

Міністерство освіти та науки України
Миколаївський національний аграрний університет
Факультет культури й виховання
Кафедра іноземних мов

**МАТЕРІАЛИ СТУДЕНТСЬКОЇ КОНФЕРЕНЦІЇ
МИКОЛАЇВСЬКОГО НАЦІОНАЛЬНОГО АГРАРНОГО
УНІВЕРСИТЕТУ**

м. Миколаїв, 24 березня 2016 р.

Миколаїв
2016

УДК 811
ББК 81.2
М-34

Редакційна колегія:

В.С. Шибанін – д-р. тех. наук, професор;
С. Г. Заскалета – д-р. пед. наук, доцент;
К. В. Тішечкіна – канд. філол. наук, доцент.

Матеріали студентської конференції Миколаївського
М-34 національного аграрного університету, 24 березня 2016р.,
м. Миколаїв. – Миколаїв : МНАУ, 2016. – 54 с.

У матеріалах студентської конференції МНАУ, секція іноземних мов, розглянуто різноманітні актуальні питання, пов'язані з професійною діяльністю майбутніх фахівців, проаналізовано досвід інших країн.

УДК 811
ББК 81.2

© Миколаївський національний
аграрний університет, 2016

Зміст

<i>Байбарова І.</i> Innovative development of science and education as strategies for the formation of Ukraine.....	4
<i>Колінько Ю.О.</i> Nanotechnology: Fundamental Concepts.....	6
<i>Коломейцева О.Д.</i> Immunology as a Study of Human's Immune System.....	8
<i>Лебедева А.А.</i> The Tax System of Ukraine.....	11
<i>Левіт Н.В.</i> Biochemistry: the Main Problems of Study.....	13
<i>Ленчук І.І.</i> Die Geschichte Der Schweinehaltung In Deutschland.....	15
<i>Лі В.М.</i> Cancer Diseases: The Problems Of Diagnosis And Treatment...	16
<i>Мардзявко В.А.</i> The Advantages Of Ocean Energy In The World.....	19
<i>Мужилкіна К.М.</i> The Development Of Ukrainian-Canadian Relations..	21
<i>Муратов М.Є.</i> Tourist London For Ukrainians – 2016 The Year Of English Language In Ukraine.....	22
<i>Омельяненко Д. Ю.</i> Nature, Structure And Reproduction Of Viruses.....	23
<i>Петрова А. П.</i> Formation Of Innovative Development Of Education In Ukraine And Its Implementation Issues.....	25
<i>Пронько В.</i> Mark Carney: EU Exit Is 'Biggest Domestic Risk'.....	28
<i>Резниченко К.</i> The Problem Of Investment Risk.....	30
<i>Сіліна А., Самбуренко К.</i> The Budget of Ukraine for 2016.....	32
<i>Скрипник Д. Є.</i> The demographic crisis in Ukraine.....	34
<i>Смірнова С.</i> Innovative Development Of Education In Ukraine: Innovation Politics And Principles	36
<i>Тимофєєва Т.</i> Finland: The Sick Man Of Europe?.....	38
<i>Ткачук А.</i> The Banking System Of The United States.....	40
<i>Трененков В.І.</i> Colliders are used for accelerating.....	42
<i>Трум О.</i> The Development Of The Baking Industry In Ukraine.....	43
<i>Тупчій Д. Ю.</i> Organic Food Products In Agriculture.....	45
<i>Часник М.</i> International regulations on education and its impact on public policy in the field of education Ukraine.....	47
<i>Шевченко М.В.</i> Innovative development of higher education and educational strategy in the context of integration into the European Union.....	49
<i>Шляхова Т.</i> Economic crisis.....	51

УДК 001.895:37.011(477)

INNOVATIVE DEVELOPMENT OF SCIENCE AND EDUCATION AS STRATEGIES FOR THE FORMATION OF UKRAINE

Байбарова І. – студентка групи А 6/1

Науковий керівник – Артюхова О.В., к.пед.наук, доцент кафедри іноземних мов МНАУ

У статті розглядаються проблеми інноваційного розвитку України на основі впровадження науково-технічних інновацій та інтеграції науки й освіти як стратегій розвитку держави.

