

DOI: <https://doi.org/10.34069/AI/2023.61.01.5>

How to Cite:

Tolochko, S., Bordiug, N., Mironets, L., Mozul, I., Tanasiichuk, I. (2023). Forming ecological culture in educational applicants within the context of modern education. *Amazonia Investiga*, 12(61), 41-50. <https://doi.org/10.34069/AI/2023.61.01.5>

## Forming ecological culture in educational applicants within the context of modern education

### Формування екологічної культури здобувачів освіти в умовах сучасної освіти

Received: January 3, 2023

Accepted: February 15, 2023

Written by:

**Svitlana Tolochko**<sup>17</sup><https://orcid.org/0000-0002-9262-2311>**Nataliia Bordiug**<sup>18</sup><https://orcid.org/0000-0002-3489-4669>**Liudmyla Mironets**<sup>19</sup><https://orcid.org/0000-0002-9741-7157>**Iryna Mozul**<sup>20</sup><https://orcid.org/0000-0002-8331-9011>**Iuliia Tanasiichuk**<sup>21</sup><https://orcid.org/0000-0001-7772-1509>

#### Abstract

The article reveals the foundations of the formation of the ecological culture of youth. The most important function of culture is highlighted. Taking into account the latest global trends, it is claimed that the formation of ecological culture among young people is gaining importance. The article notes that culture consists of four main elements. Each of these components plays a significant role in creating a cultural image and providing environmental education for specialists. Digitization of education is an undeniable requirement of modern times. The current system of education and science must undergo major digital changes and meet the global trends of digital development so that every person can successfully realize his potential. The article defines the main goal of open education. Features of open education are quality, excellence, accessibility, flexibility and creativity. In this system, the learning process becomes open and creative, free access to information resources, freedom of choice, an individualized approach are ensured, conditions are created for joint creative mastering of the

#### Анотація

У статті розкрито основи формування екологічної культури молоді. Виділено найважливішу функцію культури. Враховуючи новітні світові тенденції, стверджується, що питомої ваги набуває формування екологічної культури у молоді. Стаття зазначає, що культура складається з чотирьох основних елементів. Кожен із цих компонентів відіграє велику роль у створенні культурного іміджу та забезпеченні екологічної освіти спеціалістів. Цифровізація освіти є беззаперечною вимогою сучасності. Нинішня система освіти і науки має зазнати великих цифрових змін і відповідати світовим тенденціям цифрового розвитку, щоб кожна людина могла успішно реалізувати свій потенціал. У статті визначено головну мету відкритої освіти. Особливості відкритої освіти є якість, передовий характер, доступність, гнучкість і креативність. У цій системі процес навчання стає відкритим і творчим, забезпечується вільний доступ до інформаційних ресурсів, свобода вибору, індивідуалізований підхід, створюються умови для спільного творчого освоєння світу у

<sup>17</sup> Doctor of Pedagogical Sciences, Professor, Chief Researcher of the Laboratory of Extracurricular Education Institute of Problems on Education of the National Academy of Educational Sciences of Ukraine, Ukraine.

<sup>18</sup> Doctor of Pedagogical Sciences, Professor, Department of Ecology and Environmental Technologies, Zhytomyr Politechnic State University, Ukraine.

<sup>19</sup> PhD of Pedagogical Sciences, Associate Professor, Department of Biology and Teaching Methods of Biology, Sumy State Pedagogical University named after A.S. Makarenko, Ukraine.

<sup>20</sup> Candidate of Pedagogical Sciences, Senior Lecturer of the Department of Theory and Methodology of Primary Education, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Ukraine.

<sup>21</sup> PhD, Lecturer of Medical and Biological Fundamentals of Physical Culture Department, Pavlo Tychyna Uman State Pedagogical University, Ukraine.

world in the formation of the ecological culture of the students of education. We are lighted up the principles of the educational policy of digital development.

**Keywords:** education seekers, open education, digitalization, culture, ecological culture.

## Introduction

Informatization of society contributes to the solution of a large number of urgent tasks, among which the issue of the introduction of open education takes place both at the global level and in individual countries and regions. Scientific and practical interest in the phenomenon of open education is associated with new educational opportunities, namely, deepening democratization. This is flexibility in the organization of the educational process, individualization of education, deepening and expansion of the source and information base of educational and scientific projects, etc. (Leshchenko & Yatsyshyn, 2014).

