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## CHAPTER 1

### GENERAL PEDAGOGY AND HISTORY OF PEDAGOGY

#### DEVELOPMENT OF PRIVATE COMMERCIAL EDUCATION IN YELYSAVETGRADSHCHINA (LATE XIX - EARLY XX CENTURY)

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**Abstract.** *The study of the past of domestic education provides an opportunity to study the historical experience of private commercial education, to predict the main trends of its development in the future, to study the process of such development in this period will enrich modern science with knowledge about the mechanisms of modernization of commercial education. The article provides a historiographical analysis of research that reveals the issues of private commercial education in Yelisavetgrad region in the late nineteenth - early twentieth century. It is established that at the present stage the interest of scientists both in the system of commercial education and in the peculiarities of the development of some private commercial educational institutions in Yelisavetgrad region has significantly increased. Researchers are trying to more objectively assess the achievements in the field of commercial education in the region, due to the openness of archives and the availability of new sources. It is revealed that dissertation and monographic researches are of great value for understanding the specifics of regional features of commercial education of the studied period. Few scientific studies of modern scientists (V. Postolatiya, O. Guryanova, A. Kava, O. Filonenko, etc.), which revealed the prerequisites, main stages, content and forms of organization of the educational process in private commercial schools in Ukraine, in particular in the Yelisavetgrad region, testify that the history of commercial education was a significant page in the history of the Yelisavetgrad region of the pre-revolutionary period. In private commercial educational institutions, which were one of the best commercial institutions in the Russian Empire, the experience of combining two levels of education was formed - general and vocational, a democratic form of government prevailed, and educational tasks were effectively solved. It is established that the holistic history of the development of commercial education in Yelisavetgrad region in the late XIX - early XX centuries has not yet been properly covered in historiography. Further development of analysis and systematization of research on this issue.*

**Keywords:** *historiography, pedagogical research, Yelisavetgrad region, commercial education, private commercial educational institutions.*

**JEL Classification:** I0; I20

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**Introduction.** The development of an independent Ukrainian state has created favorable conditions for the restoration and development of pedagogy, the national system of education and upbringing of children and youth in Ukraine. The success of education reform largely depends on the full and effective use of those positive achievements that are based primarily on national and regional pedagogical experience. These circumstances encourage the study of materials on the history of schooling in Ukraine as a whole and, in particular, in some of its regions.

The study of the past of domestic education provides an opportunity to study the historical experience of private commercial education, to predict the main trends of

its development in the future, to study the process of such development in this period will enrich modern science with knowledge about the mechanisms of modernization of commercial education.

**Literature review.** At the present stage, the interest in the study of commercial education in the region has increased, as evidenced by the works of modern researchers V. Postolatiy, O. Guryanova, A. Kava, O. Filonenko and others. These studies reveal the prerequisites, content, forms, methods of organizing the educational process in commercial educational institutions of Yelisavetgrad region.

The history of the development of private commercial education in Yelisavetgrad region is represented by a small amount of scientific research. The complete history of the development of commercial education in Yelisavetgrad region in the late XIX - early XX century is not yet properly covered in historiography.

The purpose of the article is to carry out a historiographical analysis of research related to the development of private commercial education in the Yelisavetgrad region in the late nineteenth - early twentieth century; identify key aspects of the study of problems in modern theory of scientific knowledge.

**Methods.** The historical-structural method provided an opportunity to systematize historical and pedagogical works on various aspects of the development of private commercial education, the activities of private commercial schools in the Yelisavetgrad region in the late nineteenth - early twentieth century.

**Results.** The history of commercial education was one of the brightest and richest pages in the history of the Yelisavetgrad region of the pre-revolutionary period. The experience of combining two levels of education - secondary and vocational schools - was formed within the walls of commercial educational institutions.

At the present stage, the interest of scientists has grown significantly both in the system of commercial education and in the peculiarities of the development of individual commercial educational institutions in the Yelisavetgrad region. Researchers are trying to more objectively assess the achievements in the field of commercial education in the region, due to the openness of archives and the availability of new sources.

It is obvious that the current level of development of the methodology of historical and pedagogical sciences has allowed modern researchers to more fully and qualitatively present the experience gained over a period of time.

Dissertation and monographic researches are of great value for understanding the specifics of regional features of commercial education of the studied period, which became the main informative source of reconstruction of historiographical process on accumulation of scientific knowledge on the history of commercial education in Yelisavetgrad region in this period.

Thus, the general characteristics of the development of commercial education in Yelisavetgrad region in the period under study are given in the monograph by O. Filonenko "Education of Kirovograd region (Yelisavetgrad region) in the scientific reflections of Ukrainian scientists (second half of XIX - XX centuries)" (2017) [7].

An important material in the context of studying the historiography of the evolution of commercial educational institutions in the region is the dissertation research of V. Postolatiy "Development of commercial education in Ukraine (1804-1920)" (1996) [6] and O. Guryanova "Organization of the educational process in commercial schools of Ukraine (1894-1920)" (2007) [2]. These studies reveal the specifics of the formation and development of commercial education in regional and special-professional contexts; extensive local lore material is presented; generalized statistical and archival materials on the development of commercial education at a certain historical stage.

The activity of Vasyl Ivanovych Khartsiev at the Yelisavetgrad Public Commercial School, which he headed for ten years (1909-1919), attracts special attention of modern scientists.

Thus, the activity of V. Khartsiev as the head of the Yelisavetgrad public commercial school is considered in the researches of I. Dobryansky and V. Postolatiy "Public and private initiative in the development of education in Ukraine (late XIX - early XX centuries)" (1998) [1], O. Guryanova "Organization of the educational process in commercial schools of Ukraine (1894-1920)" (2007) [2], "School of joy - the call of generations" (2007) [3], A. Kava "Pedagogical activity and heritage V. I. Khartsiev (1866-1937)" (2014) [4], O. Filonenko "Pedagogical innovation of V. I. Khartsiev in Yelisavetgrad Public Commercial School" (2014) [8] and others.

A number of meaningful scientific investigations of V. Postolatiy claim to systematically comprehend the versatile achievements and vital activity of V. Khartsiev [5; 6, etc.].

Thus, in the book "Pedagogical education in Kirovograd region (1895-1965)" (2006) [5] V. Postolatiy characterized the pedagogical work of V. Khartsiev in the form of theoretical innovations and practical generalization of progressive ideas based on the activities of the Yelisavetgrad Public Commercial School, which allows us to talk about the design of a holistic author's concept on a humanistic basis. The author notes that the main tasks set by V. Khartsiev in organizing the activities of the Yelisavetgrad Public Commercial School as an author's school, were achieved:

- integration in the single educational space of students and teachers;
- formation of a new, different from the mass practice, the content of the educational process;
- humanization of education and upbringing;
- formation of nationally conscious citizens of the state.

The same can be said about the dissertation research of O. Guryanova "Organization of the educational process in commercial schools of Ukraine (1894-1920)" (2007) [2]. Investigating the organization of the educational process in commercial schools of Ukraine, the scientist revealed the content of the educational process in the author's school V. Khartsiev. In her work, the researcher emphasizes that V. Khartsiev organized the educational process on the newest democratic and humanistic principles at that time, sought to achieve high results of educational work not by external coercion and encouragement of students, but by instilling in them a deep inner motivation to mastery of knowledge and self-improvement and tried to

create cool educational environments on the basis of morality, intelligence and diligence. O. Guryanova emphasizes that the result of his activity was the creation of organizational and educational conditions for the opening of a network of similar educational institutions throughout Ukraine.

Analyzed and determined the uniqueness of organizational and pedagogical work of Yelisavetgrad Public Commercial School as the author's school of V. Khartsiev A. Kava in the dissertation "Pedagogical activity and heritage of V. I. Khartsiev (1866-1937)" (2014) [4]. Thus, the researcher revealed the peculiarities of the organization of the educational process in Yelisavetgrad Public Commercial School and characterized this school as the author's humanistic school of V. Khartsiev. In the dissertation the author argues that the features of organizational and pedagogical activities and scientific and methodological work of the teacher were innovative and occupy a worthy place in the general context of the history of pedagogical thought of the second half of XIX - first half of XX century.

As a result of research of activity of Yelisavetgrad public commercial school, as author's school, in the dissertation innovative ideas of the teacher were defined:

- creation of pedagogical self-government in the form of a teachers' corporation, a commission of class observers, subject commissions;
- creation of the only secondary school in Ukraine, whose work was built on partnerships between educators and students (practiced joint trips to nature, discussion of works of classics of Russian and Ukrainian literature);
- creating a favorable environment, a positive socio-moral climate of the school; focus on art and creating a creative atmosphere; interaction of family, school, community;
- creation of a parent council, which was involved in the organization of educational and extracurricular activities;
- organization of the first children's park in Ukraine (summer health camp "Alhambra");
- improving the professional skills of teachers (congresses of teachers of fine arts, mathematicians in St. Petersburg, the congress of teachers of aesthetic education in Dresden);
- creation of a self-governing student organization in the form of an organizational structure - the Club of high school students;
- rethinking the assessment of students' knowledge (refusal to give grades and replacement of their characteristics, replacement of transfer exams with exhibitions of student work) [4, p. 14–15].

A. Kava draws attention to the fact that V. Khartsyev in Yelisavetgrad Public Commercial School used original author's forms of organization of the educational process, which intensified the independent cognitive activity of students: laboratory classes, extracurricular activities, local history trips, excursions; creation of interest centers (drawing bureau, research work on school sites, workshops); joint work of students and teaching staff; lessons-walks, "Art walks" (scientific direction "Plein air").

The main directions of the educational process of V. Khartsiev's author's school are determined in the work: mental education (educational process was enriched with such forms as debate, discussion of abstracts, works of classics of literature, excursion observations, magazine articles, etc.). Labor education at the school was realized through work in the school garden, topographic images of the garden, yard, projection drawings, work with paper, as a result - an exhibition of student works "My leisure". Aesthetic education consisted in the differentiation of tasks according to the age of children: from a simple observation of the environment, works of art - to creative activity in the form of analysis of perception. Ways to implement aesthetic education in the school were: illustration of educational material, acquaintance with works of art (painting, sculpture, literature, music), outdoor activities [4, p. 15].

In the article publication "Pedagogical innovation of V.I. Khartsiev in Yelisavetgrad Public Commercial School" (2014) [8] O. Filonenko emphasizes that the reforms that V. Khartsiev carried out in the school were recognized as successful, and therefore served as a model for other similar educational institutions. Thus, the practical activity of an outstanding teacher in a separate institution had a significant impact on the then state of secondary education in the country, and on its further development.

The researcher notes that in 1911 evening trade classes for adults were opened at the public commercial school of V. Khartsiev, and in 1913 - a trade school with a three-year course of study. This school trained clerks, clerks, accountants and others. In trade classes they studied accounting, commercial arithmetic, trade correspondence, calligraphy, German and Russian languages, general arithmetic.

The author emphasizes that V. Khartsiev's pedagogical ideas brought novelty to pedagogical practice. He defended the principles of systematic, clear and accessible learning. In his opinion, the teacher should be a competent specialist who has knowledge of various fields of science and skills to arouse interest in scientific work in students [8, p. 218–219].

Yelisavetgrad Public Commercial School of V. Khartsiyev, - says O. Filonenko, - is not only the history of a particular domestic school, but above all the experience that can be useful to the current various types of secondary schools in Ukraine [8, p. 218].

Also noteworthy is the publication of O. Guryanova "School of Joy - the call of generations" (2007) [3], which is devoted to the author's schools of the commercial level of education in Ukraine in the early XX century. The article pays special attention to the activities of educational institutions through the prism of the personalities of famous teachers, in particular V. Khartsiev, who managed the author's schools. The scientist comprehensively analyzed the pedagogical work of V. Khartsiev, his achievements as director of the Yelisavetgrad Public Commercial School, which allowed her to come to the conclusion: "V. Khartsiev managed to implement new ideas in the conditions of the usual mass school, which were rethought, concretized, developed and tested in practice. In his pedagogical views we can find many things that we will later meet in A. Makarenko and V. Sukhomlinsky" [3, p. 122].



**Discussion.** Thus, all researchers agree that the history of commercial education was a prominent page in the history of the Yelisavetgrad region of the pre-revolutionary period. In the course of scientific research it was proved that these educational institutions differed from other educational institutions in the region by original approaches to the organization of the educational process. The financial independence of commercial schools from the state provided them with some independence in addressing issues of management of the educational process and the introduction of new, progressive forms and methods of teaching and education in the educational process. These schools formed the experience of combining two levels of education - general and vocational, dominated by a democratic form of government, which helped to address the demand for specialists in the labor market.

**Result.** The historiographical review of the researched problem allowed to establish that at present there are no such scientific researches where the historiography of development of private commercial education of Yelisavetgrad region of the studied period would be systematically and fully analyzed, therefore the question of development of commercial education of the region in the end study.

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## REFORMING OF THE PRIMARY EDUCATION SYSTEM IN UKRAINE (1917-1939)

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**Abstract.** The article identifies positive trends of this period: state reform of the content of school education in connection with the stimulation of pedagogical and psychological research of scientific problems (differentiation and individualization of the educational process, stimulating cognitive activity of students, combining developmental and reproductive functions of education with preservation of material component). to increase the efficiency of the educational process, improve the conditions for the intellectual development of students and the quality of their general education); generalization of the system of didactic principles: the principle of the leading role of theoretical knowledge in primary education; the principle of learning at a high level of difficulty; the principle of fast pace of learning; the principle of students' awareness of the learning process. Based on the results of psychological and pedagogical research on the age cognitive abilities of children, the purpose and objectives of propaedeutics of primary education are specified.

The purpose of the study is to study, systematize, generalize and scientific coverage of archival, scientific, literary materials of a historical and pedagogical nature on the development and formation of education and pedagogical thought in Ukraine from 1917 to 1939.

It was found that the reforms of primary education in different historical periods were both an instrument of educational policy of governments and a catalyst for the development of pedagogical science for the modernization of school education. Summarizing the reasons for state reforms, we note that their selection and content were determined primarily by socio-political (change of governments, political regimes, creating conditions for the functioning of social order, interaction of the pedagogical community with government institutions), socio-economic (ensuring economic development educated, skilled workers) and only later pedagogical (state and needs of primary education in accordance with the needs of society, interaction with pedagogical science) determinants. The reform projects were based on advanced pedagogical principles, which outlined their directions, nature, results: equal access to education, compulsory and free education, democratic, national, unified school, connection of school with life, labor, social, educational, humanistic, pedocentric, scientific.

Thus, a significant part of primary education reforms was carried out in the following areas: change of structure (age of entry, terms, forms of education) and organization of the educational process (relationship between school and society, preparedness of teachers for reforms, assessment system); updating the content of education (theoretical aspects, the presence of the national component, the political component), methods and forms of education (verbal, active and creative).

**Keywords:** inclusion, inclusive education, child with special educational needs, socialization.

**JEL Classification:** I0; I20

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**Introduction.** The development of an independent Ukrainian state has created favorable conditions for the reconstruction and development of the national education system in Ukraine. There is a need to understand the historical facts, events and

phenomena, to reflect in the content of historical education the laws of historical development, to reform the content of primary education, to fill it with cultural and historical heritage of the Ukrainian people.

**Literature Review.** Scientific researches, reflections in the works of L. Bondar, M. Gritsenko, P. Drobiazko, M. Lysenko, N. Pobirchenko, S. Sisoeva, O. Sukhomlinskaya, M. Stelmakhovich, B. Stuparyk, D. Fedorenko, A. Cherkashin, M. Yarmachenko, etc., reveal the problems of educational policy, general schooling, development of national education, ideas of the Ukrainian national school, originality and originality of the Ukrainian concept and models of general education, activities of teachers and public figures.

**Aims.** The purpose of this article is to analyze the formation and development of authentic pedagogical thought, Ukrainian schooling, reforming the system of primary education in Ukraine (1917-1939).

**Results.** The desire of the Ukrainian people to revive the national school, which emerged during the XIX and early XX centuries, was successful in the autumn of 1917. Ukrainian schools began to open in Ukraine. The General Secretariat of the People's Education, established by the Central Council, has joined the development of the educational business. He headed the General Secretariat and actively engaged in the development of the national education system I. Steshenko. May 20, 1917 The General Secretariat of Education has proclaimed the declaration outlining the program for the reorganization of public education. It stated that the secretariat was primarily intended to integrate the management of school education, namely: the care of conducting Ukrainian schools on the ground, organizing the publication of textbooks, teacher training. The merit of the secretariat was the fact that he took care of the elimination of the so-called dead-end schools, which were in tsarist public schools, and proclaimed the unity and continuity of all educational institutions from primary school to university [4].

Taking into account the support of the Central Rada, I. Steshenko is actively involved in holding the First All-Ukrainian Teachers' Congress (April 5-6, 1917), where it was decided to establish an All-Ukrainian Teachers' Union. I. Steshenko became the organizer of the Second All-Ukrainian Teachers' Congress (August 10-12, 1917), the All-Ukrainian Professional Congress (August 13-15, 1917) and the meeting on the organization of public education in Ukraine (December 15-20, 1917). on which the national education development plan was developed and approved [3].

November 7, 1917 there was a historic event. The Third Universal declared the creation of the Ukrainian People's Republic and the concentration in its hands of the full power [3].

Under the conditions of sovereign Ukraine, the development of a national school has risen to a new level. From the earliest days of the proclamation of the Ukrainian People's Republic, Ukrainian teaching was actively involved in the revival of the national system of education and upbringing. The UNR government gave priority to the issue of the revival and development of national education in Ukraine, which became a nation-state concern.

December 28, 1917 The Central Council decides to reform the school case. UNR eliminates school districts where commissariats of all nationalities are created. This decision abolished the directorates and inspections of public schools. Instead, the institute of provincial and district commissioners of public education was established and school councils were attached to them [4].

The UNR government, given its national desire to create a home school, took care of providing (accessibility) education to all school-age children. The school was announced as a two-year comprehensive seven-year school. At the first stage of study time was determined for 4 years; on the second - 3 years. First of all, the first level of study was provided. Education at the UNR was proclaimed free, democratic in nature.

With the proclamation of the IV Universal of Ukraine's independence, the General Secretariat of Education becomes the Ministry of National Education of the UNR and continues the educational policy of its predecessor.

A significant contribution to the development of the national school was made by the Minister of National Education and Arts of the UPR in 1918-1919. prominent scientist I. Ogienko, later Minister of Religious Denominations (1919-1924). With his involvement and direct leadership, the "Petliur Unified School and Parent Committee Project in Ukraine" was developed. The main ideas and provisions of this project were reflected in the decisions of the Second Congress of the All-Ukrainian Teachers Union [4].

**Discussion.** A considerable amount of work was done by the Ministry of Education and the Arts, led by I. Ogienko, on the analysis and generalization of the state of education in Ukraine and on the design of the structure, content of a truly national education, and a national school.

The projects of the ministry and the government of the UNR, numerous ideas of educators about the construction of a new school essentially formed the concept of national education. It is based on the following guiding principles: the socio-state nature of education, when not only the state but also the parent community is recognized as the initiator of the national school; declared equal rights of all citizens to receive general education regardless of nationality, race, social origin and status, gender, religion; education of children in their mother tongue was introduced; Ukrainian language was compulsory for students of any nationality; envisaged diversity and differentiation of educational institutions; democratization of all aspects of school life, the election of school governing bodies, teachers and other school staff; it was planned to use the most appropriate curriculum and curriculum options, taking into account the interests and capabilities of students and parents; the highest governing body of the educational institution was to become a school council, which would be elected on a democratic basis; priority nature of financing and moral support of the school at the expense of education funds, which were formed from different sources of income (local budget, contributions of interested agencies, enterprises, cooperatives, societies, individuals, charitable organizations, revenues for paid services of the school); full financial and economic independence of the school and the national character of the educational activity of the school were guaranteed.

The UNR government, the teaching of Ukraine did everything in their power to ensure that the provisions of the concept of national education and upbringing were not implemented in a declarative nature. In particular, the priority was to introduce free and compulsory education in lower and upper primary schools in Ukraine. In 1919, there were 50,244 elementary schools, 1,211 higher elementary schools in Ukraine [2].

State of Ukrainian elementary school in 1918-1939pp. was determined by the historical conditions in which Ukraine was between the two world wars. The situation of the Ukrainian school at that time was different, as Ukraine was in the conditions of fragmentation of lands under different governments: under the Bolsheviks, under Poland, under Romania, under Czechoslovakia. Because of the political circumstances of the time, the pedagogical events on these lands were almost completely separate and there were sporadic links between them. We consider the state of national education in the central Ukrainian territories.

Artificial borders separated the Ukrainian nation, Ukrainian schooling and pedagogy. Educational transformations in central Ukrainian lands began with the seizure of power by the Bolsheviks in December 1919. because of the destruction of conventional schools and the establishment of a unified Soviet school - the only labor.

The Bolshevik government in Ukrainian schooling largely duplicated the education system in Moscow. In 1919, a number of decrees were issued: the formation of the People's Commissariat of Education (People's Commissariat) of the USSR, provincial and district departments of public education; about the separation of the church from the state and the school from the church; about the transfer of all educational institutions under the control of the People's Commissariat, etc. Accordingly, the People's Commissar of the Ukrainian Soviet Socialist Republic issued a number of decrees and instructions on school management and the content of teaching, on the prohibition of teaching the Law of God and the exercise of religious education [5].

As of March 1920, the system of public education in Soviet Ukraine covered the following structures [4]:

- Preschool institutions (kindergartens and playgrounds) for children of 4 to 8 years;
- seven-year vocational school, which consisted of two grades for children of 8 to 15 years: first - 1-4 grades; second - 5-7 classes;
- vocational schools and colleges for teens and young people aged 15-18;
- Higher education institutions for young people of 18-22 years.

The above project of a unified labor school, created by the first People's Commissar of Education in Ukraine, G. Hrynko, in 1922 under the dictatorship of the Kremlin was changed and adapted to the system introduced in the RSFSR by A. Lunacharsky. In addition, in 1924 despite the autonomy in cultural construction, the People's Commissariat of Education in the USSR was forced to accept the Moscow program for a seven-year labor school [4].

Thus, despite its formal legal independence, the Ukrainian SSR was in fact subordinate to the Russian Federation (Moscow), which already in the 1920s

intensively intervened in the affairs of Ukrainian schooling, and in 1930 took them under complete control and launched a powerful Russification. The study of the Russian language is introduced: not as a foreign language, but as a second language, ie equal to the native Ukrainian language.

Politics of military communism destroyed the economy, sputtered agriculture and hit the Ukrainian school system painfully.

In 1921-1923 pp. famine erupted in Soviet Ukraine, killing 1.5 million peasants. The economic collapse forced the Bolsheviks to move from the politics of military communism to the NEP, that is, to the free market, which promoted the development of private initiative. General liberalization opened the possibility to raise questions about the revival and development of Ukrainian pedagogical culture and the national school.

December 30, 1922 proclaimed the formation of the USSR. J. Stalin, who at that time was acting as a People's Commissar for Nationalities, led a large-scale Russification line, which caused intense dissatisfaction among non-Russians. Therefore, in April 1923, the XII Congress of the RCP (b) practically condemned Russian chauvinism and proclaimed the principle of rooting. The new national policy was to promote the training of Ukrainian teaching staff, the introduction of the mother tongue in education, the de-Russification of the state apparatus, and even the creation of a republican army. The process of Ukrainization began in Ukraine [3].

The Ukrainianization campaign covered all spheres of life in Soviet Ukraine. It had the greatest impact on education. Unlike tsarism, the Bolsheviks paid considerable attention to schooling. This was due to [4]:

- a) for propaganda purposes;
- b) the desire to raise the production potential of the country through education and vocational training;
- c) the intention, through the Soviet school, pedagogy and education, to communicate to society.

Particularly impressive were the successes in eliminating illiteracy. In 1925. compulsory and free primary education was officially proclaimed, but no bourgeois and turmeric children were admitted to the school, so about half of the pupils were enrolled.

As for the successes in Ukrainianization, they were truly significant. The leading role in it was played by the People's Commissariat of Education, including its leaders O. Shumsky, and later M. Skrypnyk. Thanks to them, significant changes in Ukrainian national education and culture have been achieved. The culmination of the 1929 Ukrainization. more than 80% of secondary schools and 30% of higher education institutions have provided exclusively Ukrainian language education 97% of Ukrainian children have studied in their native language. In schools intensive study of Ukrainian studies was carried out, creative searches of effective ways of teaching of students were supported [1, 4].

Ukrainian studies encompassed a system of scientific knowledge and research on the history (genesis) of ethnicity, nature, language, nation, state, culture,

international relations of Ukrainians with their own destiny and sovereignty, mentality and integrity (catholicity).

In May 1926. A. Shumsky was dismissed from his post of Education Commissar. And since September 1929 mass arrests and executions of prominent figures of Ukrainian science, education and culture began.

After the genocide against the Ukrainian peasantry, the offensive on Ukrainian national culture began (1933-1939pp.). By the tragic consequences, this time has come to be known as the "shot of revival". It was a period of curtailing of Ukrainianization and carrying out the Russification of all branches of Ukrainian life, education and pedagogy. The ethnocide, genocide and linguocide used by the Bolsheviks against the Ukrainians was accompanied by the physical extermination of the Ukrainian intellectual elite, nationally conscious teachers, which led to a mass beheading of the Ukrainian people. There was a defeat of the Ukrainian national school. All the best layers of Ukrainian national culture, science, literature and the arts, works by eminent Ukrainian and foreign writers were officially banned and were removed from school programs and textbooks. The school of the USSR did not even have its own textbooks, but used the ones published in the RSFSR.

Resolutions of the Central Committee of the CPSU (b) "On Primary and Secondary School" (1931), "On Curricula and Regime in Primary and Secondary School" (1932) meant the offensive on Ukrainian schooling and pedagogy, the introduction of a totalitarian regime, "enslavement" of teachers, ubiquitous planting of Stalin pseudopedagogy [2, 3].

In the USSR, Soviet pedagogy advocated the formation of a Soviet man, not a Ukrainian. Teachers and scholars who stood in the national position of their native people were officially banned (G.Vashchenko, S.Rusov, Y.Chepiga, P.Kholodny, M.Demianovsky, P.Steblyn, etc.). Official recognition was given only to those teachers who took to the Soviet platform (A. Makarenko, V. Zatonsky, Y. Ryapo, T. Lubenets, I. Sokoliansky, O. Zaduzhny, G. Kostyuk, S. Chavdarov, O. Popov) [2, 3, 4].

The constant waving of the sly brimstone of the struggle against "Ukrainian bourgeois nationalism" served as a screen of continuous persecution against all Ukrainian, national in school, education, pedagogical science. Love for the Fatherland, for the people, national patriotism, in the USSR was considered the most serious crime. From 1927 to 1939 up to 10 million people were destroyed in Ukraine.

The decision of the Central Committee of the CPSU (b) "On pedagogical distortions in the system of drug addicts" (1936) condemned the pedagogical theory of childlessness and infertility, falsification under quotations of communist "leaders" and "classics", the resolutions of party conferences, plenums and congresses [4]. . The number of Ukrainian-language schools in Soviet Ukraine has been sharply declining. Instead, they opened schools in Russian or bilingual (ultracurricular), which later became Russian. This insidious policy of the Bolshevik colonizers in the field of schooling has, over the decades, led to the decline of the national school and national consciousness. Stalinized politicization and militarization were waged in all the links of the school.

**Conclusion.** Thus, the ukrainization of education brought back to life the national school of Ukraine, in which young people acquired the best achievements of the spiritual culture of their people. After centuries of persecution, humiliation in the Ukrainian people appeared national optimism. But the revival did not happen. The Ukrainian people opposed the Stalinist plans for socialist collectivization and industrialization. The leaders of the party and the state, led by J. Stalin, considered the reasons for the opposition to be the unconquered national spirit of Ukrainians, high level of national consciousness, their identity and their rejection of the Bolshevik ideology. The people were sentenced. The criminal collectivization of 1930-1931, the famine of 1932-1933, the mass extermination of the Ukrainian intelligentsia, and above all the figures of education, interrupted the process of ukrainization. Ukraine has completely lost the signs of autonomy and moved to the position of a suburban, colonial territory.

A frantic attack on the achievements of Ukrainian culture, education, and science began. The first in this process were actions aimed at liquidation of the national school of Ukraine, it was transformed into a means of genocide against Ukrainians, whose main task was to Russify the indigenous population, distort its national outlook, consciousness, character, excommunication from the traditions, customs and culture of its people.

**Author contributions.** The authors contributed equally.

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## HISTORICAL AND PEDAGOGICAL ASPECTS AS A SUBJECT OF CONTENT ANALYSIS OF POPULAR SCIENCE PUBLICATIONS

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**Abstract.** The purpose of the article is to identify the frequency and nature of the coverage of pedagogical problems in the publications of the journal «Science and Society» with demonstration of powerful epistemological potential of automated content analysis. The research methodology is based on a set of general scientific methods – system-structural, diachronic, statistical, problem-chronological. The study followed the principles of historicism, objectivity and multifactorialism. Revealed the basic stages of this method and its purpose. Investigated the pedagogical problems and its various aspects (popularization of scientific knowledge; organization of educational process in high school; self-education of adults; pedagogical education of parents; propaganda of state ideology and communist education; training and upbringing of children of preschool and school age), which was found on the pages of the magazine for years: 1973, 1983, 1987, 1990, 1991. An array of text information from the magazine «Science and Society» is being processed using automated text coding techniques through key tokens. The results of the study are presented as diagrams. The Janis coefficient and validity are calculated using formulas. In the analysis takes into account the historical context as meta-knowledge, which allows to expand the perception of research results. The most popular topics in the journal «Science and Society» were discovered and uncovered in 1973, 1983, 1987, 1990, 1991. The results of the study demonstrate an analytical approach to pedagogical issues and can be used to share pedagogical experience and in the organization of non-formal education, in particular of adults.

**Keywords:** content analysis, automated content analysis, pedagogical issues, popular science publication, «Science and Society», «Knowledge» society, Ukraine.

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 2; **tabl.:** 0; **bibl.:** 12

**Introduction.** In recent years, the amount of information that the user operates, growing at a rather rapid pace. Accordingly, it reduces the time for its analysis and processing. One of the ways to solve this problem may be to use the computer technology as an enhancer of intellectual abilities of a human. Modern computing capabilities and software developed in recent years, can significantly accelerate the analysis, processing and digitization of a large amount of information. At the same time, the process of mastering complex software is simplified. Not only computer specialists can use the most complex programs, but also other specialists such as sociologists, pedagogists, psychologists, psychiatrists, economists, etc. As a result, interdisciplinary connections are deepening.

In domestic scientific research increasingly encountered various methods of analyzing information, in particular, content analysis (text-mining, automated, quantitative or qualitative content analysis).

The concept of content analysis is understood by the method of analyzing information in order to obtain reliable and valid conclusions from texts in the social context of their use by means of intersubjectively agreed rules for the systematization of information [6].

Note that content analysis is an effective tool for studying the content of historical documents, periodicals and reflects the mood of the era. Taking into account the above mentioned, we considering the method of automated content analysis as perspective one to study the problems of the popular science publication «Science and Society», published since 1923. With the support of the People's Commissariat of Education of the USSR. Since 1951 till today it is publishing with the assistance of the society «Knowledge» – public scientific-educational society of Ukraine [14]. The main areas of work of this society are: educational work, organization of education of adults and parents, raising the culture of citizens, informing society about state ideology, popularization of scientific knowledge, publishing activity.

The choice of the magazine «Science and Society» is due to the fact that it is one of the most demanded scientific and popular publications both in the Soviet era and in the times of independent Ukraine. In addition, it serves as a content carrier of relevant information on current pedagogical issues.

