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ORIGINAL ARTICLE



ECOLOGICAL CONSCIOUSNESS FORMATION AMONG STUDENTS AS RELEVANT AND GLOBAL PROBLEM OF THE PRESENT: UKRAINIAN AND POLISH EXPERIENCE

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Halyna V. Bilavych¹, Larysa V. Slyvka¹, Iryna I. Rozman², Jan Bilawicz³, Nadiya O. Fedchyshyn⁴, Larysa Ya. Fedoniuk⁴, Boris P. Savchuk¹

¹VASYL STEFANYK PRECARPATHIAN NATIONAL UNIVERSITY, IVANO-FRANKIVSK, UKRAINE

²MUKACHEVO STATE UNIVERSITY, MUKACHEVO, UKRAINE

³WARSAW MEDICAL UNIVERSITY, WARSAW, POLAND

⁴ I. HORBACHEVSKY TERNOPIL NATIONAL MEDICAL UNIVERSITY, TERNOPIL, UKRAINE

ABSTRACT

The aim: The purpose of the study is to develop a scientifically grounded methodology for the formation of ecological consciousness among students on the activity basis, taking into account the interdisciplinary approach in the process of extracurricular work.

Materials and methods: The research was conducted during 2016–2021 on the basis of pedagogical faculty of Vasyl Stefanyk Precarpathian National University (PNU, Ukraine) in several stages. At the theoretical and diagnostic stage, the state of problem development in the scientific literature was studied; international documents on environmental protection and sustainable development were studied; domestic pedagogical experience was analyzed and generalized; through interviews, questionnaires, observations, interviews a statement experiment was carried out, which resulted in initial data on the state of environmental knowledge of future professionals, study the results of students' acquisition of environmental knowledge in university, their attitude to environmental protection, willingness to improve their knowledge of nature. 200 students were involved in the experiment. Also, students from the Warsaw Medical University (WMU, Poland) were interviewed.

Results: The ecological consciousness formation among future specialists has to be done on the activity basis. It should be a purposeful and completely voluntary process, taking into account the students' interests on interdisciplinary basis, using traditional methods (narration, conversation, lecture, etc.), but with an emphasis on the activity basis. Environmental education in higher education institutions should gain the status of a strategic large-scale and high priority course, with expanded and updated content, form and methods of training, which are based on the activity basis.

Conclusions: Forms and methods of ecologic and humanistic nature forming the ecological consciousness of a person create a model of positive moral and social behavior; forming such a behavior among students will ensure the nature preservation on planet Earth.

KEY WORDS: formation of ecological consciousness, environmental education, students, Ukrainian students, Polish students

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INTRODUCTION

At the beginning of the XXI century the problem of environmental education among children and youth has become particularly acute as the environmental situation in the world and in certain regions of Ukraine worsen. Therefore, specialists consider it as pan-European and all-planetary. Boys and girls who after graduating from a secondary school receive vocational education at universities, are obliged to be included in the system of educational influence at the appropriate level. Environmental education starts in the family and preschool, continues at school, naturally and logically should be continued in higher education institutions (HEI), and thus throughout life [1].

Complexity of this process is due to the fact that the youth starts an independent life in the era of not only rapid development of science, technology, but also of those challenges that are associated with risks. They are provoked by negative effects of the scientific and technological rev-

olution, environmental disasters, etc. These challenges are of all-planet scale [2; 3].

We are currently monitoring serious steps taken by Ukraine at the legislative level: in 2019 the Law "On Basic Principles (Strategy) of the State Environmental Policy of Ukraine until 2030" was adopted, which is our country's response to the challenges of globalization and social transformation. Ukraine, on the one hand, has clearly declared the priority of environmental protection, ecologically balanced nature management, on the other hand, outlined the root causes of environmental problems, including the subordination of environmental priorities to economic feasibility; low level of understanding in the society of the priorities of environmental protection and the advantages of balanced (sustainable) development, imperfection of the system of ecological education and enlightenment; unsatisfactory level of compliance with environmental legislation and environmental rights and responsibilities of citizens, etc. [4]. The analysis of this Law gives grounds to assert that the Strategy of the State Environmental Policy of Ukraine until 2030 corresponds to the ideas of ecologically balanced nature management, in particular the Resolution of the United Nations General Assembly "Transforming our world: Sustainable Development Agenda until 2030" [4].