In order for each person to be able to successfully realize their abilities, the modern system of education and science must undergo thorough digital changes and correspond to the global trends of digital development. Thus, digitalization of education is an indisputable requirement of modern times (Ivashev et al., 2021).

The issues of the formation of ecological culture and health-preserving practices of young people do not depart from economic and political phenomena that vividly reflect the contradictions of our society. One of the urgent tasks of pedagogical science is to provide the future specialist with knowledge of ecological culture regarding the requirements for professional activity. In order to form an ecological culture of education seekers, a modern approach to the problems of raising the personality of a new formation, a healthy, mobile, competitive, morally mature, professionally cultured specialist ready for active life in the conditions of modern educational phenomena is needed. This

формуванні екологічної культури здобувачів освіти.

Виділено принципи освітньої політики цифрового розвитку. При формуванні екологічної культури фахівців в контексті сучасних освітніх явищ має чинне місце інформаційне освітнє середовище відкритої освіти. Екологічна культура фахівців може допомагати трансформації людства від споживацького способу життя до ощадливого та відновного, оскільки саме в закладах освіти можна виховати любов до навколишнього середовища, краси та здоров'я.

**Ключові слова:** здобувачі освіти, відкрита освіта, цифровізація, культура, екологічна культура.

requires open education and digitalization. It is not easy to organize high-quality training of specialists with the aim of forming an ecological culture of education seekers using digital technologies, for this it is necessary to inspire and motivate the participants of the educational process, to solve various technical problems. Therefore, in the current conditions, open education and acquired experience in the use of new information and communication technologies, distance learning, mastering the relevant skills and personal competencies acquire a special significance (Osadchuk, 2022).

**The purpose.** To reveal the foundations of the formation of ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization.

## Literature Review

M. Leshchenko, A. Yatsyshyn (2014) considered the historical basics for the appearance of the type "open education", they generalized the scientific literature to compare the position of scientists regarding the content of the idea of "open education", examined the genesis of using this concept. In addition, recognized the key problems of the progress of the open education system, acceptable the convenience of using open education technologies in the educational development, measured capable instructions for realizing elements of open education.

Ye. Ivashev, O. Sakhno, V. Hriadushchna, A. Denisova, A. Lukiianchuk, S. Udoviyk substantiated conceptual research plans reflecting the content of digitization and its purpose in the development of education. The

article presents a model of the development of digital competence of teachers of professional (vocational and technical) education institutions. The authors indicated plans for the application of various digital technologies in the educational process, as well as the introduction of elective courses and short-term thematic author's courses into the educational process of improving the qualifications of teachers of professional (vocational and technical) education institutions (Ivashev et al., 2021).

I. Maistryuk I. & N. Ponomaryova (2022) considered the issue of introducing innovative pedagogical technologies in digital schools, such as the following topics: prospects for the development of education in a digital society, innovations in education, and information and communication technologies in modern education.

T. P. Gerasimykh-Chernova (2021) devotes her research to the problems of ensuring digitalization of the educational process under martial law; discussion of issues related to the development of digital competence of teachers and applicants for education in vocational education institutions, the acquisition of digital literacy skills and digital culture.

V. Osadchuk (2022) carried out a historical analysis of the development of open education, analyzed its strengths and weaknesses. The scientist positions open education as a modern educational technology, a factor of anticipatory development of society, aimed at helping people's openness to knowledge. The author studied the urgent issues of the use of information technologies, as well as their implementation in the educational process of educational institutions that provide educational services both in the context of traditional and distance learning. He emphasizes that open universities have both advantages over the traditional education system and their vulnerabilities, while creating a set of perspectives for improving the quality of education.

O. Bida, T. Zorochkina, I. Oros, O. Kuchai, A. Chichuk & T. Kuchai (2021) studied the problem of ecological culture development of educational applicants and expressed, concretized and methodically corroborated pedagogical situations for real health-saving activities of students in the educational process of educational institutions.

Xiaoming Yi (2019) emphasizes that: «two outcomes of ecological education through esthetic engagement in schools: students acquire rich and full esthetic experiences through whole-body involvement in the natural environment and students' art-making promotes conversation between their esthetic experiences, art creation, and ecological ethics».

Z. Alimin, N. Warnandi, R. Akhlan, & E. Ratnengsih (2019) believed that: «the objectives of the study to find out the implementation of inclusive education have an impact on the expansion of learning access for all children in the context of compulsory education, recognizing the objective conditions of inclusive education implementation from the perspective of cultural approaches, policies and practice of inclusive education».