The study of pedagogical issues revealed on pages of this popular science publication allows us to thoroughly examine the evolution of this phenomenon in Ukraine in order to identify educational tendencies in the development of public opinion and pedagogy as a science, in particular. Also, this publication is a reflection of the content and activities of the head of the magazine – Society «Knowledge» of Ukraine.

The purpose of the article is to identify the frequency and nature of the coverage of pedagogical issues in the publications of the journal «Science and Society» with demonstration of powerful epistemological potential of automated content analysis.

**Literature Review.** An important contribution to the development of content analysis has been made by such foreign scholars as Elo S., Kyngas H. (2008) «The qualitative content analysis process» [4], Gavora P (2015) «The State-of-the-Art of Content Analysis» [5]. Deep investigations of this method of information processing were made by Indian scientist Devi B Prasad (2008) «Content analysis: A method of Social Science Research. Research Methods for Social Work» [3], American scientist Krippendorff, K. (2004) «Content Analysis. An introduction to Its methodology» [7] and British scientist Popping R. (2000) «Computer-assisted text analysis» [9].

Scientists White, M., March, E. (2006) in the article «Content Analysis: A Flexible Methodology» [15] describe content analysis as a systematic, rigorous approach to the analysis of documents obtained or created during the study. Important scientific explorations of discussion and classical content analysis were made by domestic scientists Denusova, S. (2014) [2] and Ivanov, O. (2013) [6].

**Aims.** The aim of the article is to study the periodical «Science and Society» and identify pedagogical aspects and political propaganda by the method of automated content analysis.

**Methods.** To solve this goal, the materials of the journal «Science and Society» were analyzed for years: 1973, 1983, 1987, 1990, 1991. The analysis was conducted with the help of automated content analysis, which corresponds to three basic principles of scientific method:

1. Objectivity: clear rules that allow different researchers to get the same results within the same material being studied.

2. Impartiality: the material for analysis was not specifically selected in order to confirm the viewer's point of view.

3. Generalization: the research method can be used by other researchers to another material [3].

The results were processed using the web-based reading and analysis tool.

**Results.** Automated content analysis was conducted in five stages, in accordance with its methodology [7].

The first stage of the study includes the definition of the subject and object of the study, the selection of content units (words and phrases) to formulate the predictable categories that interest us in terms of the goal.

The object of research is a sample of magazines «Science and Society». The subject is the content of these journals related to the pedagogical and socio-educational context.

At the second stage, the sample size of the magazines «Science and Society» is determined. The selection of the magazines «Science and Society» was elected in 1973, 1983, 1987, and 1990 in 1991 in order to identify the difference in the coverage of pedagogical issues, taking into account the specifics of socio-historical processes in Ukraine and trends in the development of the enlightenment movement. The calculated validity of the sample is in the range of 0.8 – 1, which allows making grounded conclusions based on the input material.

The third step involves coding by category and quantitative research. Categories are selected using words and phrases related to the topic under study.

These categories are content-independent, which corresponds to the methodology of this analysis [7]. At this stage, the researcher uses an intelligent filter to identify phrases that contain words-markers that match the specified categories [6].

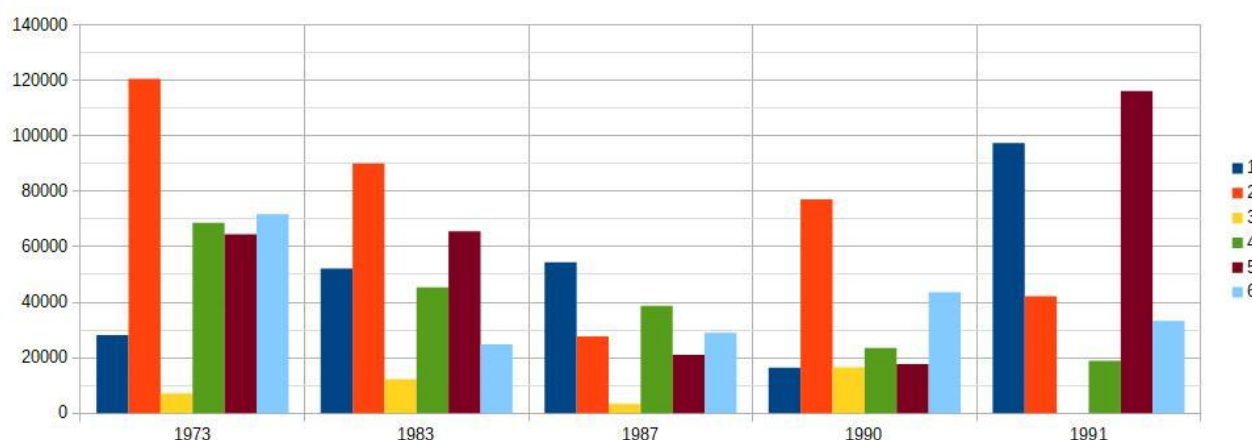
In the fourth stage, trial coding was performed – checking whether the selected content categories are in line with the text, taking place amendments to the coding of the categories. Categories do not repeat and are not interconnected by content.

At the fifth stage, the frequency of appearance of each category (frequency analysis) is counting. The unit of calculation is the number of characters without spaces for elucidation of each of the category.

In a result of research work using the web-based environment for reading and analysis of the text as categories of content analysis, the following were highlighted: popularization of scientific knowledge, organization of educational process in high school, adult self-education, pedagogical education of parents, propaganda of state ideology and communist education, training and the upbringing of children of

preschool and school age. For each category separately for each year of the sample a quantitative content analysis was made.

Figure 1 presents the quantitative frequency of each identified category in the periodical «Science and Society» for years: 1973, 1983, 1987, 1990, 1991.



**Figure 1. Analysis of the distribution of content by the most common pedagogical issues of the publication «Science and Society» in the years of the sample**

where, 1 – Popularization of scientific knowledge; 2 – Organization of educational process in high school; 3 – Self-education of adults; 4 – Pedagogical education of parents; 5 – Propagation of state ideology, communist education; 6 – Teaching and upbringing of children of preschool and school age.

As seen in Figure 1 in year 1973, the greatest attention was paid to the following pedagogical problems: popularization of scientific knowledge, organization of educational process in higher education, teaching and upbringing of children of preschool and school age in the context of communist ideology, and the smallest — self-education of adults. In parallel with this, active ideological propaganda was carried out. This year falls on the time of the so-called Brezhnev stagnation, which is characterized by social, personnel, and economic stability in the state [2].

Among the materials aimed at popularizing scientific knowledge, one should note the active cooperation of the members of the «Knowledge» society of Ukraine with the magazine in discussing the issues of the «technical revolution» and its social consequences; international contacts of specialists of Soviet Ukraine with foreign colleagues on joint research, exchange of scientific and technical documentation, printed materials, participation in international conferences, congresses, meetings, seminars, symposiums, international exhibitions; internship of specialists abroad and learning of forward experience; cooperation with foreign companies and organizations.

The issues of organizing the educational process in the high school concerned the problems of reviewing the content of education, improving the curricula of individual subjects at technical and agricultural activity kinds, and launching the work of new chairs: higher mathematics, cybernetics, mechanized information processing, statistics. The discussion was about on the method of network management and the theory of mass service. Became topical questions of acquisition

of a special internship of foreign students in higher educational institutions of the Ukrainian SSR, exchange of personnel and equipment between Ukrainian and foreign universities.

The upbringing of a fully developed personality as a cultural, enlightened, spiritually rich person was seen in the formation of its ideological beliefs. Priority was given to the task of upbringing the worker of a socialist society. At the same time, the general secondary education was propagated to the adult population, since it was believed that a worker with secondary education is working one third more productively than his colleagues with seven-year education. The vocational guidance activity for children and young people with an emphasis on working professions was actively implemented. Particular attention was paid to the pedagogical education of parents on the problems of education and training of children.

Emphasized importance of inheritance the knowledge and skills in the labor and educational sphere from the older generation to the younger. At the same time, it was stressed on the harmful example of adults, which is expressed in alcoholism, smoking and violations of labor discipline. Also, attention was focused on peculiarities of adolescence and methods of educational influence on the part of parents.

As is known, in these chronological boundaries, the leading role in the upbringing of school-age children belonged to the pioneering organization, the significance of which was emphasized in the pages of the magazine.

There was a need to involve physiologists and hygienists in considering issues on the length and structure of the school day.

The Jānis coefficient for this year was 0.41 (Figure 2). This testifies to a rather positive aggregate assessment of pedagogical issues.

In 1983, the number of symbols to highlight pedagogical issues with an emphasis on the relevance of certain themes has decreased, while maintaining the scope of propaganda of state ideology in publications. This happened against the backdrop of a gradual mutation of the party's course from the construction of communism to underlining the achievements of the then «developed socialism».

Becoming popular the attraction of scientists to popularize scientific knowledge through the publication of «novelties of science and technology», placement on the pages of the journal of public lectures.

An important theme is the effectiveness of training the personnel of the economic profile, since the economic specialties have become more widespread not only in profile higher education, but also in technical, construction, agricultural, etc.

The issue of the absence of courses in social psychology, industrial sociology, technical aesthetics in most universities is discussed. At the same time, attention is focused on improving the material base of institutions of higher education, raising the level of methodological, research and ideological and educational work.

Among the problems of general secondary education, comes to the fore the poorly organized vocational guidance work among high school students, propaganda among the entrants of economic specialties.

The emphasis is on the education of a person capable of self-replenishment of knowledge and skills building since childhood. The school acts as a leader in the formation of the creative thinking of the younger generation in addressing this issue.

At the same time, raised questions of moral education of children, the role and importance in this process of parents is marked. Propagating conditions for successful family education, such as: attention to the problems of the child, advice, support, the need for praise from parents for the work.

However, the greater part of the articles contains criticism of nationalist currents, focusing on the benefits of Soviet society and the upbringing of the «Soviet man». It is emphasized the participation of the Ukrainian SSR in the activities of many international organizations, with a view to strengthening peace among peoples, facilitating the conclusion of conventions on the prohibition of development, production and the proliferation of bacteriological weapons.

The aggregate assessment of pedagogical trends for this year was 0.34 (Figure 2), indicating a slight shift in the assessment of the relevant phenomena. But in general, there is a positive trend.

Reducing attention to the coverage of pedagogical issues can be traced back in 1987. This correlates with the change in the public consciousness, caused by the beginning of the «restructuring» and the policy of publicity. It was at the time of the restructuring that the transition from the positive assessment of the socialist path of development to the negative. As the state gradually ceased to fully oversee the mass media, it became possible to highlight not only the achievements of socialism, but also its congenital and acquired flaws. This moment clearly reflects the Jānis coefficient – 0.07 (Figure 2).

On the pages of the magazine appear a new view on the forms of popularization of scientific knowledge, namely, lectures. It is proposed to introduce evenings of questions and answers, «round tables» with participation of representatives of different branches of knowledge, lectures and disputes, etc. Particular attention is paid to moral and ethical issues.

The development of cybernetics and the massive appearance of computers led to discussions on the pages of the magazine on the feasibility of introducing courses in computer science at universities and secondary schools. The authors of the publications emphasized the urgency of reviewing curricula and programs for the preparation of economists, lawyers, engineers, designers and healthcare workers.

The content of school textbooks, educational textbooks for universities is criticized as too «noisy» by non-informative messages.

Most articles relate to the description of cooperation between research institutes and institutions of higher education, emphasizing the tasks of research work in universities and the ways of their solution.

Among the leading areas of self-education, the acquisition of knowledge on ecology is becoming a priority. The urgency of this topic is due to the consequences of the Chernobyl accident (1986).

At the same time, the pedagogical issues of the magazine are expanding due to coverage of ones related to moral and ethical education, promotion of a healthy lifestyle and deprivation of bad habits, especially alcoholism.

Gradually, the norm of ethics of the magazine becomes a tolerant attitude towards the Orthodox Church as an educational institution and moral authority in society. Traced a change in the valuation of religious life from nihilistic to tolerable. This fact was detected in all the specified categories in 1987.

In 1990, the pedagogical problems became more in demand, the number of such materials in the periodical publication «Science and Society» is growing in relation to 1987. At the same time, appear a new field in the discussion of pedagogical aspects – national. On the pages of the magazine there are calls from commentators to go to teaching subjects in educational institutions in Ukrainian. This is due to the gradual movement toward the independence of Ukraine, which was marked by the adoption by the Verkhovna Rada of the Ukrainian SSR of the Declaration on State Sovereignty [1].

Is being Disseminated information on paid training courses at the Academy of Sciences of the UkrSSR for postgraduate students, graduates of vocational technical schools and working youth, which is preparing for admission to higher education. The idea is that the basis of classes should be independent training of students on the methodological manual.

The pages of the magazine are actively discussing changes in the organization of the educational process in the general education school: the establishment of deep interSubject connections, the choice of pupils lessons based on their interests, strengthening the humanitarian orientation of education, harmonization of curricula in mathematics and computer science, expanding the content of academic disciplines through additional topics in the field of ecology, economics , modern technologies, types of human activity.

In the context of long-term information isolation for Ukrainian specialists, academics, and teachers, the issue of further training in the educational and research centers of the West is of the utmost importance. This is considered the precondition for the revival of Ukraine's statehood.

The aggregate estimate of pedagogical linking materials for this year was – 0.04 (Figure 2), which indicates a somewhat negative emotional coloration of the content of publications.

Trends in the coverage of pedagogical issues in 1990 were continued in 1991, demonstrating somewhat increasing dynamics. The number of materials devoted to pedagogical aspects has increased, especially in publications of the category «popularization of scientific knowledge». For example, in the publications of 1991, the focus is on the need for a radical revision of approaches to research by geneticists and breeders because of their isolation from practice. A high school offers a new approach to studying the history of Ukraine. Emphasizes the need for training courses on the history of Ukraine and political science for the general public. Published appeals to scientists on the preparation of publications on a this topic.

At the same time, on the pages of the magazine for the first time there is information about the organization of seminars, courses on management training and obtaining an international certificate of the manager.

An important issue for parent's education is the AIDS problem and the prevention of this disease. The role of a woman in the potential transmission of this disease to the child is noted. The issues of drug abuse and responsibility for the organization of personal life are revealed.

Pedagogical education of parents focuses on the popularization of knowledge on Ukrainian studies and ethnopedagogy: traditions of respect to parents and the Ukrainian family; family values; ceremonies and beliefs of Ukrainians; national holidays, etc.

Propaganda is intensifying in terms of building up Ukrainian statehood, in particular the national education system. This is due to an increase in the activity of unions and societies, which are aimed at the cultural revival of Ukraine.

The coefficient of Janis was 0 (Figure 2). This indicates an increase in the positive mood in publications and relative optimism.



**Figure 2. The Janis Coefficient for the «Science and Society» magazine over the years**

**Discussion.** This study, as well as the researches of other scholars [10], proves the effectiveness of using automated content analysis in studying the issues of periodicals.

Taking into account the results of the conducted research, we note that the method of automated content analysis enabled to determine the content of the publications of the journal «Science and Society», to identify the problems and frequency of coverage of pedagogical aspects and orientation of state ideology in years: 1973, 1983, 1987 , 1990, 1991. The results obtained do not contradict but



complement the research of foreign scientists [10], which used content analysis to analyze the focus and activity of publications in the study of periodicals.

In 1973, the most attention was paid to the organization of educational process in high school, education and upbringing of children of preschool and school age, the least – self-education of adults. In year 1983, preference was given to publications on psychology, sociology, aesthetics, preparation of economists for the national economy, as well as moral and ethical issues.

In year 1987, the emphasis shifted toward pedagogical education of parents in the following forms: questions and answers, „round tables”, lectures-disputes; attracts attention to ethical issues, environmental education and counteraction to harmful habits. Discussed such issues as introduction of „Rhetoric” and „Informatics” courses in the high school. Appear publications on a tolerant attitude towards the Orthodox Church. Since year 1990, pedagogical issues are considered in the context of the national context of education and upbringing of the younger generation.

The reader’s attention is drawn to teaching in educational institutions in Ukrainian language, proposed to revise curricula in secondary schools, substantiated the importance of interdisciplinary connections. Arise publications of vocational-oriented character, proposals for the improvement of professional skills of different branches of knowledge, scientists, and teachers. In year 1991, a growing share of publications devoted to management issues.

Proposed a new approach to studying the history of Ukraine in schools and universities. Spreading a knowledge on Ukrainian culture. The problems of AIDS and its prevention become important.

We share the opinion of scientists [6; 2], which prove the expediency of using automated content analysis in the humanities, in particular, in the process of research historical and pedagogical problems.

The advantages of automated content analysis in the process of studying the publications of the journal *«Science and Society»* were: the identification of valuable historical, socio-cultural, pedagogical experience through the analysis of relevant texts; tracking complex models of human thinking by means of language. At the same time, this method has its own limitations: analysis may require considerable time expenditures and a well-balanced approach to the choice of analytical tools; it is hard to automatize and formulate of conclusions.

The analysis is a synthesis of the capabilities of a computer machine and intellectual abilities of a person. If automation allows you to reduce the time spent on processing the material, then the intellectual potential of a person is able to distinguish content links and deliberately to divide the information by categories. The volume of input data should show the character of the material under investigation.

This study was conducted taking into account possible constraints, which gives the right to make objective conclusions.

**Conclusions.** In the course of the study, the content of pedagogical issues and the propagation of state ideology in the scientific and educational publication *«Science and Society»* was revealed with the help of automated content analysis.

The epistemological potential of automated content analysis enabled us to process 3800 pages of the periodical «Science and Society» in years 1973, 1983, 1987, 1990, 1991.

According to the results of the study, it was established that the pedagogical orientation of publications in 1973, 1983, 1987 was carried out in line with the Soviet realities and had a corresponding ideological coloration. The usual was an optimistic view of the phenomena and processes in contemporary times. Since 1990 the direction of pedagogical problems has become a national context. This fact is most fully observed in 1991. This suggests that the journal «Science and Society» in the early 1990's radically changed approaches to the selection of pedagogical material under the influence of state-building processes in independent Ukraine.

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## PREREQUISITES FOR THE ESTABLISHMENT OF EDUCATIONAL SOCIETIES IN YELISAVETGRADSHCHINA IN THE SECOND HALF OF THE XIX - EARLY XX CENTURY

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**Abstract.** *The process of formation of cultural and educational activities of public societies of Yelisavetgrad region is a part of the whole history of Ukrainian pedagogy, which has a direct and indirect connection with social, cultural, economic, legal, demographic, state-building and other factors. The article reveals the preconditions for the establishment of educational societies in Yelisavetgrad region in the second half of the XIX - early XX century, namely: educational - led to the expansion of the network of educational institutions; political - caused the emergence and territorial expansion of settlements in central Ukraine, where, among other things, the school was built; economic - led to an increase in the population, the main activity of which was agriculture and manufacturing, whose occupations required appropriate knowledge, and therefore encouraged to obtain quality practice-oriented education; socio-cultural - caused an increase in the level of culture of the inhabitants of the region, contributed to the intensification of the educational movement, which led to the emergence of cultural and public societies in the region.*

*It was found that among the greatest achievements of Yelisavetgrad charity in providing various segments of the population with both basic and special knowledge - rich and diverse activities of Yelisavetgrad Society for Literacy and Crafts, which was founded in 1873 on the initiative of public and cultural figure, teacher MFedorovsky and united around him a large part of the city's intelligentsia and was one of the most successful in the Russian Empire in terms of its activities. The society carried out large-scale educational, pedagogical and educational work on a charitable basis: it promoted the establishment of educational institutions, organized Sunday readings of progressive literature, conducted significant educational and organizational and propaganda work among the population and students, organized theater performances, concerts and art.*

**Keywords:** *educational societies, preconditions of creation of educational societies, Yelisavetgrad society of distribution of literacy and crafts, educational activity, public initiative.*

**JEL Classification:** I0; I20

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**Introduction.** The preconditions for the establishment of educational societies in the study region cannot be considered in isolation from the general process of development of the educational movement in the Russian Empire.

In the context of revealing the problem of the development of the enlightenment movement in the Ukrainian lands of the Russian Empire, the period of the second half of the XIX - early XX centuries needs exceptional actualization, because at this time there is a growing community interest in education.

Thanks to the hard work of the progressive part of the intelligentsia of Yelisavetgrad region and with the assistance of progressive public and cultural-educational figures in the region, the preconditions for the establishment of educational societies were created.

**Literature review.** A significant role in the actualization of the research problem was played by the works of local lore specialists of modern researchers

I. Bosa [2], V. Boska [3], O. Trybutska [5], O. Filonenko [6], L. Filoretova [7], etc. in which the authors, analyzing the educational activities of the Yelisavetgrad Society for the Dissemination of Literacy and Crafts, note the place and role of individuals in the development of educational institutions and the system of public education in the Yelisavetgrad region. At the same time, the pedagogical and public-educational activity of the Yelisavetgrad Society for the Dissemination of Literacy and Crafts and its members, which carried out large-scale educational, pedagogical and educational work on a charitable basis, contributed to the establishment of educational institutions, remains poorly covered.

**Aims.** The purpose of the article is to reveal the preconditions for the establishment of educational societies in Yelisavetgrad region in the second half of the XIX - early XX century.

**Methods.** The historical-logical method made it possible to determine the socio-political and social features of social development and their influence on the development of the educational movement in Ukraine in the specified historical period; constructive-genetic method provided an opportunity to determine the socio-historical and cultural-pedagogical prerequisites for the development of educational societies in Yelisavetgrad region in the second half of the nineteenth - early twentieth century.

**Results.** From the second half of the XIX century. On the territory of Dnieper Ukraine, which included the Right Bank, Left Bank, Slobozhanshchina region and Southern Ukraine, there were illegal circles, associations, societies, whose main task was to spread education among the people, awakening their national identity. These societies soon became known as Communities. Ukrainian Communities took from the Cyril and Methodius ideas of patriotism, Ukrainophilism and defined their activities as scientific, educational, cultural [4, p. 13]. From the beginning of the first Communities in 1861 until 1907, when they were transformed into Enlightenment societies, the citizens aimed to form the national consciousness and self-consciousness of the Ukrainian people through enlightenment, dissemination of knowledge, education, literacy of the masses. They considered the organization of Sunday schools with Ukrainian as the language of instruction, ethnographic research, dissemination of the Ukrainian word through printed publications, creation of Ukrainian textbooks for public schools, struggle for the introduction of the Ukrainian language in educational institutions, creation of a national school, and in this context development of content, forms and methods of teaching children and adults [4, p. 10].

Summarizing the experience of educational activities of societies operating in Ukraine, O. Sukhomlynska states that the activities of each of the "Enlightenment" differed in its features due to local circumstances. But they were united by a common goal - "to promote the development of Ukrainian culture, in particular the education of the Ukrainian people in their native language" [3, p. 64]. The task of educators was to:

- 1) the spread of primary education;
- 2) replenishment of knowledge of those who graduated from primary schools;

- 3) acquaintance of Ukrainians with spiritual and material treasures of the native land;
- 4) the development of their love and respect for their people;
- 5) the formation of the desire to work for the good of the nation [3, p. 64].

In the middle of the XIX century. The Russian Empire was experiencing a deep crisis in almost all spheres of life. The essence of this crisis was the inconsistency of existing feudal structures and relations with the world's leading trends. This became especially noticeable after the wave of bourgeois revolutions in Europe (1848–1849), which established a new bourgeois society. Characteristic features and manifestations of the crisis situation in the Russian Empire were [6]:

- decline of landed estates, increasing exploitation of peasants;
- the dominance of regressive methods of management, inhibiting the development of capitalist processes, ie artificial restraint of the formation of the free labor market, industrial development, etc .;
- growing social tensions in society.

The government did not limit itself to judicial, military, peasant and financial reforms. The development of capitalism required changes in the education system, requiring the production of skilled professionals in various fields.

Some liberalization of life in the Russian Empire contributed to the intensification of the democratic part of society, which, in turn, advocated the introduction of universal education.

The intelligentsia also condemned the class character of the school, supported the development of education, and so on. For the first time in the history of the empire, pedagogical problems began to be widely discussed by the public. Moreover, they have become the subject of many public initiatives. Thus, at the turn of the 50-60s of the XIX century. the educational life of the country was enriched by a new phenomenon - the emergence of social and pedagogical movement.

In addition, the advanced intelligentsia was well aware that government measures not only remained on paper, but profoundly and radically changed the course and direction of people's lives in its progressive, progressive, socio-cultural development, it was necessary to prepare the masses for major educational reforms. A possible way for such development could be to create conditions for access to primary education for all segments of the population. Education, thus, could become the only driving force for the development of not only mental but also moral strength of the people [4, p. 12].

In 1864, the government carried out an educational reform of the school, the essence of which was to create a unified system of education. As a result of the school reform, a unified system of primary education was introduced. Primary education was provided by primary public schools, which worked according to a single curriculum. The purpose of these institutions was to teach students the Law of God, reading, writing, and the four acts of arithmetic. The educational process throughout the Russian Empire was carried out in Russian.

Thanks to the reforms of the 60's of the XIX century. education and training became a public affair, which was reflected in the internal structure of schools. The

management of public schools passed to the county and provincial school councils, and the maintenance of educational institutions became the responsibility of the local population and the zemstvo.

However, these changes were not rapid, as they were determined primarily by socio-economic conditions and autocratic policy in the field of education, and the proclaimed idea of universal education did not change in practice the class nature of education [6, p. 54].

Scientific research shows that the period of the second half of XIX - early XX centuries. was one of the most complex and dynamic in the history of national education. Changes in the whole structure of the Russian Empire and the needs of economic development in the new conditions required adequate provision, including human resources. The rapid development of scientific and technological progress and market relations has significantly exacerbated the increase in requirements for general education and training. Public educational activities, which offered new, more democratic and progressive ways of educational evolution, also became noticeably more active. Cultural and educational activities of the public in the second half of the XIX - early XX century became extremely relevant and intense.

At this time, civil society began to develop - various organizations, associations, groups were created, which had different goals and objectives, generally criticized the state of affairs, pushed the government to radical change in various fields, and in particular in education. There are Communities whose members raise issues of national education, schooling and publication of educational literature in Ukrainian [7, p. 124].

As a rule, representatives of the local aristocracy and intelligentsia became the founders of various centers of education: educational institutions, educational societies, and so on. With inevitable obstacles, but persistently and systematically, such activities continued throughout the second half of the XIX - early XX centuries. With each passing year, it became more visible and tangible, more and more widespread and qualitatively deepened, despite serious government opposition. The persistence of the public forced the government in some cases to yield to it. However, these were the exception rather than the rule.

From the above follows the following prerequisites for the creation of legal public throughout the Russian Empire: the need to direct the forces of the intelligentsia to solve complex scientific, educational, industrial, commercial, military and other issues; the need to reform school education, which required the creation of various associations to address pedagogical issues. The activity of the educational movement in the Ukrainian lands of the Russian Empire was conditioned by positive changes within the Ukrainian society, the activity of progressive pedagogical forces, the formation of a new generation of intellectuals, the desire of the Ukrainian intelligentsia to consolidate in order to enlighten the Ukrainian people.

Thus, the middle of the XIX century. for the Russian Empire is characterized by the fact that, on the one hand, there was a need to create such types of organizations as educational societies, on the other - there are conditions for this.

60's of the XIX century. were a time of progressive changes and shifts in the social life of the entire Russian Empire, which included the Kherson province, which could not but affect the development of education in the Yelisavetgrad region.

The reforms of the 60's and 70's intensified the process of development and expansion of the network of educational institutions in the territory of the Russian Empire [6, p. 54]. Fateful for the Russian Empire in general, and for Ukraine in particular, was 1861. It is the starting point in the development of Yelisavetgrad: in 1861 the city was transferred to the civil service, and soon (1865) restored to the status of county center.

At this time, economic and cultural development was revived in Yelisavetgrad - a public meeting and a public library were organized in the city, for which books were donated by representatives of the local intelligentsia. Carrying out the reform of city self-government (1871) in Yelisavetgrad not only increased the living standards of citizens, but also intensified the development of primary and secondary education [6, p. 65].

In Yelisavetgrad region, in accordance with the Regulations of July 14, 1864, gradually began to open city folk schools, Sunday schools, men's gymnasium, began public readings, etc. [77, p. 23, 166–169].

The activities of the schools of Yelisavetgrad district were coordinated by the Kherson zemstvo, introduced in 1865 after the approval of the "Regulations on zemstvo institutions" (1864). According to the division of the Ministry of Education, it was part of the Odessa educational district. According to the document, the zemstvos were to control and ensure the improvement of cities, construction of roads, water supply, etc., as well as to expand the school network. However, their rights extended to a greater extent only to economic problems. The educational process was controlled by the Ministry of Public Education and the Synod through provincial and county school councils, principals and inspectors of public schools [6, p. 61]. However, as we are convinced by the reports of the Zemsky Zbor and other primary sources, this local authority made a lot of efforts not only to expand the network of primary schools in Yelisavetgrad district in the second half of the XIX - early XX centuries, but also contributed to improving the educational process. supporting these educational institutions financially (funds were allocated for the purchase of visual aids, books, etc.). In addition, after the Government's prospects for agrarian development of the southern regions of Russia, local authorities allocated small plots of land for school gardens, orchards, etc., ie, created conditions for the practical study of the basics of agricultural production to increase its productivity.

The county also contributed to the expansion of educational space in the Yelisavetgrad region. Thus, as early as 1873, representatives of the Yelisavetgrad Zemstvo appealed to the government of tsarist Russia with a request to introduce general primary education. Particular attention was paid to the expansion of the content of the educational process in primary school as a basis for further learning and human development. Representatives of the county stressed that the tasks of primary education can not be limited to the acquisition of basic literacy, and justified the need to extend the period of study at this stage of education to four years [7].



It was thanks to the zemstvo in Yelisavetgrad that the first secondary school was established and maintained - Yelisavetgrad Zemstvo Real School (1870). The county had a positive attitude to the opening of an archeological museum, evening drawing classes and the publication of the first in Ukraine independent of the Ministry of Public Education magazine "Pedagogical Bulletin" (1881-1883) [2, p. 111–112].

Thus, both on the part of state structures and on the part of the public, in Yelisavetgrad there is not only an understanding of the need to solve the problem of vulnerable groups, but also an attempt to solve these problems.

Scientific research has shown that in the history of Yelisavetgrad region in the pre-revolutionary period there was a significant number of patrons who contributed to the development of culture, art, education, science, medicine and other fields.

**Discussion.** It should be noted the positive dynamics in the process of socio-cultural development of Yelisavetgrad region, during which, with the assistance of cultural and public figures, the necessary conditions for the development and dissemination of education in the study region were created.

A special place in the socio-cultural process of Yelisavetgrad region is occupied by local leaders of the cultural and educational movement - N. Braker, M. Zavadsky, P. Ryabkov, O. Pashutin, M. Fedorovsky, V. Khartsiev, etc., who actively participated in the development of education and culture of the region. .

Enlightenment ideas demanded new non-standard initiatives, and the very realization of this prompted the intelligentsia of Yelisavetgrad to unite around the idea of creating an educational society. Thanks to the hard work of the progressive part of the intelligentsia of Yelisavetgrad region and with the assistance of progressive public and cultural-educational figures in the region, the preconditions for the establishment of educational societies were created.

The leading trend of cultural development in the region was the emergence of cultural and social societies, which was a characteristic phenomenon in the Russian Empire in the late nineteenth century. Cultural and public organizations performed a great educational work and thus raised the level of general culture of the population. In particular, in the Yelisavetgrad region the work of the Society for the Dissemination of Literacy and Crafts, which was founded in 1873 on the initiative of public and cultural figure, teacher M. Fedorovsky and united around a large part of the city's intelligentsia and was one of the most successful in the Russian Empire. consequences of their activities [5, p. 8].

