ORIENTATION OF STUDENTS TO THE FORMATION OF AN ECOLOGICAL CULTURE FOCUSED ON SUSTAINABLE DEVELOPMENT

Abstract. The article reveals that the formation of environmental awareness of technical college students involves a certain accumulation of knowledge that they receive in the field of ecology. In particular, it (ecological awareness) is based on consideration of issues of the probability of contamination of the atmosphere, hydrosphere, and soil during the production of the device, structure, and system under development; application of engineering solutions for environmental protection, including methods, devices or cleaning systems, as well as low-waste and zero-waste technologies, eliminate or reduce the amount of harmful emissions, etc. The task of developing ecological culture includes the formation of an actively supportive or, at least, an executive position of the individual in relation to environmental norms. On the basis of the analysis carried out, ecological culture can be defined as a generalized characteristic of an individual who is in the process of creating and mastering material and spiritual values in the system "man - nature", which, integrating the totality of knowledge, ideas about nature, emotional-sensual and valuable attitudes towards her, the relevant skills and abilities, forms an inseparable unity of her ecological consciousness, ecological responsibility and ecological experience, which affects the use of natural resources both at the global and at the regional and local levels of the system.

It is noted that the ecological culture of students of a technical college is an integrative quality that allows a graduate of a technical college, through the harmonization of the "man - nature" system, to most adequately define his place in the surrounding world, to fully actualize life resources, to reveal himself more fully and to show his abilities in various spheres of life and activity.
Keywords: education seekers, technical college, environmental education, ecocentric orientation, communicative interaction.

Коваль Юлія Андріївна доктор філософії (PhD), викладач кафедри гуманітарних, економічних та фінансово-облікових дисциплін, Вінницький державний педагогічний університет імені Михайла Коцюбинського, https://orcid.org/0000-0001-7160-5240

СПРЯМОВАНИСТЬ СТУДЕНТІВ НА СТАНОВЛЕННЯ ЕКОЛОГІЧНОЮ КУЛЬТУРИ, ОРИЄНТОВАНОЇ НА СТАЛИЙ РОЗВИТОК

Анотація. У статті розкрито формування екологічної свідомості здобувачів освіти технічного коледжу передбачає певне накопичення знань, які одержують у сфері екології. Зокрема, вона (екологічна свідомість) грунтується на розгляді питань ймовірності забруднення атмосфери, гідросфери, грунту під час виробництва розроблюваного пристрою, конструкції, системи; застосування інженерних розв’язань захисту довкілля, включаючи як методи, апарати чи системи очищення, а й маловідходні та безвідходні технології, ліквідують чи зменшують кількість шкідливих викидів тощо. В завдання розвитку екологічної культури входить формування активно-підтримуючої чи, як мінімум, виконавчої позиції особистості стосовно екологічних норм. На основі проведеного аналізу екологічна культура може бути визначена як узагальнена характеристика особистості, котра знаходиться під час створення й освоєння матеріальних і духовних цінностей в системі «людина – природа», яка, інтегруючи суккупність знань, уявлень про природу, емоційно-чуттєве та ціннісне ставлення до неї, відповідні вміння та навички, утворює нерозривну єдіність її екологічної свідомості, екологічної відповідальності й екологічного досвіду, що впливає на використання природних ресурсів як на глобальному, так і на регіональному та локальному рівнях системи.

Зазначено, що екологічна культура студентів технічного коледжу – це інтегративна якість, яка дозволяє випускнику технічного коледжу через гармонізацію системи «людина – природа» найбільш адекватно визначити своє місце у навколишньому світі, максимально повно актуалізувати життєві ресурси, більш повно розкритися та проявити свої здібності в різних сферах життя та діяльності.

Ключові слова: здобувачі освіти, технічний коледж, екологічна освіта, екоцентрична орієнтація, комунікативна взаємодія.

Formulation of the problem. The high level of environmental culture of students of education provides for the possibility of active use by each student of
technical college of not only material, but also recreational and developmental values of nature for personal development and self-improvement. If purposeful educational activities allow students of a technical college to discover the psychological potential of communication with nature as a special natural resource, then this not only creates additional opportunities for their personal development, but also forms a belief in the unique value of the natural world. This in itself is a serious factor affecting the development of ecologically safe technologies of nature management. Ensuring the active participation of education seekers in supporting the ideas of sustainable development and maintaining the health of the environment is the most important aspect of the activity of forming the environmental culture of students of the technical college.

The positive attitude of technical college students towards environmental protection structures is the strongest incentive for public support for their activities (N. Anatska, V. Baranovska, S. Boychenko, O. Bondar, Yu. Buts, F. Volvach, G. Glukhova, V. Honcharuk, G. Hulyk, V. Derkach, M. Drobokhod, V. Dubovy, O. Dubovy, M. Dyachenko-Bogun, O. Yeremenko, O. Yeresko, A. Yermolenko, S. Ivanenko, V. Ishchenko, I. Kachur, M. Kiselyov, O. Krayniuk). Involvement of students in direct practical activities to support the "health of the environment" creates a sense of belonging in them: technical college students tend to protect what their creative activity was aimed at, what their own work was invested in [1-4].