A. Hoffmann, & L.L.P. Sobrinho (2022) show in the article recommendation to examine Environmental Education as an instrument of environmental and ecological sustainability.

S. Findlow (2019) notes that: «...a critical framework integrating Capability, Feminist and Critical Pedagogic theories to challenge the reductive focus within sustainability discourses on the physical environment, and education's typical 'development' focus on economic growth».

P. Kubiznak, W. Hochachka, V. Osoba, T. Kotek, J. Kuchar, V. Klapetek, K. Hradcova, J. Ruzicka, & M. Zarybnicka (2019) shows that: «...purpose-designed systems, applying features found in Internet-of-Things devices, enable more efficient gathering, managing, and disseminating of a diverse array of data needed to study the life histories of wild animals».

Q. Jian (2020) believed that: «due to advances in technology and the advent of many inventions, many factories have emerged, causing many environmental problems».

## Methodology

For the research, a set of methods was used in particular: analysis of philosophical, pedagogical, psychological literature, synthesis, comparison, generalization for the study of scientific literature, to compare the positions of scientists regarding the content of the concept of "open education"; to determine the importance of open education in the process of digitalization of educational and pedagogical space.

At the stage of formation of an environmental problem, methods that stimulate independent activity play an important role. The tasks are aimed at identifying contradictions in the interaction of society and nature, at forming a problem and generating ideas about the way to solve it, taking into account the concept of the studied subject. Discussions stimulate educational activities, promoting the manifestation of the applicants' personal attitude to problems, familiarization with real environmental conditions, and the search for opportunities to solve them.

The theoretical and methodological basis is the philosophical propositions about the general connection and interdependence of nature, man and society; cultural approach to interaction in the "man-nature" system; psychological and pedagogical concepts about the leading role of activity in the formation and development of personality; concepts of environmental education and upbringing; ideas of personally oriented education; the concept of problem-based developmental learning; the main provisions of the competence approach in education.

The methodological basis of the research was made up of various approaches that define activity as the leading condition for full-fledged personality development in the educational process and allow considering the person of the future specialist in the context of subject-subject educational relations as a subject of professional development; interdisciplinary and systemic approaches that contribute to the construction of the educational process on the basis of continuity, integrity and system; a complex of philosophical, natural, psychological and pedagogical concepts of the interaction of society and nature; principles of humanization and humanization of higher education.

In the field of knowledge, there is a rethinking of the theoretical, methodological and conceptual foundations of the formation of the ecological culture of the individual. Natural and active concepts of ecological culture appear. Studies on the development of a typological approach in the field of ecology, environmental culture and environmental education have shown that the cognitive paradigm is evolving from a classical (biological) understanding of the essence of the concept of "ecological" to an operational one. The methodological analysis made it possible to distinguish two types of environmental culture of the individual: natural and active. The natural-scientific type of ecological culture of the individual is characterized by "classical" ideas

about the essence of ecological activity. For the most part, they are reduced to a biological approach to the study of environmental issues. The active type of environmental culture of the individual is a modern methodology for solving environmental problems in society. All the above-mentioned problems are considered by us in the article.

## Results and Discussion

Taking into account modern world trends, the formation of ecological culture among young people is of primary importance. We will show the main advantages of forming an ecological culture of youth in the context of open education and digitalization. We would like to note that culture consists of four main elements:

- Concepts (found mostly in language; thanks to them, people's experience can be organized).
- Relationships (they not only distinguish certain parts of the world with the help of ideologies, but also show how these components are related to each other: in space and time, in meaning, on the basis of causal conditioning).
- Values (generally accepted beliefs about the goals to which a person should strive. They form the basis of moral provisions).
- Rules and regulations (these elements regulate the actions of people in accordance with the values of a certain culture (Horbach et al., 2019)).

Each of these components plays an extremely important role in creating the cultural image and environmental education of applicants for education. Culture, like any other social phenomenon, performs certain functions in public life, is a complex of subjectivations and objectivations that must necessarily be assimilated in the process of cross-cultural education and used in everyday orientation. The most important function of culture is that it is the way in which societies solve global problems in the context of modern educational phenomena: open education and digitalization.