In clause the problems of development of Ukraine are considered on the basis of introduction scientific and technical both integration of a science and education as strategy of development of the state.

Study of innovation strategies of the state development driven by the needs of the development of Ukraine as full subject of the international community on the basis of construction of economically developed, democratic, and that it is important for Ukraine, the legal community. After all, democracy may develop only in those countries, where the laws alone for all members of society, are treated equally for all and compied by everyone, regardless of positions of power [1].

The scope of innovation processes is related to the state innovation support policies their origin and development, and to effective management of these processes, which should be provided by training activities, retraining and advanced training of managers, heads of innovative projects and educational programs of innovative management, and also professional development of civil servants (special categories that deal with issues of state innovation policy) on the problems of innovation development of Ukraine [2].

Characteristic features of innovative technologies are the dominance in the structure of GDP high - tech industries and intellectual services, the formation of an overwhelming part of the national profit by the expense of innovative or technological rents, the main costs of which are formed by intangible assets, i.e. intellectual capital. The main difference between innovative technologies is in un interrupted technological upgrading of science and education, and self-reproduction of "mental" factors, their non-alienation in the production process, the quick update and the relative availability for use. Innovation are based on ramified horizontal connections of entities, the processes of their self-organization and decision-making management by the influence of incoming information [3].

One of the steps of innovative development of Ukraine should be restructuring of knowledge economy, which is formed in Ukraine now, at least at the level of program documents. One of these is the Doctrine of the Economy of knowledge, which reveals strategy the "European choice", in line with the objectives of the "Strategy of sustainable development and structural-innovative restructuring of Ukrainian economy (2004-2015) and identifies practical ways of

realization the Concept of innovative development economy of Ukraine [4]. The main objective of the Doctrine of the economy of knowledge is:

- firstly, in outline of the promising ways of improving the state innovation policy in the aspects of development educational, scientific, scientific-technical innovation, and related industries, providing practical recommendations on post-industrial development of the national economy of Ukraine as one that is based on contemporary sources and resources growth;

- secondly, in determining directions of practical reformation activities, which should ensure rapid qualitative growth of production and reform the systems of social relations.

The development of the economy, which based on knowledge - "economy of knowledge", in all the world is recognized by the main way of increasing the countries competitiveness. And it applies not only developed countries, and also countries with transition economies, including Ukraine. The country's ability to produce knowledge, in particular science, their implementation and effective using for development in such an economy to get the main factors of sustainable development along with the traditional sources - the investment and labour resources.

Total restructuring knowledge, the imperatives of the rebuilding of education in the conditions of globalization and scientific-technological progress, characteristics of public administration by the implementation of innovation in education, the main directions of development educational service sectors in the developed countries of the world and interconnection of the educational potential with sustainable development of the country, and also methodological problems in determining the demand for skills already embodied in a number of scientific publications.

Today knowledge has become a determinative of social development. For the group of developed countries, that included to the organization of economic cooperation and development (OECD), the rate of the basic long-term growth of the economy depend from the support and extending the global base of knowledge, that became possible in the information society. These countries restruct their economies, which are based on knowledge, creating millions of jobs, associated with the use of the newest knowledge by groups of suddenly opened new directions and disciplines [5].

Література:

1. Біла книга національної освіти України / Акад. пед. наук України; за ред.. В. Г. Кремня. – К., 2009. – 376 с.

2. Ващенко Л.М. Управління інноваційними процесами в загальній середній освіті регіону: Монографія. — К.: Видавниче об'єднання "Тираж", 2005.—380 с.

3. Даниленко Л.І. Управління інноваційною діяльністю в загальноосвітньому навчальному закладі: Монографія. – К.: Міленіум, 2004. – 352с.

4. Кремень В.Г. Освіта і наука в Україні – інноваційні аспекти. Стратегія. Реалізація. Результати / Василь Григорович Кремень. – К.: Грамота, 2005. – 448 с.

5. Національна доктрина розвитку освіти. – [Електронний ресурс] – Режим доступу: <http://zakon2.rada.gov.ua/laws/show/347/2002>.