The drama and complexity of the situation, among other things, is that, according to the above state documents, the leading tasks of environmental education are the formation of environmental culture by means of formal and non-formal education of all segments of the population. At the same time, theoretical and methodological principles of environmental education in higher educational institutions require an indepth analysis of the problem of specialist's training (teacher, ecologist, engineer, physician, diplomat, etc.) as a new type of personality who is able to develop environment-friendly society and solve problems of nature preservation.

THE AIM

The purpose of the study is to develop a scientifically grounded methodology for the formation of ecological consciousness among students on the activity basis, taking into account the interdisciplinary approach in the process of extracurricular work.

MATERIALS AND METHODS

The research was conducted during 2016–2021 on the basis of pedagogical faculty of Vasyl Stefanyk Precarpathian National University (PNU) in several stages.

At the theoretical and diagnostic stage, the state of problem development in the scientific literature was studied; international documents on environmental protection and sustainable development were studied; domestic pedagogical experience was analyzed and generalized; through interviews, questionnaires, observations, interviews a statement experiment was carried out, which resulted in initial data on the state of environmental knowledge of future professionals, study the results of students' acquisition of environmental knowledge in university, their attitude to environmental protection, willingness to improve their knowledge of nature.

200 students were involved in the experiment. Also, students from the Warsaw Medical University (WMU) were interviewed.

RESULTS

Thus, the training a specialist with a high level of environmental knowledge, environmental awareness and culture on the basis of new criteria for assessing the relationship between human society and nature (not violence, but harmonious coexistence with it) should be one of the main levers in solving extremely acute environmental and socio-economic problems of modern Ukraine.

The main educational documents also stress on the importance of environmental education of the upcoming

generation. The Concept of Environmental Education, adopted in 2001 in Ukraine, which is based on the Law of Ukraine "On Environmental Protection" (in particular Article 7 "Education and Upbringing in the Field of Environmental Protection") [5] emphasizes that the main purpose of ecological education is the formation of environmental culture of individuals in particular and society in general, the formation of skills, fundamental environmental knowledge, environmental thinking and consciousness, based on the attitude to nature as a universal, unique value [6].

Consequently, the young person of the XXI century needs a new philosophy of life, a high level of ecological culture and ecological consciousness, formed ecological conservation skills, nature preservation behavior. Ecological consciousness formation of the person is caused not only by the need of time, it is an important pedagogical problem. Environmental education is now one of the leading directions in professiogram formation of future specialists who study at a higher school institution. It is important that the student mastered the knowledge of general laws of nature and society development, properly understood relationship of the existence between human and nature, being able to subordinate their activities to the requirements of rational nature management. Under such conditions, it is possible to efficiently solve global environmental problems which face not only Ukraine but also the whole human civilization.

There are grounds to argue that the natural wealth of the present generation of Ukrainians, inherited from thousands of previous generations, is a testimony to the high level of their ecological consciousness. The knowledge of nature as a gift of God, that should be preserved and valued, has been transmitted for centuries from the great-grandfathers to the growing generations. Therefore, Ukrainian pedagogical knowledge in the field of nature conservation should be updated and virtually applied in higher education institutes.

Scientists believe that ecological consciousness is a higher level of people's mental perception of nature, a sphere of social and individual consciousness, which is inextricably linked with the reflection of nature as a part of human life, the image of place and role of a human in the environment, as well as self-regulation of this reflection. Under the ecological consciousness (according to opinion of the majority of scientists) we understand the totality of ideas of interaction in the system "human – nature" and in nature itself, attitude towards nature, as well as corresponding interaction strategies with it [7; 8; 9; 10].

