed to socio-economic factors but also to the absence of a personality-oriented approach in the preparation of future physics teachers, especially during their pedagogical practice. There exists a traditional approach that caters to the so-called average student without considering their level of preparation and individual qualities. Meanwhile, the variability and flexibility of modern educational programs and technologies impose specific requirements on the personality of the future physics teacher, including: a profound mastery of the subject and its teaching methodology, a broad scientific outlook, a high level of culture and professional competence, and the ability for lifelong self-learning and self-improvement.

Therefore, there is a gap between the demands of the job market and the level of practical preparedness of future professionals, who face difficulties adapting to the real pedagogical process in modern secondary schools. Prominent educators such as G. Vashchenko, A. Makarenko, I. Ohienko, S. Rubinshtein, V. Sukhomlynsky, and K. Ushinsky have emphasized the necessity of combining deep theoretical knowledge with purposeful practical training and systematic involvement of future teachers in real educational institutions. The theoretical and methodological foundations of teacher training have been studied by researchers like O. Abdulina, Yu. Babansky, V. Bezpalko, I. Bekh, S. Honcharenko, I. Ziazun, N. Kuzmina, V. Kremen, M. Lugovyi, N. Nichkalo, M. Skatkin, V. Shadrikov, and others. The place and role of pedagogical practice in the teacher's professional training system have been the focus of works by S. Arkhangelsky, V. Bondar, S. Polyansky, M. Prykhodko, V. Rozov, V. Slastonin, N. Talizina, and others. The introduction of school life into practice should be carried out by students through observation of the best examples. During their pre-diploma practice, students conduct demonstrations of the best lessons given by local teachers, winners of competitions like "Teacher of the Year" and "Class Leader of the Year," followed by analysis. Additionally, the planned review and discussion of fragments of artistic and documentary films on pedagogical topics, such as "Pedagogy of Compassion" and "Architecture of the Soul" (by Professor Redko H.B., Odessa), are included in the program. The pre-pedagogical practice program includes tasks for independent work, which require deep theoretical knowledge and the ability to

conduct observations, summarize and systematize collected materials, use various methods for student and class diagnostics, and apply techniques for educational impact. The use of interactive teaching methods (such as roundtables, pair work, group work, changing groups, aquarium, microphone, etc.), the review and analysis of pedagogical artistic and documentary films, lesson simulations, and more before and during the pre-pedagogical pedagogical practice stimulates and activates students' independent work.

This includes completing written creative tasks, discussions, debates, contests for the best segment of a lesson or extracurricular activity, the results of micro-studies related to the testing of non-traditional teaching methods for student and class engagement. The results of pre-pedagogical practice are discussed jointly by the methodologist and students upon completion of each stage. During the first stage of pre-pedagogical practice, students are encouraged to create and coordinate an "Individual Plan for the Development of Pedagogical Abilities" for the entire practice period with teachers and methodologists. Afterward, to enhance the effectiveness of professional competence formation, trainees conduct "modeling lessons" with their fellow students, who play the role of students. This helps students overcome their uncertainties and "polish" contentious elements of their future lessons. To develop pedagogical abilities, which are a component of the future physics teacher's professional competence, we conducted pedagogical training sessions (to develop communication, suggestive, perceptive, and other skills), pedagogical workshops, lesson simulations, encouraged students to complete individual creative tasks, and utilized other forms where tasks were presented in a problem-oriented manner during this type of practice. For the development of research competence during practical classes and student pedagogical meetings, we discussed pedagogical situations (problems) taken from pedagogical literature, personal observations, and the experiences of graduates. Many interesting tasks were drawn from lesson plans, lesson analyses, pedagogical diaries, and reports from student trainees. When selecting tasks for practical classes, we aimed to incorporate facts and situations that arose during the study of various academic disciplines. The use of such tasks promotes a more thoughtful understanding of theoretical concepts among students, acquaints them with advanced teaching methods and practices, encourages them to observe and analyze their own work and the work of others, and helps them approach the assessment of each technique and method more critically. Most importantly, it enables them to create new approaches themselves, which are crucial components for forming the professional competence of future physics teachers. The success of the professional competence formation process, as evidenced by experience, largely depends on the level of development of humane interpersonal relationships among students and between students and the teacher-supervisor during pedagogical practice.

According to the developed system, students' activities gradually become more complex from one course to another, depending on the purpose and objectives of learning at each stage of professional competence formation, the level of theoretical preparation, as well as the independence of future teachers in the process of their

activities, their overall development, and individual characteristics. The main goal of educational practice in school physics experimentation is the formation of didactic competence. Therefore, the focus is placed on developing students' abilities and skills in conducting frontal laboratory classes (frontal laboratory work, frontal experiments, experimental tasks), as well as work in the physics laboratory.

To achieve the goal of preparing future physics teachers, the following tasks need to be completed: study the topics of frontal laboratory work in accordance with the curriculum for eleven-year-olds in physics; familiarize oneself with the equipment used for conducting school-level physics experiments, which is produced by the industry; explore possible variations of instructions for conducting frontal laboratory work (descriptions in textbooks, workbooks) and anticipate the possibility of implementing them for both specialized and leveled instruction for students; study safety regulations for life activities when conducting frontal laboratory sessions and physics practical work; earn how to provide safety instructions and maintain documentation for safety measures in the physics classroom; creating new devices or modifying existing ones (with the teacher's permission) for conducting frontal laboratory sessions and physics practical work, and proposing new instructions for their use; Learning to perform basic repairs on apparatus is essential. Carrying out laboratory work, physics practical exercises, and home experimental assignments requires a specific set of skills, including the ability to plan and prepare experiments, observe, measure physical quantities, and process and interpret experimental results. Since the educational process, from a psychological and pedagogical perspective, involves the interaction of two participants (the teacher and the student), a significant role in addressing the tasks of the school physics course lies with the teacher. The teacher should be prepared for experimental activities and possess the necessary skills. The process of acquiring skills is quite complex, and it continues during the period of receiving professional education as well as in the course of practical activities. For future teachers, it is essential to provide opportunities for further improvement of their experimental skills gained while performing laboratory work from various physics courses. The main goal of the production pedagogical practice for fourth-year students is the formation of professional competence and the enhancement of didactic, communicative, and research competencies. This is achieved through the generalization, systematization, and deepening of pedagogical knowledge, skills, and abilities, as well as preparing students to perform all the functions of a physics teacher and implement a system of educational work with students. This serves as a prerequisite for: forming a cognitive interest in independent deepening of knowledge in psychological-pedagogical and professional disciplines; developing the motivational sphere of personality, values, and needs in activities that ensure logical connections with all components of the learning process; shaping systems of actions and cognitive changes in the individual's cognition, promoting cognitive activity as a whole, which will contribute to the formation of the professional competence of the future physics teacher.

The distinctive feature of the production pedagogical practice for fourth-year students is that they become involved in a team addressing real problems of the

teacher's professional work. They become acquainted with the actual content and scope of this work and independently perform all the duties of a teacher's assistant in their specialized field and class leadership. Moreover, their practice in the school environment contributes to the development of independence in defining and implementing educational tasks.

Fifth-year students, during their production pedagogical practice, work as physics teachers and class leaders. Their activities have a creative character as they independently perform the functions of a teacher and class leader, develop and implement their own activity programs, and analyze the results.

The achievement of the goal of forming professional competence in fifth-year students occurs through differentiating and individualizing the content and organizing pedagogical practice. This includes offering students a variety of tasks based on their professional orientation, general and professional training, and individual characteristics. It also involves allowing voluntary selection of the object of work and types of activities, and using a wide range of collective, group, and individual work forms.

In addition to assigning student groups to schools, it is also beneficial to individually attach some students to experienced educators to learn from the best examples of pedagogical experience. Throughout this type of pedagogical practice, methods similar to those used during the preparatory and production pedagogical practice of the educational qualification level "bachelor" are employed, taking into account changes that have occurred in previous types of practice. For example, for the development of research competence, pedagogical tasks from innovative educators' experiences are selected, and for the development of communicative competence, students are encouraged to communicate with parents to achieve mutual understanding and active cooperation.

The study of this integral component of the professional training of future physics teachers has been explored by scholars such as O. Bugayov, S. Kamenetsky, N. Purysheva, O. Pyorishkin, I. Sokolov, A. Usova, and others.

Literature review. Recognizing what has been accomplished, it is worth noting that under modern conditions of higher pedagogical education reform in the context of European requirements, shifting the focus from the process of learning to its outcomes, and implementing personality-oriented and competency-based approaches, the issue of improving the effectiveness of organizing and conducting pedagogical practice as an integral component of practical training for future professional pedagogues remains relevant. In this regard, the purpose of this article is to analyze some current issues related to the organization and conduct of pedagogical practice in the system of professional training for future physics teachers, with a focus on shaping their professional culture and competence.

Preparing a highly qualified and competent teacher is a complex and multifaceted process, largely determined by the experience and the feelings they acquire in the early days of their pedagogical career, especially during their period of pedagogical practice. The successful organization and management of this practice is significantly influenced by the style of thinking and the level of professional culture

of the future expert. The formation of these aspects within the individual's overall personality structure is one of the most important educational tasks of a pedagogical university, a vital factor in its cognitive and exploratory activities. However, equipping students with a system of scientific knowledge during the study of disciplines in the fields of psychology, pedagogy, natural sciences, and the professional cycle of training does not automatically ensure the development of their pedagogical thinking and professional culture. The cultivation of these attributes is a lengthy process that requires knowledge and effort, representing a level of thinking culture that they can only achieve through purposeful, specially organized work.

Due to this, a special place in the system of professional training for future physics teachers is occupied by the course of physics teaching methods, where students master both general and specific issues of the discipline and the system of school physics experiments. The students' attention is focused on comprehending and understanding the fundamentals of pedagogical activities related to the analysis of traditional course questions, including what, why, and how to teach, as well as planning and organizing the educational process, searching for ways to enhance its effectiveness and efficiency. However, the reduction in classroom hours and the shift towards self-study, which has been happening recently, pose certain challenges to the quality assimilation of the fundamental course topics, which undoubtedly affects the effectiveness of pedagogical practice.

In our opinion, the foundation for addressing these issues in the training of modern physics teachers is the concept of fundamentalization as a new philosophy of education quality. This approach involves the in-depth mastery of universal, methodological, and subject-specific knowledge, overcoming professional isolation and cultural limitations, and reorienting education towards the development of a harmoniously developed individual. This can only be achieved through the integration of fundamental and professional training for future physics teachers and by providing a creative, research-oriented nature to their educational and cognitive activities. This is particularly relevant during the period of pedagogical practice.

The teacher's role should be to stimulate students, help them define their own learning trajectory since personal knowledge is truly fundamental. Under such conditions, education will be the most promising investment in the future specialist. The organizational and methodological basis for managing the process of pedagogical practice for future physics teachers is a system where the objectives and tasks, content, and structure, as well as the responsibilities of supervisors and students, are clearly interrelated. Uniform goals and requirements, standardization of pedagogical university regulatory documents, the organization and conduct of practice based on individual educational programs that include a creative, research component, and the introduction of a rating system for evaluating students' activities collectively contribute to raising the level and quality of their professional training, consequently enhancing their successful adaptation to the real pedagogical processes in modern comprehensive schools.

