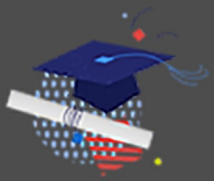
SUSTAINABLE DEVELOPMENT: MODERN THEORIES AND BEST PRACTICES



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Sustainable Development: Modern Theories and Best Practices

Materials of the Monthly International Scientific and Practical Conference (April 21-22, 2023)

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The collection consists of materials from the Monthly International Scientific and Practical Conference “Sustainable Development: Modern Theories and Best Practices”. They represent scientific research results in such scientific areas as financial and economic, managerial and legal, social and cultural, ecological and technical, educational and pedagogical issues of sustainable development on local, regional and international levels.

Keywords: Sustainable Development, Financial Issues of Sustainable Development, Economic Issues of Sustainable Development, Managerial Issues of Sustainable Development, Legal Issues of Sustainable Development, Social Issues of Sustainable Development, Cultural Issues of Sustainable Development, Ecological Issues of Sustainable Development, Technical Issues of Sustainable Development, Regional Features of Sustainable Development, International Cooperation for Sustainable Development, Educational Institutions and Pedagogy for Sustainable Development.

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FINANCIAL AND ECONOMIC ISSUES OF SUSTAINABLE DEVELOPMENT

CIRCULAR ECONOMY AS THE INNOVATIVE STRATEGY OF BUSINESS DEVELOPMENT IN UKRAINE

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In the context of growing environmental, financial, social and other risks, the development of the national economy depends on the efficiency of the production system, its innovation and stability, coordination of relations between stakeholders, the formation of a new culture of consumption and more. Herewith the efficiency of the production system should be based not only on measuring profitability and other financial results of enterprises, but also on the introduction of efficient technologies, principles of social responsibility, which will provide them with unique competitive advantages in the long-term perspective, optimal use of natural, human and other resources. Therefore, the priority of public policy in the context of reviving the growth rate of the national economy should be to ensure principles ofresponsibility, sustainability of the economic system, implementation of the concept of circular economy in key areas, in particular inproduction, agriculture and so on.

Thus, the circular economy model is a complex innovation system economic methods and mechanisms, the basic purpose of which is to optimize the use of resources [1]. Also, circular economy will minimize the risks of the system, especially those associated with fluctuations in resource prices and limited access to them in world markets. Despite the fact that the model of circular economy is under development and implementation, some countries have made significant progress in it.

It is clear that the development of circular business models needs active support from the governement, participation of private businesses, a single systemic approach of a public policy in the context of sustainable development.

The implementation of a circular economy will help to maximize resource efficiency, reduce waste, andpromote sustainability. The benefits of implementing such a model could be developed in the following ways in Ukraine [1]:

1.Resource efficiency.By optimizing the use of resources, Ukraine cardecrease its dependence on limited resources. For example, it could be done by adoptingenergy-efficient technologies.

2.Waste Management and Recycling. Because of the war the ecological problem is very important for Ukraine, sodifferent waste management systems are able to ensure proper collection, sorting, and recycling of waste. Also it will lead to create new jobs and businesses.

3.Collaborative Networks. Ukraine can foster collaboration between businesses, academia, and government to promote circular economy initiatives by creating different partnerships, clusters and common projects.

It is important for Ukraine to approach the circular economy as a long-term strategy, involving stakeholders from various sectors and continuously evaluating and adapting best world policies and practices.

1. Hryshova, I. Yu., & Nesterova, K. S. Kontsept tsyrkuliarnoi ekonomiky v konteksti zabezpechennia staloho rozvytku. Ekonomika APK. (2021). 4, 88 - 94.

FOR DEVELOPMENT OF A TRANSPARENT FINANCING POLICY OF THE DEFENCE AND SECURITY SECTOR (CASE OF UKRAINE)

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The defence industry is an integral part of the country. The territorial integrity of the state depends on its development. By improving every component of the defence sector, Ukraine not only implements new technologies, and new models of weapons but also provides a huge number of people with stable employment. This sector supports stability, including economic stability, as enterprises can fulfil orders, resulting in a flow of funds. Although Ukraine was in a relatively peaceful part of the world, the events of February 24, 2022, again emphasize the importance and necessity of supporting the country's defence capability.

One of the most important segments for any defence sector is its financing, or funding, without which there will be no salaries, no new technologies, and no quality equipment. The dynamics of defence spending represent a significant increase since 2014 (Fig.1).

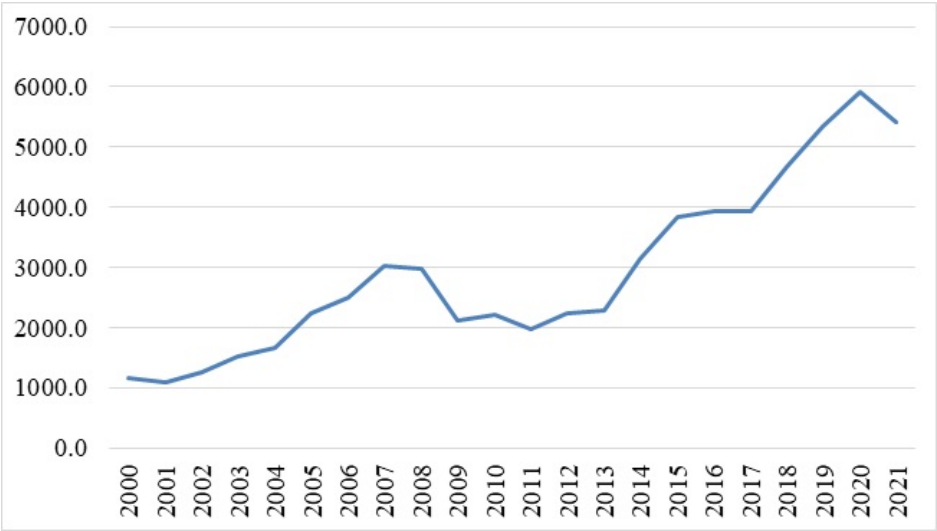

Fig. 1. Defence expenditure in Ukraine (US dollars) Source: SIPRI

The country began to rebuild its previously forgotten military-industrial complex (MIC) since the beginning of the aggression in 2014, which has been accompanied by an increase in military expenditures. This trend has been particularly pronounced since the arrival of the new government in 2019. Additionally, the defence expenditure as a percentage of GDP has risen significantly, from 1.1% to nearly 6% over the analyzed period [1].

The issue of financing and funding has become particularly acute. The State Defence Order (SDO) has become one of the key means of regulating the scientific and material-technical needs of defence and national security in Ukraine, which determines the order of interaction between ministries, other central and local executive authorities, state institutions, organizations, and business entities of all forms of ownership during its formation, placement, and execution, as well as providing measures for the implementation of Ukraine's international agreements on military-technical cooperation. The SDO is not simply a list of desired purchases by the Ministry of Defence, the National Guard, the State Border Service, and other law enforcement agencies, but also serves as a stimulus instrument.

Meanwhile, the financial performance of the State Targeted Defence Program for the Development of Weapons and Military Equipment during 2014-2019 was several times lower than planned. In recent years, structural reforms have begun in the defence sector of Ukraine, especially in the areas of procurement and state-owned enterprises. However, the risk of corruption remains high; new approaches require implementation, independent parliamentary oversight needs to be consolidated, and corruption risks in operations need to be mitigated, especially considering the war.

This work employed econometric research methods, which are based on the construction of models and their subsequent economic analysis. The research aims to analyze the factors that influence the growth or reduction of corruption risks in the financing of the defence and security sector in Ukraine. However, selecting the

dependent variable for the analysis was challenging for the research team. No index measures the degree of corruption in the defence sector of any country from 2000 through 2021. The Government Defence Integrity Index was developed by Transparency International only in 2020. Therefore, we can hypothesize that it might be possible to combine the available data on the state's defence expenditures in Ukraine for 2000-2021 and the level of corruption in Ukraine as a whole (for example, the Corruption Perceptions Index calculated by Transparency International) to create an indicator that would illustrate the level of corruption in the defence sector specifically. However, the graphs of defence spending in Ukraine and the hypothetical dependent variable are almost identical in dynamics, which confirms that the dependent variable is defence spending, not corruption in this sector, which is not consistent with the purpose of the research. Thus, the variants of the dependent variable proposed are not meaningful, and in general the idea of using a dependent variable as one that is simultaneously related to defence expenditures and the level of corruption in the country as a whole (in the absence of an index that would determine the level of corruption in Ukraine in the defence sector) turned out to be unfounded.

Based on the fact that, firstly, the level of corruption in the defence sector is determined not only by those factors directly related to its activities, but also by general societal factors; and, secondly, assuming that if such existed, we believe that the dynamics of its value corresponding to different historical periods of independent Ukraine would not differ significantly from the nature of the dynamics of the indicator measuring the level of corruption in Ukraine as a whole, it was decided to use it as a dependent variable is the indicator that measures the level of corruption in Ukraine as a whole. The most popular index that measures the overall corruption index in a particular country is the above-mentioned Corruption Perceptions Index (CPI).