Thus, the socio-cultural preconditions for the creation of public societies in the Yelisavetgrad region include the following: the revolutionary movement of the mid-nineteenth century. and the resulting government reforms, liberalization of life, which led to a revival of activity of a wide range of progressive pedagogical forces, the advanced intelligentsia of the region and a large group of members of the public, the desire of local intelligentsia to consolidate for education.

**Conclusions.** Thus, the analyzed preconditions contributed to the development of the educational movement in Yelisavetgrad region in the second half of the XIX - early XX centuries, namely: educational - led to the expansion of the network of educational institutions; political - caused the emergence and territorial expansion of



settlements in central Ukraine, where, among other things, the school was built; economic - led to an increase in the population, the main activity of which was agriculture and manufacturing, whose occupations required appropriate knowledge, and therefore encouraged to obtain quality practice-oriented education; socio-cultural - caused an increase in the level of culture of the inhabitants of the region, caused the private initiative of public figures the emergence of cultural and public societies in the region.

The process of formation of cultural and educational activities of public societies of Yelisavetgrad region is a part of the whole history of Ukrainian pedagogy, which has a direct and indirect connection with social, cultural, economic, legal, demographic, state-building and other factors.

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## THE FEATURES OF THE DEVELOPMENT OF EDUCATION IN ELISAVETGRAD REGION IN THE SECOND HALF OF THE XIX – THE BEGINNING OF THE XX CENTURY

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**Abstract.** In approaches of assessing the development of Ukrainian science, it is extremely important to take into account the regional component, because there is a unique self-portrait, historical and cultural traditions, a specific cultural environment and cultural and educational space in each region of Ukraine. Elisavetgrad region is known for distinctive and original cultural and educational traditions, seminal pedagogical ideas, peculiar innovative methods and forms of their practical implementation. The purpose of the article is to study the features of the development of education in Elisavetgrad region in the second half of XIX - early XX century. The historical-structural method gave an opportunity to arrange historical and pedagogical works on various aspects of educational development, the functions of educational institutions, distinguished persons in Elisavetgrad region in the second half of the XIX – the beginning of the XX century.

The article reveals the socio-cultural conditions of development of the region and the genesis of education in Elisavetgrad region in the second half of the XIX – the beginning of the XX century. It is established that there were a number of educational institutions from this period in the region that differed from other educational institutions in the Russian Empire by innovative approaches to the organization of the educational process: Elisavetgrad Women's Gymnasium (1860), Elisavetgrad Cavalry Junker School (1865), Elisavetgrad free craft and literacy school (1867), Elisavetgrad military grammar school (1869), Elisavetgrad high real state school (1870), Voznesensk women's grammar school (1876), Voznesensk men's grammar school (1876), Elisavetgrad men's grammar school (1879), Bobrynetsk women's grammar school (1876), Commercial school (1908), Dobrovelychkivka Women's Teacher's Seminary (1912), Novomyrhorod Women's Gymnasium (1914), etc.; a private initiative was developed in school affairs. It was found that in the second half of the XIX – the beginning of the XX century education was enriched by the achievements and creative work of public figures, educators in the Elisavetgrad region. Significant educational work was carried out by the Elisavetgrad Charitable Society for the Propagation of Literacy and Crafts (1873–1914), which was one of the most successful in the Russian Empire.

It is determined that the development of educational processes in the region was significantly influenced by socio-historical features of the country: changes in political and state system, the rise of socio-pedagogical movement, the establishment of Soviet power, the implementation of the policy of Ukrainization.

**Keywords:** Elisavetgrad region, region, education of Elisavetgrad region, educational institutions, professional education, innovation.

**JEL Classification:** I0; I20

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**Introduction.** At the present stage of state formation, the main task of the policy of education reform is its compliance with the priorities of regional development at the regional level. One of the strategic objectives of the content of education, defined by the "National Doctrine of Education Development in Ukraine in the XXI century"

(2002), "National Strategy for the Development of Education in Ukraine for 2012–2021" (2012), the Law of Ukraine "On Higher Education" (2014), "On Education" (2017), is the optimal combination of classical heritage and modern achievements of scientific thought, the use of positive achievements of national and regional pedagogical experience.

In approaches to assessing the development of Ukrainian science, it is extremely important to take into account the regional component, because each region of Ukraine has a unique self-portrait, historical and cultural traditions, a specific cultural environment and cultural and educational space. Kirovograd region (Elisavetgrad region) is known for distinctive and original cultural and educational traditions, seminal pedagogical ideas, peculiar innovative methods and forms of their practical implementation.

**Literature Review.** The problem of development of education and pedagogical thought in Elisavetgrad region, since the 90s of the XX century, is revealed in many works of Kirovograd researchers (P. Buldovich, V. Vdovenko, O. Guryanova, I. Dobryansky, M. Dolgikh, M. Dubinka, A. Ivanko, N. Kalinichenko, J. Koloskova, V. Koretska, V. Kravtsov, V. Kudina, O. Luta, I. Mudry, I. Murovana, G. Perebyinis, O. Pertsov, V. Postolatiy, O. Prytyupa, T. Pecherytsia, L. Ryabovol, B. Khyzhnyak, I. Chernyshenko, etc.), as well as in local lore works of our compatriots (V. Biloshapka, V. Bosko, O. Chudnov, S. Shevchenko, S. Yanchukov and others).

However, the problem of scientific understanding of the peculiarities of the development of education in Elisavetgrad region in the second half of the XIX – the beginning of the XX centuries has not been the subject of a holistic study yet. At the same time, there were certain achievements in this process that have not lost their scientific and practical significance and relevance.

**Aims.** The purpose of the article is to study the features of the development of education in Elisavetgrad region in the second half of XIX - early XX century.

**Methods.** The historical-structural method gave an opportunity to arrange historical and pedagogical works on various aspects of educational development, the functions of educational institutions, distinguished persons in Elisavetgrad region in the second half of the XIX – the beginning of the XX century.

**Results.** There was a time of progressive changes and shifts in the 60's of the XIX century in the social life of Ukraine, as well as the Russian Empire of that time, which included the Kherson province, which affected the development of education in Elisavetgrad region. At that time the focus was on the diversity of types of educational institutions. The scope of teaching subjects and their distribution by classes in gymnasiums and real schools were determined by the curricula of the Ministry of Education. Numerous reforms of the school were aimed at improving education and adapting it to changes in society. Public education in Ukraine in the second half of the XIX – the beginning of the XX centuries, as well as in the Russian state in general, was one of the important social problems.

During this period new pedagogical ideas and concepts were born, which emerged as a result of a number of economic and educational reforms and intensified

the social and pedagogical movement, which led to the development of education, pedagogical thought, and educational activities in Elisavetgrad educational region.

In general in the 1860s and 1890s Kherson province and Elisavetgrad region, which was a part of it, were among the largest parts in the country. Only in the county center more than 23 thousand people lived [2, p. 3].

Before the reform of 1861 in Elisavetgrad region there were only a small number of primary schools and no secondary school, from the mid-60's of the XIX century, mainly through private and public initiative, the network of primary and secondary schools began to expand in the region. Educational institutions have become key centers of life and activity of the pedagogical intelligence.

The activities of schools in Elisavetgrad district were coordinated by the Kherson zemstvo, introduced in 1865 after the approval of the "Regulations on zemstvo institutions" (1864) [1, p. 531–532]. According to the division of the Ministry of Education, it was part of the Odessa educational district. Zemstvos controlled and ensured the improvement of cities, construction of roads, water supply, etc., as well as expanded the school network. But their rights extended mainly to economic problems. The educational process was controlled by the Ministry of Education and the Synod through provincial and county school councils, principals and inspectors of public schools [7, p. 61].

According to zemstvo reports, Elisavetgrad zemstvo began to study the state of education only in the mid-60s of the XIX century, however, paid more attention to the development of the city high school for the needs of the wealthy [1, p. 463–489]. However, as we are convinced by the reports of the Zemstvo Assembly and other primary sources, this local authority made a lot of efforts not only to expand the network of primary schools in Elisavetgrad district in the second half of the XIX – the beginning of the XX centuries, but also contributed to improving the educational process, supporting these educational institutions financially (the funds were allocated for the purchase of visual aids, books, etc.).

The network of secondary schools of Elisavetgrad district in the second half of the XIX – the beginning of the XX centuries formed men's and women's gymnasiums and progymnasiums, as well as one real school. Among the most significant secondary schools of Elisavetgrad district of the second half of the XIX – the beginning of the XX centuries we will name the following: Elisavetgrad women's gymnasium (1860), Elisavetgrad zemstvo real school (1870), Voznesensk women's grammar school (1876), Voznesensk men's grammar school (1876), Elisavetgrad men's grammar school (1879), Bobrynets women's grammar school (1882) (1914), Novomyrhorod Women's Gymnasium (1914), etc., which differed from other secondary schools in the Russian Empire by innovative approaches to the organization of the educational process; developed private initiative in school affairs [9, p. 65].

Characterizing the position of the educational sector in the county, we note that the main number of educational institutions was concentrated in Elisavetgrad. According to the data of 1861 in Elisavetgrad, in addition to the Parish County and theological school, there was an officer cavalry school, a private men's boarding

school – Humbert, a private men's school – Speitel, 2 women's boarding schools, 3 single-class women's schools, a city women's school for children from poor families. 2 free men's Sunday schools at cavalry and county schools, state Jewish school of the I category, Jewish Talmud-tor of the first degree, 20 Jewish headers – men's and women's of the second degree [4, p. 84].

In the second half of the XIX – the beginning of the XX century there were several military educational institutions in Elisavetgrad: in 1859–1866 it was an officer cavalry school, and from 1865 to 1917 it was a cavalry school, which from 1865 to 1902 was a cadet school (ECUS) (one of the two in the whole Russian Empire), from 1902 to 1917 – the military (ECS). In 1869–1886 there was a military gymnasium (the only one on the territory of Ukraine) [8, p. 143].

One of the types of educational institutions in the Russian Empire there were real schools. Real schools at that time were considered to be secondary schools that provided real education. Elisavetgrad Zemstvo Real School is rightly considered the best educational institution in the region. From 1873 to 1882 the institution was headed by Mykhailo Romulovych Zavadsky, a teacher, educational reformer, and senator. It should be noted that it was M. Zavadsky who published from 1881 to 1883 in Elisavetgrad the first in Ukraine independent magazine from the Ministry of Public Education "Pedagogical Bulletin", which presented the advanced pedagogical ideas of that time.

Among the greatest achievements of the Elisavetgrad charity in providing the common people with both basic and special knowledge there is the rich and varied activity of the Elisavetgrad Free Crafts and Literacy School, founded on October 15, 1867 with the assistance of the teacher of the local cavalry school M. Fedorovsky and officers' wives Ryazanova and O. Nekrasova. Compared to other primary schools, this institution was much better in both educational and other aspects, and craft departments made it generally exceptional among the city or government (county) schools at that time [10, p. 14].

According to numerous documents, the Elisavetgrad Free Craft and Literacy School was the only such craft and literacy school in terms of its type, programs, and teaching skills, not only in Elisavetgrad, but also in the entire Russian Empire.

The last decade of the XIX century was marked by the rapid development of art education in the region. Elisavetgrad of the late XIX – the beginning of the XX centuries has the fame of the city not only with a high level of education, but also musical, artistic and theatrical culture. G. Neuhaus's music school played a significant role in the development of musical and choral culture in the city. From here the outstanding musicians and composers G. Neuhaus, F. Blumenfeld, and the classic of Polish music K. Szymanowski came out at the beginning of the XX century. The first steps in art were made by the famous artist I. Pokhitonov here, a native of the city. On October 5, 1885, the Elisavetgrad Society of Fine Arts began its activities, the members of which taught the art of singing in the premises of a noble club.

Amateur musical and theatrical groups operated on the territory of the region, which gave rise to the Ukrainian professional troupe, founded by Mark Kropyvnytsky in the autumn of 1882. M. Zankovetska, I. Karpenko-Kary, M. Sadovsky,

P. Saksagansky, I. Tobilevich and others were also involved in this success [8, p. 35]. Prominent representatives of Ukrainian theatrical art and later folk artists of the USSR G. Yura and I. Maryanenko began their work here [11, p. 127].

At the beginning of the twentieth century there were 337 schools of various subordination and 135 church-parish schools on the territory of the region, in which about 50 thousand children studied. In addition, there were private boarding houses, Sunday and public schools, Jewish headers, and so on. These and other educational institutions played a significant role in the socio-cultural life of the region [6, p. 43].

In the beginning of the twentieth century because of the objective reasons public educational institutions had limited opportunities to innovate. Educational institutions had a much greater innovative potential, the founders of which tried to build the pedagogical process on humanistic principles, to increase its efficiency by making changes in the content, methods and forms of teaching and education. Author's educational institutions based on the original (author's) ideas and the technologies were created. That was it the Elisavetgrad Public Commercial School which was founded by the famous teacher Vasyl Ivanovych Khartsiev in 1908. It should be noted that the Elisavetgrad Public Commercial School, headed by V. Khartsyev for ten years (1909–1919), differed from other secondary schools in the Russian Empire by innovative approaches to the organization of the educational process: individual approach to students; close connection with the families of students, free choice of methods of teaching and education by teachers. The educational process of the commercial school was built on democratic, humanistic, pedocentric, labor (active) principles, which contributed to the purposeful, comprehensive and harmonious development of students.

In the beginning of the twentieth century along with the problem of providing educational services for the population, the urgent issue was the implementation of in-service teacher training to increase the number of professionally trained teachers, as well as in-service training of existing ones. From 1909 they became two-year, later - three-year training [9, p. 168].

It is worth to note that in the territory of our region at the Dolynska station of the Southern Railway of the Kherson province the outstanding teacher Anton Semenovich Makarenko began his pedagogical activity, working in a two-class railway school (1911–1913).

In the beginning of the 1920's, after the final establishment of Soviet power in Ukraine, state restructuring began, in the process of which a number of educational reforms were carried out. The reform was carried out in difficult socio-economic, socio-political conditions. The most important feature of school education in the region at that time was its subordination to the interests of the state, the restructuring of public life.

Peculiarities of the studied period (the need to rebuild and build new educational institutions, etc.) led to the fact that school education in the region developed in difficult financial conditions, it forced to use funds from residents and rural communities to support schools in the 1920s. There was a shortage of qualified teachers in the region.

The functioning of school education at that time was assessed by statistics: the number of schools, the number of students, the number of teachers; the number of Ukrainian schools and the schools of national minorities, the education of children of workers, peasants, artisans, etc. In 1920, there were 500 schools in the region, including 28 schools in Elisavetgrad. There were 494 schools in the county. There was a network of "elimination of illiteracy" (651), schools for adults (77), orphanages (21), and vocational schools (19) [6, p. 44].

Beginning from 1923 the financial situation of the region's socialist institutions gradually increased, the teachers' salaries increased, and the percentage of children enrolled in school increased. Thus, in the Zinoviev district in 1924/1925 AD there were 493 schools; between them I degree (1-4 classes) – 469, II degree (5-7 classes) – 34. They were distributed as follows: in the District city – 17, freelance cities – 22, in rural areas – 454. In general, 36.5% of the district's children were covered by the socialist education schools. In 1925/1926 academic year 47.08% – the number of children which was covered by the school from the total number of school-age children [3, p. 465–566].

Note that the sources of funding for schools were diverse. After the decree of July 13, 1922, labor schools were removed from the state budget and transferred to local maintenance. The contractual campaign (maintenance of schools by the population) did not yield noticeable results, and the gradual strengthening of the budget allowed, according to archival documents, within the old district for 1924/1925 to open 12 such schools in 5 districts of the region [3, p. 560].

The economic needs of schools (upkeep) were provided by village councils and village societies. More than 50% of schools provided textbooks to students at the expense of parents. Salaries of teachers in these schools, as well as contributions to socialist education were made at the expense of parents or the population in the amount of local budget rates.

These facts allow us to conclude that the creation of contract schools, attracting funds from the population was not caused by strict requirements of the authorities, and the difficult situation and the need to rebuild schools. It should be noted that these processes did not take place spontaneously, but in accordance with the decisions of the provincial congresses and meetings on public education.

The public involvement in education management is becoming widespread in the region. The activity of regional educational structures is a vivid example of the policy of decentralization of management. But both decentralization and self-government had clear limitations and had to ensure the implementation of state guidelines. The freedom of methodical searches of pedagogical workers had a similar character.

Gradually, a clear system of methodological work is being formed in the region. Methodical commissions existed on funds that were deducted from the special funds of labor schools and educational institutions. Labor schools were taken as bases in the districts. There were no bases on the Professional Education Vertical, as well as on the Political World, except one elimination of illiteracy school. Due to the lack of funds all research supporting schools were in very difficult financial conditions.

From the first half of the twentieth century attention was paid not only to primary and secondary education in the region, but also to the training of qualified specialists in the field of public education. This was due to the dynamic reform of the education system, the lack of educational staff and the inconsistency of working teachers with modern requirements.

Thus, in the 20's. XX century pedagogical courses were the most widespread form of teacher training. In 1922 the Elisavetgrad Higher Pedagogical Courses with a three-year term of study began to operate. In a number of documents, these courses are called universities. The tuition was paid. In 1923–1925 the Elisavetgrad Higher Pedagogical Courses were headed by a professor Vasyl Ivanovych Khartsiev [5, p. 55–59].

Note that the 20s of the twentieth century also differed from all other periods by the general spread of methodical work, the development of the system of advanced training, the holding of pedagogical meetings and congresses. Thus, in some years the training of all teachers was carried out. This was due to the fundamentally new nature of the tasks and technologies of school work and the lack of a sufficient number of qualified teachers. The development of the system of pedagogical education allowed to solve the problem of providing the school with teachers at the end of the period.

**Discussion.** Reforming school education at that period was provided for a policy of Ukrainization. Archival materials show that painstaking work was carried out in the case of Ukrainization in our region. Thus, in the conclusions of the survey of the District Commission on Ukrainization which was conducted on November 11, 1926 by the inspector of the District Executive Committee O. Dudarenko it is noted that “in the case of Ukrainization both in the district and throughout the district instructional materials were provided in full to institutions and government commissions. Carrying out Ukrainization did not violate the rights and interests of national minorities” [3, p. 515].

Thus, in general, this period was a controversial and important stage in the development of education in the region. The main reasons for the reform of school education were primarily political: a change in the political system, and pedagogical – the needs of school practice. It was found that the 20s of the twentieth century are characterized by the following areas of educational development in the region: the general spread of methodological work, the development of advanced training, the pedagogical meetings and congresses. The most important feature of education in the region at that time was its subordination to the interests of the state, the restructuring of public life.

**Conclusions.** It was found out that from the second half of the XIX century, mainly due to private and public initiative, the network of primary and secondary schools began to expand in the region, which differed in innovative approaches to the organization of the educational process; a private initiative developed in school affairs.

During the analysis of socio-cultural conditions of education development in the region in the second half of the XIX – first third of the XX century it was established that the development of educational processes in the region was significantly



influenced by the socio-historical features of the country: changes in the political and state system, the rise of the socio-pedagogical movement, the establishment of Soviet power, the policy of Ukrainization.

The prospects for further exploration are the history of primary, secondary and higher education in the region, the theory and practice of education.

**Author contributions.** The authors contributed equally.

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## CHAPTER 2

# INNOVATIONS IN THE MANAGEMENT OF EDUCATIONAL INSTITUTIONS

### FORMATION OF NATIONAL SELF-CONSCIOUSNESS - THE LEADING DIRECTION OF PEDAGOGICAL INNOVATION OF THE END OF THE XX CENTURY

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**Abstract.** *The Ukrainian school in the past had a significant experience in organizing a school based on a national idea. However, after the entry of Ukraine into the Soviet state, Ukrainian national priorities were largely eliminated, and therefore, in the Soviet era, innovative searches aimed at strengthening the national identity of education and the national aspect of education could not be fully realized, although Ukrainian teachers tried to promote the consolidation of national consciousness. The purpose of the study is to analyze the peculiarities of the implementation of national education in the system of innovative pedagogical movement in Ukraine at the end of the twentieth century. After gaining independence by Ukraine, the formation of national values along with humanity became one of the priorities of the state policy in the development of education in Ukraine and, accordingly, one of the leading directions of the innovative pedagogical movement. Questions of national education were actively developed by scientists and implemented in the practice of school teachers. Innovative searches had various forms of expression. Ukrainian teachers developed author concepts of national education. On the basis of this, the organization of the whole school activity took place, there was the confirmation of Ukrainocentrism as a philosophy of teaching subjects, filling the curriculum of the Ukrainian studies, introducing the interactive course of Ukrainian studies, implementing author educational systems, creating schools of various centers that studied Ukrainian customs and traditions, the activities of the Small Academy. Under the leadership of the innovators founded children's organizations, the cells of the society, whose activities are aimed at studying the history, cultural heritage, customs, traditions of the Ukrainian people. Innovative searches have been embodied in the founding of new types of institutions in different regions of Ukraine - the Ukrainian national schools of families.*

**Keywords:** *innovative movement, national education, author's conceptions of national education, Ukrainian studies, school-motherland, national values, formation of national values.*

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 0; **tabl.:** 0; **bibl.:** 23

**Introduction.** The idea of humanization is well revealed in the establishment of the national beginning as the main factor of a teaching-educational process. Scientists convince that the main factor of the formation of the national consciousness is to be national school which develops and protects national culture, is an inseparable part of the national soil and roots of its people, whose organization, contents and forms of the work correspond to national-cultural needs of Ukraine [4, p. 5]. Ukrainian school in the past had a good experience in the organization of schooling which was founded

on the national idea. However after Ukraine joined the Soviet countries, Ukrainian national priorities were weakened to a great extent, which is why in a Soviet period innovation search aimed at establishing the national identity of education and the national aspect of education could not be realized fully, Ukrainian educators tried to encourage the establishment of the national consciousness though.

**Literature Review.** There were several periods in the history of Ukrainian education during which the attempt was made to build a system of education which would be based on the national values. According to O. Siropolk, Ukrainian education was developing continuously from the beginning of XX century; in the process of cultural-educational work the national consciousness of the Ukrainian people grew seriously, they changed from an ethnographic mass to the nation which tried to comprehend the main aim of the statehood [14, p. 484]. The first period was a short-term independence (1917-1920), when, as O.V. Suhomlynska stated, a new system of national education which was based on democratic principles was initiated. In the scientist's opinion, it was this fact that played a decisive role in a further development of pedagogical science and school in Ukraine [17, p. 122]. General views and opinions of a nationally conscious part of Ukrainian teachers were mostly concentrated in "Memorandum of All-Ukrainian Teachers' Association to the Directory of the Ukrainian People's Republic". The following was stressed in the preamble of the document: "it is the national education carried out through school and out-of-school education that can make our people active in the fight for a better life of the native land. And the national school headed by a nationally conscious and well-supplied teacher becomes a leader in this process" [20, p. 96]. The next period covers the 20ties of XX century. Characterizing this period, O.V. Suhomlynska underlined that in 1920 the Soviet power reigned on a larger part of the territory of Ukraine, and it needed a strong ideological foundation [20, p. 154]. Ukrainian bolsheviks were building a system of education which would develop communist ideals in people's consciousness; they understood very well how important it was to use national culture, national language, national school in this process. In fact, the creation of the Soviet education system and its Ukrainization (teaching in the native language) took place at the same. Those measures were directly aimed at serving the cause of the creation of the communist society. Educational work was announced to be the third front in the fight for socialism following military and economic ones. It is in this context the tasks to introduce national school were implemented [20, p.164]. Analyzing the policy of Ukrainization at that time, B.M. Stuparyk stated that the main difference of this process in the Soviet Ukraine from the one which was carried out in previous years was its aim. In XIX-XX centuries and in the years of liberation movements Ukrainization was aimed at national-cultural rebirth of Ukrainians, establishing in their consciousness the necessity to build their own state; but Ukrainization in the 20ties was caused by the aspiration to strengthen communist ideals as soon as possible rather than by the respect to national interests and ideals of the Ukrainian people [19, p.19]. Later on the process of the creation of national school, in particular that of the education of an individual's national consciousness, ceased. O.V. Suhomlynska wrote about this fact: "The education which was based on

the foundation of a Marxist-Leninist theory had a well-expressed national character and it helped develop the Ukrainian culture and the Ukrainian national consciousness, which is why a totalitarian regime liquidated Ukrainian peculiarity and introduced its further unification” [20, p.175]. However, the principles of the national education, laid at that time, received another start of the development in new historical circumstances which became possible after Ukraine got its independence in 1991. The creation of national Ukrainian school and the formation of the national consciousness of a personality became one of the leading trends in the innovation pedagogical movement in Ukraine.

**Aims.** The task of this paper is to analyze some peculiar aspects of the implementation of the national education in the system of the innovation pedagogical movement in Ukraine at the end of XX century.

**Methods.** During the writing of the article the following methods were used: the method of historical comparison, methods of analysis and synthesis, the method of generalization and others.

**Results.** It is a well-known fact that in the Soviet era the innovation search aimed at the establishment of the national identity of education could not be realized to a full extent. In this area the most outstanding achievements were made by V.O. Suhomlynskyi. N.P. Dichek stated that Ukrainian ethnopedagogics became one of the system-forming components of V.O. Suhomlynskyi’s educational concept. V.O. Suhomlynskyi referred to original national traditions of our people, used their routine habits and traditions, taking into consideration peculiar mentality of his country-fellows [5]. N.P. Dichek made a reasonable remark that novelty as a national component of V.O. Suhomlynskyi’s educational system appeared ahead of its time and was not in demand in society and in turn it was not valued during the creator’s life time. However, an onward development process of pedagogics was due to the ideas and experience of the innovation activity which in its general essence is a required condition for the forward movement of all the spheres of people’s life [6, p. 68].

The striving of Ukrainian educators to establish a teaching-educational process on the national basis before the country got its independence can be found in the book of I. Kushnirenko which was devoted to a former minister of education of UkrSSR M. Fomenko “Educational star of Mykhailo Fomenko: life and creative work”. Here are some memories published in the mentioned book. The author gives some interesting facts how the minister had to be strong and persistent in supporting some educators who tried to have non-standard thinking and to act creatively in response to real demands of society and life. Teaching and educational work was initiated at Hnidyn eight-year school in Kyiv region, this activity was based on the principles of national upbringing, people’s studies and family pedagogics. This innovation caused a negative response on the side of the majority of the then party and educational executives at different levels. However in March, 1989 there were some publications in “Radianska osvita” newspaper (with the knowledge of the Minister) about people’s studies in Hnidyn eight-year school, which led to the spread of its experience in Ukraine and its popularization. One can read in the comments of the newspaper

“Radianska osvita” that studying this subject “children cherish their biggest wealth during all their school years: the desire to learn the world, to keep the memory about mother’s song and father’s house/hata”. The article informed that “Beginning from this school year new subjects appeared in the timetable of Hnidyn eight-year school. There are weekly lessons of nature studies, art studies, folk games for 4-8 graders. Two-week hours are spent on studying ethics for elementary classes, the time for studying fine art tripled. There are classes for studying nature protection. On request of the teachers’ staff the Ministry of people’s education made the innovations legal, added necessary amendments in the curricula of an eight-year school.” Exactly after this the experience of Hnidyn educators began to spread in Ukraine [9, p. 65].

It is quite natural that after Ukraine got its independence the national accent of a teaching-educational process became one of the leading trends in the innovation search. Humeniuk H.M. stated: “The fact that Ukraine got its independence led to drastic changes in all the spheres of social life including education. The value orientation change took place in the process of a social system transformation, and the need in national school came first; this school with help of its students is to ensure a national-cultural rebirth of Ukraine. National spirit is to dominate in this school, the educational experience of the people is to be wisely applied as well as its educational system, people’s pedagogics, educational traditions. The school is to establish a belief in every student’s consciousness that the cause of building a state is the cause of the whole nation, his/her own cause.” [4, p. 32, 34]. In 1994 a principal of one of the schools states: “Now nobody doubts that the approach of people’s studies to the educational system gives plenty of opportunities for upbringing in the spirit of loyalty to the nation, for the formation of moral norms of culture” [4, p. 32, 34].

Scientists began to develop the national education idea very actively. Scientist B.M. Stuparyk was one of its outstanding founders. O.V. Suhomlynska gave a well-deserved credit to his activity and wrote: “The leadership of the educator is unquestionable in the sphere of national approaches to the education of children and students, in the preparation of teachers in Ukraine. Bohdan Mykhailovych was the first to explain the term “national education” and began to widely use it in the years when scientists were afraid to do so remembering the contents it used to have in the Soviet time. Nowadays the educator’s words, which are also the name of one of his articles, sound quite relevant “National school is a guarantee for prosperity and sovereignty of the Ukrainian state” [17, p.5]. When Ukraine got its independence the formation of national values along with universal ones became one of the priorities of the public policy in the development of education in Ukraine [10, p. 4].

The implementation of the innovation search aimed at the establishment of national values was carried out in different ways and forms. Here are some examples how the national approach to teaching and education was realized in the regions of Ukraine. Sazonenko H.S., director of the Ukrainian humanitarian lyceum at KNU named after T. Shevchenko, suggested and introduced successfully the Concept of national education “A citizen of Ukraine of XXI century” to the curricula of the mentioned educational institution; the core of the concept was the philosophy of Ukrainian studies [11]. The set task explains the main aim of the lyceum which

consists in the creation of the national elite of Ukraine, the people of a national-state, patriotic-humanistic type of the perception of the world, the citizens of loyal love of freedom, Motherland, the individuals with a strong will and character. The basis of the educational model of the lyceum is the philosophy of Ukrainian studies which is concentrated on Ukrainization – the philosophy of teaching subjects, filling the curricula with Ukrainian contents, the introduction of inter-active course of Ukrainian studies [11].

The national idea as a core of a teaching-educational process is the foundation of the performance of many Ukrainian schools. One of them is Chkalivka secondary school in Nikopol district, Dnipropetrovsk region; from 2002 this school functions as an institution of a new type – a *Ukrainian national school-family*, its principal is Amelina O.A. [23]. A specific organization of a teaching-educational process of this school was widely propagated in regional editions and central pedagogical periodical press, including a special edition of All-Ukrainian practical journal “Principal of school, lyceum, gymnasium”, 2005, №5 (Education in Dnipropetrovsk region). Ukrainian studies became an integrating teaching-educational subject. Lessons of Ukrainian studies were included into basis contents of education – 1-11 grades, and the lessons were taught in the framework of the program of Ukrainian studies (2001) under the editorship of P.P. Kononeko. The teachers’ staff received the task – to add Ukrainian studies contents to the school teaching-educational process. To maintain folk and family traditions, the working programs of such clubs as “Vyshyvanka” and “Samorobka” (teacher Demnychenko L.M.) were approved. In 2002 Lunar month was worked at school, according to it folk holidays were divided into three cycles: autumn, winter, spring. The most favorite holidays at school were: Christmas of God Mother, Protection of the Holy Virgin, Pylypivka (autumn), Holiday of Andrew or Kalyta, Holiday of St. Nicholas, Christmas, Melanka, Candlemas (winter), and in spring we celebrate Yavdoha’s Day (Day of the sun), Clean Thursday, Annunciation, Easter, Day of mother and family[1, p.55-64 ].

Besides the mentioned-above schools in Dnipropetrovsk region, there are very many schools in different regions of Ukraine which define their essence as a *national school-family*. A good example is Studianska general secondary school of I-III category (a Ukrainian national school-family) of Dubny district council of Rivne region. The information on its official site confirms that this educational institution takes into consideration the national features and identity of the Ukrainian people, develops moral relationship of the village residents, assists a student’s personality in learning and expressing a valued approach in the period of the development of the Ukrainian statehood; family-school education and teaching takes place based on the combination of scientific national pedagogics and Ukrainian family pedagogics [18].