Aims. The purpose of the article is to highlight the features of educational and pedagogical practice in the system of professional training of future teachers of physics.

Methodology. The analysis of state normative documents, educational and methodological materials, periodicals, and dissertations related to the organization and conduct of pedagogical practice in the system of professional training for future physics teachers has allowed us to prepare a working program and methodological recommendations that can serve as a well-directed basis for actions. Thus, pedagogical practice is an integral component of the professional training of future physics teachers, performing several important functions:

1. Adaptation function: It familiarizes students with the specifics of organizing the educational process in real conditions of a general educational institution, the rhythm of the pedagogical process, the system of internal relationships and connections.

2. Educational function: It consolidates, expands, and deepens the knowledge, skills, and abilities acquired during the study of disciplines in the fields of psychology and pedagogy, natural sciences, professional preparation, and practical training. It also involves acquiring contemporary teaching technologies and physics teaching methods.

3. Developmental function: It fosters the development of pedagogical thinking and professional culture, worldview, cognitive activity, independence, and the formation of research skills, including self-education.

4. Educational function: It promotes the formation of an active life position, responsibility, the development of professionally significant personal qualities, as well as interest and love for the teaching profession.

5. Organizational function: It involves organizing one's own pedagogical activities and students' learning activities, applying elements of interaction and cooperation, and creating a student community.

6. Projective function: It includes planning one's own educational and educational work, selecting the content and scope of educational information according to the lesson's topic, optimally combining forms and methods of educational and cognitive work with students, taking into account their age and individual characteristics, and preparing lesson plans, educational activities, and more.

7. Communicative function: It entails establishing pedagogical communication with students, parents, and colleagues based on mutual understanding, mutual respect, empathy, and partnership, as well as creating a friendly psychological atmosphere aimed at acquiring new educational information.

8. Diagnostic function: It involves assessing the level and quality of professional and general education, the ability to self-control, self-analysis, and self-evaluation of one's pedagogical activities.

Results. Pedagogical practice involves students working independently with scientific and methodological literature, systematically observing and analyzing the educational process, studying the experience of physics teachers, familiarizing

themselves with the system and methods of using demonstration and laboratory equipment, technical means of teaching (TMT), planning their own educational work, conducting and analyzing open educational sessions, and organizing educational events. This period of the educational process should be seen as an opportunity for students to improve their skills in scientific research on relevant pedagogical, psychological, physics teaching methodology issues, as well as prepare necessary materials for their qualification (diploma) work. The overall supervision and implementation of the practice program are carried out by the person appointed by the pedagogical university's practice department. Direct guidance during the practice is provided by experienced teacher-methodologists who are assigned by the department based on their scientific interests, pedagogical workload, and at least 5 years of work experience in the field of preparing specialists in the relevant direction. Pedagogical practice begins with an introductory conference attended by the supervisor, teacher-methodologists, and students. During this conference, the following issues are discussed: the goals and objectives of the practice, its duration, types and forms of pedagogical activities for students, the rights and responsibilities of interns, teacher-methodologists, the allocation of students to schools, and the monitoring procedure for their work. Requirements for the documentation of the practice are also discussed. During the practice, students take on the role of a teacher, so they are required to adhere to the schedule of the educational institution, undergo training on occupational safety and fire safety rules, and work according to an individually developed plan that has been approved by the teacher-methodologist (practice supervisor). The content of the practice should have an individual creative character and include the following types of activities.

Discussion. Educational and Methodical Work:

a) Familiarization with the specifics of organizing the educational process in a general education institution, the rhythm of the pedagogical process; the annual plan of educational and extracurricular activities of the school, the work of the pedagogical council, methodological associations, and the parent committee.

b) Study of the curriculum for the educational course; the calendar, thematic, and lesson plans for the work of the physics teacher; analysis of students' performance based on class records, students' notebooks, and diaries.

c) Getting acquainted with the physics classroom and its material and technical equipment.

d) Attending physics teacher's classes, familiarization with their teaching methods and forms of work (including the use of active teaching methods, problem situations, non-traditional forms of organizing students' cognitive activities, methods of knowledge assessment, etc.).

e) Systematic individual work with individual students; counseling students engaged in scientific research in the Ukrainian Student Research Association (MAH).

f) Selection and creation of didactic materials and visual aids (wall charts, displays, classroom decoration).

g) Independent planning and conducting of lessons of various types using modern teaching methods and ICT, their obligatory discussion and self-analysis.

h) Attending and analyzing the lessons of fellow teacher-practitioners.

i) Participation in the work of teachers' methodological associations, preparation of presentations and reports.

2. Educational and Upbringing Work:

a) Attending and analyzing the class teacher's upbringing events; studying and summarizing their experience in upbringing work.

b) Pedagogical observations of students and the class, studying their age and individual characteristics, analyzing academic performance and behavior problems.

c) Independent preparation and conduct of upbringing events.

d) Conversations with students and colleagues, preparing psychological and pedagogical characteristics of individual students and the class as a whole.

e) Individual conversations with parents, consultations.

During the pedagogical practice, students should demonstrate knowledge of educational disciplines from the psychological-pedagogical, natural-scientific, and professional cycles of training and develop the following skills based on them: organizational, professional, communicative, projective, and reflective-creative. Upon completion of the practice, students acquire the following skills:

1) Planning, organizing, and conducting various types of lessons and upbringing events.

2) Organizing communication with students and colleagues during the process of joint interaction.

3) Perception, understanding, control, and correction of students' behavior.

4) Analysis and ways to resolve specific pedagogical situations.

5) Formation of elements of their own pedagogical style.

To improve the quality of practical training for future physics teachers during their pedagogical practice, it is possible to provide them with individual tasks that will help them acquire experience in solving pedagogical, scientific, and organizational tasks, including those related to psychological-pedagogical diagnostics of the educational process. Performing such tasks will activate students' activities, expand their horizons, increase initiative, and make the practice more specific and purposeful.

Individual tasks can include the following directions:

Didactic tasks:

a) Preparation of didactic materials, visual aids, demonstration and laboratory equipment, and ICT for specific topics/sections of the physics course, taking into account various forms and methods of organizing students' cognitive activities, including ICT tools.

b) Development of assessment tasks to check the level of students' initial knowledge of specific topics/sections of the course.

Scientific-methodical tasks:

a) Analysis and summarization of the pedagogical experience of the physics teacher.

b) Study and summarization of the state of the material and technical equipment of the physics classroom.

c) Analysis of the influence of teaching methods and approaches on the quality of students' assimilation of the educational material.

d) Participation in the work of teachers' methodological associations, preparation of presentations and reports.

Upbringing tasks:

a) Assistance to the class teacher in conducting upbringing events.

b) Organization and conduct of their own upbringing event.

c) Development of visual propaganda materials (posters, wall charts, announcements, etc.) with a professional focus.

Psychological-pedagogical diagnostics tasks of the educational process:

a) Study of the features of students' cognitive activities (learning interests, motivation, attitude towards independent work, etc.), and identification of factors affecting positive motivation for learning.

b) Study of students' personal development (values, motives), analysis of socially inadequate behavior.

c) Study of interpersonal relationships among students in the group, analysis of specific pedagogical conflicts and ways to resolve them.

The content of individual tasks during the practice may be specified and refined by the physics teacher. Materials obtained by the student during the execution of individual tasks can be used in the future for the preparation of qualification work, presentations, articles, and more. Systematic analysis of educational and methodical work, upbringing work, and individual tasks of the student requires mandatory documentation in a journal of psychological and pedagogical observations.

Conclusions. The preparation of highly qualified specialists has been and remains the most important task of domestic higher pedagogical education. Modern society has a fundamental educational need for the formation of individuals capable of self-learning, self-education, and self-improvement throughout their lives; individuals who can easily adapt to rapidly changing socio-economic and information-technological conditions, have a broad scientific worldview, a high level of culture, and professional competence. However, it should be noted that the existing system of practical training for future physics teachers does not fully ensure their competitiveness, mobility, and ability to adapt socially and professionally. An explanation for this lies in the gap between the demands of the labor market and the quality of practical training for future professionals, a crucial component of which is pedagogical practice.

In our view, the main theoretical and methodological principles for organizing and conducting pedagogical practice, which will contribute to the self-realization of future physics teachers in the process of their professional development and, consequently, successful adaptation to the real pedagogical process in modern educational institutions, should include:

1. Strengthening the interconnection between the higher education institution (HEI) and the general educational institution (school).

2. Integration of fundamental and professional training based on a person-oriented, competency-based, and credit-based approach.

3. Increased emphasis on methodological preparation for future physics teachers.

4. Providing practice with a research-oriented character by introducing individual educational programs that involve creative and research tasks.

5. Implementation of a rating system for assessing students' performance.

We have analyzed the foundational concepts of the competency-based approach, defined and developed the concepts of "competence" and "professional competence," and clarified the essence of the process of forming professional competence.

Based on the analysis of the scientific literature, we find it appropriate to distinguish between the concepts of "competence" and "competency." Competency reflects the functional capabilities of a specialist and derives from the Latin word "competentia," meaning suitability for a task, a sphere of responsibilities entrusted to a specific individual. In contrast, the concept of "competence" is broader in meaning and closer to the concept of "professionalism." By professional competence of future physics teachers, we understand the totality of personal and professional qualities of a student (value content orientations, knowledge, skills, abilities) resulting from their experience in a specific socially and personally significant sphere of activity.

Competence is the student's mastery of a specific competency (or competencies), which includes their personal attitude toward it and the subject of their activity. It has been clarified that the peculiarity of the process of forming the professional competence of future physics teachers lies in the complex dialectical relationship between the researched concept and pedagogical practice as a means of its formation. On one hand, during pedagogical practice, the student will be involved in real pedagogical processes and interaction with children, so they should already have a sufficient level of professional competence. On the other hand, pedagogical practice, in our opinion, can most effectively contribute to its formation.

Nowadays, there is a need to justify the use of special pedagogical conditions because students lack the necessary skills, abilities, and psychological readiness to work in educational institutions of various types. Students need to familiarize themselves with the structure and content of the educational process in educational institutions, as well as the specific work of physics teachers and class leaders. The importance and necessity of using special pedagogical conditions for the formation of professional competence in future physics teachers during pedagogical practice have been substantiated. It has been proven that the use of such conditions stimulates independent thinking among students, promotes active learning, positively influences cognitive motivation, develops self-control skills, and gives the educational-cognitive activities of students a research-oriented direction.It has been established that in modern conditions, the theoretical foundation for the renewal of the content of professional education, aligning it with contemporary needs in accordance with European and global educational trends, relies on the competency-based approach and the creation of effective mechanisms for its implementation. This approach is widely recognized in global pedagogical thought and actively implemented in domestic professional education practice. It entails a shift from the traditional knowledge-centered paradigm to the formation of a clearly defined set of

competencies that embody the readiness of future professionals to perform their professional activities.

Therefore, the key pedagogical conditions for the effective organization of pedagogical practice in the preparation of future physics teachers include:

1. Mastery of modern methods and forms of pedagogical activities, effective teaching technologies.

2. Acquisition of pedagogical forms of educational interaction with students and the ability to independently and creatively apply knowledge and methods acquired during the study of specialized and psycho-pedagogical disciplines.