The regression of the level of state control over corruption (dependent variable corr_control) on all 8 factors as independent variables(Eviews soft is implemented) (data source [2-11]):

·The ratio of the actual expenditures of the State Budget of Ukraine on defence to the planned ones in the corresponding year;

·The share of capital expenditures in total government expenditures on defence in Ukraine;

·Net arms exports from Ukraine;

·The ratio of state expenditures on wages for public sector employees to total state budget expenditures;

·Index of the rule of law in Ukraine;

·Index of the quality of regulatory policy of the state in Ukraine;

·Index of democratic society in Ukraine;

·Gini index for Ukraine.

The fully significant and relevant model revealed the following results and initiated the list of practical recommendations:

1) these factors are significantly negative triggers to the corr_control: the ratio of the actual expenditures of the State Budget of Ukraine on defence to the planned ones in the corresponding year & the share of capital expenditures in total government expenditures on defence in Ukraine;

2) these factors are significantly positive triggers to the corr_control: The ratio of state expenditures on wages for public sector employees to total state budget

expenditures; Index of democratic society in Ukraine & Gini index for Ukraine.

Practical recommendations:

I. It is necessary to modernize the system of accounting for the execution of defence expenditures of the state budget of Ukraine, to make it more rigid (perhaps with the use of modern information technologies) since the over-execution of the expenditure plan is one of the factors of the manifestation of corruption risks in this sector.

II. Special attention should be paid to the sector of capital expenditures for defence (funds for the development, purchase, modernization and repair of weapons, military equipment, and means) during the implementation of corruption control, as the model confirmed that this sector has the highest corruption risks.

III. Public servants who hold positions related to the performance of administrative and economic functions should increase their official salaries because, under such conditions, their tendency to abuse their official position and obtain illegal benefits should decrease.

IV. When developing normative legal acts (laws, by-laws (CMU resolutions, orders of the Ministry of Defence of Ukraine, various methodological recommendations)) that regulate issues of control over corruption in the defence sector, it is necessary to take into account the need to involve the public in monitoring the activities of public officials in the field of financing defence.

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PUBLIC SOCIAL POLICY IN THE CONDITIONS OF DIGITIZATION IN UKRAINE AS A FACTOR OF SUSTAINABLE DEVELOPMENT

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Analysis of issues of formation and implementation of social policy ir a modern transformation conditions as a factor of sustainable development becomes increasingly important, and has an interdisciplinary nature. This issue in the public administration system encourages further research of the forms, models, mechanisms, and principles of social policy in the period of European integration in the Ukrainian state and society (Kryshen, O.V.).

The digitization of society is an objective process.It should be done under the rules established by national law and taking into account world principles and models for the realization of the rights and freedoms of citizens. At the moment, information resources become increasingly important, and the right to receive information becomes one of the basic rights of citizens. At the same time, impartiality and openness of digital communications are important aspects of social relations in matters of realization of opportunities for each person, and in terms of sustainable development. It should be noted that the legal regulation of the entire system of social relations, formed based on electronic communications, digitization, and economic relations is not ideal. Also, legal regulation does not always accompany the process of electronic communications, does not ensure the effectiveness of such changes.

In the process of analyzing the development of digital technologies in Ukraine, it is worth examining the statistics. Statistical data is a prerequisite for the digitization of various areas of activity in the social sphere and as the basis for the implementation of further strategic goals. Thus, from 2013 to 2017, Ukraine occupied the leading position in Europe in terms of financial flows and the volume of tasks performed on digital platforms. Social and digital transformations are interdependent. However, the existing patterns are not manifested as they have to be in the Ukrainian context. Nowadays, excising war on Ukrainian territory doesn’t help to develop its digitization.

The introduction of digital technologies into the economy, management in the social sphere, and administration ensure the realization of the rights of the population to receive information, to access the benefits of electronic resources, to use the latest developments etc. are important.

In addition, an important aspect is to ensure quality and security both in the information sphere and in all areas where digitization is used. The main thing here is to determine the quality of legislative and legal communications' regulation in the social sphere.

The exclusion of a person from participation in management activities has its characteristics and advantages, and in some cases is indispensable. However, in any case, the main goal is to ensure the rights and freedoms of the population and maintain national security (Social and digital transformation).

Ukraine has approved the information on the Unified Provision System of the Social Sphere. It outlines all aspects of the creation and operation of a single information

environment in the social sphere. This regulation defines the structure, mechanism, and sources of filling the system with information, establishes the procedure for management, interaction with other state information systems and registers.

It is necessary to determine the main areas of activity in this aspect, namely: the formation of the Unified Social Register, which focuses on information about citizens who have the right to social support from the public administration; prevention of illegal actions and abuses in providing social protection to the population; ensuring openness, transparency, and control of social expenditures of the country.

This system will enable the social sphere to move to electronic document management. The system also creates a retro conversion subsystem, whereby all paper documents and archives of social institutions have to be digitizedin terms of sustainable development.

An important outcome is a significant easing of the receiving process of various social benefits and providing services to the population. The integration of the system with the Action Portal will help to resolve these issues without even leaving home (Cabinet of Ministers of Ukraine).

Thus, the implementation process of Public Social Policy in modern conditions is closely related to the implementation of the digitization process. This process is important because it provides an opportunity to improve the quality of services to the population, to make them public. At the same time, effective legal framework formation remains an aspect of social policy implementation in the context of digitization and in terms of sustainable development.

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REGIONAL MODELS OF TECHNOLOGY TRANSFER: DRIVING INNOVATION AND ECONOMIC GROWTH

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Technology transfer plays a crucial role in fostering innovation and driving economic growth in regions worldwide. As advancements in science and technology continue to accelerate, effectively transferring knowledge, inventions, and intellectual property from research institutions to the commercial sector becomes paramount. This research examines different regional models of technology transfer, exploring their key features, benefits, and challenges. By understanding these models, policymakers, researchers, and stakeholders can make informed decisions to enhance technology transfer initiatives and maximize the socio-economic impact within their respective regions.

University Technology Transfer Offices (TTOs) are instrumental in bridging the gap between academia and industry. These offices facilitate the transfer of research findings, patents, and expertise from universities to commercial entities. TTOs typically engage in activities such as patent filing, licensing agreements, spin-off creation, and industry partnerships. By providing essential infrastructure, expertise, and legal support, TTOs enable the commercialization of research and facilitate the creation of innovative startups and industry collaborations.

Science parks and innovation hubs are physical spaces designed to foster collaboration and knowledge exchange between academia, industry, and startups. These purpose-built ecosystems offer a range of amenities, including research facilities, incubation spaces, and networking opportunities. By co-locating research institutions, businesses, and entrepreneurs, science parks encourage serendipitous interactions, knowledge spillovers, and entrepreneurial activities. The close proximity of stakeholders within these hubs accelerates technology transfer and the development of new products and services.

Cluster-based models focus on creating regional ecosystems that cluster related industries and institutions together. By concentrating resources, expertise, and infrastructure, these clusters encourage collaboration, specialization, and innovation. Clusters often emerge around a particular industry or technology domain and promote knowledge sharing, joint research projects, and access to a skilled workforce. These models leverage the synergies created by co-located entities to enhance technology transfer and drive economic growth.

Public-private partnerships (PPPs) involve collaboration between government bodies, research institutions, and private industry to facilitate technology transfer. These partnerships leverage the strengths and resources of each sector to drive innovation. PPPs often provide funding, infrastructure support, and regulatory assistance to expedite the transfer of technology from research to commercial applications. By aligning public policy goals with industry needs, PPPs create an environment conducive to technology transfer, investment, and job creation.

Regional models of technology transfer are essential drivers of innovation and economic growth. University Technology Transfer Offices, science parks, cluster-based models, and public-private partnerships all play critical roles in facilitating the transfer of knowledge and intellectual property from academia to industry. By adopting and enhancing these models, regions can unlock their full potential, fueling entrepreneurship, creating high-value jobs, and fostering a culture of innovation. It is crucial for policymakers and stakeholders to understand the key features, benefits, and challenges associated with these models to effectively support technology transfer initiatives and maximize their socio-economic impact within their respective regions.

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SOCIAL AND CULTURAL ISSUES OF SUSTAINABLE DEVELOPMENT

BASIC MOTOR SKILLS IN CHILDREN AND ADOLESCENTS DURING PHYSICAL EDUCATION CLASSES IN A NEW UKRAINIAN SCHOOL

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The current stage of state-building in Ukraine requires reforming all aspects of human life, changing one's outlook, consciousness, and attitude to the phenomena of social life. The previous state system formed a person incapable of an active creative lifestyle, independent decision-making, and searching for new approaches to the content, forms, and methods of practical activity. All this applies to the sphere of physical education. [1]

Physical education is an organized pedagogical process aimed at morphological, functional improvement of the human body, formation and improvement of its basic vital skills, abilities and related knowledge, education of moral and volitional qualities [3].