According to anthropocentric approach, ecological consciousness is defined as human's knowledge and understanding of its possibilities of influence on nature. It may serve as a definition of the goals of such influence, the evaluation of options for predictable behavior in the eco-environment, taking into account the consequences of behavior and self-cognition as one of subsystems of the ecosystem [10].

The problem of the ecological consciousness forming among future specialists is multidimensional. The meth-

odological foundations of environmental education and upbringing in higher education institutes were considered in the studies of A. Slastionina, A. Nekos, A. Myronova, H. Tarasenko, N. Lysenko, H. Danylova, N. Hnylusha, and others. The works of these scientists reveal the methodological and theoretical foundations of environmental education and conditions for their implementation. In the dissertation works of L. Lukyanova, N. Hreyda, M. Shved the issues of the system of ecological culture components formation, consciousness and world outlook, were outlined. Formation of ecological consciousness of a person as a psychological problem was studied by S. Deriado, T. Ivanova, I. Kryazh, A. Lyovochkina, V. Yasvin and others. From the foregoing, it may be concluded that many scholars were engaged in the study of the problems of environmental education of future specialists, but in general, their researches were aimed at preparing future teachers for teaching various special courses (T. Hladiuk, M. Shved), determining the readiness level for environmental education (M. Boycheva, T. Ninova), formation of ecological culture (N. Hreyda, V. Krysachenko, H. Ponomaryova). At the same time, the problem of students' educational consciousness formation is not sufficiently disclosed in pedagogical and psychological aspects. In our opinion, more attention has to be paid to the issue of content-conceptual foundations of students' educational consciousness, foundations for development of this personal quality on the activity basis, taking into account the interdisciplinary approach.

Nowadays, there is ambiguity and variety of interpretation of content patterns of the concept of "educational consciousness", which is linked to numerous approaches to the study of this notion, which rely on different theories. Considering the ontology of the notion of "consciousness", we draw attention to the fact that from a psychological standpoint, it integrates into itself three interrelated categories: mental reproduction of the natural, social and artificial environment; mental expression of the personal "I" in this environment; self-reflection and self-relation of "I" to reality and to this environment.

From the pedagogical point of view, the ecological consciousness formation of a person is a complex and laborious process aimed at rethinking knowledge, transforming them into beliefs, which evoke value orientations and settings among boys and girls, their conscious and responsible attitude towards nature. Under such conditions, in the terms of ecological consciousness, nature is the highest value. Ecological consciousness is a category that depends on the level of development of such features as concern about the state of the environment, a sense of responsibility, a moral attitude towards nature, etc.

The purpose of the study is to develop a scientifically grounded methodology for the formation of ecological consciousness among students on the activity basis, taking into account the interdisciplinary approach in the process of extracurricular work.

In the course of research, the following methods were used: theoretical methods: specific search (analysis of scientific literature on researched problem) for systematization and synthesis of facts, information, subjects of research, materials on studied topic and definition of the essence of the basic concepts; structural and functional (tutorials, dictionaries, reference books, fiction, collections of oral folk art, etc.) to substantiate the structure, content, principles of constructing the methodology of forming the environmental consciousness of students; empirical methods: observation, conversation, interview with the aim of clarifying the level of ecological consciousness among students, identifying the attitude of students towards the implementation of environmental education.

The level of ecological consciousness of future specialists in higher education institutes will increase in case of: formation of environmental abilities and skills of students will be carried out on the activity basis by using the interdisciplinary approach; systematically work on the formation of ecological consciousness of future specialists, the expansion of their knowledge of nature, nature management, environmental conservation, the environment and its protection, etc.; formation of a value relation to nature preservation; to involve students in nature conservationand scientific research activities, to create an ecologically rich environment.

In the context of the concept of our study, the opinions of scientists from Europe, Great Britain, and the United States, who actualize the problem of ecological consciousness, fit harmoniously [11; 12]. The main message of these works is as follows: a human in its actions and relations with nature should be responsible for the decision making [13]. The authors also emphasize the legal aspect of the environmentally appropriate behavior, value-oriented knowledge as an important component in the system of environmental training of children and youth.