Mykolayiv municipal collegium (principal Sichko S.M.) classifies itself as a Ukrainian national teaching-educational institution, the main task of which is to bring up citizens of Ukraine, to develop Ukrainian intelligentsia with a high moral, intellectual and creative potential. The institution achieved a great success and has a high potential for the development, teaching and education of the generations of new Ukraine. This school teaches natural sciences and mathematics, it is a national school

by its essence and a European school by its philosophy. The school principal presented the principles of the school functioning [15]. The collegium includes: a scientific-methodological council, a cultural-educational center “Ukraina dukhovna”, an information-education center “Ukraine-Europe”, a center of scientific-experimental work, a school “Kobzarska nauka”, “Kobzarskyi maidan”. The school principal proposed and headed the All-Ukrainian experiment “The formation of the national consciousness of students based on the traditions of Kobzar art”. The teachers’ staff of the collegium approved “The concept of the national education of school students”; according to the document a sub-structure “Kobzar science” was included into a teaching-education process, which was a component of the regional and All-Ukrainian experiment “School-family”. The information-education center “Ukraine-Europe” functions in the framework of the collegium, its activity is directed towards the improving the knowledge of the collegium students about Europe and European integration, culture, language and history of the European people. Every year the leaders of the center conduct weeks of the European countries, “Eurovision” competition and festival “Ukraine is a European country”. He wants to create Europe in his school – “Let it be jealous and come to visit us”.

The Information-analytical and cultural-educational center of the national societies of Mykolayiv region was opened at the institution to develop national tolerance, culture of international communication. The collegium students take part in scientific and cultural-educational programs, projects, conferences, round-tables.

An invaluable source of the national-patriotic education is Ukrainian kozak pedagogics which is based on moral values: patriotism, endurance, psychological culture and high kozak morals. We can develop beliefs and an active life position only through the knowledge about the history of the nation and its heroic past. A purely scientific (without policy) presentation of history and geography of Ukraine, language and literature, ethnography, people studies, principles of national consciousness, principles of the Ukrainian state and law, a wise integration of these subjects with the courses of a mathematic-natural science cycle directed towards the formation of the nationally conscious citizens of a young Ukrainian state – all this is the best way to the truth.

The system of the collegium educational work is based on the ideas of kozak pedagogics as part of folk pedagogics. At the collegium the attention is paid to studying the history of the Ukrainian kozaks, their traditions, habits, folk kozak pedagogics; students’ kozak stockade “SICH” (“Slava-Glory” and “Chest-Honor”) were built. The activity of this organization is directed towards a creative continuation and maintenance of kozak customs and traditions in contemporary conditions, it has to help every student develop the desire to create the best humane qualities of a Ukrainian-patriot and to form the national consciousness, historical memory, a social position, patriotism, readiness to defend Motherland, the love of the native land through learning about the spiritual heritage of Ukrainian kozaks. Children like the idea of a non-traditional form of the lessons – every member of “Sich” organization can express creativeness and initiative; students are fond of romanticism of kozak campaign, a victorious history of Ukrainian kozaks.

A serious work, aimed at the rebirth of the national culture, traditions, customs of the Ukrainian people, is done at the educational institution. The Ministry of education and science of Ukraine approved the initiative of the teachers' staff of Mykolayiv municipal collegium to carry out experimental work on the theme: "The formation of the national consciousness of students on the traditions of kobzar art". A long-term (15 years) creative-educational activity of Buky folk youth choir "Kobzar bell ringing" pioneered the introduction of the experimental-testing work at a state level. The youth of the municipal collegium gave a start to present-day and future cultural contests aimed at preserving and restoring the national system of musical values in 1-11 grades [15; 16].

**Discussion.** To realize the national idea, Small academy of art was founded in Ivano-Frankivsk general secondary school № 10, its main task was to express folk pedagogics in educational forms and methods. The academy was headed by Oksana Sochavska, deputy principal in charge of educational work. The work was carried out in two stages: theoretical and practical. Theoretical material was studied at optional courses: people studies, Ukrainian studies, ethnography, folklore, Hutsul studies; children got their practical skills at various art and idea-thematic faculties of SAA: artistic embroidery (leader – teacher of the Ukrainian language and literature Oksana Semotiuk and primary school teacher Halyna Fedorko), pysanka art (Easter egg painting) (leader – deputy principal Yaroslava Skyba), sopilka playing (leader – teacher of music Viktor Rymar), ornamental-household art. Open days of folk pedagogics which were conducted according to a specially worked subject were a good tradition at school [2].

To bring up a citizen of Ukraine is one of the leading directions in the work of Vovchanivska H.O. – teacher of Derenkivka school, Korsun-Shevchenkivsk district, Cherkasy region. The teacher stated that the realization of the national idea became the creative continuation of author's methodology of O.A. Zakharenko as to the upbringing of young Ukrainians. Vovchanivska H.O. explained the educational system "Kalynove hrono/Guelder rose cluster" and in 1992 she, together with teachers, parents, village residents, founded All-Ukrainian society "Moloda Prosvita/Young education" named after T.H. Shevchenko; the major aim of its activity was to bring up a conscious citizen of Ukraine on the traditions, customs and habits of the Ukrainian people. Everyone is involved in the teaching-educational process – students, teachers, parents, village public. Various clubs function in "Kalynove hrono", namely: "Chornobryvtsi", "Kalynonka", "Lelechata", "Kobzar", "Rushnychok", "Krynychenka", "Kozachata", "Liubystok", "Barvinok", "Vyshyvanka", "Verbychenka". The teacher underlines the fact in the presentation of the experience that these are not just nice names-symbols – this is a well-thought and goal-oriented activity to bring up young citizens of Ukraine with universal morals. School "Kalynove hrono" is a center of high morals for teachers and students; it is the source where we study true history, cultural heritage, customs and traditions of the Ukrainian people [3, p.15-20]. The national education belonged to priority directions of the pedagogical system of teaching-educational complex № 28 in Dnipropetrovsk city. The teacher of this teaching-educational complex L.O. Dubova has stated that a



national-public, moral rebirth of Ukraine is not possible without our return to primary sources of the life of the people, primary bases of the existence of the nation, and all this envisages the formation of a sense of the national consciousness as an inseparable condition for the creation of true patriotism and pride for the native land, the people and the history among the citizens of a new generation of sovereign, independent, democratic Ukrainian state [7, p.49]. The experience of this school presents a great interest mostly because teaching was done in the Russian language at this school, and this language was widely used in the city. The school teachers tried to find new approaches to make the Ukrainian language, the Ukrainian literature, Ukrainian morals to become part of students' life; they wanted the Ukrainian language to live in their hearts forever. The teachers understood that one-time events were not enough, they wanted to open a creative potential of every child as a patriot, a citizen with high moral qualities, better family feelings; they wanted a student to be a carrier of the best achievements of the national and world culture.

The innovation search in the realization of the national idea as a basis of the education in teaching-educational complex № 28 in Dnipropetrovsk city resulted in the organization of the school center of spiritual rebirth "Svichado/Candle" on the principles of family upbringing, folk pedagogics and scientific pedagogics. Dubova L.O. tells about the major tasks of "Svichado" center which are the following: to restore correct understanding of a fundamental concept – folk culture; help each student master folk culture and all national and universal values on this basis; to teach students folk morals, certain norms of a behavior, ethics and aesthetics of an everyday life, habits and skills of working activity, physical improvement. The center united seven societies: "From non-existence to immortality", "Flashes of kozak victory", "I would play the bandura", "Silent bell tower", "Woman of fashion", "Education", "Old Ukrainian crafts". In the society "From non-existence to immortality", senior grade students carried out research work, they dealt with the rebirth of forgotten names of writers, literature figures. The students defended the results of their research in Small academy (Mala academy), also they made presentations at the conferences and prepared papers for students' proceedings. Members of "Flashes of kozak victory" perform expedition-search work, study history of kozaks, their every-day life routine, their customs and habits. Parents and students together with the museum workers visited Kodak, Khortytsia.

Members of "I would play the bandura" studied folk art, music, songs, dances, they learned about folk instruments, Kobzar art, history of the Ukrainian theater, actors of Ukrainian drama theater named after T.H. Shevchenko. Members of this society were active participants in district, city and regional festivals of amateur activities. Folk customs, rituals, traditions, folk calendar holidays were studied in "Silent bell tower", members of this society paid a great attention to the renovation and popularization of the mentioned traditions. School students in team with the society members arranged such celebrations as "Harvest holiday", "New Year holiday", "From house to house to bring in New Year", "Vesnianky/Spring festivities", "Ivana Kupala/Midsummer". The most active participants spent Christmas holidays in Lviv city where they could take part in caroling

(koliaduvannia, shchedruvannia); this activity gave them a comprehensive understanding that people have common primary national roots and a thousand-year history, a material and spiritual culture no matter where they live – in the West or in the East, in the North or in the South [7, p. 50].

Students can learn about traditional cuisine, Ukrainian every-day routine life, dishes, dwellings, the history of Ukrainian outfits in society “Woman of fashion”. Girls-participants could show their skills at such contests as “Hostess”, “Needlewoman”, “Near the oven” and others.

“Prosvita/Education” society covers teachers, students and parents; its task is to advocate Ukrainian books, a Ukrainian word, to arrange meetings with writers, to hold such holidays as “Protection of a reader’s form”, “My reader’s diary”, “In the world of the fairy tales”, “Meeting with favorite characters”. Members of “Old Ukrainian crafts” studied artistic crafts of the past, artistic embroideries, Petrykivka painting, wood carving, pottery. Children acquired skills and abilities to carefully treat monuments of history and culture of their native land. The materials prepared in the societies were used by linguists, teachers of History, people studies, music; also they were useful in out-of-class and out-of-school educational work. Children’s participation in the work of the societies helped them get easily involved in public life; they could develop intellectual abilities, artistic tastes, worldwide guides [7, p. 51].

**Conclusions.** So, after Ukraine got its independence, one of the main trends in the innovation search was the restoration of a Ukrainian national school, the formation of the national consciousness. Scientists began to work on the issue of the national education and school teachers started to introduce it into their practical work. The search was carried out in various forms: Ukrainian educators developed authors’ concepts of the national education and arranged the work of schools on this basis, namely, Ukrainian centrism as a philosophy of teaching methods, addition of the Ukrainian contents to the curricula, introduction of an inter-active course of Ukrainian studies, realization of authors’ educational systems, organization of different clubs/societies at schools which studied Ukrainian customs and traditions, functioning of Small academy. Children’s organizations, centers for studying customs, traditions of the Ukrainian people were organized across the country under the leadership of the innovators. The innovation search led to the establishment of the institutions of a new type in various regions of Ukraine – Ukrainian national school-families.

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## MODERN PEDAGOGICAL TECHNOLOGIES IN HIGHER EDUCATION

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**Abstract.** *The article describes the main pedagogical technologies used in higher education. Traditional and innovative pedagogical technologies of higher education are studied. Modern pedagogy is a set of theoretical and applied sciences about teaching, upbringing and education as specially organized and purposeful processes, as well as ways to improve these processes. That is why the learning process in higher education is implemented within a holistic system of organizational forms, methods and technologies of teaching, which makes it possible to form a competent specialist. The purpose of the article is to explore modern higher school pedagogy and pedagogical technologies, principles, methods on which it is based and which is guided in its activities. It is proved that pedagogical technologies include the following components: educational technologies that define the concepts of education, educational systems; learning technologies (education, management) - forms and methods of teaching; technologies in education - technical means of education; pedagogical technique that reflects the level of pedagogical skills of the teacher. Modular and developmental learning contributes to the formation of personality not only through the content, methods, forms of organization, but also through active self-education of students, which leads to greater results. Currently, there are several approaches to creating a modular system depending on the geography and content and structural features of innovation and educational experience: American and German models, Lithuanian model, Ukrainian. The variety of methods and forms of work with modular-rating pedagogical technology makes it possible to better master the theoretical and practical material, and therefore in modern higher school pedagogy, this technique is one of the first places. It is concluded that the modular technology of teaching, analysis and evaluation of students' learning activities is an important step towards the intensification and optimization of the educational process in higher education. The modular system of education requires from scientific and pedagogical workers proper psychological and pedagogical training, restructuring of organizational and methodological aspects of the educational process. Humanities education is designed to enrich the intellectual and spiritual culture of man as an active creator of material and spiritual values.*

**Keywords:** *pedagogical technologies, classification of technologies, traditional and innovative pedagogical technologies, modular-rating system of education.*

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 0; **tabl.:** 0; **bibl.:** 14

**Introduction.** The modern period of development of society in the state, new transformations implemented in all spheres of life require the transition from educators to a qualitatively new level of pedagogical work, as there is a replacement of educational systems, teaching methods, new content, other approaches, learning technologies. The Law "On Education" states the purpose of higher education as follows: "The strategic objectives of the higher education system and its priority areas for reform are set out in the State National Program "Education" ("Ukraine of the XXI Century").

Higher school pedagogy should ensure the implementation of the following functions: educational, scientific-cognitive, motivational, transformative, predictive,

projective, culturological, adaptive, formative-educational and formative-professional.

That is why recently in education there have been some changes due to the reform of higher education, which prompted the introduction of new pedagogical technologies.

**Literature review.** The main aspects and principles of education, which are guided by teachers of higher education, are enshrined in the legislation of Ukraine. In particular, the Constitution of Ukraine and the Law of Ukraine on Education.

Issues and problems of pedagogy in general, and higher education in particular, were studied by such researchers as V.M. Galuzinsky, M.B. Yevtukh, N. V. Kuzmina, A. M. Aleksyuk, S. S. Vitvytska, A. I. Kuzminsky, Z. N. Kurland, V. M. Nagaev, V. L. Ortynsky and others. The main principles of reforming the system of higher education, which provided for a change in approaches to teaching and educating student youth, are covered in the works of P. Talanchuk, V. Zaychuk, M. Zgurovsky, V. Kremen, S. Nikolaenko, M. Stepko; monographic researches of Y. Alekseev, O. Navrotsky, V. Yablonsky, T. Finikov are devoted to the peculiarities of formation and development of higher educational institutions of Ukraine; experimental work on the implementation of the ideas of the Bologna process in modern higher education is reflected in the works of J. Bolyubash, V. Shinkaruk, V. Grubinko; modern approaches to the education of student youth are considered by O. Robul, N. Semergey. However, even today there are many problems and unresolved issues regarding the educational system of Ukraine, pedagogy in general and pedagogical technologies of higher education.

**Aims.** The purpose of the article is to explore modern higher school pedagogy and pedagogical technologies, principles, methods on which it is based and which is guided in its activities.

To achieve this goal, you must solve the following tasks:

- to find out the features of the modern educational system and the specifics of higher education;
- to reveal the principles of higher school pedagogy;
- explore pedagogical technologies used in higher education;
- identify traditional and innovative pedagogical learning technologies in higher education.

**Methods.** The methods used in the research process relate to general scientific knowledge. Historical-geographical method for studying educational experience: American and German models, Lithuanian model, Ukrainian. The method of analysis is for a thorough study of the modular technology of training organization. Descriptive method – to generalize the classification of modern methods and technologies of teaching in higher education.

**Results.** The current stage of development of Ukrainian society is characterized by bringing education to the level of developed countries. Education is one of the most important strategic areas of any state, because it contains the potential for future development. As a result of the strengthening of democratic ideas in the modern world, there is a need to bring Ukrainian education in line with the requirements and

demands of today. Accordingly, the reaction of higher school teachers was a large-scale deployment of the innovation process, testing and implementation of new concepts and technologies in the theory and practice of modern education. "At the turn of the millennium, a new system of higher education is being created in Ukraine, focused on entering the world educational space. This process is accompanied by significant changes in the pedagogical theory and practice of the educational process of the university. There is a change in the educational paradigm, a new content is proposed, other approaches, a different pedagogical mentality" [3, p. 146] However, this does not mean that modern educators have completely departed from traditional pedagogical learning technologies. Because in the conditions of informatization and globalization of modern society it is necessary to bring up a competent specialist.

Modern pedagogy is a set of theoretical and applied sciences about teaching, upbringing and education as specially organized and purposeful processes, as well as ways to improve these processes. That is why the learning process in higher education is implemented within a holistic system of organizational forms, methods and technologies of teaching, which makes it possible to form a competent specialist.

Recently, the terms "technology", "pedagogical technology", "learning technology", "educational technology", "learning technology", "technology in education" are widely used in science and education, and therefore have many formulations, depending on how the authors present the structure and component of the educational process.

This is emphasized by S. Sysoyev in the work "Fundamentals of pedagogical creativity", "A special role in the implementation of these tasks belongs to pedagogical technologies, which are now introduced into the system of continuing education and serve , creative and spiritual development, and the needs of society for personal, professional and social development of man" [13, pp. 86-87].

The concept of "pedagogical technology" is not new to pedagogy, it is known since the 20s of the twentieth century, but its interpretation in the twentieth century has changed. Scientific research in the direction of optimization and improvement of the organization of educational process at various levels of education, including higher education, testifies to essential transformation of the term "pedagogical technology" - from "technology in education" to "technological education", and then to "Pedagogical technology" [3, p. 150].

Pedagogical technologies are an organizational principle that launches into action and directs in the necessary direction the creative forces of the bearers of scientific knowledge and pedagogical experience" [13, pp. 86-87].

To date, there are more than 300 definitions of "pedagogical technology". All these definitions are expressed differently in relation to the system of principles, techniques and methods used in the learning process. The most common are the following interpretations of the concept.

"Pedagogical technology is a well-thought-out model of pedagogical activity in the design, organization and conduct of the educational process with unconditional provision of comfortable conditions for students and teachers" [12, p. 27].

"Pedagogical technology is a systematic method of creating, applying and defining the whole process of teaching and learning, taking into account technical and human resources in their interaction, which aims to optimize forms of learning (UNESCO)" [3, p. 150-151].

S. P. Maksymyuk acquires a different interpretation of the term "pedagogical technology" in the work "Pedagogy", where it is stated that "pedagogical technology is a pedagogically and economically justified process of achieving guaranteed, potentially reproducible, planned pedagogical results, which includes the formation of students' knowledge and skills specially processed content and which is implemented strictly on the basis of NOP and step-by-step testing" [10, p. 602].

Summarizing all the definitions, we conclude that pedagogical technologies include the following components:

- educational technologies that define the concepts of education, educational systems. At the present stage, it is a humanistic concept of education.
- learning technologies (education, management) – forms and methods of teaching;
- technologies in education – technical means of education;
- pedagogical technique that reflects the level of pedagogical skills of the teacher.

The most thorough interpretation of the term is given in the work of S. S. Vitvytska, who argues that pedagogical technology is "a system of the most rational ways to achieve the pedagogical goal, the scientific organization of the educational process, which determines the most rational and effective ways to achieve the ultimate educational goal "cultural goals". [3, p. 151].

Taking into account all these factors [9-14], modern pedagogical technologies of universities must meet the following criteria:

- conceptuality – a clear definition of philosophical, psychological, didactic, social, etc. concepts that define educational goals. All these elements are disclosed in educational sources, such as the National Doctrine of Education of Ukraine in the XXI century, the State National Program "Education" ("Ukraine of the XXI century"), the Law of Ukraine "On Amendments to the Law of the USSR "On Education", The Law on Higher Education, etc.;
- systematic – clear ordering of all pedagogical technologies of the university;
- logic, integrity, completeness;
- manageability – purposefulness of the learning process, means and methods in order to achieve optimal results;
- efficiency – the selection and use of the most appropriate methods and tools of learning to achieve results;
- synthesis of traditional and innovative components, pedagogical science and practice.

In modern domestic and world pedagogical theory and practice there are many variants of pedagogical technologies and almost all of them are used in the system of higher education. So there are the following classifications:

- classification of teaching methods: by the level of activity of students (E. Y. Golant) – passive, active;
- by source of knowledge – verbal, visual, practical;

- for didactic purposes (M. A. Danilov, B. P. Yesipov);
- by the nature of cognitive activity (I. Y. Lerner, M. N. Skatkin).

The most recognized classification of pedagogical technologies today is the classification of G. K. Selevko, who classifies all pedagogical technologies:

- by level of application – general pedagogical, part-subject, branch, local, modular, narrowly methodical;
- on a philosophical basis – materialism, idealism, dialectics, metaphysics, scientism, natural correspondence, humanism, antihumanism, anthroposophy, theosophy, pragmatism, existentialism;
- by the leading factor of psychological development – biogenic, sociogenic, psychogenic, idealistic;
- by focusing on personal structures – information – ZUN, operational – COURT, self-development – CYM, formation – SEN, formation – SDP, heuristic;
- by the nature of content and structure – educational, educational, secular, religious, general, professional, humanistic, technocratic, monotecnology, polytecnology, penetrating technologies;
- by organizational forms – classroom, alternative, academic, club, individual, group, collective way of learning, differentiated learning;
- by type of cognitive activity management – classical lecture, learning with the help of TZN, system "consultant", book learning, system of small groups, computer training, system "tutor", program management;
- approach to the child – authoritarian, didactic, anthro-po-, pedocentric, personality-oriented, humane-personal, technologies of cooperation, free education, esoteric;
- by the predominant (dominant) method – dogmatic, reproductive, programmed learning, explanatory-illustrative, dialogical, developmental learning, game, problem-solving, self-developing learning, creative, informational (computer);
- in the direction of modernization of the existing traditional system – on the basis of humanization and democratization of relations, on the basis of intensification and intensification of activities, on the basis of efficiency of management organizations, on the basis of methodical and didactic reconstruction of material, nature compliance, alternative, integral technologies
- by category of students – mass technology, advanced learning, compensating, victimological, technology of work with difficult children, technology of work with gifted;
- according to the concept of assimilation – associative-reflex, developing, internalizing, behaviorist, gestalt technologies [8, p. 154].

**Discussion.** Each of these pedagogical technologies has a number of features, positive and negative features, so they can not all be used in high school, and the degree and extent of their use depends on many factors that must be considered when choosing any of the technologies. "At the present stage, the priority areas for improving the educational process are the development of individual forms of education, the introduction of integrated courses. development of the information base of the educational process, optimal saturation of its automated systems, research based on computer technology" [10, p. 602]. Therefore, in recent years, higher



education institutions are increasingly resorting to the technology of modular learning, which is introduced into the educational practice of higher education as an advanced pedagogical experience and as an experimental psychological and didactic system.

Modular and developmental learning contributes to the formation of personality not only through the content, methods, forms of organization, but also through active self-education of students, which leads to greater results.

Currently, there are several approaches to creating a modular system depending on the geography and content and structural features of innovation and educational experience: American and German models, Lithuanian model, Ukrainian.

The model of such training is subject to the process of acquiring knowledge, skills and abilities in the form of perception and understanding of each new piece of information, understanding it through understanding, generalization and consolidation of knowledge, skills (ability to apply them in practice), the need for new knowledge.

At the same time, the formation of specialists "is achieved to some extent by stimulating the systematic independent work of students on the basis of structuring educational material, control and evaluation of knowledge and determining the rating of students" [9, p. 264]. The structuring of educational material is its division into logically complete parts (topics, sections), modules, the assimilation of which allows the student to achieve a certain goal.

A. Alekseyuk, V. Vonsovich, S. Gornostaev, I. Klyuy, A. Kulandina, V. Semichenko, A. Furman and others interpret the concepts of module, modular training, educational module differently. In particular, V. Bodnar believes that "modular learning – the process of learning modules in a complete didactic cycle ..." [2, p. 6].

Modular technology assumes that the study of the discipline is carried out by separate modules. Accordingly, the material of the module is divided into smaller structural parts, called learning elements, which, on the one hand, are interconnected, and on the other hand, perform an independent function.

Each module covers lectures and practical classes, as well as a significant amount of independent work. The level of mastering a certain amount of program material for each module usually includes an assessment of knowledge of theoretical material, obtained through testing, classroom, tests, assessment for preparation for seminars, rapid surveys and homework (in points).

That is, the modular approach allows students to more deeply and independently master the material, because the concept of "module" covers not only the information that the student must have, but also methods and forms of direct, indirect and independent learning activities for students to master certain information.

The process of presenting the material during the modular training does not actually differ from the traditional one. The control and assessment of knowledge takes place differently: in portions, which consist of separate completed sections of the discipline.

During the study of the section the student performs one – three tests, demonstrating a thorough knowledge of the material, skills and abilities to apply them in practice, carrying out the correction and self-assessment of their knowledge.

Positive assessment during the study of modules is taken into account in the exam, test. Students who wish to improve their knowledge and rating can take the exam for the entire course. A student who studies well and receives high marks during structural tests is eligible for exemption from examinations.

A. O. Maksymovych emphasizes, the following methods are used in module-rating training:

- information (lecture, problem lecture, story, conversation, counseling, demonstration, etc.);
- operational (algorithms, laboratory work, etc.);
- search (discussion, business game, situational tasks, brainstorming, progressive seminar, role play, defense of project fragments of the lesson or its integral structure, etc.);
- self-study (listening, reading the module, reading the text, etc.) [9, p. 267].

The variety of methods and forms of work with modular-rating pedagogical technology makes it possible to better master the theoretical and practical material, and therefore in modern higher school pedagogy, this technique is one of the first places.

**Conclusions.** Thus, the modular technology of organization of training, analysis and evaluation of students' educational activities is an important step towards the intensification and optimization of the educational process in higher education. But they need from scientific and pedagogical workers proper psychological and pedagogical training, restructuring of organizational and methodological aspects of the educational process.

The problem of forming a new type of educational space that adequately responds to global socio-cultural changes, and its importance in social progress is the subject of study of both scientists and practitioners – teachers. In the third millennium, there is a natural need to reform the educational system and change the emphasis in the practice of modern humanitarian training of young people. Humanities education is designed to enrich the intellectual and spiritual culture of man as an active creator of material and spiritual values.

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## ONLINE EDUCATION: CHALLENGES AND PROSPECTS

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**Abstract.** Today, online education is a modern and effective tool for increasing the competitiveness of universities, meeting the various needs and interests of consumers of educational services, and implementing the concept of continuing education. This determines the relevance of studying and describing trends and prospects for the development of online education in Ukraine. The aim of the article is to study the features of online education in Ukraine, its problems and perspective directions of development. Methods: Logical method was used in order to understand the meaning of online education; methods of system analysis were used to identify trends that accompany the development of online education in Ukraine; comparative analysis - made it possible to compare the phenomena in order to establish similarities or differences between them. Results: The article highlights the directions of the penetration of Internet technologies into the educational process. The essence of the concept of "online education" is revealed. The model of online education by T. Anderson is considered and the author's interpretation of online education is provided. It is noted that not only students, but also young people who do not have the opportunity to simultaneously combine study with work or who live in areas remote from the regional centers, can get an online education; housewives; military personnel; managers are ready to get a second education. The trends that accompany the development of online education in Ukraine have been identified. Problems of the introduction of online education have been formed (insufficient professional training of teachers and teachers; reluctance of students; limited implementation of information technologies in educational institutions, lack of a single educational standard for online learning, lack of a favorable environment). Promising directions for further development of online education in order to improve its quality were identified. Therefore, there is an intensive development of online education, both throughout the world and in Ukraine. Online courses contain significant pedagogical potential associated with informatization and intensification of the educational process. Online courses in the near future will form a real foundation for continuing learning.

**Keywords:** Internet technologies; online learning; online courses; student; teacher; online educational environment.

**JEL Classification:** I0; I20

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

**Introduction.** The education system in the 21st century is directly related to information technologies, which are rapidly developing. Their dissemination requires the educational system to adapt to the new reality, resolve urgent issues, develop new methods and forms of education. Therefore, over the past twenty years, it has increasingly become the subject of research on the use of online education and the inclusion in the educational process of its individual elements, such as electronic or online courses.

Today, online education is a modern and effective tool for increasing the competitiveness of universities, meeting the various needs and interests of consumers of educational services, and implementing the concept of continuing education. Ukraine, as a state with a developed education system, is also actively involved in this process. This determines the relevance of studying and describing trends and prospects for the development of online education.

**Literature Review.** The work of such scientists is devoted to the implementation of online education - conducting webinars, courses, online meetings, Internet conferences: T. Anderson, T. Vorobieva, M. Horn, S. Danver, O. Dereza, E. Kirsanova, V. Kryzhanivska, Y. Opanasyuk, A. Khalikov. The problems of online education were investigated by: I. Deinega, D. Mamatov, Yu. Navolochnaya. The theoretical and practical foundations for creating open online courses in Ukraine have been developed by: V. Bykov, V. Oliinyk, V. Osetskyi, I. Tatomyr.

Highlighting previously unsolved parts of the general problem to which this article is devoted. In Ukraine, at present, quite a lot of attention is paid to the development of the educational system, while there is not enough research devoted directly to online education.

**Aims.** The aim of the article is to study the features of online education in Ukraine, its problems and perspective directions of development.

**Methods:** Logical method was used in order to understand the meaning of online education; methods of system analysis were used to identify trends that accompany the development of online education in Ukraine; comparative analysis - made it possible to compare the phenomena in order to establish similarities or differences between them.

**Results:** The development of electronic culture, informatization, globalization and technological openness has even touched those areas that have not changed for centuries, for example, the education system. It should be noted that the penetration of Internet technologies into the educational environment in Ukraine occurs in the following directions.

Firstly, it is an increase in the efficiency of the work of budgetary educational institutions. Such implementation consists both in optimizing existing processes (online schedule, using digital technologies in lectures, etc.) and in creating new ones (distance learning using online courses). Information technology in this area mainly improves the operation of the existing system, since changes in regulations are not on track to technological progress.

Secondly, the emergence of many paid online courses and educational services offered by the business sector. This segment of the online education market is its most flexible and advanced component, since the competition here is moving towards perfect. Along with large world-scale companies, there are many representatives of medium, small and micro-businesses specializing in narrow niches in this market. The specificity of the latter's activities is the almost complete absence of regulation by the state and professional communities and, in many cases, the shadow nature of their activities. If the work and income of more or less large organizations that are in the center of attention in their fields of activity can be monitored, then educational

services offered by bloggers, freelancers, financial advisers, tutors and other Internet users cannot be tracked. The channels for obtaining such services are usually social networks.

Thirdly, these are Internet resources that provide educational information and educational services free of charge. From a global perspective, the online encyclopedia (Wikipedia), thematic forums, blogs and blog platforms (for example, Habrahabr) is an important source of knowledge for those engaged in self-education. In addition, free educational materials in applied areas of knowledge (coding, sewing, working with plumbing, etc.) are offered in social networks such as Instagram and Youtube.

As noted A. Dereza, R. Sklyar and S. Dereza, new Internet technologies provide new opportunities. A few years ago, to obtain Western business knowledge, we traveled abroad, today you can listen to business courses of teachers online for free. You need to pay for the course only if you want to get a diploma. So, just sitting in the Ukrainian office, you can communicate "sincerely" in English with foreign professors. All this is due to the rapid development of webconferencing in our time (Dereza, Sklyar & Dereza, 2020).