In addition, physical education is a holistic, specialized process in which motor development is combined with mental education and upbringing, the purpose of which is to meet the needs of both the individual and society as a whole in the formation of a fully developed person [2].

The emergence and origin of physical education is caused by the requirements of society, determined by the level of development of material production and social ideas about the purpose, tasks, means and methods of their application.

The software of physical education includes the state program of industry development in the system of relations with other social phenomena: education, professional and military activity, health improvement and leisure of different social groups.

According to A. V. Domashenko, the system of physical education of the country is a certain model of organization and management of physical education and health of the population, the features and priority directions of which depend on the structure of the state, the degree of its development, customs and other factors.

Effective solution of pedagogical tasks aimed at forming motor function of primary school age children during physical education is of great importance in connection with society's requirement to increase the level and quality of motor fitness of the younger generation, as well as to strengthen the health of the nation, which is closely connected with economic, social and political development of Ukraine [1].

According to scientists, the development of motor skills depends on the content (curriculum material, teaching methods, material base, technical equipment), activity (teacher and student activity) and time components of learning. Effective solution of

tasks of the complex program of physical education is provided by complex use of the listed components at each physical education lesson [2].

Motor qualities are connected with typological features of revealing properties of the nervous system (strength - weakness, mobility - inertia, balance - imbalance of nervous processes) which appear in the structure of qualities in the form of natural abilities [4].

The highest growths of coordination abilities are observed in girls up to 11 years old, in boys - up to 12 years old. Scientists note that coordination qualities are in a system of relations with a number of other motor qualities and psychophysiological characteristics of the human body and are complex and closely related to motor exercises training [4].

All types of memory are used in physical education lessons, but depending on the way of presenting educational material they have different meanings. During demonstration, the leading role belongs to visual memory, during description and narration - to auditory and verbal-logical memory, during motor exercises - to motor, vestibular, tactile memory.

The best effect in memorizing motor exercises is obtained by combining different teaching methods. Much depends on the complexity of the exercise, the stage of its learning[5].

Primary school children's memory is primarily developing in the direction of increasing its arbitrariness, increasing the ability to consciously control it, and increasing the volume of semantic, verbal, and logical memory. At this age, there is a pronounced change in the ratio of involuntary and voluntary memorization towards an increase in the role of the latter. However, without pedagogical assistance, children tend to use only the simplest methods of voluntary memorization and reproduction.

In general, teaching younger students the ability to compare raises their analytical and synthetic activities to a higher level. Analysis gradually turns into abstraction, which becomes an important component of students' mental activity, necessary for generalization and formation of concepts.

According to researchers [3], primary school students are very emotional. Physical education classes are interesting and exciting, but they can cause children not only joy and vigor, self-confidence, but also sadness, resentment and even a negative attitude towards physical education.

In the process of developing motor skills, it is necessary to constantly orient students to perceive only a certain kind of information by actively concentrating on visual, auditory, and proprioceptive sensations. Scientists O. F. Artyushenko, I. O. Dudnyk, A. O. Artyushenkonote that the whole process of training is based on the formation of an integral image of a holistic motor action.

Already in the process of performing the first element of movement it is necessary to take into account the influence of the technique of its performance on the effectiveness of all subsequent elements.

H. Wiener notes that the system has feedback only if it uses information about the state of the controlled object to achieve the goal.

Here's how V.O. Sukhomlynskyi used feedback in the process of presenting educational material: "...and I focus not on my story, but on the thinking of teenagers: I see by their eyes whether it is clear or not; if necessary, I add new facts" [6].

The pedagogical process of physical education of schoolchildren is based, among

other things, on medical control, during which the state of health is determined, and students belonging to special, preparatory and main medical groups are identified. Based on the results of the medical examination, teachers create curricula for individual work with students that would meet the health and desire of children.

Thus, physical education of schoolchildren consists of three subsystems: mechanisms of national and intra-school control;

Medical control (medical examinations and medical and pedagogical observations);

Pedagogical process of physical education of children (methods of teaching and control) [3]. The other two subsystems perform their own control functions, the results of which directly affect the success and effectiveness of the process of physical education at school.

The main subsystem is the pedagogical process of pupil's physical education itself, which needs to be improved and is the subject of our study.

The weakest point in this process is pedagogical control during the lesson, i.e. the lack of effective methods of operational control. Each scientific school offers its own interpretation of operational control in physical education lessons, but this does not make this issue less relevant or promising.

For example, ballistocardiography is used for this purpose, claiming that the duration of ballistocardiogram registration is 30 seconds and, having a standard of each student's norm, it is possible to assess the current state of the cardiovascular system. However, the use of subjective methods of detecting the "standard" immediately casts doubt on the feasibility of using this method during classes [6].

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FORMATION OF CHILDREN'S ORIENTATION TOWARDS A HEALTHY LIFESTYLE

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As the great teacher Sukhomlynskyi said: “I am not afraid to repeat again and again: health care is the most important thing for a tutor. Children’s spiritual life, worldview, mental development, strength of knowledge, faith in their own abilities depend on cheerfulness.”

The first vital value of a modern person is the value of life and health. Nowadays health is considered as a state of complete physical, spiritual, mental and social well-being of a person.

Teaching children to maintain and strengthen their health is one of the most important tasks of educational institutions and teachers as a whole.

The problem of the formation of a healthy lifestyle is covered quite carefully in many socio-philosophical, pedagogical, sociological works. This problem became particularly relevant in the second half of the 20th century, both in the world as a whole and in Ukraine. This aspect was studied by V. Glukhov, N. Vizits, V. Mochenov, V. Balsevich, P. Vinogradov, G. Myzan, A. Matveev, and H. Morozov. The experience of these scientists is of great importance for our generation: the valuable aspects of the culture of a healthy lifestyle have been studied; the role of developing cognitive interest in increasing the culture of a healthy lifestyle is shown; prior positions of will and motivation in the formation of a healthy lifestyle is determined.

Socrates, Plato, and Aristotle noted the need for physical development to strengthen the child’s health and harden it.

Health is not only the absence of diseases, but also a positive psychological well-being. All its aspects are equally important and should be considered in relation to each other. It is no accident that ancient medicine paid great attention to the education system, which combined the physical and spiritual development of the child. History shows that society has a constant need to form motor skills necessary in a person’s life: walking, running, swimming, to develop their physical abilities to optimal levels: strength, endurance, dexterity, flexibility, etc. [3].

It is obvious that the child’s attitude to his health should be a subject of pedagogical care. The forms, content, and methods are directly related to those age-specific features that determine the uniqueness of each stage of a child’s development and become the basis for the formation of certain internal attitudes, including a healthy lifestyle [2].

To attract children and give them a boost to a healthy lifestyle, we need to take certain measures:

- promotion of a healthy lifestyle: dissemination of information about the benefits of exercise, proper nutrition, hygiene, healthy sleep, etc.;
- involve children in sports: organize sports sections and clubs at school or in a club, hold sports competitions, physical education classes, etc.;

- a good example of adults: parents and teachers should be an example for children, demonstrating a healthy lifestyle, not smoking, not using alcoholic beverages and drugs, proper nutrition;

- organization of a healthy environment: in schools, kindergartens and other places where children are, it is necessary to ensure comfort, create favorable conditions for physical exercises;

- to educate children in self-discipline: children must independently establish the correct daily routine, eat properly, do physical exercises, etc.

These measures will help shape children's focus on a healthy lifestyle and reduce the risk of diseases and health problems in the future.

As Arthur Schopenhauer said: "Health outweighs the other benefits of life in such a way that a healthy beggar is happier than a sick king."

A person lives in a community, and his thoughts, desires and deeds are determined by the actions of the environment around him. If a healthy person stays close to a person with the flu every day and breathes the same air, then he will also get sick. If a person lives in an atmosphere of rage, in an environment of temptation and depravity, then this atmosphere cannot but destroy his soul. Therefore, the environment can be considered the cause of the appearance of bad habits. [1].

By the way, we are discussing bad habits, but there are also good ones. Why does a person take on the bad ones faster? Probably because it is easier to turn off the light than to dispel the darkness. If person had bad habits at a young age, they will accompany him throughout his life. There are many families that set a bad example for their children, where parents abuse alcoholic beverages. Smoking, as well as drug and alcohol abuse is common among boys from such families. Another reason for the emergence of bad habits is the conflict of upbringing, when there is a gap between what is taught and what those who teach (parents, teachers, adults) do.

Harry Ford said: "Meeting together is a beginning, staying together is a process, working together is success." Only together, with the joint efforts of parents, tutors, teachers, psychologists, social pedagogues can bring results in such a difficult and responsible matter.