3. Development of a creative and research-oriented approach to pedagogical activities.

4. Gaining experience in conducting scientific-methodical work and research-experimental forms of pedagogical activities.

5. Familiarization with the experience of teachers and the mastery of the most effective teaching techniques and methods used by them.

Additionally, specific (not typical for traditional) forms of organizing students' educational activities aimed at shaping their professional competence during pedagogical practice have been experimentally verified. These include seminars held before each type of practice, which help students activate their previous knowledge of pedagogy, psychology, and physics teaching methodology, as well as mini-pedagogical student councils, which involve the presence of both a teacher and a lecturer, among other things.

It has been demonstrated that the effectiveness of educational activities, the level of motivational, cognitive, and operational components of professional competence in students from the experimental group after the formative stage of the pedagogical experiment is significantly higher.

A comprehensive program of pedagogical practice for students of physical specialties, aimed at shaping their professional competence, has been developed and implemented in the educational process of higher pedagogical institutions in Ukraine. The educational manual "Practical Professional Pedagogical Training for Students of Physical Specialties" has been created, which contains specific, non-traditional forms, methods, and techniques for organizing pedagogical practice. This manual serves as the methodological basis for organizing pedagogical practice and reveals the pedagogical conditions for the formation of professional competence of future physics teachers.

Future research prospects in this direction include the creation of a comprehensive model for organizing and managing the pedagogical practice of future physics teachers, the determination of organizational and pedagogical conditions and criteria for assessing all its components based on a rating system in the context of European requirements.

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THEORETICAL FOUNDATIONS OF USING WEB TECHNOLOGIES IN THE TRAINING OF FUTURE SPECIALISTS IN THE FIELD OF CHEMISTRY

Viktoriia Davyskyba[1], Vitalii Honcharuk[2], Vladyslav Parakhnenko[3]

[1]Lecturer at the Department of Chemistry, Ecologyand Relevant Teaching Methodologies, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: vika197031@gmail.com, ORCID: https://orcid.org/0000-0002-3900-9745

[2]Ph.D. (Pedagogy), Associate Professor, Department of Chemistry, Ecology and Methods of its Training, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: gvitalii1975@gmail.com, ORCID: https://orcid.org/0000-0002-3977-3612

[3]Lecturer-trainee, Department of chemistry, ecology and methods of their teaching, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: vladparachnenko@ukr.net, ORCID: https://orcid.org/0000-0002-4312-6194

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Abstract. *The article examines the theoretical foundations of using web technologies in the training of chemistry teachers. The factors of preparation of future chemistry teachers for the use of WEB technologies during distance learning have been determined. The use of educational WEB-resources enables teachers to carry out purposeful and more effective interaction with students, organize individual educational work, introduce and deepen methodical materials from educational subjects. An analysis of the theoretical works of domestic and foreign scientists was carried out, which indicates that in the context of the study of the quality of education, there is no unambiguous methodology for the development of WEB-oriented educational systems. The use of WEB technologies is growing significantly in all spheres of human life, in particular, this applies to the sphere of education. One of the main reasons for teachers' intensive attention to the problem of implementing WEB technologies is the convenience and ease of use of existing tools for finding, creating, and using educational WEB resources. Using educational WEB resources, it is possible to greatly increase the effectiveness of the educational process, to activate the educational and cognitive and independent activities of students. In the process of his activity, the teacher has to solve tasks related to the search for available educational WEB resources, analyzing them for the feasibility of using them in the educational process and creating his own. First of all, this affects the chemistry teacher, since his profession is closely related to the use of WEB technologies. Chemistry teachers can use WEB resources for distance learning, in class and in extracurricular work. The introduction of WEB technologies into the educational process requires the development and practical use of scientific and methodological support, the creation and effective use of tools and systems of computer training and knowledge control, the systematic integration of these technologies into existing educational processes and organizational structures.*

Keywords: *WEB technologies, training of chemistry teachers, education, informatization of education, pupils, students, computer training, knowledge control.*

JEL Classification: I 23, I 29

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Introduction. The use of web technologies in education is one of the most promising directions for the informatization of education. One of the main reasons for the increased attention of educators to the problem is the convenience and simplicity of using existing tools for searching, creating, and using educational web resources. The development of computer and web technologies inevitably leads to the informatization of all types of educational activities, including the creation of an information and educational space. The priority directions for creating an information and educational space include the implementation and use of the didactic possibilities of the Internet and web technologies (web services, educational web resources, online communities) in higher education. This allows organizing the learning process in a way that engages students actively and with enthusiasm, allows them to see the results of their work, and enables them to assess their progress independently. Combining traditional teaching methods with modern information technologies can help achieve these goals. Today, various possibilities of internet technologies are used in several main areas: as a means of obtaining information, as a means of communication, for entertainment, and for learning. The Internet provides access to an unlimited amount of text, audio, and video materials in different languages, including electronic newspapers and magazines, electronic versions of printed publications, library catalogs, archives, museum websites, educational institution websites, transcripts of some television programs, movie scripts, web pages of famous political and cultural figures, etc. Educational web resources are electronic resources placed on the web locally or globally in various formats (text, graphics, archives, audio, and video formats). They can be classified by their functional purpose into educational, educational-methodical, reference, normative, scientific, pedagogical, and software tools. The development of information technologies is rapidly progressing, with the number of software products constantly increasing. To prepare the younger generation for life in an information society, higher education institutions must educate professionals who can make decisions independently using their knowledge of modern information technologies and means of accessing information resources. It is important for future teachers to possess the skills to independently create informational resources and to master the technologies of creating educational websites, which have become essential components of a unified educational space.

Educational web resources provide information and presentation, advisory, informational-methodical, enlightening, and educational support for the activities of interaction subjects. They open up new opportunities for interaction with the public and allow:

1. Interactively deliver information to the audience regardless of their geographical location.
2. Provide up-to-date coverage of the activities of the web resource through the publication of news, reviews, catalogs of publications, as well as scientific, methodological, and practical materials.
3. Utilize modern means of communication (email, interactive conferences, forums) and effectively organize the portal's support service.

4. Activate the participation of educational staff, students, and teachers in Internet competitions, contests, and conferences.

Educational web resources can be classified by their purpose of use:

1. For independent work by students or pupils.
2. For the preparation of teachers for classes.
3. For self-education of educators.
4. For organizing practical work during classes.
5. For organizing extracurricular activities in a discipline.

Literature review. The use of web technologies in the preparation of chemistry teachers has been explored in the works of various scholars, including S. Arkhangelsky, V. Bykov, N. Voropai, O. Goryachev, M. Zheldak, A. Kolomiets, N. Morze, L. Petukhova, Y. Rivkind, O. Spirin, N. Tverezovska, and others. These studies have addressed the challenges in preparing future chemistry teachers and the integration of web technologies.

The preparation of future information technology specialists has been researched by scholars like A. Verlan, O. Goncharova, Y. Goroshko, A. Yershov, V. Klochko, E. Kuznetsov, O. Kuznetsov, Y. Mashbitsa, V. Monakhov, N. Morze, S. Rakov, Y. Ramsky, I. Robert, Z. Seydametova, S. Semerikov, E. Smirnova-Tribulska, Y. Tryus, and others. These studies have focused on the psychological and pedagogical aspects of using modern information resources in the educational process.

Aims. The article's aim is to clarify the theoretical foundations of using web technologies in the preparation of chemistry teachers.

Methodology. The problems of modern school education can be solved at a qualitatively different level through the application of computer technology and advanced ICT (Information and Communication Technologies). The use of telecommunications and Internet information resources not only complements the informational content of educational subjects in general education but also significantly changes the methods of their teaching, updates the content of education, and enhances the professionalism of teachers. Modern ICT has fundamentally changed our perception of traditional forms of education. Since the most accessible environment for implementing educational programs today is the Internet, the combination and creation of an educational space in this network provide enormous opportunities for educational institutions of various levels to realize their educational potential at a higher and more qualitative level.

Information technologies (IT) represent a set of methods and software and hardware tools integrated for effective data processing. Based on this concept, web technologies can be defined as a set of methods and software and hardware tools integrated for effective processing of web resources located in the web space (local or global, such as the Internet). Therefore, the concept of web technology is associated with the use of web space - the World Wide Web (WWW) - a global information space based on the physical infrastructure of the Internet and the HTTP data transfer protocol. Web technologies provide answers to the questions:

If this question were related to information on a user's computer (which is not connected to the network), you can use text, graphic, and sound editors. However, to

perform these operations on the network, you only need a web browser and a set of relevant web technologies that function on different servers. For example, to enter text in an email, you don't need to use a text editor installed on your computer because most email interfaces have a built-in editor that allows you to type text directly in the browser. This technology is called web technology.

For instance, well-known social networks like VKontakte or Odnoklassniki utilize various web technologies that allow users to upload and view photos, music files, videos, and more. Google offers the Google Docs service, which includes a web-based text editor for creating .doc documents, a web-based presentation editor, and spreadsheets. Therefore, you don't need to use software installed on your computer; it's sufficient to open a web browser, enter the Google system's address, and create the required document.

Any web technology can be implemented using network resources, either globally or locally, within a single audience or an entire building. Let's take a look at the basic principles of how the Internet functions. In summary, the World Wide Web (WWW) is built on a variety of technologies that serve different functions within the Internet. For instance, to create dynamic web pages, PHP is used, while CSS technology is used to enhance the visual perception of web content by allowing for unified styling across multiple web pages. JavaScript is used to create dynamic elements on web pages, making them more attractive and functional.

Web pages can either be simple static sets of files or be created by a specialized computer program on a server known as a "website engine." This program can be custom-built for a specific website or be a ready-made product designed for a certain type of website. Some of these programs allow website owners to flexibly structure and present information on their websites and are known as content management systems (CMS). The process of creating websites as functional information resources is a complex task that requires a combination of various professional skills. The general term used to describe this process is "web development."

Web services are technologies that allow applications to exchange data regardless of the platform and programming language. A web service must have a programmatic interface, which it uses to receive commands and data in a pre-agreed format, perform operations, and send responses over the network. Data transferred over the network is typically in a standardized format, often some variant of XML. The TCP/IP protocol, usually HTTP or HTTPS, is almost always used. A group of web services that interact in this manner forms a web application. The corresponding application architecture is known as service-oriented architecture (SOA).

Today, there is a large number of web services operating on the internet that are based on web technology. In chemistry lessons, a computer is used as a means of learning and as a tool for automating educational activities. It can be applied throughout the entire lesson for learning new material, reviewing and consolidating it, assessing knowledge, and preparing for lessons.

However, it is necessary to use various ways of applying ICT in lessons because their monotonous use hinders holistic and creative perception of educational material. The introduction of information and communication technologies is an educational

strategy for teaching and learning. The peculiarity of this technology is that it does not necessarily have to be used at all stages of the lesson because it requires a certain foundation, additional efforts, time, and is relevant in solving a range of problems in modern chemistry teaching methodology.

The intensity of computerization of chemistry lessons is determined by their focus: some lessons incorporate multimedia elements, while others are entirely computerized. The former involve episodic use of computer resources to address specific lesson tasks, such as checking knowledge from the previous topic, demonstrating experiments, acquiring new skills and knowledge, completing exercises, and conducting assessments. Fully computerized lessons (multimedia lessons/lectures) are used to achieve educational objectives when studying new material.

