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ECOLOGICAL-NATURALISTIC WORK IN OUT-OF-SCHOOL EDUCATION INSTITUTIONS OF UKRAINE IN CONDITIONS OF DISTANCE LEARNING

During the period of active introduction of distance learning in general secondary education institutions, its theoretical, content and organizational foundations were reflected in a number of methodological recommendations and explanations, but the issue of its organization in out-of-school education institutions, where ecological-naturalistic work is carried out, have not received adequate theoretical and applied reflection yet. The article characterizes the content foundations of ecological-naturalistic work in out-of-school education institutions in conditions of distance learning, presents its advantages and disadvantages. It is determined that organization of the high-quality ecological-naturalistic work in out-of-school education institutions in conditions of distance learning requires development of appropriate managerial and pedagogical competences. The lack of methodological recommendations, technical capabilities for high-quality ecological-naturalistic work is emphasized. It is recommended for the methodological departments of out-of-school education institutions to direct their efforts to the development of methodological recommendations, using the innovative experience of out-of-school education institutions in Ukraine and abroad.

Key words: *ecological-naturalistic work, distance learning, institution of out-of-school education.*

Introduction. The key idea of an out-of-school education institution (hereinafter – OEI) is to create conditions for self-realization, self-development of the pupil, for acquiring motivation to learn oneself and nature, necessary life competences, encouragement to creative activity. The purpose of the educational process in circles and other creative units of the ecological-naturalistic direction of OEI is development of abilities, formation of life competences of pupils, acquisition of knowledge about the environment, formation of an ecological culture of an individual, acquisition of experience in solving environmental problems.

The epidemic caused by the COVID-19 virus, and especially the introduction of martial law associated with the armed aggression of the Russian Federation against sovereign Ukraine, radically changed the lives of Ukrainian educators. Despite this, teachers continued to carry out ecological-naturalistic work (hereinafter – ENW) – they began to actively work on solving the problem of harmonious development of pupils' creative abilities, ensuring their meaningful leisure, implementing

systematic psychological support for pupils and their parents in distance learning. Teachers of OEI faced certain difficulties in organizing the educational process in this form. These circumstances have formed the problem of conducting high-quality online classes in OEI institutions.

Analysis of current research. Researchers V. Bykov, Y. Zhuk, I. Pidlasyi, S. Myhovych, V. Oliinyk, O. Ovcharuk and others made a significant contribution to solving the problems of distance learning. Organization of ecological-naturalistic work in the OEI is revealed in the works of V. Verbytskyi, H. Pustovit, V. Bereka, V. Kremen, I. Riabchenko, O. Sukhomlynska, T. Sushchenko and others. The issue of introducing distance learning in the educational process of the OEI was considered by L. Vorona (Vorona, 2021) and reflected in the materials of the methodological and pedagogical project (Tykhenko, 2021).

It should be noted that if during the period of active implementation of distance learning in general secondary education institutions (hereinafter - GSEI), its theoretical, content and organizational foundations were reflected in a number of methodological recommendations (Vorotnykova, 2020, Bachynska, Matushevskaya, 2020, Burtseva, Malieiev, 2020), regulatory documents (*On approval ...*, 2015, *On features ...*, 2020) and explanations of the Ministry of Education and Science of Ukraine (hereinafter – MES) (*Organization of distance ...*), but the issue of its organization in the OEI where ENW is conducted did not receive adequate theoretical or applied reflection.

The article is aimed at analyzing ENW in the conditions of distance learning as a form of educational activity in the system of out-of-school education in Ukraine, the main advantages and disadvantages of developing and implementing elements of distance learning in OEI.

Research methods: theoretical: analysis; generalization of psychological and pedagogical sources; identification of relationships between phenomena and processes, as well as patterns and trends in their development; comparison; system-structural method; empirical: surveys, observations, comparisons, interviews with teachers, pupils and their parents.

Research results. If the epidemic caused by the COVID-19 virus, which periodically arose from 2020 to 2021, prompted improvement of the distance learning organization, the introduction of martial law in our country contributed to the search for other approaches to solving educational problems in the OEIs (Rebryna, 2020, p. 4).

Distance learning in Ukraine is regulated by a number of regulatory documents: “National Doctrine of Education Development”, “Concept of Distance Education Development in Ukraine”, “National Informatization Program”, Laws of Ukraine “On Education”, Order of the Ministry of Education and Science of Ukraine “On Approval of the Regulation on Distance Learning”.

ENW is carried out in accordance with the Laws of Ukraine “On Education”, “On Out-of-School Education”, “On General Secondary Education”, “On Preschool Education”, Regulations on Out-of-School Education Institution, the Concept for the implementation of state policy in the field of reforming general secondary education “New Ukrainian School” for the period up to 2029, the Concept of national-patriotic upbringing in the education system of Ukraine.