For Ukrainian schoolchildren, students, as well as teachers and professors in higher education institutions, the manual book "Environmental Handbook 01 Environmental Education" [14] can become a table book on ecological education programs operating in the UK. This is an effective educational and methodological resource that answers the question "What is environmental education and how to implement it?" [15].

Let's pay attention to the research "Environmental Education and Student's Perception, for Sustainability" [16] conducted by Gratiela Dana Boca and Sinan Saraçlı. The authors surveyed 358 students at the Northern Center of the University of Baia Mare (Romania). They studied the state of environmental education of students of engineering and electrical, mechanical, economic specialties, their attitude to ecological problems, analyzed the participation of future specialists in environmental protection activities. It should be noted that Ukrainian scientists have not conducted a similar study.

The research was conducted during 2016–2021on the basis of pedagogical faculty of Vasyl Stefanyk Precarpathian National University in several stages.200 students were involved in the experiment, also, students from the Warsaw Medical Universitywere interviewed.

Theoretical and methodical basics of a technique of creation of the ecologically saturated ecological environ-

Table 1. Participants of experimental study

Name of the specialty	Number of respondents at the I – V years of Vasyl Stefanyk Precarpathian National University and Warsaw Medical University					Total number of respondents
	l year	II year	III year	IV year	V year	
engineering	28	3	0	20	5	50
biology	3	3	10	22	12	50
pedagogy	2	26	0	16	6	50
medicine	0	0	0	25	25	50
Total	33	32	10	83	48	200

ment for formation of nature protection knowledge and ecologically expedient behavior of experts in educational process of high school and in out-of-class work were developed, conclusions were formulated and methodical recommendations were implemented.

The purpose of the survey is to find out the students' attitude towards environmental problems, the level of their ecological awareness and environmental activities.

The questionnaire was created on Google Forms and was used both as an online form and as the standard manual filling by the audience.

Among the respondents there were students acquiring engineering, biological, pedagogical, medical education. The participants were aged 18-22 years. The ratio of men and women at this stage of the experiment ranged as follows: 34.66% of males and 65.34% of females (total 200 people). The general characteristics of the sample of students are given in table I.

At the beginning of the experiment, 200 questionnaires were issued. The main purpose of the questionnaire was to determine the level of environmental awareness among students. The most active were fourth-year students (Table I). For various reasons, third-year students abstained from engineering, pedagogical and medical specialties. The answers of biology students (PNU), medical students (WMU) showed a sufficient level of theoretical knowledge about environmental issues, proved a high desire and goal setting for self-development and self-improvement. Pedagogy students showed better knowledge in a general culture. Students – future engineers – showed the lowest results and the least interest in this survey. About 31.33% of students did not want to identify themselves as "anonymous".

Let's analyze some data from the survey of fourth-year students, as they most actively participated in the study and in general almost the same number of students participated in the survey (25% of future physicians; 20 future engineers; 20 future biologists; 16 future teachers).

Ecological consciousness is an extremely complex, multifaceted, systemic phenomenon, which is inseparable from self-consciousness of an individual. In the "ecological consciousness" phenomenon the constructs that make up the basis of ecological self-consciousness are singled out. Ecological self-consciousness is one of the forms of ideological self-awareness of an individual.

The study of ecological consciousness and self-consciousness of an individual in the period of adolescence and

adulthood has important scientific significance. It is at this age that a person is capable of active transformation of the environment, which in turn also has an effect on a person. Therefore, the level of consciousness development and an individual's self-awareness depends on how the interaction with the outside world would be subjected to the laws of morality and spirituality.

Ecological self-consciousness of the individual is self-awareness both as the part of the ecosystem, and as a unique personality; it is an activity that will not harm nature, but rather will be aimed at its preservation and accumulation. So, our methodology was aimed at creating a profound awareness among students of the necessity of environmental preservation, which is a common habitat for the whole humanity. One of the key pedagogical conditions of our methodology was the active approach. We believe that onlyby the means of specific ecological events the ecological consciousness of students can be developed. In this case ecological knowledge is not enough, because most of those who commit ecological barbarism towards nature and environment still possess some knowledge about nature, ecology, the importance of its conservation. But in real life they don't do it. In our opinion, it is real specific nature-conservation measures that can actually form the ecological consciousness among students.