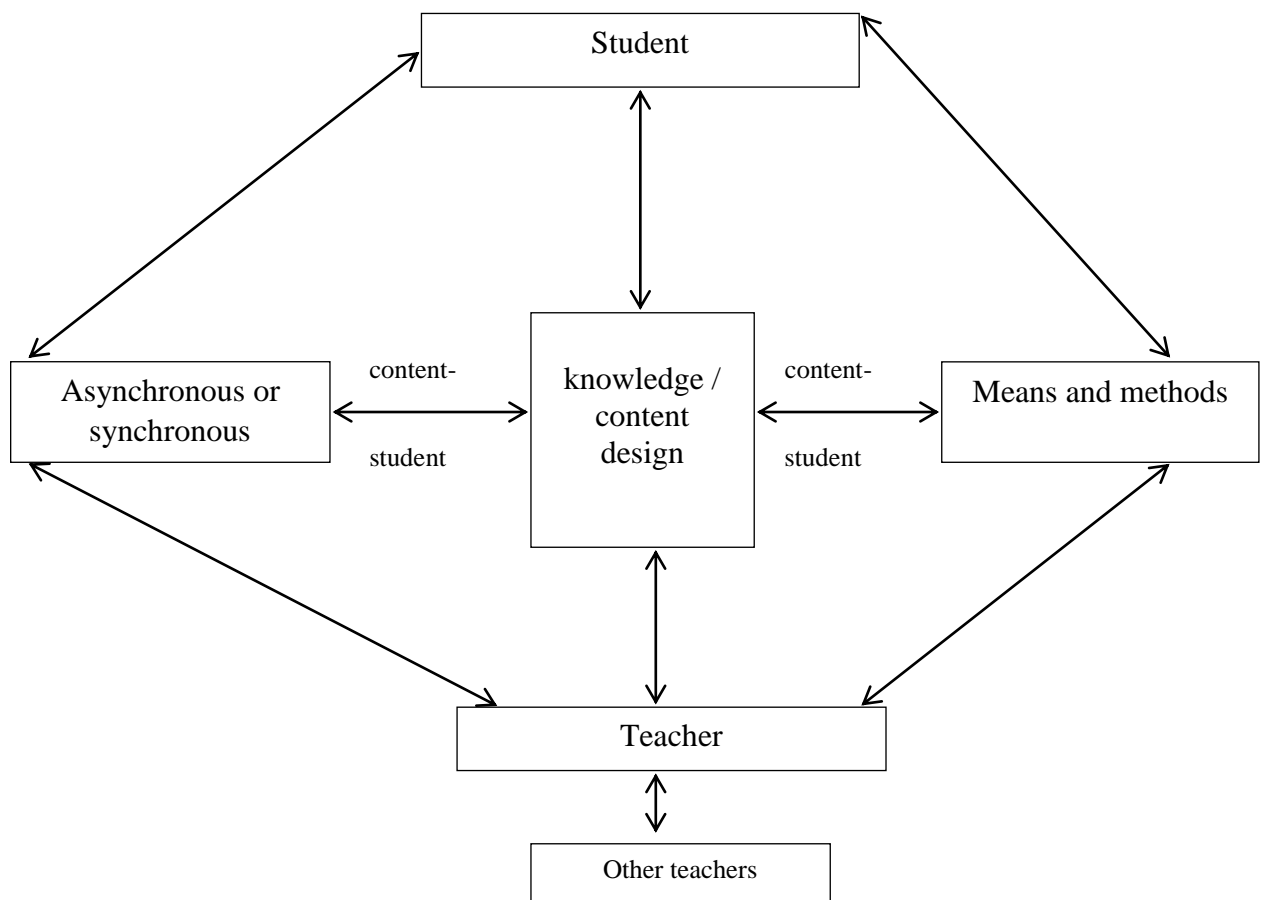
The indicated development of information technologies has made the problem of modernizing the education system of Ukraine urgent. Online education is a shining example of such modernization, which, thanks to the Internet, covers wide sectors of society and becomes an important factor in its development.

The theoretical interest in online education first arose in the context of studying the experience of distance education, the desire to understand its capabilities in connection with the use of new information and communication technologies (ICT) in the educational process. V. Kirsanov and V. Chernenko consider distance learning in the information society as a process in which "purposeful mediated interaction between a student and a teacher is carried out on the basis of information technologies, primarily using telecommunications and television" (Kirsanova & Chernenko, 2012).

The adoption of the new law "On Education" initiated the interest of researchers in another concept that is widely used to characterize online education - "e-learning". It became the subject of cognitive interest in the works of D.N. Mamatova (Mamatov, 2015), Yu. Navolochnaya (Navolochnaya, 2014), T.A. Vorobieva (2014) and others. Generally, researchers do not distinguish between distance and e-learning. Moreover, the study of the prevailing discursive practices of using the term "online education" shows that there are no differences between it, e-learning and distance learning. The consequence of this arbitrary interpretation of the concepts is that, when characterizing online learning, specialists determine at least three forms of its application in the educational system: 1) synchronous (in a single time mode) interaction of a teacher and a student using telecommunication technologies; 2) collective viewing in the audience of video lectures recorded by teachers from other universities; 3) asynchronous - self-education using electronic information packages created by specialists for a specific training course (massive open online courses).

According to the scientist A.A. Khalikov, one of the prospects for the development of online learning in an educational institution can be called asynchrony, the student receives, accumulates knowledge in a certain area, and the teacher and the educational institution control and refer them in the right direction. The student mainly interacts with his tutor (Khalikov 2013).

In this article, we rely on the most consistent, in our opinion, concept of online learning proposed by T. Anderson (Anderson, 2011). It provides that the entire educational process is exclusively in online format and the result fully or almost completely corresponds to the results of full-time education (Danver, 2016). The most frequently, online learning is carried out using a specific platform on which information is learned, and the format of this process resembles, but does not necessarily repeat, interaction in the classroom (Horn & Staker, 2014). An indisputable advantage of Anderson's concept is the online learning model (Fig. 1), which includes all participants in the online learning process and its key elements: teacher, student and knowledge. This approach allows you to determine the relationship between various elements, and typologies of online learning forms do not require strict categorization, since each form can represent a unique set of characteristics.



**Figure 1. T. Anderson's online learning model**

*Source: Compiled by the author based on (Anderson, 2011)*

The conducted analysis allows filling the content volume of online education as an asynchronous or synchronous interaction between a teacher and a student and

defining it. We distinguish three features: 1) the interaction between the teacher and the student is carried out in real time; 2) the interaction between the teacher and the student takes place using ICT resources; 3) the interaction between the teacher and the student takes place in a remote format. Since online education incorporates features inherent in various forms of education, and they are of equal importance for its characteristics, this leads us to the idea of the need to separate online education into a separate, fundamentally new, next to distance and classroom-contact education, form of the educational process, which takes place in a remote mode of one-time interaction between a teacher and a student, which is provided through the use of information and telecommunication networks. This is a fundamentally new educational form, which has long been used on the Internet for any kind of forums and commercial trainings, but has not yet been practically used in the system of higher professional education. And, what is especially important, it does not have legislative legitimation, since it does not cover the scope of characteristics either through e-learning or through distance educational technologies.

Researchers which study trends that accompany the development of online education in Ukraine: Deinega, 2018; Kryzhanivska, 2016; Opanasyuk, 2016; Osetsky & Tatomir, 2017; Romanovsky, Kvasnyk, Moroz ets, 2019; Shabanov, 2018:

1. The growing role of certification of massive online courses. This natural trend is associated with the need to control the quality of online education and the desire to ensure its comparison with formal education in different countries of the world. Among the certification tools for online courses, various ratings and expert assessments are being developed.

2. Intensive use of video materials in the content of online courses. Animations, presentations, videos in popular social networks are becoming an obligatory component of online courses, especially since the quality of mobile communications, access to the Internet and the number of smartphone users are growing every year. However, webinars are losing their power.

3. Active use of game learning. Game technologies in teaching make it possible to diversify the ways of educational interaction, provide a higher involvement in the researched subject, since the visual perception of information significantly increases the assimilation of educational material. In addition, game technologies contain opportunities for choosing individual educational strategies, assessing the ways of action and decision-making while mastering of educational material.

4. Online learning is becoming more flexible and variable, and also undertake short-term. Since the main consumer of online education is people who work and already have basic education and who want to improve their qualifications or master a new field of activity, they have significantly limited time opportunities for training. Therefore, the content of effective and demanded online courses consists of small and different in form teaching materials (video, text, presentations, etc.). It is easy to learn and allows you to implement the learning concept anytime, anywhere.

5. Using elements of virtual and augmented reality in online education. This trend has arisen due to the development of electronic technologies, since virtual reality technologies have become more accessible and have shown their effectiveness



in the professional training of physicians, historians, etc. Due to the use of such technology, it becomes possible to fully immerse in the process under study at an emotional level, and there are opportunities to form and improve necessary skills, etc. Among the advantages of virtual reality technology is the ability to visualize objects and processes, safety of use (there is no fear of damaging the object), etc. However, this technology will most likely not be widely used in the near future due to its high price and complexities of development for the mass user.

6. Active adaptation of existing content to new requests of listeners. This trend manifests itself in content modernization and constant updating. In most areas, information and technology updates are made less frequent, but requests for training content may vary. Therefore, the winners are those companies that closely follow the changes in legislation, improve and expand on the existing materials. Therefore, online courses are increasingly acquiring the features of "road maps", which purposefully allow you to master a particular skill which means online learning becomes personalized.

7. Development of social learning and mentoring in the format of online courses. An increasing number of companies are trying to use their potential for training and development of their employees, that means corporate online training is developing. Today it exists both on social networks, internal chats and forums, and on specialized sites. In recent years, there has been a tendency to strengthen the internal requirements of companies to study such way, and the rules for certification of corporate online projects are being more strictly. Due to corporate courses, a more complete satisfaction of the requirements of companies is achieved, internal resources are saved for employee training, and feedback is provided between mentors and newcomers to companies.

However, along with all the innovations associated with the introduction of a range of new technologies into the educational space, there are a number of related problems in the development of online education (Table 1).

As you can see from the table 1, there is a number of pressing problems in the field of online education that need to be solved in order to improve its quality. The main directions for solving these problems are: creation of an adaptive educational online environment for teachers and students. In the process of adaptation, teachers must learn the basics for being able to teach, and students for being able to learn. The next direction is the preparation of educational institutions for the integration of information and communication technologies. Creation of a single educational standard for online learning: electronic textbooks, methodological recommendations, teaching aids, as well as various complexes and programs.

Innovations in pedagogy can make a significant contribution to solving these problems. For this, it is necessary to conduct new research in the field of application of information technologies in pedagogy, to study the influence of information technologies on pedagogy in general, as well as on teachers and students.

In our opinion, the most perspective direction for the development of the educational process in the electronic space is massive online open courses, which are

a connecting link that can bring the educational process and the modern information space closer together.

**Table 1. Problems of the development of online education in Ukraine**

Problem	Description
1. Insufficient training of teachers and educators	The readiness of the teacher himself is one of the main elements in online learning. When integrating computer technology into online education, it is imperative to ensure that teachers are prepared for such innovations. Successful online learning begins with the confidence of educators that they are capable of learning all technologies and applying them successfully. Mass training of teachers and educators in the field of information technology will contribute to the development of online learning and modern pedagogy
2. Unwillingness of students	During the process of online learning, students face a number of obstacles in the form of their own individual characteristics, learning conditions, the ability to use computer technologies and Internet resources. Today, there are no online programs that take into account certain individual characteristics of each student and, most likely, it is impossible to create such individual programs. Therefore, it is necessary to develop an educational online environment that will be aimed at adapting all students to online learning.
3. Limited amount of implementation of information technologies in educational institutions	This implementation requires huge resources - time and money. A wide range of new curricula, guidelines, instructions, manuals, examples of online lessons. Educational institutions that have decided to add online learning to their range of educational services must have all the necessary equipment. The opportunity for decent online learning depends on well-trained educational institutions
4. Lack of a single educational standard for online learning	This is due to the fact that most teachers do not want to work for an external educational program if it was not invented by them. Other educators are reluctant to provide their own developed programs for the possibility of following them legally. Also, each educational institution aims to develop its own program, which, in their opinion, is the best among others. The lack of a single standard, at least in the main points of education, directly affects the educational process. In our opinion, the only educational standard in online education will allow getting rid of low-quality programs in this area. This fact will positively affect the learning process.
5. Lack of a supportive environment	In standard learning, the atmosphere between teacher and student is often intensive. The standard learning process "put student under some pressure", sometimes even the teacher. Generally, most students would happily skip the entire learning process to avoid stress. Teachers, in turn, do not understand why to teach those who do not want it. Therefore, online training should solve these problems. During online learning, teachers only "give" information, and students turn it into useful knowledge, use only the method of self-study. And the function of monitoring progress is transferred to the computer. This should create a supportive learning environment. However, as experience has shown, the introduction of information technologies partially influenced the consciousness of people. Most often, both sides of the educational process remain conservative in their views.

Source: author's development

The teacher's competent use of all the possibilities of massive online open courses will allow him to reach a new level of his professional activity and pedagogical skills, since it will require the teacher to maximize all aspects of his activity. At the same time, the teacher gets a huge scope for creativity in the process of creating his own authoring courses, when, in fact, no one and nothing limits him and he can realize all his creative ideas, ideas, presentations, presentation of material, new approaches to organizing training sessions and conducting control measures that "do not fit" into the existing framework of the educational process created by the Ukrainian education system. The teacher will be able to deviate from generally accepted educational standards and be the "creator" of their course.

However, the creation of open online courses will require from the teacher not only exceptional knowledge of the material included in the course content, but also computer skills that go beyond the usual "boundaries" of work in office programs. In addition, the work on creating online courses should be accompanied by creative approaches to the design of the material and the forms of its presentation.

It is important to note the fact that the teacher should not consider his own online course as a commercial project, since one of the basic principles of implementing massive online courses is to distribute them free of charge. An open online course should not be created for the purpose of making money, but with the aim of expanding the audience of its listeners. This will allow the teacher to attract completely different people to his course from different regions, not only in Ukraine, but also from foreign countries. An online course can also interest not only students, but also other teachers. Therefore, during developing, it will be a good idea to provide the possibility of communication between students and the author of the course, not only to answer questions from students, but also to receive feedback and recommendations on improving both the material of the educational course and the approaches to its conduct.

At the same time, successful work on the creation and promotion of open online courses will help to increase the rating and authority of the teacher in the educational environment. This will open the teacher's access to cooperation with other teachers and the creation of joint interesting educational courses and other similar projects also it will allow him to participate in such programs of massive open online training at the sites of leading organizations in this field.

In turn, the educational process in the implementation of mass online education will be able to reach a new level and will allow educational institutions to achieve the following qualitative and quantitative improvements:

- expanding the access of students to education and training;
- improving the quality of education;
- reducing in value of training;
- reducing the cost of providing the educational process;
- increasing income from educational activities by attracting more listeners;
- an increase in the number of courses taught;
- active training in programs not only basic, but also additional education, as well as advanced training and professional retraining;

- the use of information and communication resources not only for educational purposes, but also for activities related to the educational process.

As a result, the teacher will become a part of the global "educational mechanism", will constantly develop as a professional and teacher, open up access to knowledge for a large number of students and help them become professionals.

**Discussions.** The emergence of massive online courses is based on the implementation of modern educational principles of openness in education, equality of participants in the educational process, internationalization of educational systems, globalization of the educational space, individualization of education. The rapid development of such courses casts doubt on the effectiveness of the traditional education system, and today massive online courses are challenging it, collecting millions of donations and participants. Supporters of online education are confident that in the near future students will be able to completely "enrich" their knowledge of online courses posted on the Internet, and the system of traditional education will be radically transformed.

**Conclusions.** Therefore, it can be argued that there is an intensive development of online education, both around the world and in Ukraine. Online courses contain significant pedagogical potential associated with informatization and intensification of the educational process. In our opinion, online courses in the near future will form a real basis for continuing learning.

Among the main trends in the development of online education, the application of various technologies is leading, such as video content, game programs, elements of virtual or augmented reality. But the focus remains on people who do not want to waste time learning everything about everything. The main function of training is to provide clear answers to questions and consolidate the necessary skills. The decisive factor will remain a person's motivation and his willingness to regularly devote time to self-education.

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## MODERN APPROACHES TO TRAINING OF PEDAGOGICAL SPECIALISTS OF MUSICAL ARTS

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**Abstract.** *The content of approaches to the professional training of teachers of music arts is determined by a number of objective factors due to the realities of modern life. They pose challenges to standardized education systems, stimulating the study and implementation of foreign educational traditions and innovative practices in the domestic space that would adapt the system of national higher education to adequate functioning on a global scale. The purpose of the present investigation is to study modern domestic and global approaches to training of pedagogical specialists in music arts as part of the intensification of globalization processes. As a result, these approaches will stimulate the integration of educational space, and ensure increased dynamics of using information and media teaching tools. Methods of observation, description, complex analysis, functional method, method of comparison, method of system analysis, method of generalization and method of scientific abstraction have been used. The defining feature of modern approaches to training of pedagogical specialists in music arts is the tendency to globalization and integration of educational space. This will further determine the expanded involvement of distance learning methods, informatization of educational space, attitude to lifelong learning and, in general, a conscious and self-motivated attitude towards the process of acquiring knowledge and obtaining the necessary professional skills. Globalization processes of a music teacher in the education intensify the weight of art education and training of a pedagogical specialist of musical arts as a carrier and conductor of world cultural values. However, against this background, we should not forget about music as a source of national education of the younger generations. Therefore, a balance between national and globalization dominants is needed in the methodology of teaching music disciplines in the course of university training of music teachers.*

**Keywords:** *music teachers (pedagogical specialist of musical arts), integration, globalization, informatization of education, unified educational space, distance learning, preservation of national and cultural identity.*

**JEL Classification:** H52, H75, I23, I25.

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**Introduction.** Characteristic features of modern education are global informatization and integration. They lead to the emergence of the concept of “unified, or common, educational space” in the world. This applies to absolutely all parts of the educational process; however, currently it is especially noticeable in the field of higher education, which may be connected with a global multifaceted policy of integration between countries, especially those that have partnerships and are jointly members of international organizations. For instance, when taking into account the factors of strengthening integration in Ukraine, it is expedient to highlight the updated requirements for HEI (higher educational institutions) that have the status

of national or apply for its acquisition. The relevant resolution of the Cabinet of Ministers regulates the average annual number of foreign citizens and citizens of member states of the Organization for Economic Cooperation and Development among applicants for higher education in the institutions of higher education (Cabinet of Ministers of Ukraine, 2017). The integration process is also stimulated by the requirements for research and teaching staff regarding the number of publications in the world scientometric databases Scopus or Web of Science. All this and other factors, conditioned by the realities of modern life, pose new challenges to education systems and stimulate the study and implementation of foreign educational traditions and innovative practices in the domestic space that would adapt the system of domestic higher education to adequate functioning on a global scale. In addition, the COVID-19 pandemic made it necessary to fundamentally revise the approaches to the educational process in the direction of the development of digitalization, which first of all requires updating the material and technical bases of the HEI, the development of combined educational programs (curricula) with the possibilities of intensive use of distance education, as well as work in the direction of stimulating the motivation of students towards educational and scientific (especially at the master's level) activities. The context of music education in the paradigm of actualized factors, determining the content of modern approaches to training of teachers at the bachelor's and master's level, requires a special narrow-sectoral approach to outlining this topic. All this constitutes the relevance of this topic and, on the other hand, determines the directions of its representation in the presented intelligence.

**Literature Review.** In the literature review, we will try to find out the basic world directions of scientific research on innovations in the course of training pedagogical specialists of musical arts with an emphasis on the reforms caused by modern globalization processes and related processes of digitalization of the educational process. Poblete et al. (2019) focuses on the need for pre-university training of applicants for the profession of a music teacher and the implementation of the principles of multilevel education of a pedagogical specialist of musical arts, when his artistic component develops from an early age. Timonen et al. (2020) concentrates on the challenges facing teachers - music researchers in the context of intercultural communication. The publication "The Oxford handbook of preservice music teacher education in the United States", edited by Conway et al., is complex and multi-vector (2019). A wide range of topical issues has been covered in this publication: from the history of music pedagogy in the United States to attempts at philosophical understanding of changes in the training of music teachers.

The article by Palkki & Sauerland (2019) on young music teachers declaring their non-traditional orientation and transgenderism is one among the most innovative directions of scientific research. Researchers consider this subject matter relevant because, according to their viewpoint, modern students of music educational institutions and educators of music pedagogical universities often openly declare their support for LGBTQA communities. Palkki & Sauerland (2019) provide a systematic list of tokens that can be useful when covering gender issues in the professional university training of music teachers. They describe relevant methods of interaction

and even suggest lesson plans and pedagogical projects that can be used in the professional training of pedagogical specialists of musical arts with regard to gender issues. It should be noted that for the post-Soviet pedagogical space, this vector is still quite provocative. However, taking into account the realities of the Western world, this direction of scientific and pedagogical attention is becoming more common. Along with current dominant globalization processes, it should be expected that problems of this nature may soon become relevant for domestic music pedagogy of higher educational establishment.

The article by Montgomery et al., (2019) is devoted to the use of educational analytics in order to understand the nature and mechanisms of self-education in the system of mixed (combined) model of training music teachers. Data on self-education of future music teachers in the process of students' interaction with course materials on the Moodle educational platform within the framework of blended learning as a popular model of online learning in the field of higher education in the world practice have been taken for assessment. According to the empirical data obtained, the basic indicators of the self-education performance level of pedagogical specialists of musical arts were the indicators of daily use of the Moodle educational platform and indicators of the frequency of access to the system: the more often and regularly students entered their accounts, the better were the results of their implementation of self-study programs.

Wang (2019), who considers the professional training of a music teacher in the context of integration processes in the field of education, is important for our chosen vector of the research on the problem of university training. In particular, the author highlights the functions of professional training of music teachers, implemented in the context of international integration. He also describes the structure of professional training of music teachers in terms of international integration, as well as identifies the developmental potential of integration processes in education and its impact on the formation of relevant qualities of pedagogical specialists of musical arts.

By the way, the works of Bohdanyuk (2020), Havrilova (2017), Umrykhina deserve careful attention from the circle of domestic researchers of the specifics of music education in the paradigm of globalization and integration processes. The works of Funerova et al. (2019), Zamorotskaya (2019), Prokopchuk (2020) are very important in the paradigm of the widespread use of distance education in the training of pedagogical specialists of musical arts.

Although the professional training of applicants for bachelor's and master's degrees in musical pedagogical specialties is the subject of constant attention of researchers, the topic still requires fundamental study in the direction of highlighting the priority modern approaches to the professional training of music teachers.

**Aims.** Therefore, the purpose of the present investigation is to study modern domestic and global approaches to training of pedagogical specialists of musical arts within the intensification of globalization processes, which stimulates the integration of educational space, and increased dynamics of information and media teaching tools.



**Methods.** The outlined purpose requires the involvement of a wide range of scientific methods. In particular, in the process of preparation of this scientific research, the methods of observation, description, complex analysis, functional method, method of comparison, method of system analysis, method of generalization and method of scientific abstraction have been used. Along with this, modern standards of higher education in Ukraine for training of applicants for music and pedagogical specialties of Ukraine, as well as the legal framework in the sphere of education towards promoting the integration of educational space have been studied.

**Results.** The professional training of a music teacher is a certain hierarchical structure of the student's professional "I". It involves the integration of a complex range of competences into this personal structure, the full implementation of which means the formation of specific professional qualities and personality traits. This is an interactive process of dynamic, conscious, purposeful and socially determined (because at the stage of professional self-determination, social implementation of the personality takes place) personality transformation in the process of professional musical and pedagogical training. It is focused on the formation of personal and professionally significant qualities and competences of a specialist. This process is at least two-tiered, two directional, namely: on the one hand, there is a formation of competences of the expert in a certain kind of musical art (with setting "I know by myself"), on the other hand - competences of the professional teacher).

Training of pedagogical specialists of musical arts, as regulated by the relevant resolutions of the Cabinet of Ministers of Ukraine, is carried out within two fields of knowledge:

1) pedagogical training of music specialists with the opportunity to work at secondary schools, gymnasiums, lyceums, colleges, establishments of extracurricular education system, where specialists in the field of music are needed (clubs, children's art centers, etc.) – in the field of knowledge 01 "Education" in the specialty 014 "Secondary education (by subject specializations)", where the subject specialty 014.13 "Secondary education (Music)" prepares teachers of music.

2) professional training in the field of 02 "Culture and Art" in the specialty 025 "Musical Arts" (Cabinet of Ministers of Ukraine, 2015). As of 2020, 52 higher educational institutions of Ukraine train specialists in this subject specialty. The graduate may also additionally need pedagogical qualification within the framework of postgraduate education for his pedagogical activity.

Training of pedagogical specialists of musical arts involves mastering certain cycles of disciplines, namely: 1) musical and theoretical; 2) musical and historical; 3) musical and instrumental; 4) conductor and choir; 5) disciplines related to mastering the method of music education (methods of pedagogical musical activity). Herewith, paragraph 5 similarly, but to a different extent, relates to the structure of both of these areas of musical training. This is justified by the fact that the standard for the specialty 025 "Musical Art" enshrines the acquisition of the appropriate educational qualification level (for instance, Bachelor of Music) and diversified specialization of the relevant educational program (curriculum). This diversified specialization means that training can be carried out in two main areas of qualification, namely: 1)

performance / composition / conducting / musicological qualification; 2) teaching qualifications, within the framework of which there is an increased emphasis on modern methods of teaching musical art in the educational and professional programs of universities (to fulfill the professional duties of an instrumentalist teacher, teacher of a vocational educational institution, teacher of choral disciplines).

The content of professional training of applicants in selected specialties is regulated by higher education standards. For instance, for the specialty 025 “Musical Art”, this standard was approved in 2019 (both for bachelor’s and master’s levels); then for the subject specialty 014.13 “Secondary education (Music Art)”, the directive is still a temporary standard, taken by the Ministry of Education and Science of Ukraine as a basis in 2016.

With regard to globalization processes in the field of music education, the compliance of the Bologna Process with the international project of the European Commission “Harmonization of educational structures in Europe” (Tuning Educational Structures in Europe) is fundamental for the standards of higher education in music. It is necessary to pay attention to tendencies concerning regulation of requirements to scientific activity by experts in the field of music. As it is known, focusing on the world standards of higher education, graduates of universities, applying for diplomas with honors, are required not only to master the content of academic disciplines at a high level, but also to carry out scientific activities, the achievements of which should be reflected in the relevant scientific publications. Enhanced requirements for the scientific activity of the teaching staff of Ukrainian universities are also dictated by adaptation to international standards. However, adjustments have been made for teachers of art specialties at the regulatory level. Thus, they do not have to get a degree if they have special honors for their own artistic musical activity. For instance, the standard requirements for national HEIs regulate that cultural and art workers, working in an institution of higher education at their main place of work, are equated to scientific and pedagogical workers with a scientific degree if they are awarded the honorary titles “People’s Artist of Ukraine”, “Honored Worker of Arts of Ukraine”, “Honored Artist of Ukraine”. Such approach is fully consistent with the nature of activity in the paradigm of music. It emphasizes the dominance of artistic talent, which is a unique personal heritage; consequently, it can be equated in academic weight to the achievements of scientific creativity.

Modern globalization approaches to training of musicians-teachers also dictate increased attention to the mastery of foreign languages by students, in particular, special terminology in foreign language interpretation. This allows carriers of educational and qualification levels in the field of musical art carrying out an interethnic scientific and cultural dialogue at an optimal level. In addition, it helps adapt more quickly to foreign standards of teaching and learning in case of employment abroad.

Regarding the digitalization of the educational process, this area is also enshrined in the standards of the outlined specialties. Thus, it has been indicated that the instruments and equipment for mastering the subject area are not only a range of musical instruments, but also computer software, multimedia tools in the field of

music. In addition, in general competences, we find the requirement for the ability of an applicant for higher music education to search, process and analyze information from various sources, to acquire skills in using information and communication technologies, skills in the application of alternative innovative technologies for musicology, performing, composing, conducting, teaching. The clarification for the temporary standard of the subject specialty 014.13 "Secondary education (Music Art)" is the ability of the applicant to use modern information pedagogical technologies in order to ensure the quality of the educational process at secondary educational institutions, institutions of extracurricular art education.

Informatization of the educational space expands the variability, plasticity of the educational process; it designates its adaptability to the realities of life. Thus, the consolidation of these competences in the standards provides further legitimacy of distance learning under the conditions of COVID-19 pandemic; it regulates the ability of applicants in the field of music to study by applying multimedia tools. In addition, informatization is one of the determining factors in the implementation of world standards of lifelong learning: the graduate must be able to learn throughout life and improve qualifications, acquired during training, with a high level of autonomy (Ministerstvo osvity i nauky Ukrainy, 2017).

In the paradigm of the realities of life in 2020, distance learning in an innovative form of implementation of the educational process has become temporarily normative. In the future, it should be expected that distance learning tools in the preparation of bachelors and masters, in particular, teachers of musical arts, will remain in leading positions among the forms of higher education. However, the artistic and practical nature of the specialties that are the subject of this study, complicate the interaction of the subjects of the educational process in higher educational institutions in terms of distance learning.

Thus, the defining feature of modern approaches to pedagogical training of pedagogical specialists in music can be called the tendency to globalization and integration of educational space. It will further determine the expanded involvement of distance learning methods, informatization of educational space, attitude to lifelong learning and, in general, a conscious and self-motivated attitude to the process of acquiring knowledge and obtaining the necessary professional skills.

**Discussion.** The Strategy of Ukraine's integration into European Union was approved by the relevant decrees of the President of Ukraine. According to them, the basic directions of cultural, educational and scientific and technical integration have been determined through the introduction of European norms and standards in the domestic educational system, on the one hand, and on the other - the dissemination of domestic cultural and scientific and technical achievements within European Union and on the scale of the world community. This is a guarantee of mutual cultural and educational benefits from integration; it contributes to the enhancement of European cultural identity in Ukraine. In addition, it also enriches the European cultural identity with Ukrainian national musical achievements. Integration is a tool of educational and artistic entry of Ukraine into the European intellectual-educational and scientific-technical space (Umrykhina, 2019).

Thus, currently the priority of higher education development in the global context is the globalization (internationalization) of the educational environment, which means the involvement of domestic educational institutions in the global educational space in the framework of the formation of “unified educational environment” concept. Globalization highlights the need to train pedagogical specialists in the direction of musical arts in line with the ability to intercultural interaction in a global multinational multicultural society (Prokopchuk, 2020). Globalization processes in the education of musician-teacher intensify the importance of art education and training of music teachers as a carrier and introducer of world cultural values. However, against this background, we should not forget about music as a source of national education of the younger generations. Therefore, a balance between national and globalization dominants is needed in the methodology of teaching music disciplines in the course of university training of musicians-teachers.

In modern conditions, an approach is being formed to the interpretation of artistic competence as a synonym for the professional competence of a teacher of artistic disciplines, in particular musical arts (Havrilova, 2017). Without one's own creative potential and a conscious attitude to its development and enrichment on the part of the applicant for the profession of music teacher, it is difficult to imagine a full-fledged professional personality of a music teacher. In the paradigm of modernity, this approach remains at the forefront. The professional activity of music teachers (both creative and directly practical and methodical) plays a significant role in involving the younger generation in the national and world art space. Therefore, the profession of music teacher is designed to break the stereotypes of pupils in relation to the musical arts (Bohdanyuk, 2020). Therefore, the modernized process of professional training of the future musician-teacher contains a wide range of requirements for professional mobility, managerial qualities, readiness to organize cultural and permissive activities of schoolchildren, pupils of music schools, specialized circles, etc., as well as the entire teaching staff. The modern approach to this semantic line again requires a balance between the world musical heritage, national music, modern trends in the musical arts at the level of national development and in the paradigm of the world dimension. This perspective is relevant to the assessment of the readiness of future music teachers to take responsibility for the spiritual and artistic development of their pupils, which is usually assessed as insufficient at the graduate level. The source of development of spiritual and creative potential of pupils of music schools, clubs and general and specialized establishments of secondary, primary and preschool education can be considered, for example, educational potential of Ukrainian musical art, which at the mental-genetic level affects the personality of both the future music teacher and his pupils (Bohdanyuk, 2020). Toward this end, it is possible to accompany classes for Ukrainian pedagogical musical practice not only traditionally on the piano, but also with the use of national musical instruments, namely: bandura, flute, etc. - depending on the skills and capabilities of the teacher, his preferences and directly depending on the educational musical material. Through the implementation of the national component in line with globalization processes, digitalization, which erase the national

framework of musical life, the chance arises not to lose national self-identity in music, but, on the contrary, enrich and promote it, adapting to modern trends in music. Consequently, this will enrich the world heritage, while ensuring the preservation of cultural traditions in the musical sound and approaches to the teaching activities of music professionals.