The Law of Ukraine “On Out-of-School Education” says that out-of-school education is carried out differentially in accordance with individual capabilities, interests, inclinations, abilities of pupils, students and listeners, taking into account their age, psychophysical characteristics, health status in various organizational forms, among which is distance learning (*On out-of-school ...*, 2000).

From the first days of the active phase of the armed confrontation of Ukraine against Russia, the work of teachers of the country’s OEI was organized taking into account the Decree of the President of Ukraine “On the imposition of martial law in Ukraine” dated 24.02.2022 No 64/2022, the Decree of the President of Ukraine “On the extension of martial law in Ukraine”, 14.03.2022 No 133/2022, the order of the Ministry of Education and Science “On some issues of organization of general secondary education and the educational process under martial law in Ukraine” dated 28.03.2022 No 274, letters of the Ministry of Education and Science of Ukraine: “On ensuring the educational process in out-of-school education institutions during martial law” dated 18.03.2022 No 1/3544-22, “Recommendations on the organization of work of out-of-school education institutions taking into account the realities of martial law in the country” dated 14.04.2022 No 1/4142-22, other regulatory documents and was focused on creating a safe educational environment. The relevant orders regulating the work of teaching staff under martial law were drawn up in all OEIs of Ukraine.

Under the term “ENW” we mean the educational process, organized and directed interaction of teachers with education applicants, which is

regulated by an additional software component, variability of forms and methods of education and upbringing, which consists in the study, research, preservation of objects of animate and inanimate nature of a particular territory in the conditions of the system of out-of-school education in Ukraine.

Distance learning is a form of educational process in which its participants carry out educational interaction fundamentally and mainly at a distance and does not imply direct learning interaction of participants face to face, otherwise, when participants are territorially outside the possible direct educational interaction and when in the learning process their personal presence in certain educational premises of the educational institution is not mandatory (Bykov, 2001, p. 2).

Characteristic features of ENW in the OEI in conditions of distance learning are: interactivity of learning – interactive opportunities are used in the distance learning system as well as programs and information delivery systems that allow to establish and even stimulate feedback, provide dialogue and ongoing support that are not possible in most traditional learning systems; flexibility of training for education applicants, engaged in distance education, flexibility of place and time of study.

To organize distance learning, it is not enough to transfer classes online without changing methods and approaches. Teachers face a great challenge – to learn how to freely use modern educational electronic resources, organize work and motivate children to study, establish feedback and monitor the results of distance learning.

Distance ENW in OEI is carried out using the main forms of online communication: video conference, e-mail, forum, chat, questionnaires. Today, the Ministry of Education and Science recommends the most common web resources for distance learning: Moodle (distance learning management system), Google Classroom (platform using video, text, graphic information), Zoom and Microsoft Teams (for video conferencing and online meetings), Classtime (for creating educational applications), LearningApps.org (for creating interactive exercises), ClassDojo (work evaluation tool), etc. (*Organization of distance learning...*, pp. 20-21).

For students of primary, basic, higher levels, individual and group types of circle classes are held: lectures, webinars, practical, laboratory classes, work with various sources of information, preparation of projects, reports, essays, presentations, messages, research and experimental works, exhibitions, conferences, photo reports using various methods:

verbal – narration, conversation, search conversation, role-playing, explanation; visual – illustration, demonstration; practical – practical work, laboratory work, etc.

Control measures include intermediate (thematic, modular), final and other OEI-defined types of control of knowledge and skills acquired by the pupil in the learning process (online tests with automatic verification, questionnaires in Google forms and in Classtime) (Bondarenko, 2021, p.11).

The results of a survey of the heads of the environmental-naturalistic circles of OEI show that the majority of respondents (60 %) use Google services, as they occupy one of the central places among social services and the company itself is one of the most popular in the world. The use of Meet and Google Classroom services has a number of advantages, namely: free of charge, easy to use, free and quick access, the possibility of obtaining additional education and organizing joint work of participants in the educational process, creating their own educational resources, Google applications are in one account, all information is instantly stored in cloud storage, they are quite versatile. Such services fully meet the conditions and specifics of circle work.

The pedagogical worker independently chooses the type of mode (synchronous or asynchronous) of conducting individual training sessions. At the same time, at least 30 percent of the study time provided by the curriculum is organized in synchronous mode, the rest – in asynchronous mode (Vorotnykova, 2020, p. 33).