Undoubtedly future specialists have to be provided with necessary ecological knowledge, in particular on the challenges facing not only Ukraine, but also humanity as a whole. Having acquired its independency, Ukraine entered a completely new historical phase of development. In terms of natural conditions, the country has great potential and prospects. Ukraine has an area of 603,628 km², about 95% of which is a plain part, and the share of mountain systems of the Carpathians and the Crimea accounts for only 5%. Forests occupy 19% of its area. However, Ukraine is considered as one of the most ecologically disadvantaged countries in Europe. These facts were taken into account, while developing the process of environmental education at Vasyl Stefanyk Precarpathian National University.

Here are the answers to some questions. To the question "What is the place of environmental knowledge in your professional profile?" we obtained the following results: 94% of future engineers, 100% of future biologists, 100% of future teachers, 90% of future physicians classify them as an important and necessary component of the professional

profile. This proves that respondents are aware of the importance of acquiring knowledge about nature protection and conservation.

DISCUSSION

It is important to note that both Ukrainian and Polish students are aware of the significance of environmental activities.

According to the survey results, almost all respondents admit the importance of environmental conservation for humanity.

Polish students referred to environmental problems mainly as problems of environmental pollution, problems of nutrition and health care, waste utilization, safe technologies, demography, problems of morality and international relations. Such shift of emphasis is quite natural: ecology as a science transforms into a theoretical foundation of a broad field of medical, industrial and political management activities [9; 10]. According to Ukrainian students, environmental issues are environmental pollution (air, water, soil, etc.), deforestation of the Carpathian Mountains, nutrition problems. As we see, in the top ecological problems, as for Ukrainian students, there are the "regional" ones. On the other hand, the loss of the Carpathians may become a major ecological catastrophe for Europe; 76% of Ukrainian students consider this ecological problem to be global.

One of social factors that influenced actualization of the problems of environmental education at Ukrainian and Polish universities was the Chernobyl disaster (an accident at the Chernobyl nuclear power plant on the night of April 26, 1986). According to Ukrainian students, possible man-made disasters are ecological situation in the Eastern Ukraine, where military actions are taking place, which destroy environment, as well as in Crimea, where environmental problems are being squandered due to occupation of this territory by Russia. Also, Ukrainian students pointedout ecologically unstable areas - Donbas and Dnipro regions – as an example of excessive concentration of industry in the single area; they are one of the most contaminated regions in Europe. This region, which occupies 18% of the country's area where there are 28% of Ukraine's population, produces 40% of the total volume of industrial production. Thus, the Chernobyl disaster caused a rethinking of development of industry, power engineering, etc.

Students defined one of the causes for the emergence of environmental problems, which are low level of ecological consciousness of people who "caused this", the Soviet regime, the socialist planned economy, communist ideology, etc. Students noted that the path to high ecological consciousness lies through an effective environmental education.

Respondents' answers to the question "What do you know about organizations engaged in environmental activities? a) in your area; b) in Ukraine / Poland; c) in the world" showed that, on the one hand, almost all students are aware of the level of environmental protection in

the global dimension (for example, both Ukrainian and Polish students named UNESCO, UNEP, WHO, IUCN as international organizations involved in environmental protection activities). Ukrainian students, apart from line ministries (76%), unfortunately could not name other institutions, 24% of respondents named "green parties"; the same situation is at the regional level. Thus, the Ukrainian students demonstrate higher level of knowledge about environmental activities of international organizations than their knowledge about such activities at the state and regional levels. Polish students, in contrast to Ukrainian respondents, are better acquainted with the activities of domestic environmental organizations, social movements, foundations, environmental programs (for example, the Polish Environmental Club, League of Nature Protection, Federation of Greens, Polish Society for the Protection of Wildlife, Nature Foundation, Natural Freedom Foundation, Green Freedom, For the Benefit of All Creatures, the All-Polish National Fund for Environmental Protection and Water Management of the Republic of Poland). This proves that the level of environmental awareness of Polish students, as well as of society as a whole, is higher.

