
ЕКОЛОГІЧНА ОСВІТА

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METHODOLOGY OF ENVIRONMENTAL EDUCATION IN HIGHER EDUCATIONAL ESTABLISHMENTS OF PHYSICAL CULTURE AND SPORTS OF UKRAINE

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The methodological provisions of the system of ecological education at the higher educational establishments of physical culture and sport of Ukraine are considered in accordance with the provisions of the UNECE Strategy for Sustainable Development and the "Concept of Environmental Education in Ukraine" of the Ministry of Education and Science of Ukraine at the educational level of the bachelor and master. The Positions of methodology and organization of training of applicants of an educational level – the master of specialty 017 "Physical culture and sports", specialization "Ecology of sport" are presented. *Keywords:* ecological education, ecology of sport, sustainable development.

Методологія екологічної освіти у вищих навчальних закладах фізичної культури і спорту України. Циганенко О.І., Першегуба Я.В., Склярова Н.А., Оксамитна Л.Ф. Розглянуті методологічні положення системи екологічної освіти у ВНЗ фізичної культури і спорту України відповідно положенням «Стратегії освіти для сталого розвитку» СЕК ООН та «Концепції екологічної освіти в Україні» МОН України на освітньому рівні бакалавр та магістр. Наведені положення методології та організації підготовки здобувачів освітнього рівня – магістр спеціальності 017 «Фізична культура і спорт», спеціалізації «Екологія спорту». *Ключові слова:* екологічна освіта, екологія спорту, сталий розвиток.

Методология экологического образования в высших учебных заведениях физической культуры и спорта Украины. Цыганенко О.И., Першегуба Я.В., Склярова Н.А., Оксамытная Л.Ф. Рассмотрены методологические положения системы экологического образования в высших учебных заведениях физической культуры и спорта Украины соответственно положениям «Стратегии образования для стабильного развития» ЕЭК ООН и «Концепции экологического образования в Украине» МОН Украины на образовательном уровне бакалавр и магистр. Представлены положения методологии и организации подготовки соискателей образовательного уровня – магистр специальности 017 «Физическая культура и спорт», специализация «Экология спорта». *Ключевые слова:* экологическое образование, экология спорта, стабильное развитие.

The Program of Action of Agenda 21 proclaimed that education is the foundation of sustainable development, and the formation of a new worldview should be oriented towards creating conditions for preserving life on the

planet Earth. To implement these tasks in 2005, the United Nations Economic Commission for Europe (UNECE) adopted the "Strategy for Education for Sustainable Development" (ESD), which identifies specific tasks. The strategy states that ecological education plays a fundamental role in the long-term process of the formation of an integrated education system for sustainable development [1, 2, 3].

This role and importance of environmental education is conditioned by modern requirements of systemic ecologization of all spheres of vital activity of modern society, ecologization of various branches of the economy and all education systems – general formal and informal education, economic, humanitarian, engineering and technological, agrarian, biological, medical, etc., including education at the higher educational establishments of physical culture and sports of Ukraine [1, 2, 4].

The current "Concept of Environmental Education of Ukraine" approved by the decision of the Board of the Ministry of Education and Science of Ukraine (Minutes No. 13/6 – 19 of 20.12.2001) became the first important step in the development of environmental education in the state. However, it needs to be improved taking into account the pan-European trends in the development of environmental education in the context of the UNECE Strategy for Balanced Development and the UN Conference on Sustainable Development Rio + 20 [1, 5, 6].

In the current "Concept of Environmental Education of Ukraine" of the Ministry of Education and Science (MES) of Ukraine, it is determined that in the programs of higher educational establishments of Ukraine there

should be a discipline "Fundamentals of Ecology" (basic ecological knowledge) with compulsory addition (at the educational level – Bachelor) from the block "Applied ecology" on the profile of the university. Accordingly, for the higher educational establishments of physical culture and sports of Ukraine, the "Ecology of Sport" (with its additions regarding the environmental aspects of physical culture) should become such a mandatory complement to the discipline "Fundamentals of Ecology". At the same time, the state policy of Ukraine in the field of environmental education at higher educational establishments is based on the following basic principles: the dissemination of environmental education, the competence of environmental education, the continuity of the process of environmental education [2, 5]. In this case, in practice, issues of environmental education are considered for higher educational establishments of different profiles [7, 8, 9, 3, 10].

However, the main methodological provisions of the system of continuity of the process of environmental education at the educational levels "bachelor's – master's degree" for the higher educational establishments of physical culture and sports of Ukraine, with the use of the new branch ecological science – "Ecology of sport", have not yet been developed. This refers to both the profile of the system of environmental education by supplementing the provisions of the discipline "Ecology of Sports" at the course "Fundamentals of Ecology" (educational level – bachelor), and further study at the magistracy (educational level – master) in specialty 017 "Physical Culture and Sport", specialization "Sports Ecology", which makes this development relevant and timely.