On the other hand, high-quality professional training of a modern music teacher cannot be considered complete without teaching methods of working with the latest technical means related to the music field. This is dictated by the requirements of the time and the characteristic behavioral traits of modern schoolchildren, for whom music is a means of self-expression and self-affirmation. Thereby, many students learn a computer music editor or program for creating music or rhythms in early adolescence (Bohdanyuk, 2020). Therefore, the future teacher should also be aware of this kind of programs and mobile applications, directing the individual creative searches of schoolchildren. Mastering the range of electronic music programs will also give the opportunity to improve the school repertoire, creating covers, creatively interpret musical works (in particular, in the popular direction of adaptation to the modern sound of folk song heritage), arrange musical works for certain instrumental and vocal ensembles. In addition, the basics of activities acquired during university training with electronic means of interaction with musical works and means of online interpersonal communication in order to carry out educational activities will allow the future music teacher creatively and interestingly implementing the content of the training lines in case of force majeure situations, in particular, in terms of quarantine (Funerova et al., 2019). Teaching students of pedagogical and musical specialties the ability to follow the trends of software development in the field of music will not only give impetus to the implementation of the concept of lifelong learning, but it will also contribute to the ability of the applicant to effectively stimulate the motivational aspect of pupils. One of the most effective ways of qualitative renewal of music education lies in attracting information and communication and computer technologies in music teaching (Havrilova, 2017). The role of information and multimedia literacy of a musician-teacher is insomuch great that even it is sometimes difficult to imagine the content of professional (namely information and communication) competence of a future music teacher without it (Havrilova, 2017).

An integrative approach to training of music teachers is a synthesis of professionally significant activities (pedagogical, musicological, psychological, performing, choir, vocal, concertmaster, educational, etc.) (Kozlov, 2006). Under the conditions of international integration, the professional training of a music teacher performs educational, training, integrative-coordinating, organizational-managerial, communicative, commercial functions. The structure of professional training of pedagogical specialists in musical art contains legislative, structural, normative, functional, psychological, social-cultural, educational components. The complex of professional training implements developmental potential of integration processes in education, that is, contributes to the formation of qualities of a music teacher, professionally needed in terms of global integration and the processes of digitalization. This will make it possible to prepare the expert and the professional

who corresponds to the world educational standards, modern tendencies of development of music and pedagogical education in the world, who is capable to compete in the world music and educational space. An integrative approach to the professional education of music teachers contributes to the convergence, coherence, coordination and synchronicity of training systems of specialists in different countries, taking into account national specifics, but with a focus on the adaptability of acquired competences to the conditions of music education in the world. All this together contributes to the accumulation of experience of intercultural and interethnic communication in the subjects of the music education process. The relative coherence of vocational training systems around the world contributes to the openness of national educational systems for the implementation of international music and educational projects, educational and artistic programs, as well as for joint research, teaching and cultural activities. Such approach involves the use of resources in order to ensure the academic mobility of pupils and professional mobility of pedagogical practitioners in music (Wang, 2019).

**Conclusion.** Therefore, modern approaches to training of pedagogical specialists in musical arts are marked by multi-vector and variability of semantic competence lines. The leading factor in updating the content of training future music teachers is the globalization of the educational environment. Further, the decisive factors are the informatization of the music teacher's education, distance forms of educational and training interaction. The effectiveness of modern professional training of music teachers is especially influenced by their conscious attitude to their own education with the prospect of learning (self-development, professional and personal self-affirmation) throughout life. In the mainstream of globalization, a significant role is also played by approaches not only to updating the methods of teaching music, but also to developing ways to preserve national-cultural self-identity in musical creativity and the ability to position it in the European and global arena.

In general, integration processes in the education of a music teacher:

- provide wide access to global information, intellectual and educational resources;
- provide opportunities for the export and import of educational services in the field of music;
- expand the range of choice of individual strategies and trajectories of professional formation and further development;
- provide adaptability and continuity of professional training of a music teacher;
- create favorable conditions for academic mobility of pupils and professional mobility of music teachers-practitioners, as well as scientists from different countries;
- provide conditions for the implementation of joint music and educational projects and programs, activities of research, teaching and cultural and educational content;
- contribute to the establishment of international educational institutions or their separate structural units;
- stimulate the development and implementation of integrated curricula, programs, universalization of educational standards.

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## CHAPTER 3

### THEORY AND METHODS OF VOCATIONAL EDUCATION

#### PROBLEM-BASED LEARNING IN HIGHER SCHOOL (ON THE EXAMPLE OF TEACHING PHYSICS)

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**Abstract.** *Problem-based education is considered as a method of forming the professional culture of students of higher educational establishments. Approaches to the formation of students' professional culture in physics classes are considered. Although the concepts of problem-based learning can be applied to the study of any discipline, their use in learning a foreign language is very difficult. The author's definition of problem-based is presented. One of the benefits of problem-based learning is that students' communication skills are improved more effectively than traditional methods. A brief comparative analysis of problematic and task learning methods, algorithm (stages, content) of solving problem situations and learning tasks is given. The central concept of problem-based learning is problem. Students are offered problematic situations that have a professional and ethical focus. The right problematic situation is an emphasis on teamwork, as opposed to approaching the division into groups for victory. In the process of solving problematic situations of a professional and ethical nature, such areas of the student's personality are involved as cognitive, sensually emotional, axiological, and activity. The role of the teacher in solving problem situations is considered. The conclusion about the influence of problem-based learning on the professional culture of students has been formed. Analysis of advanced pedagogical experience, methodological literature, observations and experimental work made it possible to single out the didactic requirements for the creation of problem situations. The three groups of motives associated with traditional and active forms of education are given.*

**Keywords:** *problem-based learning, creative personality, problem-based dialogues, traditional pedagogical strategy, physics.*

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 0; **tabl.:** 0; **bibl.:** 6

**Introduction.** The main goal of modern education is for specialists to master the methodology of creative transformation of the world. The creative process includes, first of all, the discovery of something new: new objects, new knowledge, new problems, new methods of solving them. In this regard, problem-based learning as a creative process is presented in the form of solving non-standard scientific and educational problems by non-standard methods. If training tasks are offered to students to consolidate knowledge and practice skills, then problem tasks are always a search for a new way of solving. As a psychological category, it reflects the contradictions of the subject in the cognition of the object. The same problem by different people or different groups of people can be perceived differently, cause difficulties in its comprehension, be perceived as a problematic task, in which the essence of the problem is formulated and the stages of its solution are outlined.

**Literature review.** Problem-based learning is the creation of non-standard situations, during which trainees acquire new knowledge, skills and abilities.

The formation of students' professional thinking is the development of a creative, problematic approach. University training should form the necessary creative abilities in a specialist.

Elements of problem learning took place as far back as antiquity and then during the Renaissance. These are heuristic conversations of Socrates, conversations and dialogues of Galileo. Pedagogy J.-J. Rousseau – problematic dialogues – were a favourite genre of the Age of Enlightenment. In the history of pedagogy, the lectures of K.A. Timiriaziev can serve as an example of problematic presentation of material.

**Aims.** The purpose of the article is to study the features of problem learning in higher education (on the example of teaching physics).

**Methods.** During the writing of the article the following methods were used: the method of historical comparison, methods of analysis and synthesis, the method of generalization and others.

**Results.** The essence of the problem interpretation of the educational material is that the teacher does not communicate knowledge in a finished form, but sets problematic tasks for the students, prompting them to look for ways and means of solving them. The problem itself paves the way for new knowledge and ways of acting.

New knowledge is given not for information, but for solving a problem or problems. With the traditional pedagogical strategy - from knowledge to problem – students cannot develop the skills and abilities of independent scientific research, since they are given ready-made results for assimilation. Hegel aptly defined the role of scientific search, saying that not the result is a real whole, but the result together with its formation. The naked result is a corpse that has left behind a trend.

*Traditional lecture.* It is necessary to give and clarify some physical concepts (absolutely black body), then explain the basic concepts of quantum theory, communicate the main characteristics (for example, the distribution of the intensity of thermal radiation over frequencies), then derive the main and derivative formulas and show what scientific and technical problems can be solved using this conceptual apparatus.

In any activity, the main thing is the result. The result of the educational process is changes in knowledge, abilities, attitudes, holistic orientations. The result of the educational process can be achieved using various teaching methods and methods of activity.

In physics lessons, problem learning can be applied very widely, and at all stages of the lesson. For example, when studying theoretical material, you can apply the problem – actualizing the use of this phenomenon in the profession (various uses of static electricity by auto mechanics, operators, welders). Physical material makes it possible to create many problem situations, guide the cognitive activity of students, teach them to learn and use knowledge in the profession.

In problem-based teaching, a physics teacher, presenting the material and explaining the most complex concepts, systematically creates problem situations in the lesson. The teacher organizes educational and cognitive activities in such a way that, based on the analysis of facts, observation of phenomena (in a demonstration or

frontal experiment), they independently draw conclusions and generalizations, formulate rules, concepts, laws, apply their knowledge in a new situation.

The successful solution of this task will be facilitated by the use of problem-based learning, which:

- ensures the strength of the assimilation of knowledge;
- makes the learning process more attractive and interesting;
- teaches to apply knowledge in practice;
- develops analytical, logical thinking of students;
- promotes the teacher's creative growth;
- forms the student as an active subject of cognition.

The problem type of learning differs in that the teacher creates a certain cognitive situation, helps students to highlight the educational problem, understand it and "accept"; organizes them for independent mastering of a new volume of knowledge necessary to solve a problem; offers a wide range of ways to use the knowledge gained in practice.

Let's present a *problematic lecture*. The lecturer talks about the ultraviolet catastrophe, about the problem of the discrepancy between the theoretical curves and the curve obtained experimentally, about the distribution of radiation intensity in the frequency spectrum. It is then helpful to tell students about the painful scientific quest of scientists that led to quantum theory. What does the permutation of terms give? Starting with an allegedly unsolved problem, the teacher creates a problem situation in the group, forming in the students' minds the motive for mastering the frontier of scientific knowledge. Only motivation can become an effective factor in the active involvement of a person in the process of cognition. Motives arise from needs, and needs are determined by experience, attitude, assessment, will, emotion.

Creative thinking requires solving the problem of inclusion. Reproductive mental processes associated with the reproduction of learned patterns are simply useless in a problem situation.

Subject-object-subject relations contribute to the activation of creative thinking arising from the collective solution of certain problems. Some psychologists adhere to the division of motives into two groups. In both cases, the division occurs depending on what is the basis of motivation or need for knowledge. The three groups of motives given below are associated with traditional and active forms of education.

In traditional teaching, trainees form two groups of motivating motives:

I - directly motivating motives;

II - promising motives;

III - cognitive and motivating motives of the disinterested search for knowledge, truth.

Throughout the lesson, the teacher introduces the students to the essence of the problem, causes a contradiction between the knowledge, skills and abilities that they possess, and those facts, laws, phenomena that are reported to them. In order for a situation to become problematic, it is necessary that they be able to resolve it. This means that those questions become a learning problem, the answers to which are not

contained in the already existing knowledge of students, cause intellectual difficulties, but are feasible for them.

Analysis of advanced pedagogical experience, methodological literature, observations and experimental work makes it possible to single out the following didactic requirements for the creation of problem situations:

1. The educational problem should be related to the material being studied and follow from the logic of the cognitive process.
2. Problems should create cognitive difficulties that arise from objective contradictions inherent in the studied material.
3. Problem questions should be feasible for students.
4. A problematic question must necessarily encourage the expression of new ideas.
5. Problematic issues should be based on previous experience and existing knowledge.
6. The main content of the problem should guide the cognitive search of students.
7. Problematic issues should influence the emotional state of students, interest them in the content and methods of solution, intensify the activities of students, and positively influence the motivation of learning.

When creating problem situations, one should also take into account the level of knowledge of students, psychological characteristics and intellectual capabilities. Otherwise, students may lose interest in solving the problem if they will not be able to do it.

Consider a system of techniques for creating problem situations.

1. A situation of surprise arises when students are familiarized with facts, phenomena, experiences, conclusions that cause surprise, seem unusual, paradoxical. For example, teacher asks the question: «Can water boil at room temperature?», Which serves as the basis for creating a problem situation. By showing the famous experience of boiling water at room temperature, the teacher creates a situation of surprise.
2. The situation of conflict is used mainly in the study of physical theories and fundamental experiments. Such situations have often arisen in the history of the development of physics. For example, the teacher begins the study of wave interference by demonstrating water waves. Students observe wave fronts from a point vibrator and then from two point coherent vibrators. In this case, a conflict arises – the students observe «frozen» wave fronts in the form of symmetrical stripes. Why did the picture change from dynamic to static and change its appearance? By considering this conflict, students explore the essence of the wave interference phenomenon.
3. The situation of foresight is the teacher's hypothesis about the possibility of the existence of a certain pattern or phenomenon with the involvement of students in a research search. For example, teacher makes the following prediction: «It is known that the appearance of an electric current is always accompanied by the appearance of a magnetic field. Is it possible to get the opposite phenomenon: to induce an electric

current in a conductor using a magnetic field?» Discussing various options for solving the problem, the students, as a result of the discussion, come to study the well-known experience of M. Faraday related to the discovery of the phenomenon of electromagnetic induction.

4. A situation of refutation is created when students are asked to prove the impracticability of any idea, project, proof, antiscientific conclusion. For example, it is proposed to prove the impossibility of creating a certain project of a perpetual motion machine, or the existence of too large insects on the Earth, or movement at a speed exceeding the speed of light in a vacuum, and the others.

5. The situation of discrepancy lies in the fact that the life experience of students, the concepts and ideas that have developed in them spontaneously, come into conflict with scientific data. For example, when studying the Archimedean force, the following question is proposed: «There are two identical vessels filled to the brim with water. A wooden block is floating in one of them. Which of these vessels is the heavier?» The students believe that the vessel in which the bar floats will be heavier (since excess substance is added). Some believe that a vessel without a bar will be heavier (vessels are filled to the top, and the density of wood is less than that of water). Weighing the vessels shows that their weight is the same. Why? The solution to this problematic problem leads to the establishment of the law of floating bodies.

6. A situation of uncertainty arises when the proposed problem is problematic - the task has insufficient data to obtain an unambiguous answer. For example, it is known that the resistance of metallic conductors increases with increasing temperature. I ask the question: «How will the resistance of semiconductors (or electrolytes) change when heated?» Students cannot give an unambiguous answer due to the fact that they do not know how a new substance (semiconductor or electrolyte) will behave with an increase in temperature, what processes, changes in the state of a substance will be accompanied by heating. While solving the problem, the concept of the dependence of the resistance of semiconductors (electrolytes) on temperature is formed.

The problem-based lesson has the following structure:

- I. Statement of the educational problem.
- II. Statement of the educational task.
- III. Finding a solution.
- IV. Decision Expression.
- V. Product implementation.

Thus, problem learning begins with the creation of a problem situation – the main means of activating the mental activity of students and then goes through the main stages: the formation of a problem, finding ways to solve it, solving the problem, formulating conclusions, summing up the results.

So, cognitive-stimulating motivation appears when using active teaching methods and, having arisen, turns into a factor in activating the educational process and the effectiveness of teaching. Cognitive motivation encourages a person to develop his inclinations and capabilities, has a decisive influence on the formation of the personality and the disclosure of his creative potential.

With the emergence of cognitive-stimulating motives, there is a restructuring of perception, memory, thinking, a reorientation of interests, an activation of a person's abilities, creating the prerequisites for the successful implementation of the activity in which he is interested.

The inertia of traditional pedagogy is still very high and focuses mainly on the stimulation of motivating motives, on the motivation for achievement: to get high scores, to successfully pass the session, etc. Therefore, the identification of psychological and pedagogical characteristics that contribute to the emergence of cognitive motivation with its subsequent transformation into professional motivation is one of the strategic directions for the development of higher education pedagogy and innovative teaching technologies.

That is why the teacher should organize pedagogical and interpersonal communication in such a way and so direct the educational activities of students so that achievement motivation does not hinder the emergence of cognitive motivation.

**Discussion.** The task of problem learning is the formation of motives. Its success is determined by the logic and content of the student's activities. The most important feature of the content aspect of problem learning is the reflection of objective contradictions that naturally arise in the process of scientific cognition, educational or any other activity. As a result, problem learning can be called developmental, because its goal is the formation of knowledge, hypotheses, their development and solutions.

To formulate a problem correctly means already half of it. But at the initial stage of the solution, the formulation of such a problem does not contain the key to its solution.

Although the teacher knows the shortest path to solving the problem from the very beginning, his task is to orient the search process itself, leading students step by step to solving the problem and gaining new knowledge.

Some authors define problem learning as a series of problematic tasks, the consistent solution of which leads to the achievement of the set didactic goal.

**Conclusion.** As a result of research and practical activities, three main conditions for the success of problem learning have been identified:

- providing sufficient motivation that can arouse interest in the content of the problem;
- ensuring the feasibility of working with the problems that arise at each stage (a rational ratio of the known and the unknown);
- the significance of the information obtained in solving the problem for the student.

So, the main psychological and pedagogical goal of problem learning - the development of professional problem thinking – in each specific activity has its own specifics. In general, the development of creative abilities is of an applied nature and is concretized in relation to the subject, transforming into the formation of a particular creative ability, into a non-standard vision:

- to see the problem in a trivial situation when students have questions that are non-trivial for a given level of training such as: "Can any curve be set by a system of two equations?";

- to see in a new way the structure of a trivial object (its new elements, their connections and functions, etc.), for example, the coinciding outlines of the continents of both America, Europe and Africa;

- to form the ability to transfer previously acquired knowledge and skills into a new situation (the formation of meta-skills);

- to combine a new way of solving the elements of previously known methods. For example, the transfer of methods of chemical, psychological, graphological, mathematical analysis to forensic examination;

- to construct original solutions without using previously known similar methods (this is how non-Euclidean geometry was created by Lobachevski, the theory of relativity by Einstein, quantum physics by Planck).

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## STUDY OF SOCIAL MATURITY OF A PERSONALITY

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**Abstract.** *The problem of the formation of a personality in modern conditions of growth of the role of information and communication technologies is becoming one of the most urgent in the field of pedagogical research. The volume of information, information resources, and relevant technologies makes a significant impact both on various aspects of public life and on the processes of the formation of a person's personality in particular. The article is devoted to the analysis of the definition of the relationship between the social maturity of the individual and the culture of the society. Specific features of personality formation in the information society have been determined. The research has shown that scientists connect the solution to the given problem with the formation of information culture of a person. The research reflects the development of understanding the essence of the category "social maturity", as well as outlines a number of concepts, understanding of the essence of which will allow to be detailed in relation to its content. It is proved that social maturity is conditioned by certain personality qualities that have an effective influence on self-regulation of behavior. Social maturity of the individual is a qualitative degree of his development in the conditions of a specific social environment that ensures creative involvement into various types of social and cultural situation and promotes his social growth. The study of the social maturity of the individual in pedagogical research is caused by the need to search for effective forms and methods of education in the interaction of self-education and the actions of the social environment. It has been justified that in the pedagogical sense, the content of social maturity reflects only what is actually formed in a person in the form of personality traits, and also that from the external transformed to the internal structure of the new formation of a personality is directly realized in his transforming activity aimed at improving the types of activities and relations, which form the personality.*

**Keywords:** *personality, socialization, communication, maturity, social maturity, information society.*

**JEL Classification:** I0; I20

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

**Introduction.** Over the last century, the world has witnessed tremendous changes in the lives of people and society, in the development of technology and culture. The main element that accompanies these changes are changes in human communication.

Most researchers of the role of personal computers and computer networks note that their spread leads to the formation of the information society. However, the introduction of information technology as a means of finding, collecting, storing, processing, providing, disseminating information in human life does not bring us closer to the information society, which was described by D. Bell, A. Turen, E. Tofflier, P. Draker, Z. Bzhezynskyi, J. Masuda and others. The information society has not been formed yet, although the main attributes are present. There is a lot of information in modern society, it plays a huge role, but in the triad of message -



communication - interpretation, the process of transmitting is decisive. It is necessary to note the fact that the development of simulation technologies, not information technology has become a priority in recent years. As a result of increasing the RAM and speed of computers, as well as the creation of new software, there are not only qualitatively new forms of data transmission and processing, but first of all there is a growing similarity between working on a computer and managing real objects, as well as the similarity of online communications with communication in real space - time. Computerization of everyday life introduces virtual reality as computer simulations of real things and actions. Such intensive use of virtual reality technologies in recent years has a social meaning - the replacement of social reality with computer simulations. This social aspect of the development of computer technology clearly prevails over the technical aspect.

Thus, the urgency of the problem of personality formation, in particular its social maturity, in terms of updating the information culture of society follows, on the one hand, from the ontological significance of information in life, on the other hand, from increasing the functional importance of information in human life has become a system-forming value.

**Literature review.** Various aspects of the problem of social maturity are reflected in the psychological concepts of socialization and individualization of personality by G.M. Andrieieva, I.S. Koka, B.D. Paryshna; social attitudes and values (V.M. Miasyshchev, S.H. Nadyrashvili, P.N. Shykhyrev, V.O. Yadov); development of problems of leadership and leadership E.M. Dubovska, R.S. Nemova, T.M. Niukoma, F. Fiedler; social conflicts (V.O. Sosnin); stability of behavior in extreme social conditions (O.O. Zhuravlyov, V.O. Khashchenko); in theoretical ideas about personal maturity in the domestic (O.G. Asmolov, B.S. Bratus, V.P. Zinchenko, V.S. Mukhina, V.A. Petrovsky, N.I. Sobolev, V.I. Slobodchikov ) and foreign psychology (A. Adler, A. Maslow, G. Allport, K. Rogers, W. Frankl, E. Fromm); in studies of the conditions of human development as a subject of cognition (G.V. Akopov, V.Y. Lyaudis, V.O. Yakunin); in the development of methods of active socio-psychological training (Y.M. Yemelianov, E.S. Kuzmin, L.O. Petrovskaya) and others. However, the place of social maturity as a factor in the formation of personality in the information society is not fully disclosed.

**Aims.** To show the dependence of determining the content of the maturity of the individual on the specific culture of society.

**Methods.** The main method used in the article is semantic analysis of the main problems to understand the subject area.

**Results.** The processes of communication and interaction have the specificity of manifestation in terms of increasing the role of information and communication technologies in human life, and this indicates the peculiarity of the formation of a personality.

The conditionality of a personality development by procedural and substantive characteristics of communication, in which the individual enters, the roles that the individual assumes, based on the role of certain personal characteristics, thereby consolidating them, is not limited to consideration of stages of ontogenesis to its

maturity (or ontogenet adulthood). Further, depending on the participants of the communication, the role of the person in this communication, the resources and personal qualities he/she relies on, actualizing them in relation to other person, he/she continues to change. What significant relationships and situations of communication a person goes through, what subjective activity he realizes, in whose address this activity is directed (in relation to whom the personality manifests itself in its activity), what personal meaning is endowed with activity, and is "the way personality ", its formation and self-determination.

It is also important that information technology tools carry out almost instantaneous transmission of cultural values, as if compressing space and speeding up time. The information is transmitted in real time, creating the user's involvement in the course of modern history.

Passive consumption of information through computers, television, audio, radio and telephone increasingly displaces active forms of leisure, creativity, cognition, forms a rigidity of thinking, deprives people of direct communication with each other. Narrowing of personal space, alienation from wildlife causes an involuntary desire to simplify the picture of the world, fear of decision-making, fear of responsibility. Electronic communication is devoid of many aspects of the social context present in terms of personal contact. A person using a computer tends to speak more freely.

Telecommunication resources allow a person to be independent of time and space. In terms of connecting to extensive computer networks, they can communicate with people anywhere in the world; participate in group discussions, teleconferences.

It is natural that a change in people's thinking has an impact on their behavior, needs and ways of meeting them, overall way of life of individuals and society as a whole. This fact makes it socially significant to study the problems of socialization of the individual under the influence of computer technology. The interaction of man and computer becomes a social phenomenon and is not just human communication with technology, but an active process of human interaction with the information richness of human experience accumulated over the centuries.

In view of the above, we should note that human socialization in cyberspace, on the one hand, is a relatively innovative phenomenon, on the other hand, has long been a factual reality of our world, an integral part of socialization of modern personality, as well as the engine of scientific, technical, economic and the social progress of human society. Paying attention to Internet socialization, it is necessary to emphasize that the Internet environment itself is a new level of social network (there is a permanent increase in the number of users) interaction of modern people of almost different ages, at least from adolescents to the elderly, while socialization in cyberspace.

**Discussion.** Thus, in the modern era of information explosion and information revolution, humanity is forced for a limited time to adapt to the new conditions of their existence. This sharply highlights the need to discuss the very problem of human interaction with the information environment.

According to L. Mumford, a man, above all, is an animal that creates its own mind, restrains itself and self-programs. Its own organism and social organization, in which this organism becomes more fully expressed is considered to be the primary source of all its activities. Until man has done something of himself, he cannot do much in the world around him [4]. .

The role of cultural activity in human development has not yet been studied in proportion to its importance in this process. This can be fully attributed to the role of information culture in human development as a biological and social being.

Relatively recently, the development of the society has been characterized as socio-cultural, but today it looks more like technocratic. The spiritual, intellectual potential of the society is increasingly identified with the information, causing changes in culture, language, lifestyle and even thinking. Information and awareness of the individual began to replace his knowledge, human ability to comprehend and solve problems.

It would be a simple utopia to ignore the development of technology and its effect on man and society as a whole, because it is a material means of human activity and, consequently, culture. You can agree with V. M. Rozin who claims that human activity has two components - acts of activity that are implemented on a rational basis, and cultural components that live by a different logic. Therefore, he concludes that most of the problems that arise in society today cannot be solved in a scientific and technical way [7].

J. Bodriiia, who studied the problems of the information society, believed that modern culture is a culture of signs. But signs, instead of reflecting reality, simulate it. Modern society, according to Bodriiia, is filled with signs. Every day, the media attack the consumer with a huge number of facts and their interpretations. Consciousness is divided due to the fact that he can not understand all this and distinguish their own desires from others [1]. Therefore, the task of analyzing the positive and negative aspects of the adaptation process is very important now.

The problem of adaptation of human society is carried out not so much by adaptive physiological abilities, but by building a supra-individual adaptive system - culture.

As we know, the individual and society are two poles of social reality, where the individual is a specific historical phenomenon, and society forms its own type of personality.

D.I. Feldshtein sees the main meaning of human social development in the appropriation of the social essence of a man. The degree of mastery of a person's social experience of actions and relationships, self-awareness in society, self-vision in other people, willingness to act responsibly in the world is the result of social development.

Consideration of personal development in the conditions of informatization concerning social maturity seems to us perspective.

A common understanding of the concept of "maturity" is given in dictionaries. The dictionary of the Ukrainian language defines "maturity" as "the state of an organism that has reached full development; high degree of development, perfection,

skills". And then "mature is someone who has reached a certain development; who has extensive experience, has achieved high skill, is fully formed; deeply thought out, created, carried out on the basis of extensive experience, skill, etc. " [8].

According to L.M. Kohan, concept of "maturity" can be applied in any complex system to characterize its individual elements and the system as a whole. This is the state of the elements and the whole system, in which this element is able to fully perform its functions, to implement in practice (functioning) its qualitative characteristics. That is, the maturity of the system as a whole means the full implementation of its system quality [3].

Of many definitions of a mature personality, in which the main manifestations of the properties are recorded, the interpretation of P.Ya. Halperin, who believes that the individual can be considered mature when freely and consciously chosen and set the goals of their actions (taking into account causal relationships, their moral sense), for the consequences of which the individual is responsible to nature, society and conscience [2, with. 91].

In the socio-psychological context, the concept of "maturity" is often interpreted as an achievement in the development of personality and individuality, which are characterized by a person's ability to "independence" in life, when he does not need those "supports" and "help" from others vital balance and would provide resistance to the difficulties of life (K.O. Abulkhanova-Slavskaya, G. M. Andrieieva, O.G. Asmolov, V.I. Slobodchikov, etc.).

In particular, G.S. Sukhobskaya [9; 10] in a number of her works dwells on the characteristics of the most important attributes of individual psychological maturity, to which she attributes the following abilities:

- to independently predict their behavior in any life situation on the basis of developed skills to obtain the necessary information and analyze it in relation to the goals associated with the solution of specific and unusual situations in all spheres of life;
- to mobilize themselves to implement their own decision to act in spite of various circumstances and the internal socially unmotivated desire to stop it ("tired", "do not want", "difficult" and the like);
- to self-monitoring the progress of their own actions and their results (which implies the readiness of the person to "normal imaginary split" into "I am a performer" and "I am a controller");
- to the manifestation of evaluative reflection on the basis of formed self-awareness and objective unbiased assessment of their thoughts, actions, deeds;
- to an emotionally adequate reaction to various situations of one's behavior.

General philosophical understanding of this concept implies that it is a complex system with a special type of functioning and development. It is characterized by internal optimality. It is the optimality of functioning that provides not only the direction of development of the individual, the emergence and accumulation of its new strategic opportunities, but manifests itself as an indicator of its integrity, organization, which is an important factor in its further development.

Summarizing the diversity of the content of the phenomenon "social maturity of the individual", V.V. Radul notes that: "the individual is the subject of human activity, which in its turn is aimed at transforming the surrounding reality" [5, p.25-26]. Each person learns specific historical forms and ways of knowing the world and thus forms an individual, unique personality in the cultural sense, formed by their own life experience and way of knowing it [5, p. 26].

The analysis showed the dependence of determining the content of a person's maturity on a particular culture, "because a person is formed in a specific historical time and space, in the process of practical activities and education" [6, p. 41].

**Conclusions.** The article focuses on the impact of information on public life. The dependence of the content of personality maturity on a specific culture of society has been shown. Prospects for further research are due to the interaction of the phenomena of the information society and human personality.

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# PRINCIPLES OF MODERN PROFESSION TRAINING THE FUTURE SPECIALISTS FOR RAILWAY TRANSPORT IN “COLLEGE-UNIVERSITY” SYSTEM

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**Abstract.** *The events in the modern world is characterized by global and overall processes which penetrate every branch of society. Transforming processes of euro integration need the new requirements for future specialists – graduating students of higher and pre-higher professional educational institutions. As transport infrastructure takes one of the main places in economical system of every country, so the important questions of nowadays are the training of future specialists for railway transport and the search for ways of improvements the quality of such kind of training. The task of modern educational institutions is to respond quickly to the changes in the world tendencies (economic, educational, scientific, informational, technical, social). The aim of the article: research, separation and reasoning the number of principles taking into account of which, in our point of view, favour the improvement the quality of training the future specialists for railway transport. Research methodology: using the general theoretic method of scientific research and methods of analysis and synthesis as well. Results received: in course of our research there were such important principles the implementation of which help increase the efficiency of professional training the future specialists for railway transport in the system of continuous gradual education: the principle of three components unity science - theory - practice; the principle of key role of activity; the principle of humanism (humanization); the principle of knowledge integrity; the principle of democratization; principle of creation «knowledge values» system; the principle of dynamism in education, knowledge mobility; the principle the unity of studies and upbringing formation world-view, values, moral, standards of behavior etc.); the principle of the system and consistency (a transition between the levels of vocational education); the principle of continuity of education (life-long learning); the principle of forming the motivational system of activity (professional); the principle of knowledge informatization; the principle of important role of a teacher; the principle “education for future”. Practical value: in the researches we took into account the principles, which became basal for the creation the pedagogical system in course vocational education of future specialists for railway transport and favour the improvement the quality of educational process in higher (professional pre-higher) education.*

**Keywords:** professional education, principles, future specialists, “college – university” system, professional training.