Taking into account modern world trends, the main modern problems of education and nature protection are of particular importance in Ukraine, so the preparation of future specialists for environmental education, and the formation of ecological culture among applicants for education is an urgent problem in the activities of educational institutions and requires new approaches to its optimal solution. The

ecological culture of future specialists can contribute to the transformation of humanity from a consumer lifestyle to a lean and restorative one (Akseonova, Varetska, Klopov & Bida, 2020).

It is very important to bring environmental education as close as possible to everyday life – to promote the awareness of humanity that their everyday activities affect the ecological state of the immediate environment, as well as to form a culture and thinking that would help them in any situation to evaluate their own activities from the point of view of environmental expediency.

An important component of the ecological culture of a specialist is the valeological component, which provides for the preservation and promotion of human health, which to a certain extent depends on the ecological state of the environment.

Health has always been a major factor in the nation's security. Health should be one of the results of education, one of the main foundations of modern society. Today, there is a need to create an educational innovation system that would not only educate an educated cultured person, but also preserve his health.

Work on the formation of an ecological culture of educational applicants should combine two interrelated components:

- 1) their acceptance of healthy lifestyle values (propaganda component);
- 2) their acquisition of knowledge and acquisition of skills and abilities necessary for independent fulfillment of requirements and transfer of knowledge to students in future professional activities (content, information and practical planes).

The study of the state of the problem of the formation of ecological culture of educational applicants in modern scientific research allows us to formulate, concretize and scientifically substantiate the pedagogical conditions for effective health-saving activities of students in the educational process of educational institutions, namely a value attitude to the preservation and promotion of health; mastering the health values necessary in socio-personal, mental and physical terms to increase the effectiveness of professional education and further effective professional activities. In addition, implementation of a systematic solution to the problem of preserving and strengthening health in educational, informational and

behavioral terms; differentiated and individual selection of the content, forms and methods of forming the ecological culture of educational applicants, taking into account the characteristics of the student population. Moreover, development of a system of software and methodological support for the problem of forming the ecological culture of educational applicants, the development of a complex of methodological and organizational measures for the implementation of this problem; consideration and implementation of recreational and rehabilitation prospects and capabilities of the body (Bida, Chychuk, Kuchai, Honcharuk & Kuchai, 2022; Bida, Zorochkina, Oros, Kuchai, Chychuk & Kuchai, 2021).

In the XXI century, thanks to the development of information technologies that provide fast, universal and remote access to information and knowledge, new information and pedagogical technologies have emerged that form the basis for a qualitatively new development of the phenomenon of open education. The development of the category "open education" begins with definitions describing a democratic, individualized, flexible process of obtaining knowledge, which is provided, first of all, by the purposeful activity of the teacher and the management of the educational institution. At the present stage, the application of this category in the vast majority of cases is associated with ICT, in particular cloud technologies, thanks to the use of which the availability, individualization and flexibility of training is realized (Leshchenko & Yatsyshyn, 2014).

Therefore, open education is an integral part of informatization of society, reflects the general trend of consistent transition of educational processes from one state to another, the formation of the defining information and communication basis for the development of education and is necessary in the formation of the ecological culture of educational applicants.

The main purpose of open education is to prepare applicants for full and effective participation in public and professional life in the information society. Features of open education include quality, advanced character, accessibility, flexibility, creativity. In this system, the learning process becomes open and creative, free access to information resources, freedom of choice, an individualized approach are provided, and conditions for joint creative development of the world are created in the formation of the ecological culture of educational applicants.



Open education in the formation of the ecological culture of educational applicants ensures continuity of learning throughout life, changes in the nature of relations between participants in educational activities, efficiency and accessibility in obtaining knowledge. Open education, integrating all the valuable things that science has developed, reflecting the truly democratic and humanistic orientation of the educational process, is the dominant feature of the civilizational development of society (Leshchenko & Yatsyshyn, 2014).

Today, the interpretation of the terms "openness" and "open education" in pedagogical theory and practice is characterized by a variety of approaches (synergistic, anthropological, and systemic) to the disclosure of their essence. It is in an open system that you can express your personal opinion, choose your life path, and build your own career. Providing freedom for such choices means giving a person the opportunity to receive education without external restrictions. In an open education system, citizens who have difficulties in obtaining an education or who have not previously had basic or vocational education should have a real opportunity to study. Today, a cultural picture of the world has replaced the principles of the mechanical picture of the world, and the defining trend of the modern educational process should be integration, where the ideas and principles of synergetics have become the basis for holistic perception and awareness of the surrounding world. The informatization of education will raise the educational process in the formation of the ecological culture of educational applicants to the level of active social creativity, and this will expand the opportunities for Human Development and contribute to the integration and transformation of various kinds of information in an open information and educational environment.