Distance ENW has many significant advantages: no cases of violation of the principles of academic integrity, since pupils attend classes on their own free will and interests, the educational activities of pupils prevail, the role of the circle leader as a moderator increases, the role of the applicant for education is mostly active, more diverse teaching methods and lesson planning are used according to their own pace and time, the choice of educational opportunities is not limited, a pleasant and favorable learning atmosphere is created independently.

The disadvantages of remote ENW include: lack of time to communicate with classmates and lack of personal communication between participants in the educational process, the need for the pupil to have strong personal motivation, the ability to learn independently, lack of possibility of immediate practical application of the knowledge gained, education applicants cannot always provide themselves with sufficient technical equipment and have constant access to the Internet.

It is common knowledge, that the main form of organization of ENW in the OEI are creative student units (circles), which work at three educational levels (primary, basic and higher). The main purpose of the higher educational level circle (grades 10-11) is formation of a comprehensively developed personality, provision of additional education, upbringing of the future creative elite of the state, creation of conditions for the professional self-determination of student youth and admission to higher education institutions.

When achieving the set educational goal in higher-level circles, in conditions of distance learning, the teacher faces a number of methodological and organizational problems, especially in the implementation of practical components of curricula.

Since the beginning of introduction of this form of education in the OEI, teachers have adapted the existing educational programs to the relevant conditions, relevant provisions have been developed. Later, the National Ecological-Naturalistic Center for Student Youth of the Ministry of Education and Science of Ukraine offered several curricula and online courses (*Distance classes...*). From 2021, OEI teachers begin to update and re-approve curricula, the content of which is also supposed to be implemented in the format of blended and distance learning.

The practical lesson, which involves implementation of practical (control) work, takes place remotely in asynchronous mode. Some practical tasks can be performed in synchronous mode, which is determined by the curriculum.

For GSEI, practical and laboratory work (requiring the necessary equipment and materials) is recommended to be replaced with video fragments of virtual laboratories (Vorotnykova, Chaikovska, 2020, pp. 290-291), or to organize conducting and demonstration of experiments, laboratory research, laboratory and practical work, projects and research workshops. Some researchers believe that a significant part of research work in secondary schools in conditions of distance learning can be performed with instructions and explanations from teachers using illustrations, 3D models, video and photographic material (Burtseva, Malieiev, 2020, p. 63, Komarova, 2016).

As noted above, the purpose of the circles of ecological-naturalistic direction of the highest level is development of pupils' abilities, formation of their life (practical) competence, provision of additional education, deepening of knowledge in natural sciences (primarily biology). Initially, a

significant part of OEI circles works according to curricula recommended by the Ministry of Education and Science. However, at the present stage of ENW development, most circles have switched to author's training programs, which provide for a significant part of laboratory and practical work, etc. (in some programs they constitute about 50 % of the total number of hours). There is a problem in the implementation of the practical part of the curricula, even if there is a strong material and technical base of the OEI.

It should be noted that, unlike GSEI, the OEIs have a strong material and technical base for teaching natural sciences (laboratories, educational and experimental land plots, wildlife corners, livestock farms, greenhouses, aquarium complexes, etc.), conditions have been created here for the placement, storage and use of necessary, first of all, natural visual aids, special educational equipment and materials. They have much better conditions for in-depth study of natural sciences, and this in turn increases the level of educational achievements of future higher education applicants.

In conditions of distance learning, it is not always possible to directly observe, see objects and phenomena in the natural state. Internet resources, online services offer an alternative to traditional forms of the educational process organization, creating an opportunity for personal learning, interactive classes, collective teaching, etc. We believe that in practical work it is possible to effectively use visual, auditory and linguistic clarity. The problem remains the use of its kinesthetic form.

We can confidently say that among the forms of ENW in the OEI, individual (work with various sources of information, preparation of projects, reports, essays, presentations, messages, research and experimental works) and group (circles, sections, clubs, schools, other creative student associations) forms of work with pupils can be effectively used. In group forms of work, you can effectively conduct the following types of classes (according to M. Makhmutov): study of new material, combined, control and correction of knowledge and skills, generalization and systematization of knowledge and skills in synchronous and asynchronous modes using the most common web resources for distance learning – Moodle, Google Classroom, Zoom, Microsoft Teams, Google Meet, Skype, ClassDojo, Classtime, LearningApps.org, etc. Organization of such type of classes as improvement of knowledge and skills (practical, laboratory work, etc.), taking into account the content of existing curricula of the OEI, remains problematic at this time.

It is clear that a large area of the country is occupied and mined and visiting forests and other dangerous areas during martial law and post-war law is prohibited, so such a form of ENW as an excursion has limited application in the educational process. A great example is conducting virtual or online tours for students. Using the Google Maps service under the guidance of a teacher, pupils can create their own interactive maps and educational resources (Vertel, 2020).