**JEL Classification:** I0; I20

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**Introduction.** The second decade of the XXI century is marked by global and overall processes which penetrate every branch of society. Transforming processes of European integration need the new requirements for future specialists – graduating students of higher and pre-higher professional educational institutions. As transport infrastructure takes one of the main places in economical system of every country, so the important questions of nowadays are the training of future specialists for railway transport and the search for ways of improvements the quality of such kind of training.

Modern education is in the state of active search of means, methods, ways for achievement of certain harmony between public demands and needs of every

personality. Pedagogical theory and practice of nowadays are full of various approaches and ideas (based on psychology, philosophical conceptions etc.). The researcher I. Bekh (2005) emphasizes that educational space is intensively filled with the «imperative of humanism and democratization» each time [1, p.7]. A student becomes the center of educational process, and the content of vocational education is forming of personality, future professional with the development of qualities, necessary for gaining professional competence, creation the vision of life entirety, where the education is the central component, a person's demand. An educator, who teaches the certain subject, has to personify not only the best qualities of a person knowing the subject and the teaching methodology, but also be well-informed about the approaches of personality's modeling and development as the subject of educational activity, and also willingness and capacity to use own knowledge and abilities in everyday activity.

**Literature Review.** The works of such researchers as Bereza V. [2], I. Bekh [1], N. Nychkalo (2008) [4], M. Romanenko [5], V. Syvologa [7] are devoted to the problems of vocational education, its modernization and introduction of innovative approaches, receptions and technologies. Conceptual principles of continuous vocational education and the separate aspects are analysed in research works of these authors. However, the question of professional training of future specialists for railway transport in «college-university» system, the improvements of quality of such preparation remains not revealed enough.

Principle (from lat. principium is basis, beginning). Principles of studying in higher educational institutions are base positions, and the choice of content, methods, forms and means of teaching are based on them. The principles are subordinated to the objective of study.

Researchers consider such principles of vocational education: surpassed character of professional preparation; fundamentalisation; integration of vocational education, science and production; equal access for all levels of population to acquisition of high-quality vocational education; flexibility and correlation of process vocational education with restructuring and the further development of economics and population's employment, the development of different forms of property; diversification; vocational education in different regions; unity of general education and vocational training; standardization; unity of vocational training and education; professional education; ecologization; variability, personification and differentiation [4, p.87-88].

The scientist V. Sivologa (2013) in the concept of “humanization of education” distinguishes such components:

- process with characteristic features;
- orientation of development the education on humane relationships in society as universal value;
- stablishing the personality as the greatest value;
- providing the priority of interests of those who study;
- humanization of all content of educational activity;

- targeting the education on development the personality, forming mechanisms of self-education and self-training, for realization of person's creative potential [7, p.273-274].

At the same time, researcher M. Romanenko recognizes such peculiarities of modern higher education which, partly or fully, do not let implement in life the ideas of humanistic education:

- considering education as personnel – professional point of view (preparation of specialists and professionals, but not personality, in educational institutions);
- knowledge is the priority of education (although knowledge is greatly changeable);
- system of standards of educational process success eliminates the needs of personality;
- evaluation of knowledge (competences, skills), but not their influence on personality development;
- low level of person's activity in educational process;
- determination of forms, ways, methods and content of studying by pedagogical staff without a person who gets education [5].

However, vocational education is also affected by the influence of European integration processes, the mobility of labor market and the growing demands on the quality of training of future railway transport specialists, and such education has to react as it is an integral part of human being. If vocational education doesn't change to respond modern requirements of society, it will change into formal "passing the information".

Rapid scientific and technological progress, the penetration of information technology in every field of human activity, large arrays of information, which is getting old and updated rapidly, should change the professional training of future railway transport specialists, as well, as the key tasks of vocational education are urgency, purposefulness, ability to think, analyze, gain professional competencies (competencies), the need and desire for self-development, self-improvement, etc.

The scientists of the XXI century call society a "knowledge society". The author of this term is P. Drucker (1995), who believed that knowledge alone can not produce anything until it is used to solve a specific problem, in turn, the tasks are dictated by society, which the scientist called "knowledge society" [3]. The author spoke at the UNESCO Assembly (2005), the key theses of the speech were as follows:

- the knowledge society has broader parameters than the information society (social, economic, ethical, etc.);
- means of knowledge distribution are education, radio, television, press, Internet, multimedia;
- special attention to textbooks and teachers;
- the informative aspect of education is important for the knowledge society;
- the existence of not only "electronic information gap", but also "cognitive gap" [8].

Researcher M. Weber (1980) emphasizes that the definition of "knowledge society" is to some extent technical, a kind of ideal construction [9].



Psychologist V. Shadrykov (1982) points out that the first stage associated with professional activity is the adoption of profession; the next is the desire to perform it in a certain way [6, p.37]. The latter, according to the author, serves as the starting point for the formation of psychological system of activity.

**Aims.** The purpose of the article is to investigate, identify and reasoning a number of principles, taking into account which, in our opinion, will help improve the quality of training of future specialists in railway transport.

**Methods.** Achieving the goal of the research made it possible to use the general theoretical method of scientific research, as well as methods of analysis and synthesis.

**Results.** The task of modern institutions of higher education is to respond effectively to changes in world tendencies (economic, educational, scientific, informational, technical, social). In the course of our study, the following principles were important and the implementation of which helps to increase the efficiency of professional training of future railway transport specialists in the system of continuous education:

- the principle of three components unity of science-theory-practice;
- the principle of the key role of activity (scientist I. Bekh called the activity principle – “genesis principle”: maximum cognitive activity during the process of cognitive activity [1, p.7].);
- the principle of humanism (humanization);
- the principle of knowledge integrity;
- the principle of democratization;
- the principle of creation “knowledge values” system;
- the principle of dynamism in education, knowledge mobility;
- the principle of unity of education and upbringing (formation of worldview, values, morals, standards of behavior, etc.);
- the principle of system and consistency (transition between levels of vocational education);
- the principle of continuity of education (lifelong learning);
- the principle of forming the motivational system of activity (professional);
- the principle of knowledge informatization;
- the principle of the important role of the teacher;
- the principle of “education for the future”.

In our research, we took into account the principles that have become fundamental in creation a pedagogical system of vocational education for future railway professionals. Examine the characteristics of these principles.

**Discussion.** *The principle of unity of the three components “science-theory-practice”.* The effectiveness of the higher education system lies in its profoundness, which is based on scientifically reasonable theories. The important standard of higher professional education (professional pre-higher education) should be, on the one hand, the scientific and educational processes unity, and on the other – the theory and practice unity. Students need to be taught to analyse, think, query information. It is

the development of these functions of thinking will help future professionals to develop, improve, implement innovations and think creatively.

*The principle of the key role of activity.* Activity (educational, cognitive, future professional) occupies a leading place in educational process. The formation and development of such qualities, competencies, functional processes that should be intrinsic to the future professional are developed exactly in activity and through activity. The educational institution (teacher) acts as an organizer of such activities, ensuring the formation of creative educational environment.

*The principle of humanism.* The Laws of Ukraine “On Education”, “On Higher Education”, “On Professional Pre-Higher Education” point out that the purpose of education is “comprehensive development of the individual as the highest social value”.

In order to implement this principle in higher (professional higher) educational institutions, it is necessary to pay special attention to the formation and development of each individual as a subject of the educational process; knowledge should not be considered “absolute”, but to form the ability to learn (search for new knowledge); take into account the needs of each participant in the educational process; increase the students’ cognitive activity in the educational process, etc.

*The principle of knowledge integrity.* It involves the formation holistic scientific worldview, the use of knowledge not as purely presentive, but as “meta-subject”, which are integrated, systematized, generalized, inter-complemented in single scientific picture. This can be achieved by examining each object through the prism of different sciences (characterization of hierarchical and causal relationships between objects, objects and phenomena, between phenomena, etc.).

*The principle of creation “knowledge values” system.* Knowledge is not a kind of “absolute”, the eventual result of the educational process, but is only the way, the way to acquiring other knowledge. Knowledge is the basis for skills and abilities, as well as competencies.

*The principle of dynamism in education, knowledge mobility.* The XXI century is characterized by rapid globalization processes in the economy, politics, world society. The reason was the rapid development of science and technology, mobility of information (speed of information dissemination, its transmission). Education as a social (state) institution must also be developing together with society. Otherwise, it will decline, as it will be unable to meet the demands of society, which is increasing exponentially. Higher education institutions need to change in their own concepts and statutes, and on the basis of the latter changes, in their activities.

Knowledge is necessary for the formation of holistic scientific picture of the world, its key feature is mobility, namely, the ability to move from one branch of science to another, the usage of integrated approaches, the integration of knowledge.

*The principle of unity of teaching and upbringing.* Regardless of the orientation of the educational institution, in our opinion, it is important to educate future professionals in the following areas: patriotic education (love for the Motherland, its people); moral education (the concept of good and evil, respect to another person, etc.); ecological education (careful attitude to nature and everything that surrounds a

man, the search for technologies that can minimize the negative impact on the environment); aesthetic education (sense of beauty, harmony); physical education (healthy lifestyle, value of health).

*The principle of continuity of education.* Education of the XXI century is characterized by its dynamism: the variability of information, means of labour, forms and methods of professional activity. Life follows the socio-economic progress, as well as scientific and technological. All this makes demands for each personality: constant improvement, constant learning. Continuity of education (including professional) is a requirement of nowadays.

*The principle of forming the motivational system of activity.* During the studies in educational institutions, teachers, administration, etc. need to help students form a clear system of values and positive motivation for both educational activities and future professional.

*The principle of informatization the education.* Information is the basic category that a person contacts at all times. In recent decades, there has been accumulated so much information that it has become impossible (not even necessary) to keep it all “in your head”.

The task of the higher education “college-university” system is to teach future professionals to search, evaluate, analyze, summarize, store and transmit information: among the proposed extremely large amount of information to choose the necessary (reliable) one that will be transformed into knowledge (skills, competence) etc). Also, this principle includes the informatization (computerization) of professional activities: work with special equipment, as well as with special software.

*The principle of important role of the teacher.* The teacher in higher educational institution performs a number of basic functions (in relation to students): organizational and corrective, sources of scientific and educational information, monitoring and control. In relation to themselves, the teachers must constantly improve their professional level: to be interested in innovations within their discipline, as well as general pedagogical and methodological innovations; to increase the level of professional culture (carrying out scientific activities, communicating with students and colleagues, etc.).

The college teacher forms the idea of the future profession, the requirements for profession performing, helps to form values and motivational guidelines for mastering the profession in each student, as well as further improvement (training). The moral qualities of the teacher, his life position also favours the formation of a future specialist – a citizen of Motherland, who respects himself and others and so on.

*The principle of “education for the future”.* In recent decades, there has been a significant gap in our country vocational education between the knowledge (skills, abilities, etc.) that students received by studying in higher educational institutions (college, university) and the demands (requirements) of employers to their potential employees. The level of development of modern education generally does not correspond to the level of development of those industries in which future professionals must work. The key goal of higher educational institution should be to train professionals “of the future” (and to the future) who will meet the challenges of

today, who have the appropriate competencies to improve and change in accordance with the requirements of professional activity (space-time). Education today cannot be the kind it was yesterday. A person changes every day and all spheres of his life, society changes with him at the same time. Therefore, education, as a social link, must also evolve with society: the knowledge society, the information society, and so on.

**Conclusion.** The professional training of future specialists for railway transport must correspond to the modern state of development of education, science, technology, as well as general world tendencies in the industry, the requirements for specialists and the quality of their work. Therefore, it is important to review educational professional standards regularly, as well as to take into account when creating the system of vocational education principles that are based on demands and needs of society and each individual. In course of our research there were such important principles the implementation of which help increase the efficiency of professional training the future specialists for railway transport in the system of continuous gradual education: the principle of three components unity science - theory - practice; the principle of key role of activity; the principle of humanism (humanization); the principle of knowledge integrity; the principle of democratization; principle of creation «knowledge values» system; the principle of dynamism in education, knowledge mobility; the principle the unity of studies and upbringing formation world-view, values, moral, standards of behavior etc.); the principle of the system and consistency (a transition between the levels of vocational education); the principle of continuity of education (life-long learning); the principle of forming the motivational system of activity (professional); the principle of knowledge informatization; the principle of important role of a teacher; the principle “education for future”. The principles highlighted in our study were taken into account while creating the model of the system for professional training of future railway transport specialists according to conditions of continuity of professional education. Our further research will be aimed at implementing this model to system of professional training of future railway transport specialists in the practical activities of higher and professional higher educational institutions.

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## FORMATION OF POSITION IN PRIMARY SCHOOL CHILDREN IN PHYSICAL CULTURE LESSONS

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**Abstract.** The article considers the problem of posture formation in children of primary school age in physical education lessons. Diseases of the musculoskeletal system, including scoliosis and flat feet - is a problem of today with a thousand-year history. Therefore, doctors claim that recently the number of people with scoliosis and flat feet is growing significantly. The analysis of the literature showed that for the correction and prevention of posture requires a clear and purposeful use of physical education in the daily routine of students, as well as the creation and observance of certain hygienic conditions. We have proposed a set of physical exercises and therapeutic physical culture to solve this problem. The purpose of the study is contained in the methodological and theoretical substantiation of the foundations of the formation of the culture of movements of primary school students with posture defects through the interaction of gymnastic exercises and therapeutic physical culture. The set of gymnastic exercises should be developed individually taking into account the main pathological components of spinal deformity, the nature of scoliotic deformity. In the complexes of therapeutic gymnastics, much attention is paid to breathing exercises, which not only increase the functionality of the respiratory and cardiovascular systems, but also contribute to the active correction of the spine and chest. Thus, based on the results obtained in the experiment, we are able to claim that our proposed method of gymnastic special exercises has had a positive effect on posture development, improved movement culture and general physical development. Thus, research work requires further search for effective tools and methods of physical education for schoolchildren.

**Keywords:** posture, physical culture, physical exercises, medical physical culture, children of primary school age.

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 0; **tabl.:** 1; **bibl.:** 11

**Introduction.** Nowadays, the world community considers individual and public health to be a universally recognized value. The health of the nation is seen as an indicator of the civilization of the state, reflecting the socio-economic situation of society. According to UN Resolution №38 / 54 of 1997, public health is considered the main criterion of expediency and efficiency of all spheres of economic activity without exception. Moreover, experts believe that about 75% of diseases in adults is the result of living conditions in childhood and adolescence. Diseases of the musculoskeletal system, including scoliosis and flat feet - is a problem of today with a thousand-year history. Sitting at a desk, carrying bags with textbooks and modern loads in the crazy pace of life become a real challenge for the human spine. Therefore, doctors claim that recently the number of people with scoliosis and flat feet is growing significantly [9, 10].

It is very important at school to pay attention to how the child sits at the desk and behaves in everyday life. The problem of treatment and prevention of scoliosis and flat feet today is relevant and very important. Today, according to statistics, 7-8% of the population suffers from spinal diseases. Treatment of scoliotic spinal deformity has always been and is one of the most difficult issues in orthopedics. The Institute of Orthopedics and Traumatology of the Academy of Medical Sciences of Ukraine (Kyiv) is one of the leading centers in the field of traumatology and orthopedics, which studies diseases related to the musculoskeletal system of man. The Institute has developed a number of priority scientific problems that are of great importance for the development of domestic traumatology and orthopedics. It is here that the method of prevention and treatment of scoliosis was developed. The State Institution «M.I. Sytenko Institute of Spine and Joint Pathology of the Academy of Medical Sciences of Ukraine» (Kharkiv) is also studying the problems related to spinal diseases [3, 4].

According to available statistics, the prevalence of posture disorders among schoolchildren is 40-50%. Issues of posture disorders are described in detail in the works of domestic and foreign authors. However, this problem remains relevant today, arousing the interest of specialists in the field of physical education, sports and human health.

Posture is unstable during the period of increased growth of the child's body, which falls on the primary school age. This is due to the simultaneous development of the bone, joint and ligament apparatus and muscular system of the child. The creation of a new type of secondary school leads to overloading of the child's body due to the increase in the duration of classes and the volume of educational material. The total amount of knowledge that students receive in a modern Ukrainian school far exceeds their ability to master it, which leads to the deterioration of children's health. In particular, this is the cause of deviations from normal posture. A year after starting school, the number of children with postural pathology increases significantly [2, p. 76].

Posture defects create conditions for the manifestation of diseases of the spine and other organs of the musculoskeletal system, which leads to disorders of the internal organs. In children with posture disorders, the vital capacity of the lungs is reduced, the excursion of the chest and diaphragm is reduced, which creates unfavorable conditions for the activity of the cardiovascular and respiratory systems. Abdominal muscle weakness contributes to the disruption of the normal functioning of the abdominal organs. Decreased spinal function in children with a flat back causes constant brain microinjury during walking, running and other movements, which negatively affects higher nervous activity, is accompanied by a rapid onset of fatigue and often headaches [6, p. 251].

In the system of physical education of schoolchildren with postural disorders, mainly one means of correction is used - physical exercises. All this led to the choice of research topic and gives grounds to consider this problem relevant to the modern educational and correctional process.

**Literature Review.** The problem of physical education of the younger generation is one of the most important at the present stage of development of society. Leading specialists, scientists O.D. Dubogai, A.M. Laputin, V.O. Kashuba and others note that the formation of correct posture in children is one of the main pedagogical problems of school physical education. Numerous studies have shown that the process of physical education in school should provide objective control over the formation of the correct posture of students [5].

The human musculoskeletal system performs many functions, at the same time, in the process of development it is under the influence of various factors and is subject to certain changes, including pathological ones. One of the causes of deviations in health, reduced physical development, the emergence of pathological processes is a violation of the posture of the human body [2].

The scientific literature on the problems of children's posture sufficiently covers the issue of diagnosing the degree and nature of postural disorders.

The anatomical and physiological features of the formation of the musculoskeletal system of school-age children are revealed. Knowledge of which is a necessary condition for the successful development and implementation of preventive and health measures with the use of physical exercises aimed at improving posture and preventing its violation in children [1, p. 18-22].

Researchers R.A. Bannikova, M.E. Verich, I.V. Penkova, O.G. Sukharev and others determine that posture is an integrative indicator of children's health, even minor functional disorders can cause permanent deformation of the musculoskeletal system, which leads to serious consequences for children's health. An important condition for solving this problem, according to B.M. Mickan and E.S. Vilchkovskiy is an increase in skeletal muscle tone, which affects the formation of proper posture, is a consequence not only of improving the regulatory function of the central nervous system, but also the positive effects of exercise on the body of students.

Analysis of scientific and methodological literature [2, 4] shows that the violation of motor function of the spine and its morphofunctional changes occur usually due to changes in posture, as a result of which the spine can not withstand excessive mechanical loads and deforms and warps in the most vulnerable places.

The formation of the correct posture, prevention of defects - one of the most important tasks of physical education. The correct posture, as noted in the works of V.K. Vetlichenko, V.N. Seluyanov, V.O. Kashuba is important not only from an aesthetic point of view, but also from a physiological point of view: creating the best conditions for the activity of the whole organism, it provides a rational position and normal functioning of internal organs, promotes the lowest energy expenditure, increases efficiency [6].

The analysis of the literature showed that for the correction and prevention of posture defects it is necessary to clearly and purposefully use the means of physical education in the daily routine of schoolchildren, as well as the creation and observance of certain hygienic conditions [1, 4, 6].

At the international scientific-practical conference «Children's Health» (Kyiv, 2003) the expediency of comprehensive use of various means of correction of



postural disorders was noted. For the first time in Ukraine, such an approach to assessing the posture and physical development of children and adolescents, which diagnoses a quantitative assessment of physical health, was proposed by V.A. Shapovalova. Based on this method, a computer information and diagnostic program «Schoolboy» was developed, which is used for mass diagnostics of posture, physical health and rehabilitation and correction of children by means of therapeutic physical culture.

The above gives grounds to state the relevance of the chosen research topic, which is due on the one hand to the severity of the problem of school health, and on the other - the need to find effective solutions, which is certainly theoretical and practical significance for improving physical education.

**Aims.** The purpose of the study is contained in the methodological and theoretical substantiation of the foundations of the formation of the culture of movements of primary school students with posture defects through the interaction of gymnastic exercises and therapeutic physical culture.

We set the research objectives:

- to analyze the literature and research theory;
- to determine the specific essence of the formation of the culture of primary school students with posture defects;
- to identify the level of formation of posture in primary school students;
- to develop a method of forming the correct posture in junior high school students and test it experimentally in physical education lessons in the interaction of gymnastic exercises and therapeutic physical culture.

**Methods.** The following research methods were used to solve the problems of the pedagogical experiment:

1. Analysis of scientific and methodological literature
2. Pedagogical observations
3. Diagnostic methods.
4. Pedagogical experiment
5. Methods of mathematical (variational) statistics

*Analysis of scientific and methodological literature.* The analysis of scientific and special literature was carried out in order to study the state of the problem of the influence of gymnastic exercises on the formation of the culture of movements and the relevance of this problem. The basis of the literary analysis were considered: problems and prospects of active use of various means of gymnastics to improve the culture of movement in schoolchildren. Analysis of the literature allowed to characterize the correct posture and the factors that cause various posture disorders. The anatomical and physiological features of the formation of the musculoskeletal system of school-age children are revealed. Knowledge of which is a necessary condition for the successful development and implementation of preventive and health measures with the use of physical exercises aimed at improving posture and preventing its violation in children.

*Pedagogical observation.* In our study, the observation was conducted in order to study the culture of movements of primary school children as an indicator of

general culture; in order to identify the ability of students to maintain proper posture throughout the lesson. During the observation, attention was also paid to children's postures, their facial expressions and gestures, etc.

*Diagnostic methods.* We have developed tests to identify the impact of gymnastic exercises on the formation of the culture of movements of primary school children.

Test 1. «Posture» - walking on a bench, keeping the posture, pre-recorded near the wall.

The student stands with his back to the wall so that the back of his head, shoulders, buttocks and heels touch the wall, then moves away, and tries to maintain the correct posture, walks on the gymnastic bench. The ability to maintain the correct posture (without straining) in the process of walking on the bench is assessed. The test, which focuses on the formation of the correct posture as the basis of plasticity, also includes the use of additional load.

Test 2. «Plasticity» - a wave of the body.

Standing half a step from the gymnastic wall facing her, hands forward grip on top of the wall. The wave is performed by the torso from a circular squat. The degree of fusion of movement is revealed: alternate touching of knees, hips, a breast and smooth return to a semi-squat.

Test 3. «Coordination» - a general developmental exercise - currently.

Perform three general developmental exercises - currently. Clear performance of exercises and correct transition from one exercise to another (merger of performance of exercises), preservation of dynamic posture is estimated.

*Pedagogical experiment.* Pedagogical experiment - a fundamental method of research in physical education. According to the orientation, pedagogical experiments are divided into absolute and comparative. In our case, a comparative experiment. The comparative experiment is organized with a strict focus on establishing some new factor in the pedagogical process. In this case, we used as an experimental factor the influence of gymnastic and choreographic exercises on the general culture of movements of primary school students with posture defects.

*Method of mathematical and statistical processing of results.* This method was used to process the obtained results, which makes it possible to evaluate the obtained results not only from the qualitative point of view, but also from the quantitative point of view [7]. To process the average results were used:

- The arithmetic mean;
- The standard deviation;
- Medium error;
- Student's criterion.

To formalize the reliability of the differences between the average universal and definitive indicators find the coefficient T.

**Results.** As a result of observation, we found that a significant number of children do not follow their posture and pay attention to the posture only when the teacher reminds them of it. The muscles of the back and abdomen are mostly relaxed,

there is no smoothness when performing the exercises, but children happily try to look like their teacher when the teacher performs the exercise well and correctly.

**Discussion.** Posture is the ability of a person to hold his body in different positions. Posture can be right or wrong.

The correct posture is called the usual posture of a relaxed person who has the ability to keep the body and head straight without unnecessary active stress. A person with the correct posture has an easy gait, shoulders are slightly lowered and set back, chest forward, abdomen tightened, legs bent at the knees.

With the correct posture, the head and torso are on the same vertical line, the shoulders are deployed, slightly lowered and both are on the same level, the shoulders are pressed, the chest is slightly convex, physiological curves of the spine are normal (no more than 4 cm), legs are straight at the knees and pelvis. joints. The correct posture is characterized by the same level of shoulders, nipples, shoulder blades, equal length of cervical-shoulder lines (interval from ear to shoulder joint), depth of waist triangles, straight vertical line of spinous processes of the spine, evenly expressed physiological squamous curves, however cells and lumbar region (when leaning forward). Normally, the depth of lordosis in the cervical and lumbar spine coincides with the thickness of the palm of the subject. Deviation of these indicators from the norm indicates a violation of posture or scoliosis [1].

A significant role in the comprehensive treatment of children and adolescents with postural disorders belongs to exercise therapy, which is used in the sanatorium mode, and in particular in diagnostic modes. Exercise therapy is indicated for all children with postural disorders, as it is the only leading method that effectively strengthens the muscle corset, balances muscle tone, front and back of the torso, thighs. The main means of exercise therapy used for posture disorders in children are exercise, and massage and position therapy - an additional [8].

These classes should be held systematically, at least three times a week, in groups of 10 - 15 people or individually. The exercise course lasts for students 1.5 - 2 months, the break between courses is 1 - 2 months. Under the influence of exercise in the body there are a variety of positive structural and functional changes. In this case, the more intense (but optimal for these conditions) physical activity, the more active the processes during recovery and the more significant changes.

There are preparatory (1 - 2 weeks), main (4 - 5 weeks) and final (1 - 2 weeks) part of the course of exercise therapy. In the preparatory part of the course of exercise therapy are used familiar exercises with a small and medium number of repetitions of exercises. The visual perception of the correct posture and its imaginary representation is created, the level of the general physical fitness raises. In the main part of the course of exercise therapy increases the number of repetitions of each exercise. The main tasks of correction of existing posture disorders are solved. In the final part of the course of exercise the load decreases, the number of repetitions of each exercise - decreases. Throughout the course, unloading initial positions are applied lying on the back, abdomen, side, standing in the knee-elbow position.

In the complex of conservative treatment of scoliosis gymnastics occupies a prominent place. The set of gymnastic exercises should be developed individually

taking into account the main pathological components of spinal deformity, the nature of scoliotic deformity. The use of gymnastic exercises for therapeutic purposes in posture defects should primarily provide morphological correction, the formation of skills of correct posture, normalization of cardiovascular and respiratory systems and gastrointestinal tract on the background of general developmental effects. In the complexes of therapeutic gymnastics, much attention is paid to breathing exercises, which not only increase the functionality of the respiratory and cardiovascular systems, but also contribute to the active correction of the spine and chest. During the performance of exercises it is necessary to constantly pay attention to education and consolidation of the skill of correct posture, to demand exact performance of exercises [11, p. 62-63].

We started the formation of the culture of movements in the experimental part with the use of simple exercises, which are often elements of a coherent chain during gymnastic exercises. According to the classification of simple exercises, we divided into: relaxation exercises, different types of moves, ground exercises.

To combine the movements and actions of primary school students, it was proposed to study gymnastic movements, namely on the toes, in a squat, soft step, sharp, rolling, spring, lunges and others. During the performance, the experimenter required the girls to keep a clear posture, head and arms. For example, when learning a soft step, children had to bring out a leg with an outstretched toe and a straight knee, slowly lowering it from the sock to the floor and only then move on to the next step. Hand movements and splashes in the palm were added for mastering. In addition, relaxation movements were to promote more flexible performance of tasks. Students studied them with increased interest because tightness was required everywhere. Relaxation was performed with both the hands and the whole body, but the focus was on the gradual movements in the joints.

In the experimental group, students performed special exercises: 1) to form the correct posture and keep it in motion (walking) - a series of exercises for balance (types of walking on a gymnastic bench, including with a load (sandbag)); 2) for the development of plasticity, which included a series of exercises, represented a variety of "waves" of the body to the side, forward, backward, wavy movements of the hands in different directions; 3) for the development of coordination - general developmental exercises that were performed currently.

**Conclusion.** In the process of physical education classes in the experimental group, we gradually added a variety of traditional and non-traditional types of gymnastics. New non-traditional types of gymnastics (rhythmic, plastic, yoga, stretching) teach conscious control over the performed movements, self-control, mastering the ability to feel your body, muscles, relax. Exercises are aimed at relieving excessive stress, educating lightness, harmony, beauty and culture of movement.

We proposed a set of exercises for the formation of posture, which consisted of exercises for the formation of flexibility and coordination of motor skills:

1) tilts of the torso forward, backward, to the sides with the maximum amplitude - 10-15 times;

- 2) circular movements of the torso to the right and left - 10-12 times;
- 3) "bridge" from a supine position 0–3–5 times;
- 4) walking on a gymnastic bench, 5-7 times;
- 5) walking on a sloping bench, 4–6 times;
- 6) walking on a gymnastic bench with movement through objects 10-15 cm high, 4-6 times.

The results obtained in the experimental group: posture improved by 41%, plasticity by 43.7% and coordination by 44.5%. This suggests that the means of physical culture have a positive effect on the development of both posture and plasticity and coordination of movements. In the experimental group, we purposefully used in each lesson a variety of gymnastic exercises for posture, the development of plasticity and coordination. During the experiment, we obtained the following results, which are shown in table 1.

**Table 1. Test results in the experimental group at the beginning of the experiment and after it**

Name	Before the start of the experiment	After the end of the experiment	Difference	%
Posture	2,58	4,37	1,79	41
Plastics	2,3	4,08	1,88	43,7
coordination	2,45	4,41	1,96	44,5

Thus, based on the results obtained in the experiment, we are able to claim that our proposed method of gymnastic special exercises has had a positive effect on posture development, improved movement culture and general physical development. Thus, research work requires further search for effective tools and methods of physical education for schoolchildren.

**Author contributions.** The authors contributed equally.

**Disclosure statement.** The authors do not have any conflict of interest.

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## RESEARCH OF THE STRUCTURE OF LEARNING MOTIVATION AS A PREREQUISITE FOR FORMATION OF COMPETENCES OF THE FUTURE ECOLOGIST

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**Abstract.** This article considers the problem of insufficient motivation to acquire professional competencies by environmental students. Of course, the study of motivation for learning is always a topical issue. One of the priority areas of reforming modern education is to achieve a new level in the training of highly qualified specialists, including environmentalists. Proper preparation for teaching is now considered an important factor in improving the quality of education and, as a result, accelerating the socio-economic development of society. Analysis of the state of theoretical and experimental development of the problem of formation and development of motives, allows to determine the main directions in which modern research is carried out. The current stage of development of theory and practice of training future ecologists is characterized by an intensive search for ways to form and develop motives for future teaching, as one of the conditions for forming the foundations of their pedagogical skills. education. The issue of research of the structure of motivation of the student-ecologist to the choice of profession and educational-scientific activity in the educational institution as conditions of formation of professional competences is actualized. The ideas of different scientists on the definition of motivation and scope are studied. Motivation is recognized as a prerequisite and condition of activity, including training. The results of research of motives of choice of ecological specialty by students of profile educational institutions, training and realization of research activity are resulted. The low level of motivation for educational activity, the predominance of romantic and mercantile motives in choosing a profession, insufficient awareness of the need to acquire quality knowledge and research qualities. The problem of development of receptions and methods of strengthening of educational motivation of future experts in ecology is defined.