The formation of the basics of a healthy lifestyle in students should be based on the following principles:

1. Inseparability of education and training in work. The acquisition of knowledge and information must be accompanied by the process of forming the skills of responsible behavior. Healthy attitudes or the development of personal and social competence.

2. The process of education and upbringing should be based on collective, joint activity. The meaning of the work is not to dominate, but to manage the student's activities.

3. The student in the center (person-oriented approach). In the process of knowledge transfer and assimilation, the student is not a passive object of pedagogical influence, but an active participant in the educational process. A necessary condition for the effectiveness of education is the actualization and development of the student's positive potential.

4. Understanding that all five dimensions (components) of health are equally important. The main task in this regard is the balanced development of all dimensions of health (physical, social, spiritual, emotional and intellectual) [1].

The most precious thing in life is health. This is a gift that is given to us from birth.

But for some reason, people sometimes neglect their health. Especially our youth, because for them the whole life is still ahead. However, it is not always so. It happens that one careless act destroys all dreams and plans. That is why, working in such a direction as forming the principles of a healthy lifestyle in children, one should try to help children acquire the necessary knowledge, acquire certain skills and abilities that will contribute to their success in life.

The famous Leonardo Da Vinci once said: “Remember, life is a gift, a great gift. And the one who does not appreciate it does not deserve this gift.”

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FORMATION OF PHYSICAL QUALITIES OF UNIVERSITY STUDENTS THROUGH VOLLEYBALL

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Physical education has become a significant part of the educational process of a higher education institution, it affects both the student as a whole and his or her general body condition. Volleyball is considered to be one of the most common sports games popular among students. It has become one of the most popular sports because it is easy to learn, widely available and dynamic in the learning process.

The main tasks in teaching volleyball are: firstly, improving the health of students; secondly, the formation of physical qualities necessary in the future life of students, in their readiness to receive professional education, in the future, effective work as a specialist.

The modern game of volleyball is a complex sport that requires athletic training and perfect mastery of technical and tactical skills. [1,c.4]

Modern volleyball makes high demands on the physical development of a volleyball player who is obliged to participate in both offense and defense. Therefore, the requirements for speed and power training of volleyball players are very high, and repeated variable performance of technical techniques and the duration of the game require special endurance.

Physical training of a volleyball player is closely related to tactical, technical and psychological training. It contributes to the fastest possible mastering and consolidation of tactical skills, as well as technical techniques of the game of volleyball. [3,c.15]

The process of sports training of volleyball players consists of six organically

interrelated types of training: physical, technical, tactical, psychological, theoretical and game. Modern volleyball places high demands on human motor abilities and functional capabilities. In the game, the nature of the volleyball player's motor activity is due to the instantaneous change in the situation of the struggle (competitions last more than two hours). Players perform many techniques and tactical actions, jumps, falls, and sudden rapid movements. For example, a volleyball player performs up to 100-150 jumps and up to 300 technical moves during a game. During the game, the heart rate reaches 180-200 beats per minute. Each volleyball player must act effectively throughout the game, being in a continuous martial arts battle with the opponent. This requires a comprehensive development of physical qualities - strength, speed, endurance, agility and flexibility. A high level of development of special motor abilities is the basis for improving technical and tactical skills in volleyball. [3,c.6]

The majority of techniques in volleyball requires the manifestation of special strength. Thus, to perform a pass with two hands from above a certain level of development of strength of muscles of hands is necessary, a feed - strength of muscles of a hand, a shoulder girdle and muscles of a trunk, and for performance of such a difficult technical technique as an attacking blow, the complex development of strength of muscles of a hand, a shoulder girdle, a trunk and legs is necessary. The strength of leg muscles in volleyball players is manifested in jumps. [3,c.8]

Most volleyball techniques cannot be performed without developing this quality. Most of the exercises aimed at developing quickness are recommended to be performed by visual cues. This will help improve the speed of the response. It is necessary to select exercises similar in their structure to the nature of volleyball. [3,c.10]

Students pay special attention to the development of volleyball players' jumping endurance - the ability to perform jumps and series of the highest jumps throughout the meeting. For its development, exercises with a large number of jumps performed at the optimal height are used. For example, a series of attacking strokes in combination with blocking, performed without pauses.

Speed endurance plays an equally important role in volleyball, which consists in the ability to perform techniques and movements equally quickly throughout the game. High-speed endurance is developed with the help of exercises of a repeatedly variable nature, in which fast movements and individual movements are repeated many times.

Special endurance combines jumping endurance - the ability to perform all techniques as accurately as possible and focus attention throughout the game. To develop these qualities, teachers use games for students with more than the prescribed number of games (6-9), games for time, filling the pauses between games with intensive physical exercises or playing (basketball, hand ball, etc.) for 5-10 minutes at the fastest possible pace. [c.11-12]

Agility is the ability to quickly master new movements and quickly adjust motor activity to meet the requirements of suddenly changing circumstances. This quality is developed by performing complex coordination gymnastic exercises and acrobatic jumps, mastering volleyball technique and tactics, during various games and relay races, especially those with elements of new things. The coordination difficulties that a volleyball player must cope with are gradually increasing. These difficulties consist of the requirements to the accuracy of movements, to their mutual coherence and suddenness of change of circumstances. [1,c.10]

Flexibility - should be developed only to the extent necessary to ensure the smooth

execution of the necessary movements. At the same time, the amount of flexibility should slightly exceed the maximum amplitude with which the movements are performed ("flexibility margin"). Excessive development of flexibility will be harmful.

To develop flexibility, the university uses exercises with an increased range of motion (stretching exercises). They are divided into 2 groups: active movements and passive movements.

Particular attention should be paid to the development of mobility in the hip and shoulder joints, as well as in the joints of the hand and ankle. [1,c.11]

Given the interconnectedness of all aspects of an athlete's fitness, we can say that the level of physical fitness determines the successful mastery of various motor skills, which is the basis of technical fitness. Comprehensive physical fitness creates a practical basis for the effective implementation of tactical tasks. Rationally organized and regular general and special physical training serve as a means of improving basic physical qualities and mastering motor skills of volleyball players at different stages of training. [3,c.231]

Thus, it can be concluded that the use of means and methods of volleyball in the organization of physical education classes in a higher education institution contributes to the improvement of professionally important qualities of students. The higher the level of development of special qualities and abilities, the faster it is possible to master the basics of technique and tactics of the game. Formation of a physically hardened personality with knowledge, skills and abilities to use physical culture and sports for health improvement, increase of mental and physical performance should help students to successfully adapt to new living conditions.

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INNOVATIONS IN SOCIAL STANDARDS DEVELOPMENT: ADVANCING EQUITY AND PROGRESS

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Social standards are a critical aspect of society, shaping our behaviors, attitudes, and interactions. They provide a framework for promoting inclusivity, equality, and progress. In recent years, innovations in various fields have significantly impacted the development of social standards. This research essay explores the key innovations that have transformed social standards, focusing on technological advancements, data-driven insights, and collaborative initiatives. By analyzing the implications and challenges of these innovations, we gain a comprehensive understanding of their potential to advance equity and drive positive change.

Technological innovations have revolutionized the development and dissemination of social standards. The rise of technology-driven collaboration platforms has facilitated global conversations, allowing individuals from diverse backgrounds to participate in the standard-setting process. Open-source platforms have empowered communities to collectively shape social standards, fostering transparency, inclusivity, and accountability. Furthermore, social networking platforms have provided a space for public discourse, enabling the amplification of marginalized voices and challenging traditional norms.

The availability of vast amounts of data, coupled with advancements in data analytics and artificial intelligence, has opened new avenues for developing evidence-based social standards. Data analysis can uncover hidden patterns, biases, and inequalities, providing insights that inform the formulation of more inclusive and equitable standards. For example, data analytics can identify gender pay gaps, racial disparities, or discriminatory practices, enabling policymakers and organizations to address systemic inequalities and promote fairness.

The advent of technology-driven collaboration platforms has transformed the way social standards are developed and disseminated. These platforms leverage the power of the internet to bring together diverse stakeholders, fostering dialogue and collective decision-making. For instance, open-source platforms enable developers worldwide to collaborate on software standards, resulting in greater transparency, inclusivity, and

accountability. Similarly, social networking platforms facilitate conversations on social issues, providing a space for individuals to voice their opinions, challenge existing standards, and shape new ones.

Data analytics and artificial intelligence (AI) have emerged as powerful tools in social standards development. By analyzing vast amounts of data, AI can identify patterns, detect biases, and offer evidence-based insights, thereby informing the formulation of more inclusive and equitable standards. For example, AI algorithms can analyze labor market data to uncover gender pay gaps and highlight discriminatory hiring practices. Such data-driven insights enable policymakers, organizations, and activists to target specific areas for improvement and design interventions to address social inequalities effectively.