Elements of open education can be actively used in the formation of the ecological culture of educational applicants in distance education and lifelong learning; information and communication technologies make it possible not only to tell, but also to demonstrate clearly, modeling a certain situation, which will give positive results in the short term. In addition, electronic publications will promote access to more educational materials (digital formats of textbooks, methodological materials for the formation of the ecological culture of educational applicants, which is much cheaper and freely available). This ensures a higher level of system transparency and achieves higher quality indicators (Leshchenko & Yatsyshyn, 2014).

Open education can expand the educational opportunities of a person in the formation of ecological culture and create a qualitative level of openness and unity of the learning system at all levels, namely, in all types and varieties of internal and external communications. This is the connection between society and the state and the education system as a whole and specific educational institutions, and internal communications include the connection between teacher and teacher; student and student; teacher and student; school administration and teacher and student.

Collective participation in the process of forming the ecological culture of educational applicants is created thanks to a variety of dialogue systems that allow you to communicate in real time, in particular: e-mail, video conferences, and chats. For example, Swedish teachers use "electronic blackboards" ([www.sisweb.com/math/whiteboard/](http://www.sisweb.com/math/whiteboard/)), newsgroups ([www.peg.apc.org/learn/-works.htm](http://www.peg.apc.org/learn/-works.htm)), video conferences ([www.ascusc.org/jcmc](http://www.ascusc.org/jcmc)), special programs: collaborative and multimedia learning environment ([www.cc.gatech.edu/gvu/edtech](http://www.cc.gatech.edu/gvu/edtech)) and integrated information environment ([www.kie.berkeley.edu/KIE](http://www.kie.berkeley.edu/KIE)) (Leshchenko & Yatsyshyn, 2014).

In connection with the digitalization of education, the role of individual elements in the content of components of the ecological culture of educational applicants is changing and new elements are appearing. Therefore, for example, in the motivational and value component, the importance of awareness of the value of self-education increases. In the content and procedural component – a special place is occupied by the skills of using information and communication technologies and media literacy. In the control and reflexive component – to plan your own educational and cognitive activities and manage them using automated control and diagnostic tools, etc. (Maistryuk & Ponomaryova, 2022).

Digital information and communication technologies in the formation of the ecological culture of educational applicants replace, no matter how sad it may be to state, the book and the printed word as the dominant carrier of an information resource. Each new method of information dissemination makes the challenge to society its own, unexpected yesterday, opportunities for storing and transmitting information, for which it is necessary to develop new structures and methods of management. According to smartphones and laptops, today

there is a strong technological development, which is characterized as "digitization", "automation" and "networking". Almost any data can be converted to digital format, their number is almost unlimited due to a variety of storage options (therefore, publicity about the excess of information is spreading more and more loudly). Thanks to networks, stored data is instantly processed automatically and instantly becomes available to the whole world. All this simultaneously leads to changes and creates a wave of new challenges.

The implementation of the digital development educational policy is based on the following principles:

- openness – consists in providing open access to departmental data (information), unless otherwise established by law;
- transparency - consists in ensuring the possibility of using open external interfaces to departmental information systems, including application programming interfaces;
- reusable - consists in ensuring an open interagency exchange of solutions and their reuse;
- technological neutrality and data portability - is to ensure access to departmental services and data and reuse regardless of technologies or their products;
- citizen orientation consists in ensuring priority consideration of the needs and expectations of citizens when making decisions on the forms or methods of performing state functions;
- inclusivity and accessibility is to provide an opportunity for all citizens to enjoy the latest achievements of information technologies and access to services;
- security and confidentiality is to provide citizens and business entities with a safe and reliable environment in which electronic interaction with the state takes place, including its full compliance with the rules and requirements established by laws on the protection of personal data and information belonging to the state, electronic identification and trust services;
- multilingualism - consists in ensuring the provision of administrative, information and other services to citizens and business entities, including cross-border ones, using the language of their choice;
- decision support - consists in ensuring the use of the latest information technologies for the development of software products that

- support decision-making by executive authorities during the exercise of power;
- administrative simplification - consists in ensuring the acceleration and simplification of administrative processes through their digital development;
- information retention - is to ensure the storage of solutions, information, records and data, reliability and integrity, as well as their availability in accordance with the security and privacy policy for a certain period of time;
- efficiency and effectiveness assessment – consists of conducting a comprehensive assessment and comparison of at least two alternative solutions to ensure the effectiveness of the exercise of power (Ivashev et al., 2021).