**Keywords:** motivation, motive, educational motivation, motivation for research activity, future ecologists.

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 3; **tabl.:** 0; **bibl.:** 9

**Introduction.** The main purpose of the Ukrainian vocational school is to create conditions for the possibility of acquiring a certain list of competencies necessary for successful production activities. Future ecologists are required to skillfully apply the acquired knowledge, skills and abilities in specific production and technological situations, creative thinking, self-promotion and implementation of individual environmental projects, as well as confident orientation in related fields of knowledge.

The scientific and pedagogical community pays enough attention to the study of factors and conditions that affect the formation of a competent ecologist. The study of the structure of motivation for educational and scientific activities as a condition for the formation of a competent specialist in ecology remains a topical issue.

**Literature Review.** To study this problem, a theoretical analysis was performed and literature sources on this issue were systematized. Foreign and domestic scientists D. McClelland, D. Atkinson, G. Heckhausen, G. Kelly, Y. Rotter,

K. Rogers, R. May, A. N. Leontiev and others. In the psychological and pedagogical literature, the motivational aspect of learning was given due attention by S. L. Rubinstein, G. C. Kostyuk, V. S. Merlin, V. O. Sukhomlinsky, M. I. Alekseeva, I. O. Tit and others.

Scientists have long paid due attention to the role of motivation in carrying out certain activities. As early as the first half of the last century, the American psychologist N. Murrau defined motivation as a person's need to achieve results in a certain job, the desire to overcome obstacles, the driving force in trying to do something complex faster and better [1].

Motivation by A. Markova was singled out as a sphere of behavior, which includes motives, goals, emotions and the ability to learn, as an incentive to activity associated with meeting the needs of the subject, his feelings, interests, habits. Motivation can consist of a number of different motives [2, p. 100].

T. Blank noted that "motivation is an incentive to action that increases human activity, determines its interests, needs, aspirations" [3, p. 2].

In turn, this concept of T. Dudar was defined as an internal motivating cause, an actualized need that motivates a person to certain actions and deeds, as a result of which the need can be satisfied [4, p. 162], and O. Bartkiv - a generator of human creativity, which encourages them to activity [5].

A. Fonaryov considered motives as motivating causes of human activity [6, p. 74]. In his opinion, they play an important role in directing and organizing the process of cognition, the formation of a lasting interest of students in learning.

G. Schukina claimed about the significant role of motivation in ensuring high activity of educational activities [7, p. 64] and O. Sushentsev [8], who determined that the most important motive for successful cognitive activity is cognitive interest.

The content of education of the future ecologist is reflected in the curriculum. However, T. Sulima notes that the motivation to study is influenced, in addition to the specifics of educational activities and educational content, features of the educational process, psychological and qualitative characteristics of students (age, gender, intellectual development, abilities, self-esteem), specifics of teaching disciplines. The researcher noted that constant motivation for learning activities can be the key to successful self-education, self-organization, self-control, perseverance in the study of educational material [9, p. 434].

The analysis of theoretical sources allows us to conclude that the presence of proper motivation to acquire the profession should be considered as a prerequisite and condition for the formation of a student ecologist as a competent specialist.

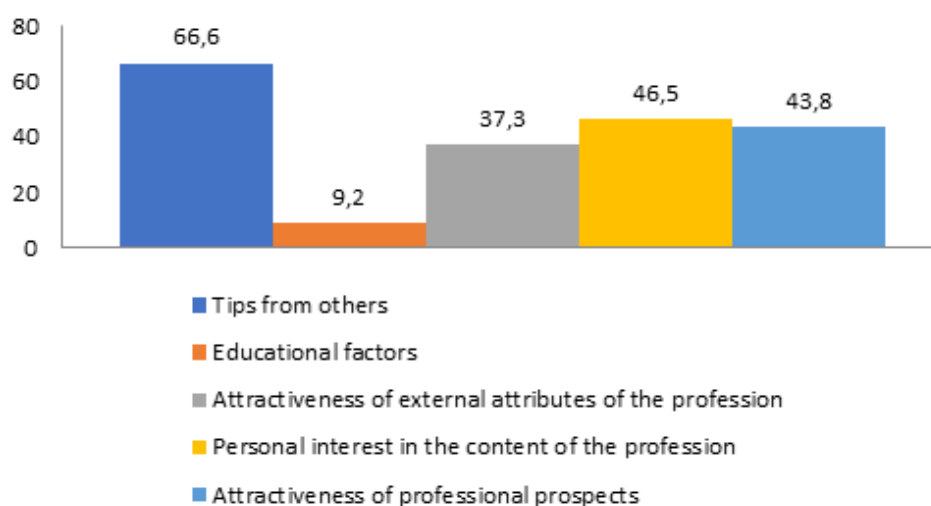
**Aims.** The purpose of the article is to research of the structure of educational motivation of students-ecologists to master the chosen specialty during the period of education.

**Methods.** Determining the structure of motives for environmental education was carried out during 2016-2018. The study involved 406 students majoring in "Ecology" and 20 teachers of natural sciences at five colleges in Kyiv, Dnipro, Myrhorod, Poltava region, Kamjanske and the city of Kryvyi Rih, Dnipropetrovsk region. The data were obtained by observing the educational activities of future

environmentalists, questionnaires of students, questionnaires and interviews of teachers involved in the study. The representativeness of the sample size allowed to draw reliable conclusions.

**Results.** Analysis of the data shows that 66.6% of respondents identified the priority factors of choosing a profession advice from others, which indicates the dominance of personal ignorance of the choice. Interest in the content of the profession of ecologist has become a priority for less than half of students (46.5%). 43.8% of respondents preferred the attractiveness of career prospects (these are indicators of conscious choice and personal desire for change for the better). Fascination with external features of the profession (prestige, high pay, comfortable working conditions, popularity of the profession, etc.) became relevant for 37.3% of respondents, and educational factors - only for 9.2%.

This dynamics coincides in the studied educational institutions with small differences. Generalized data of the whole group of respondents are shown in Fig. 1.



**Figure 1. Analysis of factors of choice of profession by students-ecologists, %.**

Simultaneously with the study of the factors of choosing a profession, these respondents studied the motives for mastering the profession. It should be noted that the majority of respondents identified several motives as a priority.

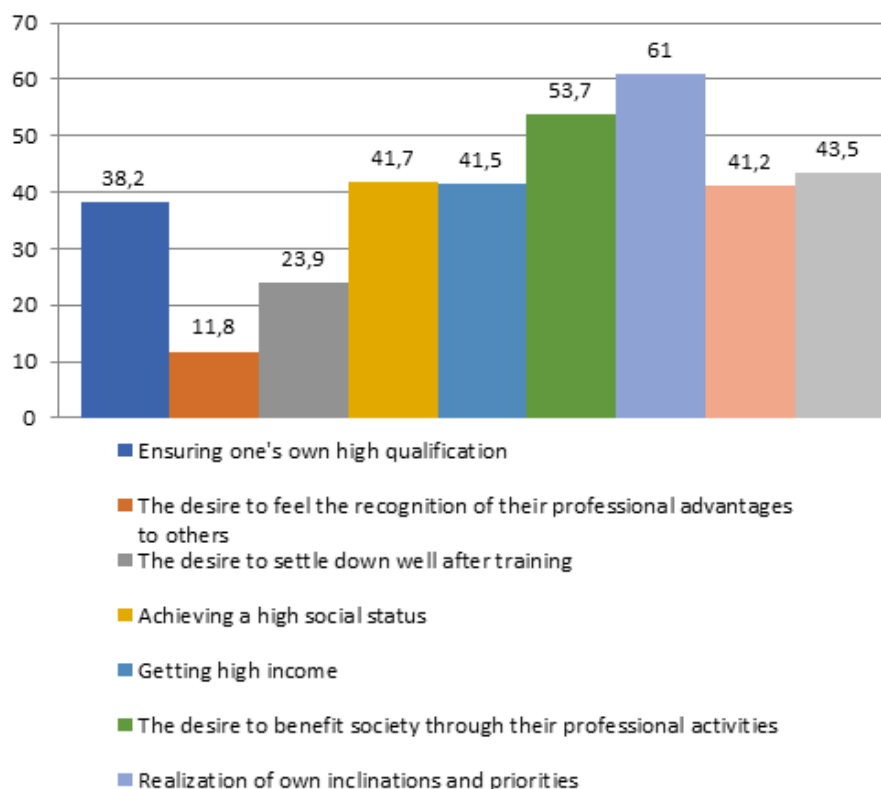
The students of the whole sample identified the realization of their own inclinations and priorities (61.0%) and the desire to benefit society with their professional activities (53.7%) as priority motives for mastering the profession, which, in our opinion, indicates the predominance of a fairly mature and realistic attitude to the profession of ecologist chosen by these students. But among these respondents, a significant proportion remained naive romantics with an immature choice of future professional activity, who chose to receive high income (41.5%) and achieve a high social status (41.7%).

It should be noted that more than a third of respondents (38.2%) consider the provision of their own high qualification to be the leading motive for learning. Naive and romantic motives also prevail among students, which indicate a fascination with the external attributes of the profession: the desire to benefit society through their



professional activities (53.7%) and the achievement of a high social status (41.5%). But college education, as a basis for further personal and professional development, which indicates a vision of further prospects for professional growth and for the realization of their own aptitudes and priorities, is present in almost half of students (43.5%). These data indicate a lack of professional motivation for learning among students, which, in turn, may lead to insufficient interest in research. The lowest rank was occupied by mercantile motives: a good job after training (23.9%) and a sense of recognition of their professional advantages among others (11.8%).

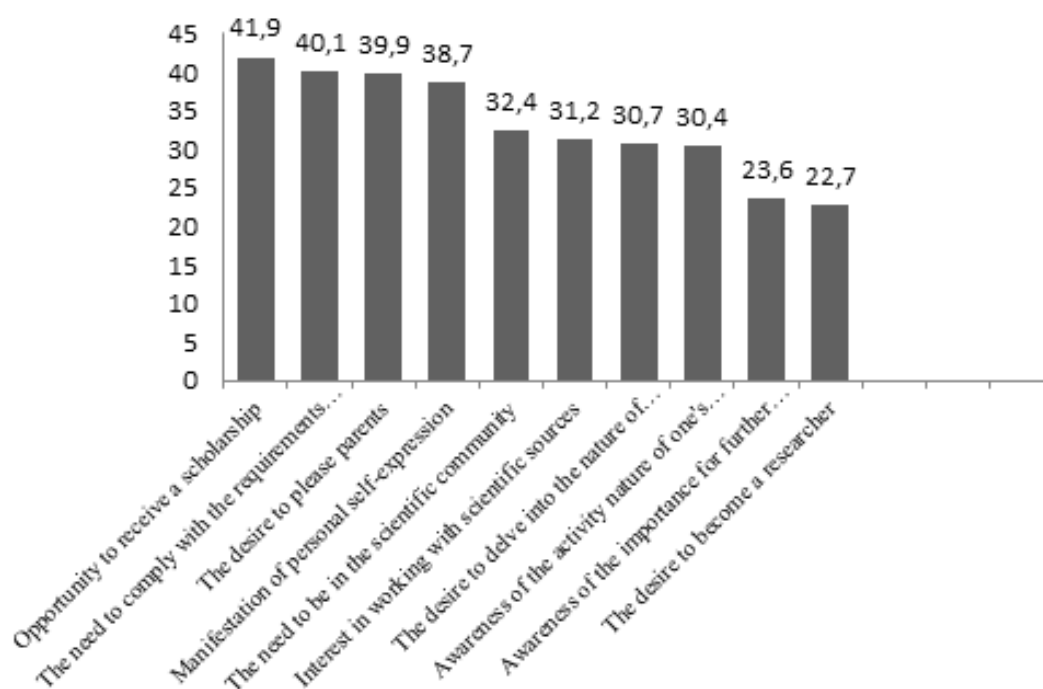
Summary data of the whole group of respondents are shown in Fig. 2.



**Figure 2. Analysis of motives for mastering the profession by environmental students, %.**

Thus, it was found that a significant number of respondents do not realize the nature of professional training and do not perceive college as the first step, the basis for further personal and professional development (only 43.5%), which does not meet modern requirements of the labor market and professional environment. It is significant that students of all educational institutions equally underestimate the importance of such motives as the social usefulness of their professional activities and gaining professional authority, professional recognition of their personality, which indicates the lack of social orientation of their own training and the dominance of purely selfish motives.

The survey of students allowed to rank the motives that motivate environmentalists to engage in research activities. Summary data of the whole group of respondents are shown in Fig. 3.



**Figure 3. Analysis of motives that motivate students to research, %.**

Based on the results, we can determine that the dominant motives for involving students in research activities are: the opportunity to receive a scholarship (41.9%); the need to comply with the requirements of teachers (40.1%); desire to please parents (39.9%); manifestation of personal self-expression (38.7%).

It should be noted that these motives for involvement in research activities, which are important for the surveyed students, are defined in the range from 38.7% to 41.9%.

It is also necessary to have a significant proportion of students who have a lack of understanding of the importance of mastering research skills, they demonstrate a model of behavior acquired in the context of secondary school. That is why the last places in the 10 most important motives were "Awareness of the importance for further professional activity" (23.6%) and "The desire to become a researcher" (22.7%).

**Discussion.** The results of research show that almost half of the students-ecologists have chosen this specialty situationally and therefore they do not see prospects in the future as specialists. It should be noted that the conscious choice of profession, the presence of appropriate motivation for learning, research and interest in studying disciplines determine the need of future environmentalists to engage in educational activities, in accordance with the objectives and goals of the educational process, and successfully complete it.

According to the results of student surveys, analysis of interviews with teachers involved in the study of educational institutions, there is always a significant share of freshmen who unknowingly, accidentally or due to a certain economic situation chose the profession of ecologist. As a result, such students are insufficiently motivated to learn and master professional skills. Also, most freshmen do not have sufficient

research skills, abilities and experience, they are not familiar with the methodology or practice of research. The vast majority of junior students are not able to productively organize their process of acquiring knowledge, work systematically, independently and persistently, which may be explained by insufficient formation of these qualities in secondary schools. It should also be noted that most students who study in colleges, not without the "help" of teachers tend to reproductive activities. This phenomenon is the reason why students do not gain experience of productive, creative work. The traditional problem is the lack of new textbooks and manuals in educational institutions, which represent the problematic presentation of educational material, and the possibility of using digital media and the use of Internet resources in the educational process is mostly based on enthusiastic teachers and so on.

**Conclusion.** The results of this study are of a recommendatory nature for the pedagogical community of educational institutions that work with students majoring in "Ecology". It is worth paying more attention to the implementation of techniques and tools to strengthen the motivation to learn the content of professional activities, which will contribute to the realization of students-ecologists of their abilities, the disclosure of their creative potential and effective professional implementation.

Based on the results obtained, we must conclude that assigning the student the role of performer, the one who must act according to a clearly defined algorithm, does not contribute to the development of creative potential of the individual and forms a utilitarian type of their worldview. In addition, a significant number of future environmentalists are not yet aware of the importance for future professional activities of mastering thorough knowledge, skills, abilities, appropriate motivation and experience, typical of a competent specialist.

The prospect of further research we see in the development of methods and techniques to increase student motivation for teaching, research and professional activities, research and analysis of the effectiveness of their impact on the consciousness and effectiveness of educational achievements of future environmentalists.

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## ORGANIZATION AND ANALYSIS OF RESULTS OF RESEARCH AND EXPERIMENTAL WORK ON FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE EDUCATORS OF EDUCATORS

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**Abstract.** *The need to solve the problem of forming the professional competence of future educators of preschool education determined the purpose of the experimental work - the implementation of pedagogical conditions and structural and functional model of forming the professional competence of future educators of preschool education on the basis of interdisciplinary approach. The logic of experimental work (concretization of experimental procedures development) in the context of approbation of the developed structural-functional model of the studied phenomenon allowed to objectively assess its sufficiency and necessity for effective formation of professional competence of future educators in the context of expediently created, timely controlled pedagogical conditions. meaningful and integrative pedagogical possibilities of interdisciplinary approach.*

*The experiment is considered as a method of scientific knowledge, which consists in the purposeful study of any phenomenon of reality in controlled and controlled conditions. The experiment, acting as a criterion for the truth of scientific knowledge, was the basis for testing hypotheses and predictions of the theory. To solve the set tasks, a pedagogical experiment was chosen, which was conducted in three stages: ascertaining, formative, and final. The choice of method is explained by the fact that it is planned to compare the results of formation of professional competence of future educators of ZDO in traditional training of students and within the implementation and realization in the educational process of pedagogical conditions and structural-functional model of formation of professional competence of future educators of preschool institutions. . The structural organization of the pedagogical experiment included: organizational training, pre-experimental section, experimental training, final post-experimental section. The results of comparative studies of the formation of professional competence in future educators of preschool education institutions in the control and experimental groups are presented.*

**Keywords:** *professional competence, methods of competence assessment, pedagogical experiment, criteria, indicators, levels.*

**JEL Classification:** I0; I20

**Formulas:** 0; **fig.:** 0; **tabl.:** 0; **bibl.:** 6

**Introduction.** In modern psychological and pedagogical research of domestic and foreign scientists the modernization of higher professional education on the basis of the competence approach is actualized [2, p. 68]. The formation of competencies of future professionals is the main goal and result of higher education. The specifics of pedagogical training - in a combination of pedagogical and special components of the disciplines of the curriculum, which, accordingly, is manifested in the formation of a block of pedagogical and special competencies [5, p. 37]. The study of the formation of professional competence of future educators of preschool education (PE) on the basis of an interdisciplinary approach necessitated an experimental test of the effectiveness of the developed structural and functional model that implements the pedagogical conditions for the formation of professional competence.

**Aims.** The purpose of the study is to analyze the dynamics of changes in the formation of professional competence of future educators of preschool education on

the basis of an interdisciplinary approach during the formative pedagogical experiment.

The task of the research: to find out the role of the interdisciplinary approach in the training of future educators of preschool education institutions and its influence on the process of formation of their professional competence.

The pedagogical experiment involved 309 students from 4 institutions of pedagogical education, from which the control (2 KG,  $n = 145$ ) and experimental (2 EG,  $n = 164$ ) groups were formed.

A comparative analysis was carried out between the indicators of the levels of formation of professional competence of future educators of preschool education institutions of the control and experimental groups at the beginning of the experimental study on their homogeneity; the levels of formation of this indicator of the control and experimental groups at the beginning (III year of study) and at the end of the experimental study (IV year of study) were assessed.

**Methods.** For realization of the purpose and tasks of research traditional (theoretical analysis and generalization of data of scientific and methodical literature: abstraction, systematization, comparison and comparison) and specific research methods were used (deductive, axiomatic, hypothetical-deductive, inductive methods - for definition of structure professional competence of future educators of preschool education institutions, characteristics of indicators and levels of its formation and to develop a diagnostic map for assessing the formation of professional competence of future educators of preschool education institutions, methods of descriptive statistics, methods of comparing nominal data.

**Results.** The most important stage of scientific analysis of the formation of professional competence of future educators of (PE) on the basis of interdisciplinary approach is a pedagogical experiment, which is one of the most effective ways to objectively test the validity of the research hypothesis. Theoretical analysis of the problem associated with the use of interdisciplinary approach to the formation of professional competence of future educators (PE), identification of factors, trends and contradictions determined the content and methodology of research and experimental work, as well as outlined key guidelines in its organization that meet the requirements pedagogical experiments [1; 4; 6].

The pedagogical experiment, the purpose of which was to test the effectiveness of pedagogical conditions and the effectiveness of the structural and functional model of formation of professional competence of future educators of (PE) on the basis of an interdisciplinary approach, was conducted during 2017-2020.

To achieve this goal, the tasks were formulated, which were solved within the framework of achieving the targets of the study:

- to analyze the initial state of the researched problem in the theory and practice of psychological and pedagogical science, interdisciplinary researches;
- to organize the educational activities of future educators of (PE) on the basis of the developed structural and functional model of formation of professional competence of future educators of (PE);

- to diagnose the formation of professional competence of future educators (PE) after graduation, using the completeness and adequacy of the selected criterion-diagnostic tools that reflect the degree of manifestation of each component (motivational, cognitive, procedural, personal) of the studied integrative professional and personal characteristics. sufficiently objectively judge the intensity and direction of change.

In general, the experimental work covered three stages: ascertaining, formative and final. The first stage involved the initial diagnosis (observational experiment) and analysis of the data. The result of this stage was the division of respondents into 2 groups: control and experimental. The second stage involved the organization and implementation of a formative experiment: the implementation of pedagogical conditions and structural and functional model of the formation of professional competence of future educators (PE) on the basis of an interdisciplinary approach. The third stage included re-diagnosis (final experiment) after the implementation of pedagogical conditions and the designed structural and functional model of formation of professional competence of future educators of (PE) on the basis of an interdisciplinary approach. Also, the final stage involved comparing the results of primary and re-diagnosis of respondents from both groups, conducting qualitative and quantitative analysis, as well as displaying a comparative analysis of data. At the last stage of the study, a statistical analysis of the results was performed.

The general direction of the experimental research was to identify the effectiveness of the implementation of pedagogical conditions for the formation of professional competence of future educators (PE) on the basis of an interdisciplinary approach. Empirical methods (pedagogical observation, testing, questionnaires, conversation) and mathematical methods of processing results were used to perform the tasks of the formative experiment. The methods of mathematical statistics were used to generalize the measurement results, analyze them and correlate them with the probabilistic characteristics of the studied objects. Experimental testing of the effectiveness of pedagogical conditions and the effectiveness of the structural-functional model was conducted on the basis of four institutions of higher pedagogical education. The study involved 164 students studying in the areas of training "Preschool Education".

To test the effectiveness of the proposed pedagogical conditions, students were divided into control and experimental groups. Given that the division into groups was carried out randomly, there was a need to study the homogeneity of these groups. To do this, a diagnosis of the formation of levels of professional competence of future educators (PE) at the beginning of the experiment, the results of which are shown in table. 1.

**Table 1. Levels of formation of professional competence of future educators of (PE) at the beginning of the experiment**

Training direction	Groups	Number of students	Levels of formation					
			High		Medium		Low	
			Abs.	%	Abs.	%	Abs.	%
Pre-school education	EG	80	14	17,5	18	22,5	48	60,00
	KГ	84	17	20,24	19	22,62	48	57,14

According to the data presented in the table, the levels of formation of professional competence of future educators ZDO at the beginning of the experiment in the experimental and control groups do not have significant differences. It should be noted that in the control groups there was an even larger (by 2.86%) number of students who are at high and medium level and a smaller (by 2.86%) number of students at a low level of professional competence of future educators.

To verify the reliability of the detected minor differences, which indicate the homogeneity of the control and experimental groups, the nonparametric Pearson's criterion (chi-square) was used [3, p. 286]. Due to the different number of students in the control and experimental groups, the distribution of relative frequencies was used, the sum of which should always be equal to 100%. Our distribution meets the main requirement of Pearson's criterion - the frequency of the interval is not less than 30. We formulate the null hypothesis as follows: the experimental and control groups are chosen homogeneous, they do not differ significantly in success. Considering the three levels (high, medium, low), we note that there are degrees of freedom. To

calculate we use the formula:  $\chi^2 = \sum \frac{(f_{\text{эксп.}} - f_{\text{контр.}})^2}{f_{\text{контр.}}}$ . The calculations are given in table. 2.

**Table 2. Calculation -criterion for the levels of formation of professional competence of future educators PE at the beginning of the experiment**

Level	Frequency $f_{\text{эксп.}}$	Frequency $f_{\text{контр.}}$	Relative frequency ( $f_{\text{эксп.}}$ %)	Relative frequency ( $f_{\text{контр.}}$ %)	$(f_{\text{эксп.}} - f_{\text{контр.}})$	$(f_{\text{эксп.}} - f_{\text{контр.}})^2$	$((f_{\text{эксп.}} - f_{\text{контр.}})^2) / f_{\text{контр.}}$
High	14	17	17,5	20,24	-2,74	7,5076	0,37092
Medium	18	19	22,5	22,62	-0,12	0,0144	0,000636
Low	48	48	60,00	57,14	2,86	8,1796	0,14315
Sum	80	84	100	100	0		<b>0,51</b>

Found 0.51. From the table of critical values of the criterion [3, p. 288] received a tabular value of 95% probability: 5.99. Since, the null hypothesis is accepted: experimental and control groups do not differ in the level of formation of professional competence of future educators of PE. The value obtained is not large enough, which indicates that the differences between the distribution of EC and CG in terms of indicators are insignificant.

Thus, the results of the analysis conducted at the beginning of the formative experiment indicate that students of control and experimental groups have approximately the same level of formation of professional competence of future educators of PE.

The next stage of the formative experiment was the introduction into the educational process of students of experimental groups of a set of pedagogical conditions and structural-functional model of formation of professional competence of future educators of PE on the basis of interdisciplinary approach. To identify the effectiveness of the proposed pedagogical conditions, the levels of professional competence of future educators of PE were checked. In the interests of the



experimental study, a comparison of the levels of professional competence of future educators of PE in students of CG and EG, the composition of which changed to take into account students who dropped out (73 students entered the EG, 72 students majoring in "Preschool Education").

The results of the diagnosis demonstrate the dynamics of changes observed between the initial and final results of the study in the experimental and control groups (Table 3).

**Table 3. Levels of formation of professional competence of future educators of PE**

Training direction	Groups	Number of students	Stages of the experiment	Levels of formation					
				High		Medium		Low	
				Abs.	%	Abs.	%	Abs.	%
Pre-school education	EG	80	start	14	17,5	18	22,5	48	60,00
		72	finish	<b>25</b>	<b>34,72</b>	<b>33</b>	<b>45,83</b>	<b>14</b>	<b>19,45</b>
	KG	84	start	17	20,23	19	22,6	48	57,13
		73	finish	<b>18</b>	<b>24,66</b>	<b>25</b>	<b>34,25</b>	<b>30</b>	<b>41,09</b>

Qualitative indicators (the percentage of students with high and medium levels of professional competence of future educators PE) at the end of the formative experiment in the experimental groups is 80.55%, while in the control - 58.91%. The high level of formation of professional competence of future educators of PE in the experimental groups increased by 17.22%, while in the control groups only - by 4.43%. The difference between the average level in the control and experimental groups is 11.58% in favor of the latter. Comparison of the results at the beginning and end of the experimental activity indicates the presence of positive dynamics in the experimental groups. This increase in the level of professional competence of future educators of PE in experimental groups is explained by the effectiveness of the formative experiment.

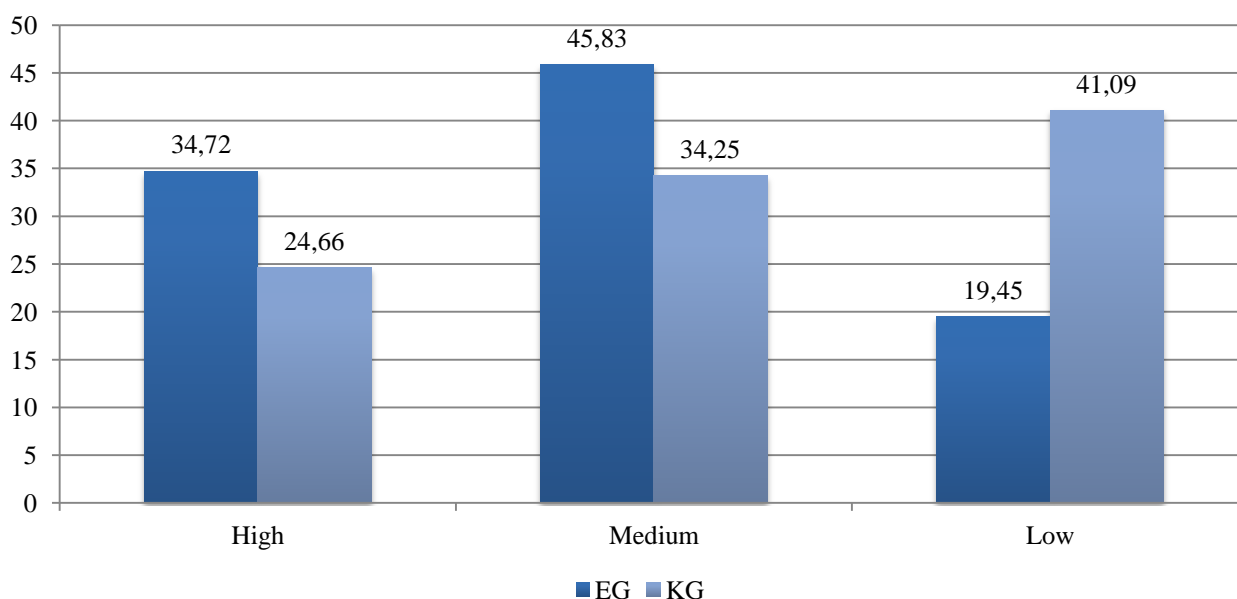
To determine the probability of the obtained results, we use the Pearson coefficient [3, p. 286], calculating  $\chi^2$  for the proposed criterion (Table 4).

**Table 4. Calculation of  $\chi^2$  to determine the levels of formation of professional competence of future educators PE**

Level	Frequency $f^1$	Frequency $f^2$	Relative frequency ( $f^1\%$ )	Relative frequency ( $f^2\%$ )	$(f^1 - f^2)$	$(f^1 - f^2)^2$	$((f^1 - f^2)^2) / f^1$
High	25	18	34,72	24,66	10,06	101,2036	4,10395
Medium	33	25	45,83	34,25	11,58	134,0964	3,91522
Low	14	30	19,45	41,09	-21,64	468,2896	11,39668
Sum	72	73	100	100	0		<b>19,42</b>

The number of intervals  $n = 3$  (levels of formation), so the degree of freedom is  $s = n - 1 = 2$ . According to the table  $\chi^2$  - Pearson's criterion, we establish that the corresponding 2 degree of freedom critical value is  $\chi^2_{crit.} = 5.99$  [3, p. 288]. Since we found  $\chi^2_{exp.} = 19.42$  more than  $\chi^2_{crit.}$ , The null hypothesis is rejected, which means a difference in the learning outcomes of students in the experimental group. This is evidence of the effectiveness of the proposed pedagogical conditions.

For clarity of change of levels of formation of professional competence of future educators of ZDO in experimental and control groups after carrying out formative experiment is resulted in fig. 1.



**Figure. 1. Levels of formation of professional competence of future educators of PE at the end of the experiment in EG and KG**

**Discussion.** Thus, on the basis of the obtained experimental data we can conclude that the pedagogical conditions for the formation of professional competence of future educators PE, which were implemented on the basis of structural and functional model, increase the levels of professional competence of future educators PE. The results of the experimental study are confirmed by reliable indicators, which are verified using the methods of mathematical statistics.

**Conclusion.** Thus, pedagogical monitoring of training of future educators of preschool education on the basis of interdisciplinary approach is carried out using a set of diagnostic techniques that allow to study the course and results of gradual development of all components of professional competence and observe the dynamics of its formation in students. The integrity and effectiveness of the criterion-diagnostic apparatus used to assess the level of professional competence is ensured by the gradual formation of its components according to their indicators, best accumulates individual diagnostics, including author's, and allows full reflection of the process of professional competence of future SMEs. training on the basis of an interdisciplinary approach.

We see further scientific research in the continuation of improving the professional training of future educators of preschool education institutions in order to comprehensively form their professional competence on the basis of an interdisciplinary approach.

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