There is still no single and generally accepted definition of ecological culture. Each of the existing definitions has both advantages and disadvantages, but not one of them cannot claim universality. That is why the article examines such a psychological-pedagogical scientific phenomenon "ecological culture" in modern interpretations as one of the leading components of personality, as the main system-forming factor that contributes to the formation of true intelligence and civilization in a person.

The purpose of forming the ecological culture of technical college students, as evidenced by our research, is to foster a responsible, conscientious attitude towards nature. Achieving this is feasible under the condition of purposeful continuous work of teachers to form in students of the technical college a system of scientific knowledge aimed at learning the processes and results of the interaction of man, society and nature, ecological value orientations, the principles and rules of nature conservation, the need for communication with nature and desire for nature conservation work. The formation of environmental culture in students of the technical college should be carried out both in education and in extracurricular activities.

The relevance of the problem of forming an environmental culture of students is confirmed at the regulatory and legal level. Thus, in Ukraine there is an appropriate legal and regulatory framework for the implementation of environmental education, for example: the Constitution of Ukraine (1996), the Law of Ukraine "On Education" (2017), "On Higher Education" (2014), the National Doctrine of the Development of Education of Ukraine in the XXI
century (2002), the National Strategy for the Development of Education in Ukraine for 2012-2021 (2014), the Law of Ukraine "On Environmental Protection" (1998) and its new edition (2018), the Law of Ukraine "On the Basic Principles (Strategy) of the State Environmental policies of Ukraine for the period until 2030", Concept of ecological education of Ukraine (2001), etc., which outline the conditions for the modernization of the higher education system - the interdependence of general knowledge and practical skills, the rise of a multi-level system of student training, variability and modularity of educational programs, it is indicated that teaching is mandatory environmental disciplines in all educational institutions. These legislative acts became decisive in the development of uninterrupted environmental education in Ukraine, because its conceptual provisions, goals, content and methods in the field of environmental protection and reasonable use of nature, public environmental organizations were defined [1, 4].

Researcher H. Glukhova in her dissertation research proves that "the formation of ecological culture is possible only if it is considered as a component of the integral process of training a future specialist and is refracted through all the components of the studied phenomenon (ecological experience, biologically determined substructure, forms of reflection, emotional-volitional and motivational spheres, ecological orientation)" [1, p. 15].

It is noted that the ecological culture of students of a technical college is an integrative quality that allows a graduate of a technical college, through the harmonization of the "man - nature" system, to most adequately define his place in the surrounding world, to fully actualize life resources, to reveal himself more fully and to show his abilities in various spheres of life and activity.

Analyzing the concept of "ecological culture" from the point of view of the generalization of all approaches, researcher A. Varenichenko concludes that ecological culture contains a number of components, namely [1, 3, 4]:
- ecological worldview (degree of compliance of ecological views with the modern scientific picture of the world; dialogue between nature and man, non-confrontational interaction between people, man and nature);
- ecological consciousness (a developed idea of the dependence of social life on the state of living and non-living nature, which allows the individual to develop an adequate vision of the world and his place in it);
- environmental beliefs (voluntary compliance with moral requirements related to attitude to nature, which implies a developed conviction in the necessity of such behavior);
- environmental literacy (involvement in environmental work using environmental knowledge, skills and cognitive activity);
- ecological self-awareness (correspondence of personal values to the values of nature and readiness for self-education of ecological culture);
- ecological outlook (recognition of the integrity, unity of the world, of man as an organic part of the biosphere and the cosmos);
**Table 1**

<table>
<thead>
<tr>
<th>Orientation of students</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENTAL EDUCATION</td>
<td>focus on the formation of cognitive, practical and creative skills of an ecological nature</td>
</tr>
<tr>
<td></td>
<td>the development of the willpower of the students of education and the improvement of the influence of nature, the desire for its knowledge in unity with moral and aesthetic experiences</td>
</tr>
<tr>
<td></td>
<td>development of norms of behavior in nature, which exclude the task of harming it, its pollution or destruction</td>
</tr>
<tr>
<td>ECOCENTRIC ORIENTATION</td>
<td>формування індивідуального досвіду, що виникає під час колективного чи індивідуального розв’язання різноманітних еколого-орієнтованих теоретичних, практичних, наукових, творчих завдань</td>
</tr>
<tr>
<td></td>
<td>розвивиток особистісного ставлення до природи</td>
</tr>
<tr>
<td>COMMUNICATIVE INTERACTION</td>
<td>спрямованість на комунікативну взаємодію індивіда з природою, в результаті якої набувається особистий досвід безпосереднього переживання єдності (спільнostі та відмінності) з природним об’єктом на рівні емоційної, особистої, ціннісно-орієнтованої взаємодії з ним</td>
</tr>
</tbody>
</table>
The main characteristics of the level are specificity, which makes it possible to consider it as a more specific concept relative to the criterion, that is, something that is a measure of the latter, and diagnosticity, which allows the indicator to be available for observation, accounting and recording. Indicators record certain states or the level of development of the investigated reality according to a single criterion [1, 3].