The answers to the question "Are you ready to carry out environmental activities?" were important to us. All students gave positive response to this question. Therefore, it is natural that the preparation of future specialists who possess high level of environmental knowledge, ecological consciousness and culture, based on new criteria for evaluating human relations and nature, should become one of the cornerstones of solving extremely acute environmental and socio-economic issues not only in Ukraine, but in Europe as well. Among the principles of environmental education of students, we highlight the interdisciplinary approach on shaping the students' ecological consciousness; continuity of students' communication with the environment involving participation in different kinds of activities; the unity of intellectual and emotional aspects in students' activities regarding environmental improvement.

Given the limited scope of the article, we provide the examples of environmental measures we carried out at Vasyl Stefanyk Precarpathian National University. They took into account all of the abovementioned pedagogical conditions for the ecological consciousness formation among future specialists. The choice of such ecological actions was caused by the common vision of the Ukrainian and Polish students on the importance of environmental conservation for humanity and future generations.

First of all, we involved students in ecological action on Earth Day. On the eve they prepared mini-performances about the first Earth Day celebration. Students noted that it took place in the United States on the day of the vernal equinox on April 22, 1970. The initiators were American activist and politician A. N. Nelson and the students of Harvard (Dennis Hayes, the activist). It is thanks to this action that in 1970, US President Richard Milhous Nixon passed The National Environmental Education Act.Environmental education was included to school curricula in order to enhance the knowledge level of the growing

generation. Environmental education was brought up on the international level at the United Nations Conference on the Human Environment in 1972 in Stockholm. The United Nations Environment Program (UNEP) was introduced to address the most global environmental problems, namely degradation of soils, deterioration of its quality, desertification, decreasing the amount of freshwater, pollution of the oceans. Coordination of international cooperation in the field of environmental protection is the main goal of this project. The students made the proper conclusions: Ukrainians are not aware enough of international events in the sphere of environmental education; it was the students and the university environment that pushed and initiated organization of environmental events and adoption of relevant vital international documents at the international level. As for Ukraine, there is the insufficient level of legislative provision of environmental education. Unfortunately, environmental education is still basing on the approach which considers nature as an inexhaustible resource, without taking into account catastrophic consequences of such an approach. Therefore, there is a growing need for new skilled personnel who will be able to provide an adequate level of technogenic and environmental safety.

Earth Day was held in the form of an ecological communal work in the city of Ivano-Frankivsk. Students gladly participate in this kind of events. Involvement of students in socially useful work on the preservation of clean environment contributes to the formation of their ecological consciousness, self-control over their own behavior towards nature, and the ability of making timely and weighted decisions on creating the safe environment. Students cleaned garbage not only near the university buildings, but also around the dormitories where they live, in the park areas of the city, at crowded downtown, near the bus station, etc. It was done in order to attract people's attention to the problems of soil pollution, as well as to encourage similar actions of city residents, especially to participation in the event "Let's make our Earth cleaner" to create a safe environment [17].

Students were involved in celebrating Earth Hour as well. During the last ten years, students along with teachers have been participating in the Earth Hour international movement. The purpose of the students' participation in these events is not only to have the light turned off for one hour, but also to turn it off every time we leave an audience, to switch off electrical appliances when not in use. In short, do not lose contact with planet Earth and take care of its conservation. It is also an event uniting Ukrainian and Polish students, and all humanity in general. It is an opportunity for educational events, when students become initiators of such movements in cities, towns, villages where they were born. For example, on March 24, 2018 (Saturday), this international event lasted from 20.30 to 21.30. We suggested those students who go home on weekends to arrange Earth Hour in a circle of their family or their friends. Those students from PNU living in a dormitory gathered in a separate room. At first they actualized ethical rules of behavior on Earth, which had been expressed by

the German philosopher and ecologist E. Callenbach: love and respect Earth that blesses life and governs it; treat every day on Earth as sacred and celebrate the change of seasons; do not consider yourself superior in regard to other living beings and do not treat them so that they would disappear; be grateful to animals and plants for the food they give you; do not damage and spoil Earth's wealth by weapons and wars; do not gain profit from Earth's resources, but try to restore its exhausted forces; do not hide from yourself and from others consequences of your doings on Earth; do not steal from future generations by exhausting and polluting the Earth; consume the gifts of Earth moderately, because all of its inhabitants have equal rights to its wealth [18].