Methodological issues of implementing digital technologies and innovative teaching methods include the use of multimedia presentations during seminars, which emphasizes a high degree of student independence in acquiring and applying knowledge. The use of web technologies, on the one hand, opens up a wide space for creativity for teachers and students, expands opportunities for solving professional and research tasks, and, on the other hand, places higher demands on the preparation of future teachers in terms of their readiness to use Internet technologies in their professional activities.

The problems of preparing future chemistry teachers to use web technologies during distance learning in their professional activities are determined by factors such as:

- Increased requirements for the quality of chemical education for future chemistry teachers as a necessary condition for accelerating scientific and technological progress in all sectors of Ukraine's economy.

- Requirements for the formation of computer literacy skills and the application of Internet technologies in the process of studying the chemistry course.

- The need to increase the quality of educational and research activities of teachers based on the use of modern Internet technologies.

In summary, the use of information and communication technologies (ICT) in teaching chemistry can enhance the learning experience and offer various benefits. However, it's essential to vary the ways ICT is applied in lessons to prevent monotony and ensure effective learning. The level of computerization in chemistry lessons can range from episodic use of multimedia elements to fully computerized lessons, depending on the specific educational objectives and needs. Additionally, the preparation of future chemistry teachers to use web technologies and digital tools is crucial for enhancing the quality of chemical education and keeping up with the demands of the modern world.

Results. There are four approaches to defining the purpose of such training:

1. Formation of a certain level of information literacy.
2. Formation of information culture.
3. Formation of information competence.
4. Formation of readiness to use Internet resources.

The use of computers in chemical education, which began almost simultaneously with their use for scientific research, for a long time occupied a minor place in the development of educational technologies. Teaching technology is understood as a system of three interconnected aspects: a set of necessary theoretical and methodological foundations for addressing issues related to the organization of the educational process, the educational process itself, and its technical equipment. Undoubtedly, computers are an effective means of assessing students' knowledge, which, firstly, helps diversify forms of assessment, making them more attractive to students, secondly, allows for a more objective assessment of knowledge, and thirdly, simplifies administration by collecting and analyzing a large amount of information in a single database. In China, a fully computerized state exam in chemistry has been introduced into the structure of final school exams. The development of distance education systems allows students to deepen their knowledge, fill gaps in specific topics or school program courses, and prepare for standardized tests. At the same time, the peculiarities of chemistry as a subject impose serious limitations on the use of distance learning. For example, in distance learning, students lose the opportunity to conduct chemical experiments, and they do not have continuous feedback with the teacher. The solution to these difficulties was found in combining traditional and distance learning methods. This approach not only allows for real experiments but also provides the opportunity to watch videos over the Internet or from CD-ROMs. Interactive interaction between the teacher and the student is carried out through email. Currently, the educational process is undergoing informatization. Modern information and communication technologies are entering all areas of human life, including education. The present requires new approaches to the educational process, new methods, and forms of presenting educational information. These new approaches are needed in teaching chemistry and natural sciences in general. One of these approaches is the use of web technologies during the educational process. The use of ICT in teaching chemistry allows intensifying the educational process, accelerating the transfer of knowledge and experience, and improving the quality of education. Modern information technologies and innovative teaching methods in the training of specialists: methodology, theory, experience, problems. In addition, the implementation of web technologies in the educational process requires the development and practical use of scientific and methodological support, the creation and effective use of software and computer-based learning and knowledge assessment systems, systematic integration of these technologies into existing educational processes and organizational structures. Chemistry teachers can use web resources for distance learning, in regular classes, and extracurricular activities. This serves several purposes: obtaining up-to-date information, instant communication with colleagues or students (optimizing the learning process), sharing personal experiences, professional development, and learning from the best practices of other teachers. Successful integration of traditional teaching methods with computers allows teachers to significantly increase the effectiveness of their pedagogical influence, making the learning process more interesting, diverse, and intensive. In particular, the use of multimedia presentations created using Internet technologies

promotes a faster understanding of the main aspects of the educational material and frees the teacher from repetitive explanations. The use of computer technologies allows teachers to create high-quality visual aids with minimal time and store such images for future use on lessons and in the development of their own methodological support."

Internet technologies play an important role in assessing students' educational achievements. Computer-based online tests and diagnostic systems facilitate rapid differentiated assessment of knowledge and timely corrections. Internet technologies can serve as the basis for organizing independent work for students. For instance, on specialized music educational websites, students can not only read about specific musical instruments but also listen to their sounds. The Internet offers unlimited possibilities for organizing extracurricular activities for students. Specialized creative Internet centers allow anyone interested to showcase their talents and gain recognition.

Internet technologies are of paramount importance in the professional self-development of teachers. Their application allows for swift exchange of professional information among experts. Sharing new ideas, lesson plans, and educational event scenarios, as well as the results of pedagogical research, significantly enhances teachers' professional development.

Internet technologies reduce the time required and prevent duplication of work. Electronic information transfer is faster compared to traditional methods and ensures the exchange of materials among a much wider group of professionals. Internet technologies serve as an effective means of communication among all participants in the educational process, facilitated through various chats and teleconferences.

The use of computer technologies provides the opportunity for continuous consultation with methodologists and instructors from the postgraduate teacher training institute, enhancing the effectiveness of the self-improvement process. Internet technologies also play a vital role in checking students' educational achievements. Computer-based online tests and diagnostic systems contribute to rapid differentiated assessment of knowledge and timely corrections.

Internet technologies can serve as the basis for organizing independent work for students. For example, on specialized music educational websites, students can not only read about specific musical instruments but also listen to their sounds.

An important condition to consider in the professional preparation of future chemistry teachers is the recognition of differences in applied software. There is a wide variety of computer tools that teachers used during their higher education and will have to work with in schools. New software tools continually emerge with more educational capabilities and specific usage features. Having basic knowledge of Internet technologies allows teachers to adapt more quickly to changes in applied software.

Significant emphasis in enhancing the professional development of future teachers is placed on acquiring skills for independent knowledge acquisition and using specific software. The ability of future teachers to search for necessary

information in reference systems and formulate inquiries correctly plays a crucial role.

An important aspect of the professional preparation of future primary school teachers is mastering pedagogical software tools for various subjects, which have gained widespread use in recent times. Future teachers should have skills in working with diverse educational software complexes and websites containing a vast collection of various materials like fairy tales, riddles, proverbs, tongue twisters, counting rhymes, educational online games, examples of crafts from various materials, and parenting advice.

The application of different technology usage methods in the process of teacher professional preparation contributes to increasing the level of their professional competence.

Conclusions. In the context of the technical changes in modern education, it is essential to achieve a new quality of education that ensures the holistic development of each individual. This involves teaching every student how to acquire, process, evaluate, and use a vast amount of information in practical activities. To address this need, a promising direction for the development of modern education is the creation of comfortable conditions to organize educational activities through the establishment of an information and communication educational environment.

The key components of this environment are the attainment of educational quality, driven by new standards of education for the new generation, and the didactic potential of information and communication technologies (ICT) and web technologies. The use of educational web resources in the training of chemistry teachers enables purposeful and more effective interaction with students, organization of individualized learning, enrichment of methodological materials for educational subjects, familiarity with new ideas, and mastery of contemporary teaching methodologies. It also facilitates communication with colleagues, participation in scientific-practical conferences, and attendance at methodological webinars and discussions on pressing issues in education in Ukraine.

The use of web technologies empowers chemistry teachers to independently shape the content of education, realize creative ideas, and employ unconventional approaches to problem-solving in the process of preparing future educators. Prospects for further research lie in enhancing the professional training of chemistry teachers through the use of web resources.

Author contributions. The authors contributed equally.

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CHAPTER 3
THEORY AND METHODS OF VOCATIONAL EDUCATION

FORMATION OF TERMINOLOGICAL COMPETENCY IN FUTURE SPECIALISTS IN THE ECONOMICAL FIELD OF STUDY

Valentyna Avramenko[1]

[1]*Ph.D. (Pedagogy), Associate Professor, Practical Linguistics Department, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: via@ukr.net, ORCID: https://orcid.org/0000-0003-4859-041X*

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Abstract. *The article reveals the peculiarities of the formation of technological competence in future specialists of the economic direction. The purpose of the article is to reveal the peculiarities of the formation of technological competence of future specialists in the economic direction. The study used general scientific technological competencies of future specialists. An analysis of the literature on the research problem was carried out to study the state of its development and prospects for research, systematization and generalization of conclusions. The work based on such a study outlines the concept of "terminological competence of future specialists in the economic profile." The current state of formation of the studied competence among students of economic education is considered. Students of economic education use the presented exercises for developing the specified competence. Ways to improve the formation of the terminological competence of economist students involve the comprehensive use of scientific and educational texts, terminological dictionaries from various economic fields of knowledge, and mass media materials. The process of forming the terminological competence of future economists takes place thanks to the presence in the economic terminology, which is developed and obeys the laws of language. The article systematizes the main parameters in the evolving economic terminology, which adhere to the laws of language: polysemy of terms; determinologization of terms resulting from their usage in various scientific fields, including economics; introduction of term components into synonymous paradigms; functioning of specialized terms as part of homonymous paradigms; introduction of professional terms into paronymous paradigms; functioning of term components within antonymous paradigms; inclusion of economic terms in word-formation nests; presence of both outdated terms and neologisms in the terminological system; increase in the use of term components in educational and scientific texts. This topic is quite promising, and further research is needed to address the issue of using specific national economic term components instead of extensive use of foreign terms.*

Keywords: *formation; competence; terminology; vocabulary; terminological competence; specialists of economical field of study; professional training; higher education institution.*

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Introduction. One of the necessary conditions for the professional training students of economical education is the formation of terminological competence, which is based on the aim of future specialists to master the lexical features of the modern Ukrainian literary language, the conceptual and terminological apparatus of the subject field of knowledge, to study disciplines oriented to their future professional activity.

The consideration of scientific literature in the field of terminology offers us an opportunity to justificate and observe the definition "terminological competence". Highlighting this definition, E. Ogar interprets it such as "a complex of language and speech knowledge, abilities and skills of a specialist, having which the foundation of the theory and practice of the specialty is forming, which is going to be necessary for a deeper understanding and assimilation of its conceptual and categorical base, for the implementation of the most diverse acts of research, of a creative-analytical and practical nature, which causes formation of the ability independently create and organize terms of professional speaker" [5, p. 32].

Literature review. Elucidating the research of scientist V. Isakova, the following components of speech competence in the structure of junior economics specialists: cognitive, active, axiological were discerned [3].

G. Bondarenko explains terminological competence as "the ability to choose terms according to the topic of the statement, taking into account the differences of paronymic terms, preventing the replacement of one terminological unit by another, using equivalent terms according to their definitions, distinguishing between terms and professionalism, also differentiating the terms of one field of knowledge from the terms of other fields , normative translating" [1].