The purpose of the work is to develop the questions of the methodology of the environmental education system for the higher educational establishments of physical culture and sports of Ukraine in accordance with the provisions of the UNECE Strategy for Sustainable Development and the Conception of the Ecological Education of Ukraine of the Ministry of Education and Science of Ukraine.

Methods of research

In accordance with the goal, a systematic analysis of scientific, educational and scientific methodological literature on the methodology of environmental education for universities of various profiles was carried out. Used methods of theoretical analysis of scientific literature are generalization, synthesis, formalization, abstraction [11].

The analysis of recent publications has shown that in the direction of developing the methodology of environmental education for higher educational establishments of physical culture and sports, there are already some researches of authors: Imasa E. et al., Petrushina N. et al., Polievsky S., Futorny S. et al. Tsyganenko O. et al. [12, 13, 14, 15-17]. However, the methodological provisions discussed in them are of a fragmentary nature and do not reflect the continuous process of environmental education in higher educational establishments of physical culture and sports.

Research results

In educational programs for higher education establishments of physical culture and sports of Ukraine it should be reflected that the ecology of sport (with elements related to the environmental issues of physical culture) is a

new science that is still at the stage of formation of both its main provisions and the definition of its place among other sciences, in including environmental ones. It should be determined that environmental activity is now mandatory, and for the most part is one of the main components of any sphere of human activity, including in the field of sports [12, 15, 16].

In addition, the ecology of sport can be considered both as an industry of environmental knowledge and the type of environmental education in sport, which can be implemented in practice at all higher education establishments of physical culture and sports of Ukraine when studying students (educational level – bachelor) discipline "Fundamentals of Ecology" (taking into account the specifics of sports activities), which is a compulsory discipline, including in accordance with international standards of higher education [15, 16].

Concerning the material sphere in the ecology of sports, the following main objects for environmental assessment (ecological inspection) and expertise should be noted, scientific research of both sports complexes and their "green" zones, sports parks, grass lawns for various sports (football, tennis, golf, etc.), water bodies (lakes, rivers, seas, etc.) for water sports (sailing, rowing, kayaking, canoeing etc.) [12, 15, 16].

The ecology of sport, according to its purpose, examines the environmental aspects and problems of sport. The ecology of sport as a science forms the principles and criteria for environmental safety of sports activities, environmental management and marketing in sport, lays the foundations of local, regional and global environmental policy in the field of sports [12, 15, 16].

The main object of the research of the ecology of sport is the state of ecosystems in the territories and water areas where sports events are held (sports activity), the ecological state of sports complexes and other objects of sports infrastructure, the state of environmental safety of sports activities, both for the environment, wildlife and for a person [12, 16].

In the methodological aspect of the curriculum and the programs in the higher educational establishments of physical culture and sports, it is necessary to cite that the ecology of sport is, in its essence, a synthetic, complex, branch section of modern ecology that covers various areas of the sports industry (including aspects of the ecology of physical culture). According to the sectoral principle of distribution of special sections of ecology, the ecology of sport can be attributed to all four main areas of modern ecology of bioecology, socioecology, technoecology and geoecology [15, 16].

With bioecology, the ecology of sports unites primarily human ecology, its biological and medical aspects, and with socioecology – ecological culture (aspects of culture in sports), education, environmental law, environmental marketing, management and business (their aspects in sport), with technoecology – ecological aspects of the construction of sports facilities, sports complexes, sports centers and their "green" zones, sports parks, the use of environmentally friendly technologies for the production of sports equipment, with geoecology it is the landscape ecology of sports parks and sports complexes and their ecological mapping [15, 16].

The main tasks of the ecology of sport as a science are: the definition

of ways of ecologization of sport as a sphere of human activity; studying and assessing the state of ecosystems, in the territories and water areas where sports events are held, the development of environmental guidelines for their conservation; development of the provisions of environmental safety of sports activities; ecological assessment of landscapes and ecological cartography of sports parks and sports complexes with their "green" zones; development of environmental requirements for sports facilities, sports complexes, sports parks, water bodies used for sporting events, etc.; development and assessment of environmentally sound technologies for sports activities; ecological assessment (ecological inspection) and examination of territories and water areas for compliance with environmental requirements of sports events; ecological management and marketing in the field of sports; environmental audit in the sports industry [15, 16].

The ecology of sport is a new branch of environmental science, but it already has some developments in relation to its main environmental law, defines the main principles and rules [12, 14, 15, 16]. The main ecological law of the ecology of sport can be defined by the law of ecologization of all sports activities. The law declares that all sport activities should be environmentally friendly, not harm the environment, wildlife and human beings, contribute to the improvement of the environmental situation in the sports industry, as well as in the entire natural environment [12, 15, 16].

The basic principles of ecology of sport are: complexity – both in terms of content and in the directions of practical activity; integrity – integrates knowledge of various sciences, including environmental ones; branch orientation – as

a branch of environmental science; environmental orientation – focus on the protection of nature and the environment, human health (as a socio-biological species, which is part of the wildlife of the planet Earth) [12, 15, 16].