On March 28, 2020, from 8.30 pm to 9.30 pm, together with the students, we celebrated Earth Hour. Due to the COVID-19 pandemic all students stayed at home. Therefore, the format of this action was changed. Prior to the event we organized an online conference with students, where they made meaningful reports on its history, the experience of nature conservation in Ukraine and abroad, international and domestic environmental organizations. It was important that students not only had to learn about nature protection in their region (which NGOs operate there, about the activities of local authorities on environmental protection, environmental problems in their region, environmental actions, etc.) and talk about it, but also to involve their brothers, sisters and parents in the online conference. Thus, environmental education was carried out.

During Earth Hour (from 20.30 to 21.30) all the participants of the event were writing an essay "I love my Earth" and created poetic works by candlelight at home. They promote a deep love for the Earth as a place of life, a rethinking of life as such, a call to value every moment, to protect nature, because it is a creation of God. Thus, we see that the terrible disaster – the COVID-19 pandemic that befell humanity, prompted young men and women to think not only about the problems of nature conservation, but also to reassess life values and care for nature, the environment. This poetry is very life-affirming and optimistic.

Thenasongcontestwasarrangedbyus (forthebestperformanceofthesongaboutplants, thenatureofthe Carpathians, the earth, etc.) and a contest of poetryreaders devoted to nature and native land. Thus, we combined environmental education with artistic and aesthetic, moral and ethical one. It is interesting to note that students did not even feel themselves awkward being in a room with the lights turned off. On the contrary, they noted that the wax candles made by the girls at the master class, "added some romance and charm" to this event. Also, in accordance with the students' will, the Earth Hour event was prolonged for another 30 minutes.

Similar events were carried out at the Warsaw Medical University.

Great interest was caused by another movement "If we do not buy – they would not cut", which was held at the Faculty of Pedagogy on the eve of Christmas holidays, December 20, 2018. The goal of the event is to enhance the

ecological consciousness of children and young people, to highlight the problem of deforestation of the Carpathians, namely coniferous trees. Educational goal was to inform students and pupils about the harmful effects of cutting-out the Christmas trees. The main attraction of the event was a contest of New Year's compositions, which should become an alternative to a live Christmas tree. Various ideas were implemented. Christmas trees and New Year's compositions distinguished by their originality and ease of execution, and most importantly, they did not require a lot of money or time. In addition, students demonstrated their own created cartoons and video films on this topic, recited poems and played songs about Christmas trees [19].

Among the events on environmental issues, Polish students named the following: competitions, volunteering, "green" schools, actions with the distribution of leaflets, participation in environmental holidays and Ecology Days, which are held in the bosom of nature. They organize reception points for batteries, light bulbs, take part in all-Polish master classes "Know, appreciate and protect your nature", events dedicated to the International Day of Nature Protection, actions "Cleaning the world – Poland" (actions of cleaning garbage in public areas – forests, rivers, streets, parks), etc.

CONCLUSIONS

Thus, these facts prove that Polish students are actively involved in environmental activities, are aware of public environmental movements and participate in them. For example, students noted the activities of the Polish Ecological Club, the League for Nature Conservation, the Federation of Greens, the Polish Society for Wildlife Conservation, etc., as providing environmental education among children and adults by promoting the dependence of quality of life on the rational use of natural resources and maintaining a balance between the environment and the development of civilization, formation caring attitude to nature among young men and women, promotion of knowledge about nature and its protection, encouragement of active environmental work, compliance with environmental laws. The analysis of the experience of environmental activities of Polish students shows that it is carried out at both national and regional levels, and is multifaceted. This has a significant impact on the formation of environmental awareness of boys and girls. This experience, in particular, participation in the public environmental movement, should be borrowed by Ukraine. The public ecological segment needs to be actualized under modern conditions of society development.