A well-known scientist in the field of stylistics of the Ukrainian scientific language H. Onufrienko [6] proves that students' acquisition of speech literacy is connected with the formation of key-competence for professional activity, entitled as a "terminological competence". Significantly deepened common language knowledge during the mastering of disciplines is extrapolated to the language of the profession, primarily to its terminological system. Mastering the language of the specialty in a higher education institution – assimilation, first of all, the most characteristic linguistic and non-linguistic features of the scientific style, genre realization, purpose determine its application in the context of professional activity of future specialists in the economical field of study. Generally, taking into our consideration, the aim of this concept is working with educational, scientific texts, where the terminology of the professional language is framed, finding out the meaning of term tokens, the scope of their usage. Consequently, the skills and abilities of the future professional activity are forming in such way. Students of economical specialties discover implementation of scientific work: writing annotations of works in a specialized direction, essays on the terminology of various branches of economic knowledge, compiling minimum dictionaries in practical and laboratory classes.

Aims. The purpose of the article is to reveal the peculiarities of the formation of technological competence of future specialists in the economic direction.

Methodology. The study used general scientific technological competences of future specialists. An analysis of the literature on the research problem was carried out to study the state of its development and prospects for research, systematization and generalization of conclusions.

Results. Assimilation the terminology as the most informative part of the professional language helps to increase the level of professional communication, forms the language and professional competence of future specialists in economics.

The above-mentioned definitions of the phrase "terminological competence" allow us to formulate the "terminological competence of future specialists of the economic profile" concept: a formed ability to use economic terms in the process of professional activity accurately, clearly and appropriately, to operate with professional terminology clearly, to be able to apply business management tools, to possess professional methods of exchanging information, use the basic principles of business communication.

The purpose of the study is to reveal the ways of forming the terminological competence of future specialists in the economical field of study.

The current state of terminological systems shows that definitions in the process of functioning are beginning to develop according to the dynamic laws of language, revealing the education system students of the economical profile. Performing exercises, analyzing the stylistic resources of the language, students understand that terms enter into polysemy relationships, terms are determinologizied as a result of their functioning in various fields of scientific knowledge, terms fall into synonymous, synonymic, paronymic and other paradigms. It is very interesting to observe the functioning of terms within the antonymic paradigm, as part of word-forming nests. This provides an opportunity to consider professional terminology in the aspect of forming terminological competence and professional development of students of economic education.

Discussion. Experiencing work with students, we are touching upon economical terminology, which is being recorded in dictionaries, scientific and educational texts. It is known from earlier researches, that terms and scientific definitions are divided into a number of groups:

1) term "lexeme" taken from the basic sciences: general and applied linguistics (system, structure, scheme, model, language), linguistic philosophy (concept, linguistic picture of the world);

2) terminology lexis functioning as the main categories of linguistic stylistics (style, functional style, function, connotation, stylistic coloring, stylistic shade);

3) names of nomenclature units used in linguistic stylistics as technical terms and concepts (vocabulary of scientific style, set of terms without definitions, a number of Greek-Latin names for types and elements in the natural and mathematical fields);

4) names of functional styles, sub-styles, types, genres of text (scientific style, popular science sub-style, educational sub-style, journalistic style, newspaper journalistic sub-style, etc.)

During our study of vocabulary, which is based on scientific, educational, mass media texts, students were asked to perform a number of tasks:

1) choose terms included in synonymous paradigms;
2) highlight terminological antonyms;
3) identify paronymous terms;
4) identify homonymous paradigms;
5) identify cases of terminological polysemy;
6) make terminological word-forming pairs, chains, nests;
7) identify archaisms, historicism, and neologisms in professional terms;
8) to answer the question why in economic terminology mainly constituent term "lexeme" was used.

Completing such exercises and tasks helps students to understand that the economical terminology system, just like the terminology another field of knowledge, is structured using a number of paradigms: synonymous, antonymic, paronymic, homonymous.

In scientific and educational texts of a specialized field, synonymous paradigms are most often presented, which include two or more members of such a complex unit, which is called paradigm. For example: consumer goods, income, profit, dividend; money, funds, capital, quasi-money, currency; auction, bidding; monopoly, cartel, trust, syndicate, consortium, concern, conglomerate, holding; broker, dealer, broker, trader, jobber. More often, lexical doublets are a borrowed and a proper Ukrainian word: advance - deposit; client - customer; investor - depositor; contract - contract; debtor - debtor; interest - percentage, dividend - profit.

Working with synonyms made it possible to determine the meaning of terms as accurately as possible, to study the patterns of their functioning. For this purpose, we suggest that students use terminological dictionaries from various economic specialties. The terms were considered on the basis of their functioning in the texts. Thus, despite the apparent similarity of meanings, the term lexemes differ in the contexts of use: "real estate" as the physical state of a person and "real estate" as "immovable property"; "market" as a place for trade and "labor market", "sales market"; "basket" as an inflorescence, "basket" as a household object and "grocery basket".

Students realize that antonymous paradigms are also part of the terminological field of the economic sector: abstractness - concreteness; generalization - differentiation; synthesis - analysis. Economic terms enter into antonymous relations at the word formation level, with prefixes or suffixes giving them opposite meanings: liquid assets - illiquid assets; agio - disagio; privatization - re-privatization; foreign exchange - non-foreign exchange; foreign trade - domestic trade; macroeconomic - microeconomics; profitable - unprofitable; import - export; development - stagnation, and others. Paronyms also interact both in texts and within paradigms: "license" - a document demonstrating a specific permit, and "licence" - a permit or tariff duty exemption; "static" - immobile, lacking development or action, in a state of rest and balance; "statistical" - a research method that studies quantitative accounting of mass phenomena; "currency" - a monetary unit forming the basis of a country's monetary

system; “volute” - a sculptural ornament in the form of a spiral scroll; “to subsidize” - to allocate funds from the state budget to cover losses; “to date” - the payment due date, establishing the term of payment from the date of issuance; “executive”- a letter, authority, committee; “executive” - skill, style, talent; “economical” - using something thriftily and economically, promoting savings, carrying out economy, “economic” - related to the study of economics (economic journal, economic geography), which enables saving something, advantageous in an economic sense; "joint-stock" - a company, bank, corporation; “shareholding” - contributions; “fuel” - a combustible (solid or liquid) substance serving as a source of thermal energy; “fuel” - flammable liquid intended for internal combustion engines.

As a result of analyzing the terms, students have come to the conclusion that homonymous paradigms in linguostylistics most often include stylistic and lexical homonyms. For example, “Dachshund” can refer to a breed of hunting dogs, or it can refer to a precisely established official pricing of goods or the size of payment for labor and services. “tender” can mean a competitive form of placing an order for the purchase of goods, provision of services, or execution of work according to per-defined conditions in agreed terms on the principles of fairness and efficiency. On the other hand, “tender” can also refer to a single-masted sailing vessel with fore-and-aft sails, including a job and a stay foresail. “Fingerboard” can refer to the upper part of stringed instruments, or it can mean the hilt of a sword or other cold weapons. It can also be a seal or stamp with a sample signature or some other text, or it can be an inscription on a document or publication that specifies a special set of rules for using it.

Therefore, through educational exercises, students have concluded that homonym in economic terminology is relatively rare compared to synonymy and paronymic.

It's great to hear that students are actively working on developing their terminological competence. The identification of cases of terminological polysemy is indeed an important aspect of mastering specialized terminology.

Based on the study of scientific and educational texts, informational models of functional styles, and dictionary entries, the students have discovered various instances of polysemy in several terms. For instance, the term "ринок" (market) has several meanings, such as market temperature, market conjuncture, and market saturation. The term “bank” also exhibits polysemy with meanings like a banking operation and banking secrecy. Similarly, the term “price” shows polysemy with meanings like price crisis and price ceiling.

Recognizing and understanding the different meanings and nuances of terms is crucial in specialized fields like economics. It enables students to use terminology accurately and effectively in their studies and professional work. Developing this terminological competence will undoubtedly contribute to their expertise in the economic domain.

Furthermore, in the process of working with educational texts, we focused students' attention on not only outdated terms or their individual meanings such as “national economy”, “socialist production”, “state settlement”, and “five-year plan”,

but also on terminological neologisms that are used in contemporary economic terminology. For example, “endorsement” refers to a valid endorsement of a person's name or an organization's name on the title page of a document; "hedging" is a technique that produces the opposite effect of another operation, which aims to minimize potential losses; hedging is typically employed in commodity, currency, and financial transactions. “Futures” are instruments used to buy and sell goods and financial documents at a specific date in the future. “Futures” come in the form of a fixed (obligatory) contract for the sale of a standardized quantity of something at a fixed price within a defined period. “Futures” are considered as the contractual tool.

Great opportunities for the development of terminological competence in students studying economics arise during the formation of economic terms in word pairs, chains, and nests. For instance, “audit – auditor – auditing – audited – auditing service – Ukrainian Auditing Chamber”.

In response to the question of why economic terminology predominantly uses compound term components, students draw conclusions that the economic terminological system continues to evolve. The emergence of new meanings and their differentiation leads to the formation of compound designations that accurately reflect new concepts: state investment, circulating capital, market infrastructure, international division of labor, foreign exchange reserves of enterprises, monetary capital reproduction, enterprise payroll fund, full replacement value of fixed assets.

Conclusions. Thus, the ways to improve the formation of terminological competence in economics students involve a comprehensive use of scientific and educational texts, terminological dictionaries from various economic fields of knowledge, and materials from the media. The process of forming future economists' terminological competence occurs due to the presence of the following parameters in the evolving economic terminology, which adhere to the laws of language:

1) Polysemy of terms;

2) Determinologization of terms resulting from their usage in various scientific fields, including economics;

3) Introduction of term components into synonymous paradigms;

4) Functioning of specialized terms as part of homonymous paradigms;

5) Introduction of professional terms into paronymous paradigms;

6) Functioning of term components within antonymous paradigms;

7) Inclusion of economic terms in word-formation nests;

8) Presence of both outdated terms and neologisms in the terminological system;

9) Increase in the use of term components in educational and scientific texts.

This topic is quite promising, and further research is needed to address the issue of using specific national economic term components instead of extensive use of foreign terms.

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FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE BACHELOR OF ECONOMY IN HIGHER EDUCATION INSTITUTIONS

Yevhen Pidlisnyi[1], Vitalii Honcharuk[2]

[1]*Ph.D. (Pedagogy), Associate Professor, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: gek8226@gmail.com, ORCID: https://orcid.org/0000-0003-3127-2116*

[2]*Ph.D. (Pedagogy), Associate Professor, Department of Chemistry, Ecology and Methods of its Training, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: gvitalii1975@gmail.com, ORCID: https://orcid.org/0000-0002-3977-3612*

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Abstract. *Based on the competence approach, such meta-educational constructs as competence and professional competence are revealed in the article. It is stated that the formation of professionally significant competencies of future Bachelor of Economics is focused on the humanistic style of interaction between students, lecturers and employers. The purpose of the article is the formation of professional competence of future Bachelor of Economics in higher educational institutions. It is aimed at developing self-and mutual evaluation of the most significant results for future professional activity, creative – is associated with the purpose, content, activity of lecturers and students, developing – focusing on the maximum development of students' reflexive and creative abilities. The factors that determine the professionally significant qualities of future Bachelor of Economics are determined. The necessity of forming professionally significant qualities in future Bachelor of Economics (ability to navigate information flows; learn, filling in the missing knowledge; have competitiveness and mobility, to solve non-standard professional tasks and strive for self-actualization in the chosen professional field) is proved. It is also aimed at developing students' personal functions (motivation, orientation to the future profession, self-realization). The following prospects for further research have been identified: revealing of relationships between the level of professionally significant competences formation of future bachelor's of Economics and their career growth; conceptual and methodological foundations of continuous education of bachelor's of Economy in the context of competence approach; productive interaction between university and employers in improving the efficiency of professional training of future bachelors to work.*

Keywords: *formation, competence, professional competence, future Bachelor of Economics, professionally significant qualities, competence approach, higher education institutions.*

JEL Classification: I 23, I 29

Formulas: 0; fig.: 2; tabl.: 0; bibl.: 15

Introduction. Modern socio-economic conditions require the preparation of professionals who are competitive in the job market, which entails a change in the educational objectives of higher education as a whole. Considering the ongoing shift in the paradigm of economic knowledge, reflected in the economic culture of society and the economic competence of the contemporary individual, the modernization of the process of professional training for economics bachelor's degree holders becomes particularly relevant. At the same time, the low competitiveness of economics bachelor's degree holders, due to the lack of essential production-related competencies in the majority of them and the inadequacies of contemporary

enterprises' human resource policies, negatively impacts the employment prospects of higher education graduates, contributing to higher youth unemployment rates.