Based on the analysis of the directions of development of digital technologies, taking into account the results of the research described above, as well as trends in the organization of the process of forming the ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization in quarantine due to the pandemic, such modern educational trends will be determined, which will soon affect the education system:

- distance learning, online learning and blended learning;
- non-formal learning (informal learning);
- cloud computing (cloud technology);
- gamification;
- Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR);
- mobile technologies in training;
- STEM Education;
- educational robotics;
- 3D technologies;
- programming or coding (Ivashev et al., 2021; Kuzminskyi, Bida, Kuchai, Yezhova & Kuchai, 2019).

When forming the ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization, a single information educational environment should provide the following functions: information system, which provides open access to information, creates conditions for information exchange; interactive, which allows you to implement internal and system connections; communication, which allows you to maintain connections "inside", as well as with the "external" information space; coordinating,

that is, to record and present in a relationship the content that is addressed to different subjects; developmental: development of intelligence, personal creative qualities; cultural-forming, related to information culture; professional-oriented, focused on the profile of future professional activity.

Based on the purposes, objectives and characteristics of the implementation of the formation of the ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization, the main principles of functioning are the following:

- the principle of an integrated approach to the problem of informatization of Education, which provides for:
  - scientifically based determination of the primary input state of the informatization process;
  - program-based approach to the development and management of this process;
  - cooperation of subjects interested in the problem of informatization of Education;
  - changing traditional views on the process of informatization of Education;
- the principle of systematic construction of informatization of education of subjects, which requires:
  - creation of new organizational structures that ensure the organization and functioning of technologies;
  - openness of this system at all levels;
  - availability of information exchanges (Gerasimykh-Chernova, 2021; Kuchai, Honcharuk, Kuchai, Visaver & Syroezhko, 2022).

The implementation of a comprehensive, scientifically and methodologically based approach to solving this problem, in our opinion, will significantly increase the effectiveness of the formation of the ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization. Turning to the problem of the general plan – to the value orientations of students – it can be stated that the ecological culture of applicants for education in the conditions of modern educational phenomena: open education and digitalization occupies a place that is not adequate to its real potential. Analyzing this problem, we identified particularly weak points in the educational process of Higher Education regarding the formation of the ecological culture of educational applicants in the conditions of modern

educational phenomena: open education and digitalization. First, from the point of view of information security of students on the issues of strengthening and preserving health; second, from the point of view of their mental and physical activity; third, from the point of view of the ability to preserve and strengthen health. Fourth, from the point of view of socially positive attitudes in the field of its development. Software and methodological support on the problem of formation of ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization depends, first, on such factors as material support of the educational process; the contingent that participates in the educational process. In addition, the implementation of specific conditions of the program (review of the content of educational material, the use of various forms of organization of educational activities, the choice of adequate content and form of training methods, taking into account the individual characteristics of students in the organization of training sessions).

These factors may vary in different regions, taking into account the conditions, but the very principles of building the process of forming the ecological culture of applicants for education in the conditions of modern educational phenomena: open education and digitalization, its attitudes remain virtually unchanged. These are: from an educational point of view-training students in health-saving activities, health-saving principles, methodological features and practical skills in organizing independent classes of recreational and health-improving orientation. Development of activity and independence in the implementation of self-education and self-improvement programs; motivational-installation and behavioral positions-organization of the pedagogical process with a focus on changing personal aspirations from individual improvement to socially important ones. The ability to use the potential of ecological culture for successful mastery of professionally significant abilities: applied skills and abilities, increasing the body's resistance to adverse environmental influences, mental and physical activity, which determines the further achievement of skill in their profession and career growth of a specialist (Bida, Zorochkina, Oros, Kuchai, Chichuk & Kuchai, 2021; Kuchai, Kuchai, Rokosovych, 2022).

The ecological culture of educational applicants in the conditions of modern educational phenomena: open education and digitalization is the defining basis for the comprehensive and



harmonious development of the student's personality, lifestyle and life position.