As the basic rules of the ecology of sports can be determined the following: the environmental focus of sports activities; environmental safety of sports activities for the state of the environment, wildlife and human [12, 15, 16].

In the methodological aspect, the ecology of sport is a division of both the ecology and the science of sports, it uses the scientific provisions of many sciences: biology, physics, chemistry, mathematics, computer science, medicine. At the turn of hygiene and the ecology of sports, a science such as the Ecoghygiene of Sport emerged [15, 16].

It should be noted that the ecology of sport as a complex, synthetic science uses methods from different sciences: biology, chemistry, physics, ecology, sports science, medicine, sociology, psychology, etc. [12, 15, 16].

Like every science and field of practice, the sports ecology has its own sections that are recommended to be presented in curricula and programs. The main sections (directions) of the ecology of sport can be identified as follows: a) general: general issues of the ecology of sport; place of ecology of sports among other ecological sciences; b) special: ecological factors of the environment and their importance in sports activities; ecosystems and their use in the field of sports; global climate change and its importance for sporting activities; ecological and medical aspects of sport ecology (ecology of nutrition, endoecology and ecological medicine, medical ecology, etc.).

A special place in the ecology of sports belongs to the problem of environmental protection and environmental protection, as this is the main direction of the ecologization of both sport activities and the entire sports sector in general [12, 15, 16].

Among the sections of this direction in the curricula and programs, it is recommended to distinguish methodologically such as: general provisions of nature protection activity in the sphere of sports; rational environmental management as a component of environmental activities in the field of sports; maintenance of ecological safety as a component of nature protection activity in sports; ecological rehabilitation of ecosystems that are used in sports; environmental management as a market system of management (management) of nature protection activities in the field of sports; ecological (environmental) inspection in the sports industry.

In the organizational and methodological aspect, the preparation of applicants for the educational level, the master's degree, magistracy 017 "Physical Culture and Sport", the specialization "Ecology of Sport" should be of a complex nature and consist of three main cycles: a cycle of general preparation, a cycle of vocational training, a cycle of disciplines of free choice of the applicant for the specialization of the magistracy "Ecology of Sport" [12].

The general training cycle should be represented by the following disciplines [12]:

- professionally oriented foreign language;
- Information technologies in scientific activity in physical culture and sports;

– civil defense and labor protection in the field of sports.

The cycle of training should include the following disciplines:

- actual problems of modern ecology of sport;
- pedagogy.

In the cycle there is a master's practice and master's work.

For the cycle of disciplines of the free choice of the applicant for a master's degree in the specialization "Ecology of Sport", the following list of disciplines is recommended:

- general ecology and neocology (as a fundamental discipline of the cycle);
- the ecology of sport (as the basic discipline of the cycle);
- environmental activities and environmental inspection in sport (as a specialization of environmental activities in the field of sports);
- balanced use of nature in the field of sports;
- environmental management and sports marketing;
- modern aspects of ecological nutrition;
- endoecology of sport;
- methodology and organization of research in the magistracy.

In the organizational and methodological aspect special attention should be paid to the cycle of disciplines of the free choice of the applicant. It is with the use of the disciplines of this cycle that the process of forming fundamental, basic and special competencies, competence in the performance of scientific research for the applicants. As a fundamental competence, competence is used on the problems of general ecology and neoecology, as a basic competence in the field of the ecology of sport, as a special

competence in matters of environmental departmental (sectoral) inspection in the field of sports; competence in the implementation of scientific research is acquired by studying the methodology and organization of scientific research in the magistracy [12].

Conclusions

The methodology of environmental education at the higher educational establishments of physical culture and sport of Ukraine should be based on the fundamental provisions of the UNECE Strategy for Sustainable Development and the Conception of the Environmental Education of Ukraine of the Ministry of Education and Science of Ukraine.

The methodological basis for environmental education at the higher educational establishments of physical culture and sports of Ukraine can be the "System of Consecutive Environmental Education" with the direction – bachelor's degree (basic on the basis of the discipline "Fundamentals of Ecology", taking into account the profile of the university) – master's degree in the specialization "Ecology of Sport".

Specialists of higher educational establishments of physical culture and sports of Ukraine as an educational level of bachelor and master (specialization "Ecology of Sport") should acquire environmental competence in both the main areas of the sport ecology and motivational and cognitive competence in environmental education.

In the methodological aspect, the ecology of sports is to be included as a component (an application on the profile of the university) to the course of teaching the discipline "Fundamentals of Ecology" (as a basic discipline) of the educational level – "bachelor" at the

higher educational establishments of physical culture and sports of Ukraine.

In the methodological aspect, the ecology of sport can be used as a spe-

cialization of the magistracy of the specialty 017 "Physical Culture and Sport" at the University of Physical Culture and Sports of Ukraine.

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