Employers seek employees who are ready to independently engage in production processes and capable of practically solving the life and professional tasks assigned to them. This depends not only on the knowledge, skills, and abilities acquired during the learning process but also on the competencies developed in graduates of higher education institutions.

Literature review. The development of competencies in students that are in demand in the job market is a pertinent task for modern higher education institutions. This is evidenced by the fact that the new generation of state educational standards is based on the ideology of education content formation "from the outcome," with competencies becoming a key component. The theory of competency formation in higher education has been substantiated in the works of N. Bibik [1], O. Bila [2], O. Vnukova [3], O. Zablotska [7], B. Mokin [9], V. Petruk [11], M. Rud [13], and others. The notions of economic competency, economic thinking, and economic culture have been studied and presented in the works of V. Volyk [4], S. Horobets [5], L. Dybkova [6], Ya. Kazarnytskova [8], Yu. Pavlov [10], and others. The authors argue that the competency-based approach should be based on the development of requirements in the state standard, curriculum, and educational programs. Moreover, contemporary demands for an individual and a professional should reflect the profound essence of the profession, which is not solely defined by the functional aspects of a specific professional activity but also by its socio-cultural and temporal context.

Indeed, the problem of developing professional competence among future economics bachelor's degree holders in higher education institutions has been overlooked by researchers in the field of professional education theory and methodology. The solution to this situation seems to lie in the modernization of higher education content, the optimization of educational process technologies, and a reevaluation of the purpose and outcomes of higher education based on the competency-based approach and competencies as the results of education.

According to the new paradigm, as viewed by O. Zablotska [7] and M. Rud [13], the goals of the modern higher education system should, first and foremost, involve creating conditions necessary for individuals to fully grasp the material culture and spiritual values accumulated by humanity. The second most important goal is to unlock internal potentials and assist in self-realization. The third goal, without which the achievement of the first two is impossible, is to stimulate self-discovery, the development of an individual lifestyle, and activities.

According to the research of O. Bila [2] and B. Mokin [9], a modern professional needs to be able to transform acquired knowledge into innovative technologies. They should possess self-education and continuous learning skills, be capable of working in teams and adapting to changes. Furthermore, it is crucial for them to possess essential civil and social competencies, which means being a responsible citizen in a democratic society.

The mission of a modern higher education institution (HEI) can be defined as providing broad access to qualitatively new and effective education for various segments of the population, while the mission of the higher education system is to achieve the integration of individual and societal needs. For both society and learners, the crucial outcome is readiness for activity. Hence, today, according to several researchers (V. Petruk [11], among others), the focus is on the "activity nature of knowledge," which means the readiness to perform activities that are reflected in the character of higher education, its goals, and its content.

The reform of Ukraine's economy has led to an increased interest in economic and legal specialties. Currently, having reached the peak of popularity, these professionals are not fully in demand, as the number of graduates in these fields has surpassed the demand in the job market. Despite the surplus of graduates in the aforementioned specialties, they remain popular among prospective students and their parents.

The government aims to regulate the balance between the admission of students and their subsequent professional demand in society by allocating more budgetary places to specialties where there is a proven necessity, as indicated by analytical data. Additionally, higher education institutions (HEIs) are opening new specialties that are in demand in modern society. One of such specialties is "Economics" (051). However, despite the evident demand for professionals in the field of "Economics," the psychological and pedagogical aspects of the learning process for economics bachelor's degree students are largely understudied. Therefore, it becomes crucial within the higher education system to explore aspects such as students' professional motivation, particularly for those pursuing newly introduced specialties, the dynamics of its development during the learning process, and the organizational and pedagogical conditions necessary for fostering students' competencies.

The educational program comprises several components, including a cycle of general education (humanities, fundamental subjects), professional training, elective courses chosen by the student, and practical training (internships or practical experience).

The set of professional competencies of graduates is determined by the level of their training. Graduates who have obtained the relevant qualifications should be prepared to carry out practical activities in their chosen field. They should be able to employ various techniques, methods, and tools to enhance the effectiveness of their preparation. Furthermore, they should continuously improve their professional skills, ensuring the efficiency of the production process.

In the context of discussing the professional training of future economics bachelor's degree holders, we have taken into account the concept that has developed in modern pedagogy regarding the necessity for the structure of an individual's personality, engaged in specific activities, to correspond with the structure of that particular activity (O. Vnukova [3], Ya. Kazarnytskova [8], B. Mokin [9]). This concept highlights the importance of aligning the personal traits, competencies, and skills of students with the requirements and demands of their chosen profession,

ensuring a better fit between the individual and the field of activity they intend to pursue.

Aims. The purpose of the article is the formation of professional competence of future Bachelor of Economics in higher educational institutions.

Methodology. The necessity for further examination of the process of forming the readiness of future economics bachelor's degree holders for professional activity is linked to the fact that existing research insufficiently considers the personal potential of these students and the conditions of the chosen professional sphere.

The analysis of scientific studies on the issue of defining professionally significant qualities of a specialist (V. Volyk [4], S. Horobets [5], among others) has enabled us to identify the factors that determine this significance (Fig. 1).

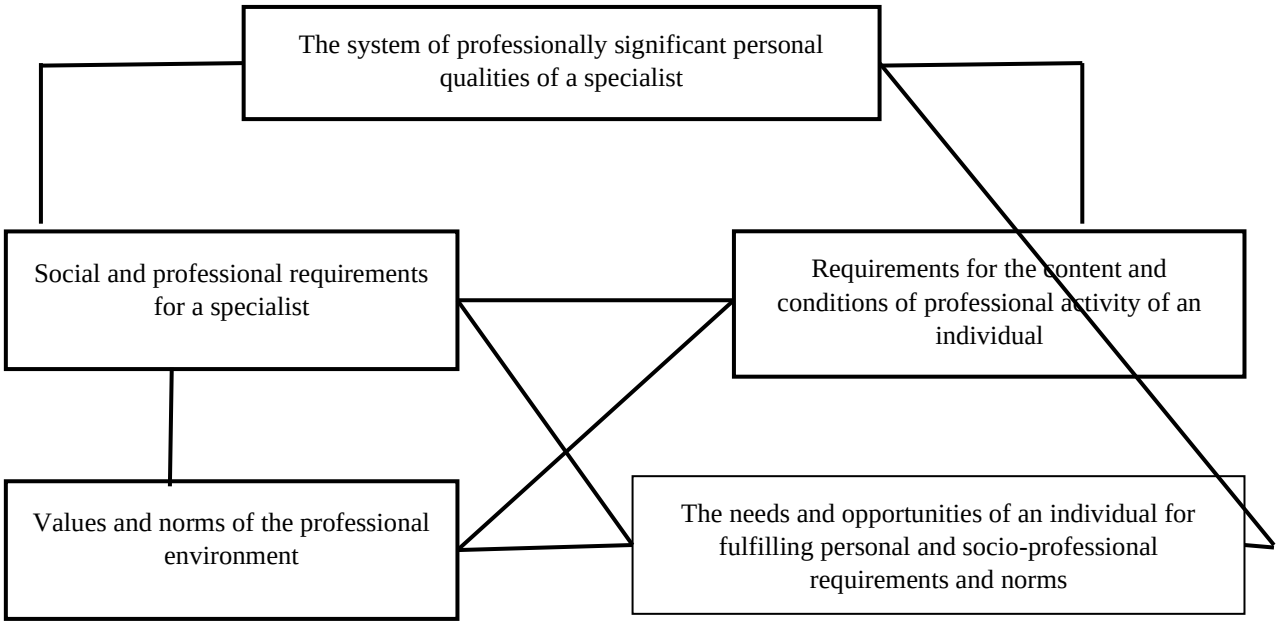

Figure 1. Factors determining professionally significant personal qualities of a specialist

The analysis of scientific literature allows us to conclude that up to the present moment, there is practically no unequivocal assessment of the significance of specific professional characteristics of a specialist. Each relevant characteristic is approached within different methodological frameworks, including the personality-activity approach, integrative approach, competency-based approach, and others.

Within the personality-activity approach, O. Vnukova [3] uses the model of a specialist's activity as the basis for the model of professionals, identifying the following basic components: problems (tasks) that a specialist has to address in their professional activity; types of activities as methods or approaches used to solve the formulated tasks; functions, which are generalized characteristics of the main duties performed in accordance with the profession's requirements; approaches to solving identified problems or tasks; theoretical or applied knowledge that a specialist employs in their activity; abilities and skills used to achieve desired results; personal

qualities that ensure the success of actions in the chosen field; value orientations and attitudes.

According to L. Dybkova [6], the personality component of the model of specialists encompasses a specific set of professional, social, moral, political, psychological, physical, and other traits of an individual – a combination of characteristics without which they cannot function in a specific role. These characteristics include professional orientation, the structure of professional motives, the level of professional activity at different stages of professionalization, and a description of the main indicators that characterize the productivity, quality, and reliability of an individual's functioning at various stages of professional development.

V. Volik [4] includes in the list of professionally significant personal qualities both the knowledge and skills that should be developed in specialists of any profession, as well as specific qualities that are dictated by the requirements of preparation for a particular specialty.

Several researchers emphasize the special role of experience, knowledge, skills, competencies, and personally and professionally significant qualities and abilities in professional activities. These qualitative characteristics (indicators) reflect the development of a specialist as a creative professional individual capable of self-improvement and self-development.

The researchers mentioned above have identified several approaches to studying the personality of a professional. The most common approach involves moving from activity to personality. Initially, any professional activity is studied, and qualities that determine its effectiveness are identified. Then, individuals who best match the identified parameters are determined. However, as pointed out by Ya. Kazarnytskova [8], this approach often limits the study of activity only from an external perspective. It relies either on observation of the work process or on expert opinions, leaving many essential characteristics undisclosed. As a result, the identified professionally significant qualities may not always be the ones that determine the success in mastering the studied activity. This approach is referred to as pragmatic, where the individual is "tailored" to meet the requirements of the profession.