As you know, culture is a complex of subjectivations and objectivations that must necessarily be assimilated in the process of cross-cultural education and used in everyday orientation. The most important function of culture is the way societies solve problems.

Taking into account modern world trends, the main modern problems of education and nature protection are of particular importance in Ukraine, so the formation of an ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization is an urgent problem in the activities of educational institutions and requires new approaches to its optimal solution. The ecological culture of educational applicants can contribute to the transformation of humanity from a consumer lifestyle to a lean and restorative one, because it is from educational institutions that you can instill a love for the environment, for beauty, and for health.

The relevance of the environmental problem is enhanced by Ukraine's entry into the European and world levels, which significantly expands the functions of teachers. It is required to master new teaching technologies, the ability to rebuild the educational space into an effective pedagogical system based on the replacement of the reproductive style of pedagogical activity with a creative one.

The European Office of the World Health Organization and the Council of Europe has published the project "European Network of Health Promotion Schools". Some schools in our country have the status of an experimental educational institution of the all-Ukrainian level for the development of models of a school for promoting health, a system of continuous valeological education. A working group of the Ministry of Education and Science of Ukraine, the Academy of Pedagogical Sciences, and the UNICEF children's fund in Ukraine has been established to develop a concept for the formation of a healthy lifestyle in children and youth. The national network of Health Promotion Schools is designed to fulfill an important task – to raise a healthy generation. In Ukraine, the model "Educational Institution – School of Health Promotion" has been developed. Schools in different regions of Ukraine are called upon to develop their own models and create health promotion schools (Kuchai, 2010; Nxumalo, Nayak & Tuck, 2022).

## Conclusions

From the above, we can conclude that scientists are increasingly talking not just about the education of the younger generation, but also about the formation of an ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization. Culture consists of four main elements: concepts, relationships, values, rules and norms. Each of these components plays an extremely important role in creating a cultural image and environmental education of specialists. The most important function of culture is the way in which society solves problems. Taking into account current global trends, the formation of an ecological culture among young people is of particular importance in Ukraine.

Digitalization of domestic education is an uncontested requirement of our time. Open education is an integral part of informatization of society, reflects the general trend of consistent transition of educational processes from one state to another, the formation of the defining information and communication basis for the development of education and is necessary in the formation of the ecological culture of educational applicants. The main goal of open education is defined. Features of open education are highlighted. In this system, the learning process becomes open and creative, free access to information resources, freedom of choice, an individualized approach are provided, and conditions for joint creative development of the world are created in the formation of the ecological culture of educational applicants. The principles of implementing the educational policy of digital development are considered. When forming the ecological culture of educational applicants in the context of modern educational phenomena: open education and digitalization, a single information educational environment should provide the functions described in the article.

## Bibliographic references

- Akseenova, E., Varetska, O., Klopov, R., & Bida, O. (2020). Efficiency of Social and Educational Experimental Training "New Physical Culture for the New Ukrainian School". *Romanian Magazine for Multidimensional Education*, 12, 1(1), 1–18.
- Alimin, Z., Warnandi, N., Akhlan, R., & Ratnengsih, E. (2019). Implementation Inclusive Education Through Ecological Approach. *Advanced science letters*, 25(1),