Global collaborative initiatives play a crucial role in setting social standards that transcend national boundaries. Organizations such as the United Nations and international labor unions foster dialogue, cooperation, and the development of international social standards. The United Nations' Sustainable Development Goals serve as a framework for addressing global challenges, including poverty, inequality, climate change, and social injustice. These initiatives encourage countries to align their policies and practices, promoting a more harmonized and consistent approach to social standards worldwide.

While innovations in social standards development offer great potential, they also present challenges that must be addressed. Ethical considerations surrounding data privacy, security, and algorithmic biases require careful attention. Transparency and accountability mechanisms should be established to ensure that the development and implementation of social standards are fair, inclusive, and not influenced by vested interests. Moreover, striking a balance between collective welfare and individual autonomy is essential to avoid paternalistic interventions that restrict personal freedom.

Innovations in social standards development have the power to transform societies, promoting inclusivity, equity, and progress. Technological advancements provide platforms for collaboration and public discourse, enabling diverse perspectives to shape social norms. Data-driven insights offer evidence-based approaches to address systemic inequalities and biases. Collaborative initiatives foster global cooperation and harmonization of social standards. However, ethical considerations and challenges related to privacy, biases, and the balance between collective welfare and individual autonomy must be carefully addressed. By leveraging these innovations and navigating these challenges, we can create a more equitable and inclusive society that upholds the values of fairness and progress.

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ORGANIZATION OF PHYSICAL EDUCATION AT SCHOOL ON THE EXAMPLE OF O.V. SUKHOMLYNSKYI

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A teacher's knowledge of the theory and methods of physical education is a leading condition for the development of pedagogical thinking, creative solving of physical education problems, allows to learn new information, critically perceive certain theoretical positions and practical actions, correctly assess the role of related scientific disciplines in the implementation of the tasks of physical education, create a basis for personal pedagogical creativity.

The first manual on "Physical Culture Theory" was a textbook published by G. O. Duperon in 1926. In this manual, the author defines that physical culture is not only the performance of physical exercises, but also the components of life: sleep, nutrition, clothing, work methods, hygiene, massage, hardening.

This is also the case in the practice of O. V. Sukhomlynskyi. In Pavlyska secondary school, the main directions of educational work regarding the implementation of the tasks of physical education and strengthening the health of schoolchildren were clearly outlined: sanitary and hygienic requirements for external living conditions and the work and rest regime of schoolchildren; peculiarities of the organization of children's physical work as an important means of strengthening health; physical education in physical education classes and in the process of extracurricular sports and mass work; organization of active recreation of schoolchildren; a system of conversations about a person and the peculiarities of the human body; optimal alternation of mental and physical work; health orientation of the physical education system: physical education lessons, morning exercises, physical education minutes, dynamic breaks; creation of a wide network of sports sections and involvement of schoolchildren in active participation in them; sports games, competitions, contest (athletics, gymnastics, swimming, horseback riding; skating and skiing, cycling; winter entertainment, building a snow fortress, etc.); confirmation in the minds of schoolchildren of the need to be attentive and careful to their health and the health of others. Active promotion and affirmation of a healthy lifestyle is the creation of a positive psychological microclimate, "the lesson should evoke positive emotional feelings, that is, a sense of satisfaction with work, a healthy feeling of fatigue" [3, p. 14].

Together with the school doctor, the teachers of the Pavlyska School determined a clear regime of work, rest and nutrition, and agreed with the parents that children with weakened health should sleep in the open air in spring, summer and autumn, eat food rich in vitamins, spend as much time as possible in the fresh air. It is important to preserve the health of physically frail and disease-prone children by involving them in vigorous gymnastic exercises and systematically hardening the body. At the same time, overcoming difficulties and achieving certain successes in certain types of sports is a good training of the schoolchildren's willpower.

Physical education and sports should bring schoolchildren pleasure and enjoyment, become a need of the individual. For this purpose, in physical education classes during various physical exercises and competitions, great attention was paid to aesthetic perfection, expressiveness and grace of movements; competitions were considered inadmissible, where the only criterion for success was the speed of performing exercises, and therefore, there are no aesthetic tastes, mass, taking into account the individual characteristics of schoolchildren. That is why the outstanding teacher warned teachers not to "turn sports from a means of physical education of all children into a means of struggle for personal success, not to divide children into those who are able and those who are not able to do sports" [1, p.294].

Parents should know that "a child's spiritual life, intellectual development, thinking, memory, attention, feelings, will - to a large extent depends on the "play" of physical powers. A weak, frail, unhealthy, disease-prone child quickly gets tired in class, eyes fade, movements become sluggish." [4, p. 193].

V. Sukhomlynskyi advocated persistently and consistently that a humane approach to the child, actively opposing the dominance of authoritarian pedagogy, which is often the cause of conflict situations and pedagogical neuroses. In the article "Don't be afraid to be kind" he wrote with anxiety: "Yelling, nervousness, temper in some places have become common in the teacher's relationship with schoolchildren. Getting used to a raised tone, to nervousness, schoolchildren are sometimes in a state of excessive excitement for five to six hours, during the whole school day. This is a serious threat not only to their health, but also to their moral development" [2, p.351-352].

Vasyl Oleksandrovich Sukhomlynskyi's pedagogical heritage is an inexhaustible source of methodical thought. Studying it, you find something new, fresh, original every time. It is quite natural to master his ideas and skillfully use them in a modern school.

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REGIONAL FEATURES OF SUSTAINABLE DEVELOPMENT

SOCIAL ENTREPRENEURSHIP IN ENSURING INCLUSIVE URBAN DEVELOPMENT

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In the context of active social and economic reforms in Ukraine, there is a need to expand the economic base for self-sufficient development. Territorial communities are reassessing the role and powers of small and medium-sized enterprises in local development. This is determined both by a greater share of the market coverage of goods and services by business entities, flexibility and mobility of activities compared to large businesses, and the formation of a new culture of entrepreneurship.

The concept of the formation of an entrepreneurial ecosystem of urbanized areas is based on the theory of endogenous growth by P. Romer [1], which argues that the diversity in their development is based on the quality of accumulated knowledge and any resources. Romer's theory allows, when applied to local-level entrepreneurial ecosystems, to identify the potential for their development through the internal balance and connectivity of its elements.

The concept of endogenous development is based on factors such as the efficiency of local resource use and territorial location. In addition, this concept combines the personal goals of individual entrepreneurs, identifies effective components of their interaction within the entrepreneurial ecosystem to achieve the main goal of inclusive city development. The differences that can be observed in the organization of the entrepreneurial process determine the productivity and efficiency of entrepreneurial activity in different spatial local systems. It is important to understand that any manipulative actions with various resources require an expert assessment of their impact on increasing benefits for the local community.

According to Habitat III, decent work and employment are key factors for achieving inclusive and sustainable urban development. Increased attention to urbanized areas by active investment is necessary to improve the conditions of existing and create new jobs and address the issue of labor shortages [2, p.2]. Cities as economic drivers of development, centers of technology and innovation are always at the source of ideas and generate new lines of activity. There are various ways to achieve sustainable and inclusive urban development. They include inclusive tourism, inclusive education, and the transformation of business models into social entrepreneurship, which, in addition to its own profit, improves the urban environment and solves additional social problems.

An inclusive business model is determined by the formation of social entrepreneurship and coordination of small, medium and large businesses, as well as the overall strengthening of social responsibility of business. Urbanized areas foster the

formation of clusters, which enable small and medium-sized enterprises to profit from economies of scale, accelerate job creation, and increase investment. Modern regional policy supports the internal development of cities and regions. However, as measures of the regional economy, which was based on external factors to improve economic performance in crisis regions, only the spatial and territorial location of economic activity has changed. The internal regional economy focuses on the problems arising from rapid changes in structure and promotes the effective development of innovation. Instead of supporting external investment impulses and interregional redistribution, the main activity within the modern regional economy is to mobilize internal resources, support and improve services for small and medium-sized enterprises. It is also characterized by active decentralization at the local level [3, p. 341].

The level of effective cooperation between the main stakeholders: business - government - public organizations, depends on the rules of doing business, the mentality of the population and numerous social, technological and legislative factors that are part of the development of entrepreneurship in general. Strong urban economies that generate decent jobs for the population are necessary to achieve Sustainable Development Goal (SDG) 8 on sustained and inclusive economic growth, full and productive employment and decent work for all; and Goal 11 on inclusive, safe, sustainable and resilient human settlements[2, p. 6-7].

It can be argued that there is an increase in the level of understanding in the Ukrainian business environment of the need for business participation in social initiatives for rapid business development, promotion of the welfare of the population, improvement of the reputation and image of the enterprise to attract and retain qualified specialists. The International Standard SA 8000 "Social Accountability" explains "social responsibility of business" as the ability of an enterprise or organization to assess the social impact of its activities, including safety and environmental impact [4, p. 300].