V. Volik [4] refers to another approach as technocratic, in which the author assumes that during the process of learning and acquiring knowledge, skills, and competencies, the missing professionally significant qualities can be formed. However, according to the researcher, the obtained knowledge, skills, and competencies, as well as the individual style of performing activities and the presence of professionally significant qualities, may not correspond to the actual level of professionalism. In situations where frustration occurs or difficulties arise in carrying out professional activities, the researcher believes that true personality traits will manifest in professional behavior. This suggests that even though technical skills and knowledge can be developed through training, genuine professional competence and behavior are also influenced by an individual's personality and inherent traits.

As a basis for the model of a professional's personality, proponents of the humanistic approach (O. Vnukova [3], O. Zablotska [7]) consider personal

characteristics that determine the effectiveness of professional activity. They compare the personal traits of successful and unsuccessful specialists, as well as the personal qualities of effective professionals. Combining the individual's personality structure with the conditions of professional activity using this approach allows presenting a model of desired personal qualities for a specialist to effectively accomplish practical tasks.

The authors consider the following as objective personality factors: professional skill, experience, gender, nationality, level of education, qualification, erudition, value orientations, social background, abilities, and age. On the other hand, subjective factors include stable personality traits such as anxiety, sociability, neuroticism, aggressiveness, emotional stability, and so on.

O. Bila [2], L. Dybkova [6], and Ye. Pidlisnyi [12] consider the personality-activity approach as a fundamental component of the system of professional qualities through an individual's abilities. They interpret abilities as a set of personal attributes that determine a person's successful performance. Within this approach, activity, including professional activity, is viewed not only as a factor in the development of abilities but also as their substantive characteristic. Researchers believe that the development of abilities in one type of professional activity enhances the quality of performing other types of activities.

The mentioned personality-activity approach is the most common but also a rather simplified approach, as it considers only those personality traits that directly influence the outcomes of activities.

In the studies of advocates of the integrative approach to the content of professional education (V. Volik [4], Yu. Pavlova [10], and others), its principles, essence, and main directions of implementation in the higher education process are revealed: interdisciplinary, intrasubject, and intrapersonal integration. This approach forms the basis for designing the module-rating system of training for bachelor's degrees in economics.

The development of the competency-based approach in the education system is dedicated to the works of N. Bibik [1], O. Bila [2], O. Vnukova [3], O. Zablotska [7], B. Mokin [9], V. Petruk [11], M. Rud [13], and others. Supporters of the competency-based approach believe that it allows integrating the goals of education and professional activity, moving from knowledge reproduction to its application and organization in professional activities, guiding students to handle various professional and life situations, and expanding employment opportunities through the development of competencies. The competency-based approach is one of the responses of the higher education system to societal demands.

The generalization of our own research allowed us to define the key concepts of education modernization. The sense-forming units of professional standards are the key constructs of professional education. There is a close interrelation between these constructs: all of them include knowledge, skills, and abilities, as well as motivational and emotional-volitional components.

Results. For the higher education system, polytechnic, organizational-economic, and information-communication competencies are essential. Among the

basic competencies, we should consider a complex of universal knowledge characterized by a high level of generalization. These integral knowledge include general scientific and general professional categories, concepts, laws, principles, and regularities of science, technology, and society.

Since the implementation of competencies occurs in the process of students' various activities to solve theoretical and practical tasks, the structure of competencies includes not only procedural knowledge, skills, and abilities but also motivational and emotional-volitional aspects. The integration of individual actions, methods, and problem-solving approaches learned by students constitutes their experience. In our opinion, the effectiveness of educational, educational-professional, and social-professional activities is significantly determined by the renewal of students' cognitive and social-professional qualities.

The scheme of the main constructs of the competency-based approach presented by us, in our view, most comprehensively reflects their essence and can serve as the basis for detailing the competency model of graduates in a specific specialty (Figure 2).

Therefore, the competency-based approach is a priority orientation of education towards the ability to learn, self-determination, self-actualization, socialization, and the development of individuality in future professionals. As instrumental means to achieve these goals, fundamentally new educational constructs are introduced: competency and professional competency. In this context, the formation of professionally significant competencies in future economics bachelor's students is oriented towards a humanistic style of interaction among students, educators, and employers, aimed at developing self- and peer-assessment of the most significant outcomes for future professional activities; it is creative in terms of purpose, content, and the activity of educators and students; it is developmental, focused on maximizing the development of students' reflective and creative abilities and promoting success for each individual. This becomes possible with the presence of professionally significant qualities in future economics bachelor's students, such as the ability to navigate through information flows, self-educate to fill in knowledge gaps, possess competitiveness and mobility, solve non-standard professional tasks, and strive for self-actualization in their chosen professional sphere. These qualities are directed towards the development of students' personal functions, including motivation, orientation towards future professions, and self-realization.

Conclusions. We consider research on the interrelation between the level of development of professionally significant competencies in future economics bachelor's students and their career growth to be promising. Additionally, we find the conceptual and methodological foundations of continuous education for economics bachelor's students within the context of the competency-based approach to be of great interest. Furthermore, we see the productive interaction between higher education institutions and employers in enhancing the effectiveness of professional preparation for future economics bachelor's students for successful practical activities as a significant area for exploration.

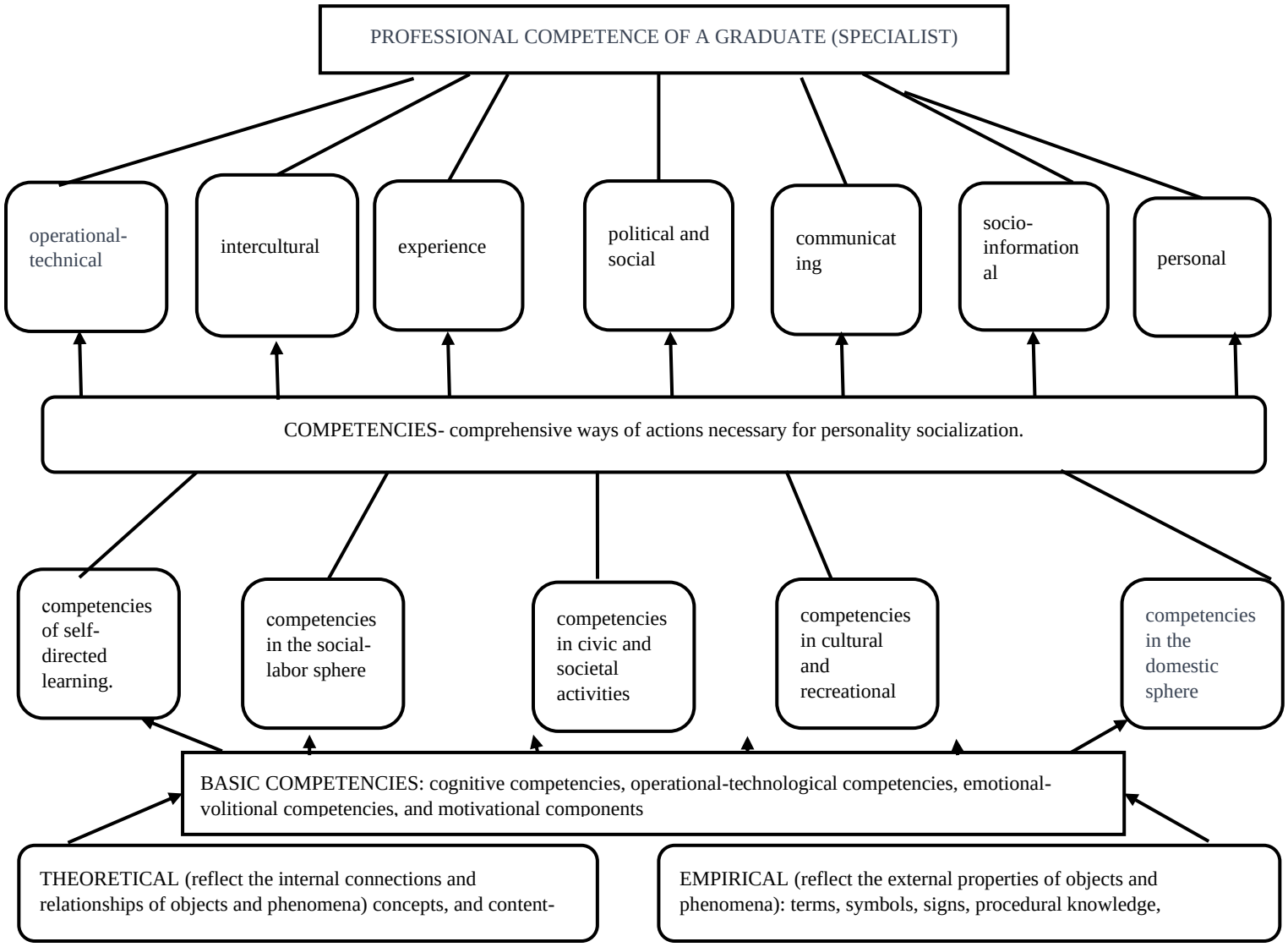

Figure 2. Diagram of the main constructs of the competency-based approach

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TWO-COMPONENT TERMS-PHRASES IN THE UKRAINIAN TERMINOLOGY OF SUGAR PRODUCTION

Larysa Zadoiana[1]

[1]*Ph.D. (Philology), Associate Professor, Department of Applied Linguistics and Journalism, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, e-mail: zadoyana_larisa@meta.ua, ORCID: https://orcid.org/0000-0001-7291-7633*

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Abstract. *The article is devoted to the linguistic description of the modern Ukrainian terminology of sugar production in the aspect of term formation. Terms and phrases of sugar production are analyzed according to such a criterion as the number of components. Models of two-component terms-phrases are considered. Based on the results of a sample of two-component terms-phrases, it was found that in the texts on sugar production, these terms constitute the most numerous group and are the most productive. This structural type is represented by the following models: "adjective + noun in the nominative case" (Adj + N n. c.); " participle + noun in the nominative case" (Part + N n. c.); "noun in the nominative case + noun in the genitive case" (N n. c. + N g. c.); "numeral + noun in the nominative case" (Num + N n. c.); "noun in the nominative case + preposition in + noun in the local case" (N n. c. + in + N l.c.); "noun in the nominative case + preposition with + noun in the genitive case" (N n. c. + with + N g. c.); "noun in the nominative case + preposition with + noun in the instrumental case" (N n. c. + with + N i. c.); "noun in the nominative case + preposition from + noun in the genitive case" (N n. c. + from + N g. c.); "noun in the nominative case + preposition in + noun in the accusative case" (N n. c. + in + N a.c.); "noun in the nominative case + adjective" (N n. c. + Adj); "noun in the nominative case + numeral" (N n. c. + Num); "noun in the nominative case + preposition on + noun in the local case" (N n. c. + on + N l. c.); "noun in the nominative case + noun in the dative case" (N n. c. + N d. c.); "a noun in the nominative case + a noun in the instrumental case" (N n. c. + N i. c.). The most productively used is attributive model «adjective + noun in the nominative case" (Adj + N n. c.), which is formed on the basis of the genus-species relationship, i.e., a definition is added to the term, which is a generic concept, representing types of the concept and specifies the generic. The terms of this model serve as expressions of lexical paradigmatic relations in the term system, in particular antonyms. Substantive two-component models "noun in the nominative case + noun in the genitive case" (N + N g. c.), "participle + noun in the nominative case" are also productive. A small number of terms are presented by models of prepositional and prepositional structures. Two-component syntactic constructions can be replaced by single words, most often composites, as a result of linguistic economy. So, among the analyzed two-component structural models, the models "adjective + noun in the nominative case" and "noun in the nominative case + noun in the genitive case" and "participle + noun in the nominative case" dominate. Other structural models are less productive.*

Keywords: *linguistic description, aspect of term formation, Ukrainian terminology of sugar production, terms and phrases of sugar production.*

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Introduction. Ukrainian scientific and industrial terminology became the object of active research by linguists not by chance, because for a long time it was on the periphery of scientific communication in Ukraine. Therefore, the study of multi-disciplinary Ukrainian terminology is an urgent matter.