- 170-174.
- Bida, O., Chyhuk, A., Kuchai, O., Honcharuk, V., & Kuchai T. (2022). Formation of ecological competence of future biology teachers. Origins of pedagogical mastery: journal (Series "Pedagogical Sciences"). Poltava national ped. V. G. Korolenko University, 29, 19-25. (In Ukrainian)
- Bida, O., Zorochkina, T., Oros, I., Kuchai, O., Chichuk, A., & Kuchai, T. (2021). Formation of ecological culture of specialists. Academic studies. Series "Pedagogy", Publishing house "Helvetica", 3(2), 3-10. <https://doi.org/10.52726/as.pedagogy/2021.3.2.1>
- Findlow, S. (2019). Challenging Bias in Ecological Education Discourses: Emancipatory 'Development Education' in Developing Countries. *Ecological Economics*, 157, 373-381.
- Gerasimyk-Chernova T.P. (2021). Modernization of the learning process using a single informational educational environment. Implementation of modern pedagogical technologies in the conditions of digitization of the economy and society: regional dimension: Materials of the regional scientific and practical seminar (June 2, 2022). Bila Tserkva, 16-20. <https://acortar.link/oXaDOr>
- Hoffmann, A., & Sobrinho, L.L.P. (2022). Environmental education: sustainability instrument environmental and ecological, *Humanidades & Inovacao*, 9(18), 60-72. <https://revista.unitins.br/index.php/humanidadeinovacao/article/view/7821>
- Horbach, N. Ya., Gelei, S. D., & Russkaya, Z. P. (2019) Theory and history of world and national culture: a textbook. Lviv: Kamenyar. (In Ukrainian)
- Ivashev, E. V., Sakhno, O. V., Hryadushcha, V. V., Denisova, A. V., Lukiyanchuk, A. M., & Udovik, S. I. (2021). Development of digital competence of pedagogical workers of professional (vocational and technical) education institutions by means of information and communication technologies: a study guide. Bila Tserkva: BINPO. (In Ukrainian)
- Jian, Q. (2020). Correlation of ecological education at colleges based on the view of ecological environment. *Journal of environmental protection and ecology*, 20(A), 230-235.
- Kubiznak, P., Hochachka, W.M., Osoha, V., Kotek, T., Kuchar, J., Klapetek, V., Hradcova, K., Ruzicka, J., & Zarybnicka, M. (2019). Designing network-connected systems for ecological research and education. *Ecosphere*, 10(6), 27-61.
- Kuchai, T. (2010). Preparation of future teachers in the universities of Great Britain for the ecological education of students. (Dissertation for obtaining the scientific degree of Candidate of Pedagogical Sciences. Specialty) Bohdan Khmelnytsky National University, 216 p.
- Kuchai, T., Kuchai, O., & Rokosovyyk, N. (2022). Formation of forestry specialists' value attitude to work and worldview of environmental sustainability. Collection of scientific works: Scientific notes. Series: Pedagogical sciences, 200, 26-30. [https://dspace.kmf.uz.ua/jspui/bitstream/123456789/1637/1/Bida\\_O\\_Orosz\\_I\\_Goncharuk\\_V\\_Teoretychni\\_osnovy\\_profesiinoi\\_pidhotovky\\_maibutnix\\_fakhivtsiv\\_2022.pdf](https://dspace.kmf.uz.ua/jspui/bitstream/123456789/1637/1/Bida_O_Orosz_I_Goncharuk_V_Teoretychni_osnovy_profesiinoi_pidhotovky_maibutnix_fakhivtsiv_2022.pdf)
- Kuchai, T.P., Honcharuk, V.V., Kuchai, O.V., Visaver, V.A., & Syroezhko, O.V. (2022). Formation of ecological culture of future specialists in the modern educational space. *Bulletin of the Glukhiv National Pedagogical University named after Oleksandr Dovzhenko. Pedagogical Sciences*, 3(50), 86-91. [https://drive.google.com/file/d/1iZUUVB4FSN\\_QnoSsqKP3mROdHvITibEONH/view](https://drive.google.com/file/d/1iZUUVB4FSN_QnoSsqKP3mROdHvITibEONH/view)
- Kuzminskyi, A., Bida, O., Kuchai, O., Yezhova, O., & Kuchai, T. (2019). Information Support of Educationalists as an Important Function of a Postgraduate Education System. *The Romanian Journal for Multidimensional Education*, 11(3), 263-279.
- Leshchenko M. & Yatsyshyn A. (2014). Open education in the categorical field of domestic and foreign scientists. *Information technologies and teaching aids*, 39, (1), 1-16.
- Maistryuk, I., & Ponomaryova, N. (2022). The content of the components of self-educational competence of a schoolchild in the conditions of digitalization of education. *Innovative pedagogical technologies in a digital school: a collection of theses of reports of the IV All-Ukrainian (with international participation) scientific and practical conference of young scientists (Kharkov, May 11-12 2022)*. Kharkiv, 141-143. (In Ukrainian)
- Nxumalo, F., Nayak, P., & Tuck, E. (2022). Education and ecological precarity: Pedagogical, curricular, and conceptual provocations. *Curriculum inquiry*, 52(2), 97-107.
- Osadchuk, V. V. (2022). Development of open education as a phenomenon of the XXI century. *Adult education: theory, experience, perspectives*, 1 (21), 58-67. (In Ukrainian)
- Xiaoming, Yi (2019). Ecological education through aesthetic engagement. *The Journal of Environmental Education*, 50(3), 183-191