Activation of social responsibility of business ensures harmonious coexistence, dialogue and effective interaction between representatives of business, local authorities and society to solve a large number of social problems at all levels. Corporate social responsibility contributes to the implementation of the company's social and environmental policy aimed at engaging local business communities and local communities on a mutually beneficial basis, as well as solving social problems. The levels of corporate social responsibility are divided into responsibility to consumers, employees, business partners, future generations, and the state for environmental protection. Despite the popularity and understanding of the need to strengthen the socially responsible component, scholars note that the degree of social responsibility in Ukrainian business is still very low. The results of the analysis and observations show an average level of social responsibility implementation among Ukrainian enterprises.

Thus, new legal mechanisms of social and state regulation, as well as innovative changes, are needed in the area of social responsibility of business. It would be appropriate to develop targeted city and regional programs to enhance social responsibility of business and create a clear and transparent system of incentives for socially responsible business. Local authorities need to support social initiatives of business structures, but with a clear delineation of responsibilities. Measures that could affect the quantitative parameters of social investment [4, p. 315] are the development and adoption of a clear legislative framework that will provide a legal framework for socially responsible business behavior and will be aimed at its optimization.

However, the understanding of the importance and relevance of ensuring and implementing the social mission of business has created a new area of activity: the transition from social corporate responsibility of enterprises, especially large ones that form a socially responsible business environment, to social entrepreneurship.

Social entrepreneurship is an entrepreneurial activity aimed at positive innovative changes in society: mitigating or solving social problems at the expense of income received from its own activities. Social entrepreneurship is also understood as a type of economic activity aimed at solving the problems of certain groups of people who, as a result of market and state failures, do not have access to vital benefits. Social entrepreneurship, which gained popularity in the second half of the twentieth century and gained a special scale worldwide in the early 2000s, is currently a relevant area of activity for instigators of social change through the introduction of entrepreneurial innovations. This type of business model is aimed at simultaneously solving economic and social problems.It is relevant not only for developing countries but also for economically developed countries.

It is worth noting that social enterprises are developing and disseminate new approaches to achieving the Global Sustainable Development Goals development at the local level, starting from the lowest level – each community member, using both traditional business practices and innovations. In general, social enterprises occupy a unique place in the economy, where, as businesses, they must be financially sustainable, and as organizations focused on and as organizations focused on achieving social goals, act as a mechanism for achieving positive social and environmental results [6].

Thus, The image of the enterprise, it's competitiveness determine the level of social responsibility of relations both in the internal environment and in the system of external relations. The more social enterprises operate in the country's economy, the higher the overall enterprises, the higher the overall result of economic activity of the entire economic system and the greater its social impact. The shift to social entrepreneurship can be assessed as a change in the business model, because through the successful development of impact investing (business support for long-term projects that focus on community change, not just profit), it is possible to change and improve the socio-economic realities of cities in the future, to develop and promote entrepreneurship with great benefit to residents and economic indicators.

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ВОЙНА КАК ТРИГГЕР ВОЗРАСТАНИЯ РЕГИОНАЛЬНОЙ НЕОДНОРОДНОСТИ УСТОЙЧИВОГО РАЗВИТИЯ

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Понятие «регион» (от лат. «region – территория, местность, область) употребляется в различных отраслях знаний с целью выделения частей территориальной целостности по совокупности признаков. Например, в экономической энциклопедии Украины приведены два подхода к трактовке понятия (Економічна енциклопедія, 2007):

1. Район, область, территория, часть страны, которая отличается совокупностью природных или исторически сложившихся условий и национальным составом населения.

2. Группа граничащих стран, которые представляют отдельный экономико-географический регион и имеют общие признаки, которые отличают его от остальных регионов.

В украинском правовом поле термин «регион» используется для обозначения конкретных административно-территориальных единиц, а именно: Автономной Республики Крым, областей, городов Киев и Севастополь (Закон Украины, 2015), в то время как в научном обращении понятие «регион» достаточно размыто. Регион рассматривается и как обособленнаятерриториявграницахстраны,характеризующаясясобственнойсистемойа, (см. выше); и как территория, на которой сложился специализированный хозяйственный комплекс (Донбасс, Причерноморье, Приднепровье и проч.), выходящая за пределы отдельной административно-территориальной единицы; и как природно-географическая зона (Лесостепь, Степь, Полесье, Закарпатье и проч.), охватывающая несколько административно-территориальных образований; и как межгосударственное образование (Вышеградская четверка, ЦЕИ, ГУУАМ и проч.).

В контексте данного исследования регион понимаемболее широко, чем просто административно-территориальная единица, обращая внимание на характеристики социально-экономической системы, взаимосвязи между ее отдельными элементами, а главное, на состояние человеческого сообщества с его «… механизмами воспроизводства, групповой идентичностью, правовыми и этическими нормами» (В. Литвин, 2010). Эта точка зрения сформирована как под влиянием европейских исследователей, так и благодаря наблюдениям за

изменениями внутренней регионалистики Украины. А. Байи (1998) пишет: «За одно столетие эволюция понятия «регион» привела нас к пониманию того, что за этим широко употребляемым и многозначным словом скрывается человеческая, историческая, культурная и экономическая реальность. Эта реальность есть общественный продукт, постепенно создаваемый обществами на местах их жизни».

Таким образом, определяющими факторами в обеспечении устойчивости регионального развития стают не собственно ресурсы, а способность населения определенной территории генерировать инновационные способы использования этих ресурсов с целью улучшения жизни. К этой особенности устойчивого регионального развития Дж. Пеленк (1994) применил термин аллотопия (поиск и обнаружение нового, новое место, прорыв к иному). Современный украинский философ С. Дацюк (2017) размышляет по поводу необходимости нового: «Иное позволяет не только выйти из кризиса, но и получить принципиально новые возможности, которые являются наиболее полным содержанием свободы».

Регионы не обладают одинаковым ресурсным обеспечением и одинаковой аллотопией, что всегда вызывает региональное неравенство, возрастающее при политическом вмешательстве центра. В Украине неспособность многих регионов «…обеспечить собственное развитие, привлечь инвестиционные ресурсы и эффективно использовать имеющийся ресурсный потенциал…» (С. Била, 2011) для достижения устойчивого регионального развития связывают именно с отсутствием инновационных прорывов, обусловленным, среди прочего, сырьевой направленностью экономики. В таблице приведены некоторые данные, характеризующие региональные отличия в Украине.

Социально-экономические отличия развития регионов Украины, 2016-2021 гг.

Показатели	В среднем по Украине	Регионы с наиболее низкими показателями		Регионы с на показателями	
		область	показатель	область	
Валовой региональный продукт (ВРП) на душу населения, тыс. грн	95,6	Луганская Ровенская Черновицкая	19,2 44,9 46,3	Полтавская Днепропетров Киевская	
Доля ВРП в общем ВВП Украины, %	100,0	Луганская Черновицкая Тернопольская	1,0 1,0 1,4	Днепропетров Харьковская Киевская	
Численность населения на 01.01. 2021 по отношению к 2016 г., %	97,3	Черниговская Кировоградская Сумская	93,5 94,5 94,6	Киевская Закарпатская Одесская	
Занятость, %	38,3	Луганская Донецкая Волынская	13,5 17,4 35,4	Харьковская Сумская Николаевская	

Заработная плата к средней по Украине, %	100,0	Черновицкая	79,1	Донецкая
		Волынская	79,8	Киевская
		Черниговская	80,5	Днепропетров

Источник: рассчитано по данным статистического сборника «Регионы Украины» (2020).

Российская военная агрессия существенно повлияла на увеличение региональных диспропорций. Харьковская область, производившая более 6% ВВП Украины, каждый день находится под обстрелами со стороны России, а металлургические комбинаты Мариуполя полностью разрушены. Сейчас боевыми действиями охвачены Луганская, Донецкая, Харьковская, Запорожская, Николаевская и Херсонская области, значительная часть территории этих регионов заминирована и сейчас не представляется возможным вести там сельскохозяйственные работы. Полностью разрушены такие крупнейшие промышленные предприятия, как ГП «Антонов» (г. Киев), Кременчугский НПЗ (г. Кременчуг), АО «Украинские энергетические машины» (г. Харьков), ММК им. Ильича, МК«Азовсталь» (г. Мариуполь) и др. Поскольку именно оккупированные регионы Украины отмечались наиболее высоким уровнем развития промышленности и сельского хозяйства, доля пострадавших областей в промышленном производстве и сельском хозяйстве очень высока:

черные металлы – 53%;
машиностроение – 40%;
производство оборудования – 38%;
добывающая промышленность – 30%;
нефтепереработка – 29%;
сельское хозяйство – 23%.

По оценкам правительства, общее падение экономики Украины в 2022 г., за счет оккупации и военных действий в южных и восточных областях, составило 30%, и это падение, в первую очередь, касается именно оккупированных регионов.