Since there is no separate class in ecology in the higher school of Ukraine today, the problem of formation of environmental knowledge and environmental awareness among students must be solved on an interdisciplinary basis and by extracurricular activities. There are following ways of enhancing the level of environmental awareness in a higher education institution: a) increasing the importance of environmental issues both in certain subjects

and by establishing internal and interdisciplinary links; b) creation the appropriate educational and material base in educational institutions: departments of nature protection, etc.; c) improvement of forms and methods of ecological education, active involvement of students in environmental work; d) formation of motives for a responsible attitude to nature, the desire to know it more deeply, to increase its wealth. To this end, it is necessary to develop pedagogical conditions for cooperation between students and teachers in the context of environmental education. The leading methodological principles of ecological education are the principles of ecological imperative (ecological responsibility of the individual), scientific-theoretical (ecological thinking), humanitarian (ecological culture), economic and legal (ecological prudence, eco-expediency, ecological-legal expediency), applied (ecological safety) and pedagogical (environmental education). In other words, it is all about creating a rich environment on active basis (students' participation in environmental activities, their involvement in university, city, state, international environmental events, the ability to organize environmental activities with students, organizing environmental education for adults, etc.). An important condition for the effectiveness of this process is the introduction of innovative teaching methods, design technologies, game techniques, excursions to nature conservation facilities, the environmental activities of students, etc., participation in the public environmental movement, designed to develop cognitive interest of future professionals in nature preserving issues.

Consequently, the abovementioned particular measures confirm that the ecological consciousness formation among future specialists has to be done on the activity basis. It should be a purposeful and completely voluntary process, taking into account the students' interests on interdisciplinary basis, using traditional methods (narration, conversation, lecture, etc.), but with an emphasis on the activity basis. Environmental education in higher education institutions should gain the status of a strategic large-scale and high priority course, with expanded and updated content, form and methods of training, which are based on the activity basis. Forms and methods of ecologic and humanistic nature forming the ecological consciousness of a person create a model of positive moral and social behavior; forming such a behavior among students will ensure the nature preservation on planet Earth.

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ORCID and contributionship:

Halyna V. Bilavych: 0000-0002-1555-0932^{A,D,F} Larysa V. Slyvka: 0000-0003-1865-6326^{E,F} Iryna I. Rozman: 0000-0002-4951-0074^{B,D} Jan Bilawicz: 0000-0003-4561-4690^{E,D} Larisa Ya. Fedoniuk 0000-0003-4910-6888 ^{D, E} Nadiya O. Fedchyshyn:0000-0002-0909-4424^{B,F} Borys P. Savchuk: 0000-0003-2256-0845^{C,E}

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CORRESPONDING AUTHOR

Larysa Ya. Fedoniuk

I. Horbachevsky Ternopil National Medical University 1 Maidan Voli, 46001 Ternopil, Ukraine tel: +380977008085

e-mail: fedonyuklj@tdmu.edu.ua

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 $\textbf{A}-\text{Work concept and design, } \textbf{B}-\text{Data collection and analysis, } \textbf{C}-\text{Responsibility for statistical analysis, } \textbf{C}-\text{Responsibility$

D – Writing the article, **E** – Critical review, **F** – Final approval of the article





89600, м. Мукачево, вул. Ужгородська, 26

тел./факс +380-3131-21109

Веб-сайт університету: <u>www.msu.edu.ua</u> E-mail: <u>info@msu.edu.ua</u>, <u>pr@mail.msu.edu.ua</u>

Веб-сайт Інституційного репозитарію Наукової бібліотеки МДУ: http://dspace.msu.edu.ua:8080

Веб-сайт Наукової бібліотеки МДУ: http://msu.edu.ua/library/