Literature review. The object of study was the peculiarities of the functioning of philosophical (N. Zhovtobryukh, 1992), psychological (L. Veklynets, 1997), biological (L. Symonenko, 2006), terminology of organic chemistry (N. Tsymbal, 2007), terminology of agriculture (S. Lyubarskyi, 2008), accounting and audit terminology (G. Barvytska, 2015), astronomical (O. Bogush, 2015), logistics (G. Karpenko, 2018), eco-marketing terminology (S. Gordun, 2020), etc. terminology. The Ukrainian term system of sugar production has not yet been worked out linguistically.

The several-week history of the development of the sugar industry, a large number of sources of terminology replenishment led to the appearance of new terms that have not yet been the subject of special study.

The relevance of the proposed study is determined by the characteristics of the terminology of sugar production in the term-creating aspect.

Aims. The purpose of the article is a linguistic analysis of two-component terms-phrases of sugar production according to such a criterion as the number of components.

Methodology. The research used a set of general scientific and pedagogical methods to ensure objectivity and comprehensiveness, including: analysis of the literature on the research problem to determine the state of its development and research prospects; comparison to study the points of view of different scientists; systematization and generalization of conclusions.

Results. Most terms of sugar production have a two-component structure. This structural type is represented by the following models: "adjective + noun in the nominative case" (P + I n. v.); "adverb + noun in the nominative case" (Dp + In. v.); "noun in the nominative case + noun in the genitive case" (In. v. + Ir. v.); "numeral + noun in the nominative case" (Ch + In. v.); "noun in the nominative case + preposition in + noun in the local case" (In. v. + v + Im. v.); "noun in the nominative case + preposition with + noun in the genitive case" (In. v. + z + Ir. v.); "noun in the nominative case + preposition with + noun in the instrumental case" (In. v. + z + Io. v.); "nominative case + preposition from + noun in genitive case"

(In. v. + from +Ir. v.); "noun in the nominative case + preposition in + noun in the accusative case" (In. v. + v + Iz. v.); "noun in the nominative case + adjective" (In. v. + P); "noun in the nominative case + numeral" (In. v. + Ch); "noun in the nominative case + preposition on + noun in the local case" (In. v. + on + Im. v.); "noun in the nominative case + noun in the dative case" (In. v. + Id. v.); "a noun in the nominative case + a noun in the instrumental case" (In. v. + Io. v.).

The most productively used attributive model is "adjective + noun in the nominative case" (P + I n. v.), which is formed on the basis of the genus-species relationship, that is, a definition is added to the term, which is a generic concept, which represents types of the concept and specifies the generic . For example: sugar

beets [Bahm, p. 3], a highly profitable culture [Bahm, p. 3], beet sugar [Bahm, p. 3], a folding machine [Bahm, p. 272], beet fields [Bahm, p. 272], beet water mixture [Bahm, p. 273], raw pulp [Bahm, p. 3], beet receiving point [Bahm, p. 271], beet shavings [Bahm, p. 275], sugar production [Bahm, p. 274], gum pit [Bahm, p. 279], unsweetened shavings [Bahm, p. 279], diffusion apparatus [Bahm, p. 277], diffusion juice [Bahm, p. 275], sugar factory [Bahm, p. 272], lime kilns [Bahm, p. 287], sweet water [Bahm, p. 288], calcareous department [Bahm, p. 286], hydraulic conveyors [Bahm, p. 272], beet-washing department [Bahm, p. 273], beet washing machine [Bahm, p. 273], pure root crops [Bahm, p. 274], beet elevator [Bahm, p. 274], sugar-free shavings [Bahm, p. 279], non-sugar additives [Bahm, p. 281], insoluble sediment [Bahm, p. 281], limestone milk [Bahm, p. 283], harmful compounds [Bahm, p. 283], defecated juice [Bahm, p. 283], limestone [Bahm, p. 287], quicklime [Bahm, p. 288], slaked lime [Bahm, p. 288], filter press mud [Bahm, p. 288], declensions [Roik, p. 41], the best variety [Roik, p. 55] and others.

The terms of this model serve as expressions of lexical paradigmatic relations in the term system, in particular antonyms, for example: light impurities - impurities with a density of less than 1 g/cm3 (chickpeas, weeds, grass, straw, etc.) that come with the beet-water mixture to the plant [TSTOB, with. 26]; heavy impurities - impurities with a density of more than 1 g/cm3 (particles of soil, sand, stones, metal objects, pieces of brick, etc.) that come with the beet-water mixture to the plant [TSTOB, p. 26].

The substantive two-component model "noun in the nominative case + noun in the genitive case" (I + I r. v.) is also productive, for example: water consumption [Bahm, p. 272], contamination of beets [Bahm, p. 273], sugar content of root crops [Bahm, p. 274], sugar losses [Bahm, p. 280], defecation process [Bahm, p. 283], filtering fields [Bahm, p. 284], juice filtration [Bahm, p. 285], juice purification [Bahm, p. 286], supply of lime [Bahm, p. 286], seed germination [Roik, p. 57], clogging of crops [Roik, p. 72], husking of stubble [Roik, p. 75], sugar consumption [Syroh, p. 48], the cost of sugar [Syroh, p. 54], duration of juice extraction [Syroh, p. 54], sugar export [Syrokh, p. 56], quality of sugar [Syroh, p. 57], the formation of dyes [Syroh, p. 57], consumption of sucrose [Syroh, p. 57], juice filtration [Syroh, p. 57], thickening of juice [Syroch, p. 57], cooking syrup [Syroch, p. 57], obtaining utfel [Syroh, p. 57], drying granulated sugar [Syroh, p. 57], washing beets [Syroch, p. 58], accumulation of beets [Osok, p. 531], a supply of beets [Osok, p. 531], beet density [Osok, p. 531], equipment complex [Osok, p. 531], fragments of beets [Osok, p. 531], sugar extraction [Osok, p. 533] etc.

Discussion. A small number of terms are presented by models of the prepositional and prepositional structure "adverb + noun in the nominative case" (Dp + In. v.); "numeral + noun in the nominative case" (Ch + In. v.); "noun in the nominative case + preposition in + noun in the local case" (In. in. + in + In. in.); "noun in the nominative case + preposition with + noun in the genitive case" (In. v. + z + Ir. v.); "noun in the nominative case + preposition with + noun in the instrumental case" (In. v. + z + Io. v.); "noun in the nominative case + preposition from + noun in the genitive case" (In. v. + from + Ir. v.); "noun in the nominative case + preposition

in + noun in the accusative case" , "noun in the nominative case + adjective" (I n. v. + P); "noun in the nominative case + numeral" (I n. v. + Ch); "noun in the nominative case + preposition on + noun in the locative case" (I n. v. + na + I m. v.); "noun in the nominative case + noun in the dative case" (In. v. + Id. v.); "a noun in the nominative case + a noun in the instrumental case" (In. v. + Io. v.).

The attributive type with the seventh procedurality is the model "adverb + noun in the nominative case" (Dp +In. v.): sweetening liquid [Bahm, p. 278], molasses-forming ability [Bahm, p. 290], a stirring device [Syroh, p. 60], reducing sugars [Syroh, p. 62], gelling sugar [Syroh, p. 79], filtering fabric [Lesyk, p. 263], reducing substances [Lesyk, p. 268], rotten roots [Lesyk, p. 248], frozen beets [Lesyk, p. 251], extraction water [Osok, p. 535], thawed beets [Osok, p. 515], rotten root crops [Osok, p. 516], thawed beets [Podpriat, p. 414], dug root crops [Podpriat, p. 416], dug beets [Podpriat, p. 417], beet cutting areas [Podpryat, p. 417], evaporated syrup [Podpriat, p. 427], peptizing action [Khomich, p. 21], circulating juice [Pryad, p. 31], control valve [Pryad, p. 31], etc.

The model "numeral + noun in the nominative case" (Ч + Ин. в.) is the first saturation [Bahm, p. 283], the second saturation [Bahm, p. 283], the first shoe [Zhem, p. 373], the second outflow [Osok, p. 544], the first filtration [Pryad, p. 37], the first crystallization [Pryad, p. 37].

Circumstantial semantic relations of place are expressed by the model "noun in the nominative case + preposition in + noun in the locative case" (I n. v. + v + I m. v.) - juice in meters [Bahm, p. 276], beets in sacks [Zhem, p. 370].

The model "noun in the nominative case + adjective" (I n. v. + P): previous defecation [Lesyk, p. 261], conditioned beets [Hom, p. 8], root crops are flabby [Osok, p. 516], flowering root crops [Osok, p. 516], wilted beetroot [Osok, p. 516], beetroots are substandard [Osok, p. 522].

The model "noun in the nominative case + numeral" (I n. v. + Ch): first saturation [Lesyk, p. 261], first filtration [Lesyk, p. 261].

The model "nominative case + noun in the dative case" (I n. v. + I d. v.): livestock feed [Podpriat, p. 410].

The model "noun in the nominative case + noun in the instrumental case" (I n. v. + I o. v.): harvesting with a combine harvester [Hom, p. 8], pollution by weeds [Hom, p. 9], air desorption [Pryad, p. 33], processing with lime [Pryad, p. 35].

The object of the action is specified by the substantive models "nominative case + preposition with + noun in the instrumental case" (I n. v. + z + I o. v.) and "noun in the nominative case + preposition with + noun in the genitive case " (I n. v. + z + I r. v.), "noun in the nominative case + preposition from + noun in the genitive case" (In. v. + from + Ir. v.), "noun in the nominative case + preposition in + noun in the accusative case" (I n. v. + in + I z. v.), "noun in the nominative case + preposition on + noun in the locative case" (I n. v. + on + I m. v.): weed control [Royk, p. 127], bleaching with lime [Syroch, p. 86], diffusion from beets [Pryad, p. 35], transportation from gauges [Bahm, p. 211], damage from weeds [Roik, p. 257], grinding into chips [Zhem, p. 370], work on filter presses [Lesyk, p. 263].

Two-component syntactic constructions can be replaced by single words, most often composites, as a result of linguistic economy, for example: a beet washer [Bahm, p. 273] – beet washer [TSTOB, p. 56], beet cutting machine [TSTOB, p. 57] – beet cutter [Bahm, p. 274], beet feeder [TSTOB, p. 67] – beet feeder [TSTOB, p. 55], hydraulic conveyor [Bahm, p. 273] – hydraulic conveyor [Bahm, p. 275] and others.

Conclusions. So, among the analyzed two-component structural models of the terminology of sugar production, the models "adjective + noun in the nominative case" and "noun in the nominative case + noun in the genitive case" and "verb + noun in the nominative case" dominate. Other structural models are less productive.

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