В регионах Востока и Юга Украины отмечается острый гуманитарный кризис, по оценкам ООН уже на начало 2022 г. в Донецкой и Луганской областях 2,9 млн людей ощущали необходимость в гуманитарной помощи (продовольствие, жилье, медицинская помощь). Сейчас проблемы выживания на прифронтовых территориях обострились до уровня гуманитарной катастрофы: за пределы Украины выехало больше 8 млн человек, значительная часть населения прифронтовых населенных пунктов переехала вглубь страны, территории зоны ведения военных действий и находящаяся под обстрелами – заминирована, разрушены жилье и объекты социальной инфраструктуры, обширные лесные массивы пострадали от пожаров, погибли культурные и исторические памятники.

Война еще не закончена, а это означает дальнейшее увеличение объема разрушений, демографические и экономические потери и, как следствие, деградация южных и восточных регионов, на восстановление которых потребуются огромные ресурсы.

В связи с этим правительство пересматривает основы региональной политики, разработав новую функциональную типологию территорий:

– территории восстановления;
– территории с особыми условиями для развития;
– территории устойчивого развития;

– полюса экономического роста.

Вполне очевидно, что восстановление разрушенных войной регионов будет осуществляться за счет потенциала территорий устойчивого развития и полюсов экономического роста (Винницкая, Полтавская, Львовская, Хмельницкая области) на основе координации планов социально-экономического развития и полного обновления градостроительной документации для регионов восстановления.

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INTERNATIONAL COOPERATION FOR SUSTAINABLE DEVELOPMENT

CHALLENGES AND PROSPECTS OF INTEGRATION PROCESSES FOR INTERNATIONAL BUSINESS IN UKRAINE

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Integration processes in Ukraine, such as its membership in the European Union, free trade agreements and other international agreements, open new perspectives and opportunities for international business. However, along with this, they also create a number of challenges that enterprises must face and solve in order to function successfully in the context of integration.

Integration processes, the conclusion of free trade agreements and other international agreements, create challenges for international business in Ukraine. Some of the most significant challenges include:

- joining international organizations and concluding agreements, Ukraine is obliged to implement and fulfill international standards and norms. This may require significant efforts and costs to modernize technologies, quality standards, management, adaptation to environmental and social requirements.
- open access to foreign markets means that Ukrainian enterprises face growing competition from global players. This requires increasing competitiveness, quality of products and services, innovative solutions and marketing strategies.
- integration with international organizations requires harmonization of the legislative framework of Ukraine with international standards. This can lead to the need to make changes to the legal system, bureaucratic procedures, tax and customs policies, which can be difficult and time-consuming for businesses.
- integration requires Ukrainian business enterprises to perform complex procedures, comply with new rules and laws, in particular in the field of customs, taxation, certification and licensing. This can be a challenge due to bureaucracy, unpredictability of procedures, corruption risks and instability of the legal system.
- integration opens up new financial opportunities, but also brings risks related to changes in exchange rates, financial stability and regulation of the financial sector.

Integration processes in Ukraine open up new opportunities for international business, but they are also accompanied by challenges that require attention and solutions. Adaptation to new standards, competition in foreign markets, regulatory convergence and financial risks are just a few of the challenges that businesses face.

Integration processes taking place in Ukraine open wide prospects for international business. By joining international organizations, concluding trade agreements and implementing reforms, Ukraine is actively integrating into the global economy and becoming an attractive place for conducting foreign economic activities.

The prospects of integration processes for international business in Ukraine are multifaceted. First of all, openness to new markets provides enterprises with opportunities to expand their geographic presence and attract new customers. Integration into European and world markets opens up access to large consumer demand and provides access to new technologies, management practices and innovations.

In addition, integration processes provide Ukrainian business enterprises with the opportunity to attract foreign investments. Openness to foreign investments contributes to the development and modernization of production, increases competitiveness and stimulates economic growth. This can help Ukrainian enterprises to expand their capabilities, raise the quality of products and services, and improve their reputation at the international level.

Integration processes for international business in Ukraine have prospects that depend on several factors. Here are some key perspectives:

- Ukraine seeks to strengthen its economic ties with the EU, and this creates prospects for the development of international business. Ukraine already exempts many goods and services from customs duties and trade barriers, which stimulates the export of imported enterprises.

- Ukraine is actively improving its infrastructure, in particular transport (roads, railways, ports) and communication (Internet, telecommunications). This facilitates international trade and cooperation with foreign partners.

- Ukraine actively concludes and expands trade agreements with other countries and regions, in particular with the EU countries and the countries of the Commonwealth of Independent States (CIS). These agreements provide favorable conditions for international business, reducing customs barriers and creating opportunities for mutual trade and investment.

- Ukraine has significant potential in the field of innovation and information technology. The country is growing highly qualified IT and software specialists

In order to function successfully in conditions of integration, international businesses must actively work on adapting to new standards and norms, increasing competitiveness, and making changes in their strategy and processes. It is also important to constantly monitor and respond to changes in the regulatory environment, be ready to deal with financial risks and look for new opportunities in open market conditions.

Integration processes in Ukraine have a significant impact on the development of international business. As a result of deepening integration with European and world markets, Ukrainian companies get new opportunities and face challenges that require adaptation and improvement of competitiveness.

One of the main advantages of integration for international business is increased access to the markets of the European Union and other countries. This stimulates the growth of the export of Ukrainian goods and services, contributes to the expansion of the client base and the attraction of new partners. Foreign economic activity is gaining new perspectives, as Ukrainian companies can use technological transfer and attract foreign investments.

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EDUCATIONAL INSTITUTIONS AND PEDAGOGY FOR SUSTAINABLE DEVELOPMENT

WORDWALL RESOURCE USAGE IN LOGICAL AND MATHEMATICAL DEVELOPMENT CHILDREN OF SENIOR PRESCHOOL AGE

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In the modern world, the issue of the rapid spread of information and communication technologies is being actualized. A large number of children from early childhood have free access to electronic devices (computers, phones, tablets, game consoles, projectors, etc.). Computer games, videos, short cartoons, podcasts, photos of social networks quickly absorb children's attention. Older preschoolers have a desire to study the proposed bright content for viewing.

Modernization of the preschool education system is carried out by experts in accordance with the trends in the development of modern society. Information and communication technologies are popularized in the use of the management of preschool education institutions to create reporting documentation, prepare and conduct pedagogical councils, to fill the methodical office, to exchange experience with other pedagogical groups, etc. Also, preschool education institutions constantly carry out a targeted search for the latest means of education for the effective organization of the educational process. Therefore, various electronic sites, services, resources, applications are used by educators to work with children during the organization of training, development and upbringing [1].

One of the priority tasks of preschool education is logical and mathematical development. The basic component of preschool education clearly defines the content of logic and mathematical education, on the basis of a normative document, programs for organizing the educational process have been created. A necessary element of a comprehensively developed personality of the child is a high level of formation of logical and mathematical competence. For successful continuation of education in elementary school, the child must have an appropriate level of intellectual readiness for school. Therefore, the teachers of the preschool education institution face an important task: to use effective forms, methods, techniques and means of teaching children from logic and mathematical education, in order to interest children in educational activities through play.

The actual problem of the present, the use of information and communication technologies (online resources, sites, programs, etc.) in the aspect of logical and mathematical development of children of older preschool age is dealt with by a large number of scientists. Namely: V.Andrievskaya, V.Bondarovskaya, E.Goncharov, V.Divak, M.Zhaldak, L.Zaitseva, T.Krivosheya, K.Kruty, D.Lyon, V.Pozdnyakova, E.Monakhov,

F.Rybakov, O.Spivakovsky, A. Ursul, V.Tsymbalyuk, L.Shevchenko Shykyrynska O., etc. Scientists explore pedagogically appropriate conditions for using online services in classes on logical and mathematical development [3, p. 342-345].

The main form of organization of education for children of older preschool age is classes. In the classes on logical and mathematical development, children learn communication with peers, interaction with the teacher, acquire teamwork skills, form cognitive activity, acquire critical thinking skills, a creative approach to performing tasks, develop all mental processes, etc. In the process of logical and mathematical development, older preschoolers gradually form logical and mathematical competence. Children acquire knowledge about numbers and numbers, geometric figures, acquire space-time representations, acquire the ability to perform practical actions with sets, solve simple arithmetic problems, count in direct and reverse order, etc. [6, p. 62-64].

The teacher thinks over the topic of the lesson in logical and mathematical development in advance, determines the goal, selects the necessary didactic materials, creates a plot, chooses didactic games, physical exercises, prepares interactive presentations, short cartoons, etc. Preparation and organization of the lesson takes place using information and communication technologies. Teachers have not been writing classes by hand for a long time, but create them in text editors [5, p. 115]. Modern educators use didactic games not only in print. Online games in electronic form with musical accompaniment, bright pictures and moving interactive elements attract children's attention to the educational material in the game quickly and successfully.