One of the priority tasks of modern state policy in the field of out-of-school education is to improve the quality of educational services, which primarily depends on the professional competence of teaching staff. The OEI is a special space for the professional activity of teachers, combining their professionalism with possession of other qualities, which is why distance learning is an opportunity for their professional growth.

Distance learning opens up significant opportunities to increase the level of professional information and communication competence, improve professional qualifications with minimal separation from the educational process, form new skills in working with online programs (online digital literacy platform “Diia”, “Prometheus”, etc.). Therefore, teachers must constantly improve their information and communication professional level, taking refresher courses in formal and non-formal education.

Methodological departments of the OEI should direct their efforts to the development of long-term work plans, using the experience of domestic and foreign teachers, get acquainted with the innovations of distance ENW in the OEI of Ukraine and other countries.

It is necessary to pay attention to the scientific and methodological support of distance learning, which includes: methodological recommendations for the development and use of pedagogical-psychological and information-communication technologies of distance learning; criteria, means and systems of quality control of distance learning; meaningful, didactic and methodological filling of the web resources of the curriculum, to develop electronic educational resources based on curricula for out-of-school education of ecological-naturalistic direction, especially for practical work in asynchronous mode.

Conclusions and prospects for further research. The situation that has arisen in the country has become the biggest and most difficult challenge for the entire educational community and the education system of Ukraine as a whole over the years of independence, distance learning has become a forced experiment that has become an impetus for analysis, conclusions,

quick decision-making for the organization of the educational process in any conditions.

Analyzing ENW in the OEI in conditions of distance learning, we can list a number of advantages and disadvantages of this form of education. The main disadvantage of ENW in distance mode is the lack of live communication and the ability to form practical skills among pupils, these are two most important conditions on which the educational process is based, they are the basis of the learning process, formation of life competences of education applicants.

Among the forms of ENW in conditions of distance learning, individual and group forms of work with pupils can be effectively used. In group forms of work, the implementation of practical components of training programs remains problematic.

Organization of high-quality ENW in the OEI in conditions of distance learning requires development of appropriate managerial and pedagogical competences that are not limited to the possession of basic online tools. Currently, there are no methodological recommendations, technical capabilities for high-quality ENW in distance mode, there are no clear instructions for distance learning in the ecological-naturalistic circles of the OEI.

Of course, the future of the out-of-school education lies in the active introduction of distance learning technologies into the educational process. A skillful combination of traditional and distance learning will create an appropriate educational web environment for distance learning, increase interest in out-of-school education, which should be the subject of further scientific research.

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АНОТАЦІЯ

Вертель Владислав. Еколого-натуралістична робота в закладах позашкільної освіти України в умовах дистанційного навчання.

За період активного впровадження дистанційного навчання у закладах загальної середньої освіти теоретичні, змістові та організаційні його засади знайшли відображення у низці методичних рекомендацій та роз'яснень, проте питання його організації у закладах позашкільної освіти, де проводиться еколого-натуралістична робота, не отримало в належній мірі теоретичного і прикладного обміркування та рефлексії. У статті розглянуто особливості еколого-натуралістичної роботи в закладах позашкільної освіти в умовах дистанційного навчання. Аналізуючи змістові засади еколого-натуралістичної роботи в закладах позашкільної освіти в умовах дистанційного навчання можна перелічити низку її недоліків і переваг. Основним його недоліком є відсутність живого спілкування та можливості формувати практичні уміння та навички у вихованців, а це, у свою чергу, найголовніші умови, на яких базується освітній процес. Серед форм еколого-натуралістичної роботи в закладах позашкільної освіти в умовах дистанційного навчання можна ефективно використовувати індивідуальні та групові. При групових формах роботи проблематичним залишається реалізація практичних складників навчальних програм особливо в асинхронному режимі. Організація якісної еколого-натуралістичної роботи у закладах позашкільної освіти в умовах дистанційного навчання вимагає розвитку відповідних управлінських та педагогічних компетентностей, які не зводяться до володіння основними онлайн-інструментами. Нині відсутні методичні рекомендації, технічні можливості для якісної еколого-натуралістичної роботи в умовах дистанційного навчання, відсутні чіткі інструкції щодо дистанційного навчання в гуртках еколого-натуралістичного напрямку закладу позашкільної освіти. Саме тому методичні відділи закладів позашкільної освіти повинні спрямувати свої зусилля на розробку перспективних робочих планів, на основі матеріалів кращого досвіду роботи вітчизняних та закордонних керівників гуртків, ознайомлюватися з інноваціями дистанційної еколого-натуралістичної роботи в закладах позашкільної освіти України та зарубіжжя.

Ключові слова: еколого-натуралістична робота, дистанційне навчання, заклад позашкільної освіти.