Criterion features for distinguishing levels are parameters, the presence of which indicates the development of the environmental culture of technical college students for the sustainable development of Ukrainian society.

A student of education, who is at a high level of development of ecological culture criteria, always shows a persistent interest in social and ecological problems in the world; realizes the personal need to increase the level of knowledge about the sustainable development of Ukrainian society; knows how to consciously structure his behavior in extraordinary social situations; possesses rational methods of searching and processing information on the problem of sustainable development, is critical of it; ready to transform the surrounding natural world taking into account the experience of using ecological knowledge; knows how to project and implement ideas of ecological expediency in professional and other types of activities; creatively solve real environmental problems, takes an active part in practical value-oriented, including environmental protection activities, etc.; knows how to make environmentally-oriented decisions in professional activities, as well as in specific environmental situations; reflexive methods, introspection of the attitude towards the surrounding natural world and oneself as an integral part of it; is able to evaluate one's own readiness to carry out environmentally-oriented professional activity, its results, including within the framework of social and professional experience [4].

The student of education, who is at the middle level of the development of ecological culture, shows interest in social and ecological problems of the world in collective activity; has a personal need to increase the level of knowledge about the sustainable development of the world; understands social problems, the essence of phenomena that exist in society; sufficient volume, strength of environmental knowledge; possesses rational methods of information search and processing; shows interest in ways of making social ecologically oriented decisions in professional activities; has an idea of ways to transform the surrounding social and natural world based on the experience of using environmental knowledge; has experience of participation in social projects, in professional and other types of activities; possesses reflexive techniques, methods of introspection, attitude to the surrounding natural world and oneself as an integral part of it; evaluates one's own readiness to carry out ecologically-oriented professional activity, its results, including within the framework of social and professional experience; shows interest in self-education and self-development in the field of sustainable development of society [1].
An education seeker, who is at a low level of development of ecological culture, does not show interest in social and ecological problems of the world; there is no personal need to increase the level of knowledge about the sustainable development of society; experiences situationally when faced with social problems; lack of knowledge and understanding of the meaning of values in life; ignores explanations from others; does not show episodic manifestations of initiative and independence in finding sources of information, interest in ways of making socially oriented decisions in professional activities; not ready to transform the surrounding social and natural world based on the experience of using knowledge; does not have experience of participation in social projects in professional and other types of activities; does not have ways to creatively solve real environmental problems, does not participate in practical value-oriented, including environmental protection activities, etc.; does not possess reflective techniques, methods of introspection of the attitude towards the surrounding natural world and oneself as an integral part of it; does not evaluate one's own readiness to carry out socially oriented professional activity, its results, including within the framework of social and professional experience; shows no interest in self-education and self-development in the field of ecology [1, 2, 3].

The characteristics of the levels of formation of the components of the environmental culture of the students in the educational environment of the technical college are presented in the context of the introduction of intra-subject innovations, which are used during the teaching of the disciplines "Safety of life", "Construction and operation of cars", "Production activity and commercial business", "Renewable energy sources", "World history", "Foreign literature", "Foreign language", "Informatics and computer technology", "Cultural studies", "Mathematics", "Installation, maintenance and repair of renewable energy installations", "Fundamentals ecology", "Basics of energy saving", "Natural sciences", "Sociology", "Maintenance and repair of electrical equipment of cars and tractors", "Physical education", "Formation of ecological culture in the educational environment of technical colleges" in experimental educational institutions is an innovation, related to the method of teaching the discipline, the creation and use in the educational process of various methodological recommendations, manuals and new electronic educational and methodological complexes. In addition to new methodological recommendations, interdisciplinary author's developments are used, which allow a deeper understanding of environmental problems and processes occurring in ecosystems.

Environmental education is one of the components of the educational process, and that is why it allows the young generation to develop the ability to think critically, analyze the situation and quickly respond to global challenges of the time. Therefore, ecological culture allows a graduate of a technical college through the harmonization of the "man - nature" system to most adequately define his place in
the surrounding world, to fully actualize vital resources, to more fully reveal and demonstrate his abilities in various spheres of life and activity.

**Conclusion.** Thus, we note that an objective assessment of the level of formation of the environmental culture of students of technical colleges requires the development of a certain diagnostic methodology taking into account a number of specific components and criteria. The choice of components and criteria for the evaluation of ecological culture and their indicators is an urgent and complex methodological problem in modern pedagogy. On the basis of the analysis of various scientific approaches, components, criteria and indicators of the level of formation of the environmental culture of technical college students were developed. This makes it possible to diagnose the formation of the environmental culture of technical college students, defining it by such levels as low, medium and high.

**References:**