Given the need for educators in interesting, easy-to-learn, with bright diverse application templates, we want in this article to highlight the possibilities of the online resource Wordwall to create high-quality online games, exercises and tasks in mathematics. Below we will reveal a detailed description of the resource, consider the technical features of working in the service and show an example of our own author's exercise "Composition of the number 10."

Wordwall is an electronic online resource for viewing and performing existing exercises (that is, created by other users) and independently creating didactic games and tasks for preschool children [7]. The teacher can use exercises in the classroom, during the independent activity of children, share a link with parents to perform tasks at home, etc.

To begin with, the educator can go to Wordwall and familiarize himself with the possibilities presented in the resource. To view the finished development of tasks and try to perform them, you do not need to register. Therefore, on the computer we type in the search bar of the Google system the name of the resource "Wordwall" on the click the search button. The Google information search engine immediately finds the desired link to the resource, click on it. We want to note that the resource has the ability to configure the language. After opening the site on the main page in the upper right corner, click on the triangle and select the desired language, after which the site is automatically updated.

On the main page of the Wordwall resource there is a brief laconic instruction for working on the site. On the page we can get acquainted with a wide range of templates (a brief description is given to the template) of interactive exercises for different age categories. The most appropriate tasks for older preschool children will be created in the following templates: "Correspondents," "Restore order," "Right, wrong," "Random wheel," "Mole hunt," "Balloons," etc. A significant positive element of the Wordwall resource is the created exercise, the content of which can be viewed in different

templates in turn.

To view and do the exercise, the user needs to scroll through the main page of the resource down and find the "Community" section in the website map, click on the name and go to the exercises. In the resource you can see the task and find out for yourself: do you like the exercises, do you want to try to create a game yourself. Therefore, if you are interested in the resource and you want to continue working in the Wordwall service, you need to register. Registration in the resource is quite simple: in the upper right corner in the side panel, click on the "Register" button, after which it is possible to log in through a Google account or enter data manually (email address and password).

After successful registration, Wordwall invites the user to increase their subscription plan. Within the framework of the basic free plan, you can create your own five exercises (tasks are created in one template and opened in many) using eighteen templates. There are two more subscription plans: "Standard" and "Pro," they open the possibility of unlimited creation of exercises and printing of materials for further use. If the user has registered for a basic plan, there is an opportunity on the site to find an exercise of other developers on a given topic. For example, we type in the search bar in the "Community" section the topic "Counting for older preschool children," the resource automatically selects exercises and we can view the task.

We suggest that you practically consider creating an exercise in the template "Hunting moles." To begin with, in the upper panel, click the button on the blue background "Create Exercise," then choose any template from the suggestions (we click on the "mole hunting" template). To create an exercise, you should come up with a game theme. We created an exercise on the topic "Composition of the number 10." We add a description of the exercise, that is, a clear explanation of how to perform the task, we wrote as follows: touch the moles, which show the composition of the number 10.

Next before us are two columns: the first under the name "Right," and the second - "Wrong." According to the names, we write the necessary answers. It is also possible to add elements and fill them. After m recorded correct and incorrect answers, you should press the "Finish" button. The created exercise has been saved and we can view the didactic game. To do this, click the "Start" button. We see the given rules of the game: a mole appears with certain examples, the child needs to touch only the mole, which has a sign with the sum of 10 (Fig. 1) [https://wordwall.net/uk/resource/55449146]. The child chooses the right answers, passes the levels, scores points, receives positive emotions and consolidates knowledge about the composition of the number 10.

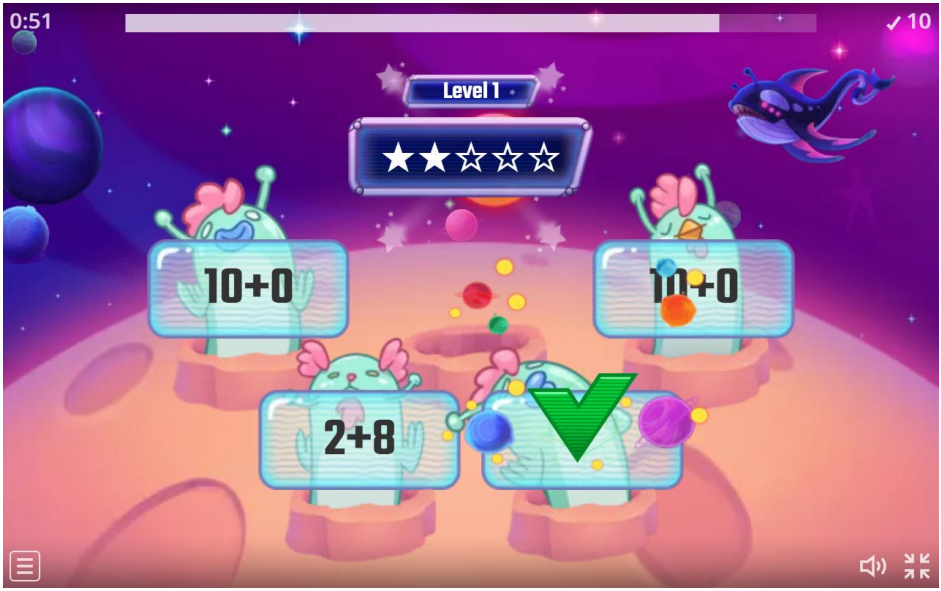

Fig. 1. Author's exercise "Composition of the number 10"

We can perform the same exercise in other templates (Fig. 2).

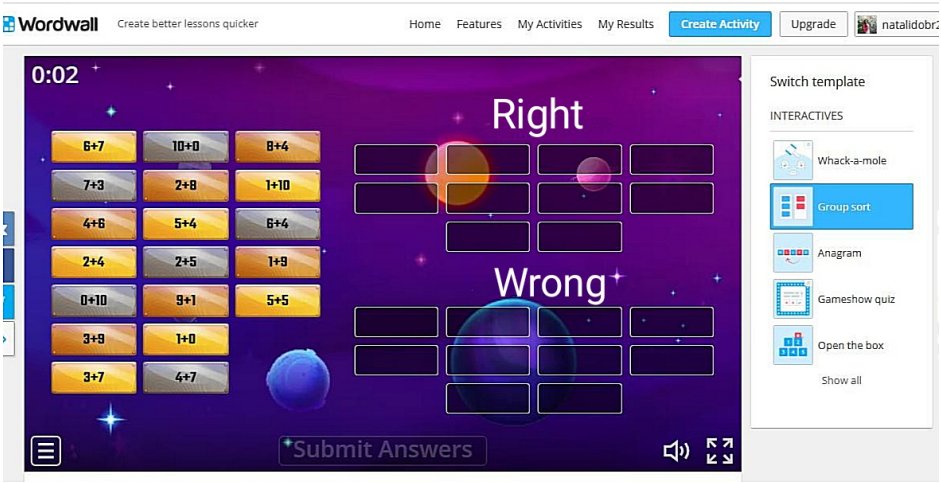

Fig. 2. Examples of viewing exercises in other templates

After viewing the exercise, you need to configure sharing or leave the game private. In the Wordwall resource, you can send the exercise to other users. You need to click on the "Share" button and choose a convenient way, copy and send: link, QR code, post the exercise on social networks. Press the "Done" button.

Wordwall resource is convenient and easy to use. Preschool educators quickly

master the creation of exercises: the templates and description are clear and clearly explained. Teachers can use ready-made developments in their classes and create their own didactic games in mathematics. Work with interactive exercises interests children, fixes knowledge in older preschoolers, forms logical and mathematical competence.

Educators can create their own games on various topics in the context of the logical and mathematical development of children of preschool age. For example: "Classification of geometric shapes," "Orientation on the plane," "Definition of time intervals," "Ordinal and quantitative counting," "Comparison of quantities," "Solving simple arithmetic problems," etc. The attention of children is attracted in the exercise by a high level of interactivity and visualization (video, audio, text, graphics).

Exercises created in the Wordwall resource can be used at any stage of the logical and mathematical development lesson structure. In the introductory part, you can offer children a didactic online game to update the basic knowledge, in the main part - to consolidate the knowledge gained, in the final part - to reflect. Educators can offer parents links to interactive exercises to perform tasks at home [4, p. 64].

Consequently, the process of logical and mathematical development of children of preschool age can be diversified by means of training. We will consider in detail the online resource Wordwall in order to create and use didactic exercises, games and tasks in mathematics. The resource has a significant number of positive aspects (many bright, interesting patterns; available music; interactive exercises, etc.). However, we consider the main disadvantage of the resource to be conditional gratuity. However, each user can decide for himself whether he wants to get more features on a paid subscription plan, whether he is satisfied with the capabilities of the basic plan.

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