УДК 338.43:330.322(477)

NANOTECHNOLOGY: FUNDAMENTAL CONCEPTS

Колінько Ю.О. – студентка групи БТ 2/1

Науковий керівник – Саламатіна О.О., доцент кафедри іноземних мов МНАУ

Nanotechnology, shortened to “nanotech”, is the study of the control of matter on an atomic and molecular scale. Generally nanotechnology deals with structures of the size 100 nanometers or smaller, and involves developing materials or devices within that size. Nanotechnology is very diverse, ranging from extensions of conventional device physics, to completely new approaches based upon molecular self-assembly, to developing new materials with dimension the nanoscale, even to speculation on whether we can direct control matter on the atomic scale. A basic definition of Nanotechnology is the engineering of functional systems at the molecular scale. This covers both current work and concepts that are more advanced. In its original sense, “nanotechnology” refers to the projected ability to construct items from the bottom up, using techniques and tools being developed today to make complete high performance products. The word “nanotechnology” defined for building machines on the scale of molecules, a few nanometers wide motors, robot arms, and even whole computers, far smaller than a cell. Physicist Richard Feynman at an American Physical Society meeting at Caltech on December 29, 1959 described a process by which the ability to manipulate individual atoms and molecules might be developed, using one set. The first use of the concepts in “nanotechnology” (but pre-dating use of that name) was in of precise tools to build and operate another proportionally smaller set, and so on down to the needed scale. In the course of this, he noted, scaling issues would arise from the changing magnitude of various physical phenomena: gravity would become less important, surface tension and Van der Waals attraction would become more important, etc. This basic idea appears plausible, and exponential assembly enhances it with parallelism to produce a useful quantity of end products. The term “nanotechnology” was defined by Tokyo Science University Professor Norio Taniguchi in a 1974 paper as follows: “Nanotechnology” mainly consists of the processing of separation, consolidation, and deformation of materials by one atom or by one molecule [2, p. 102].

One nanometer (nm) is one billionth of a meter. By comparison, typical carbon-carbon bond length, or the spacing between these atoms in a molecule are in the range 0.12 – 0.15 nm, and a DNA double-helix has a diameter around 2 nm.

On the other hand, the smallest cellular life-forms, the bacteria of the genus *Mycoplasma*, are around 200 nm in length. To put that scale in another context, the comparative size of a nanometer to a meter is the same as that of a marble to the size of the earth. Or another way of putting it: a nanometer is the amount a man's beard grows in the time it takes him to raise the razor to his face. Two main approaches are used in nanotechnology. In the "bottom-up" approach, materials and devices are built from molecular components which assemble themselves chemically by principles of molecular recognition. In the "top-down" approach, nano-objects are constructed from larger entities without atomic-level control. Areas of physics such as nanoelectronics, nanomechanics and nanophotonics have been evolved during the last decades to provide a basic scientific foundation of nanotechnology. These seek to arrange smaller components into more complex assemblies. DNA nanotechnology utilizes the specificity of Watson Crick base pairing to construct well-defined structures out of DNA and other nucleic acids. Approaches from the field of "classical" chemical synthesis also aim at designing molecules with well-defined shape. More generally, molecular self-assembly seeks to use concepts of supramolecular chemistry, and molecular recognition in particular, to cause single-molecule components to automatically arrange themselves into some useful conformation [1, p. 37].

Top-down approaches seek to create smaller devices by using larger ones to direct their assembly. Many technologies that descended from conventional solid-state silicon methods for fabricating microprocessors are now capable of creating features smaller than 100 nm, falling under the definition of nanotechnology. Giant magneto resistance-based hard drives already on the market fit this description, as do atomic layer deposition (ALD) techniques. Peter Grünberg and Albert Fert received the Nobel Prize in Physics for their discovery of Giant magneto resistance and contributions to the field of spintronics in 2007. Solid-state techniques can also be used to create devices known as nanoelectromechanical systems or NEMS, which are related to microelectromechanical systems or MEMS. Atomic force microscope tips can be used as a nano scale "write head" to deposit a chemical upon a surface in a desired pattern in a process called dip pen nanolithography. This fits into the larger subfield of nanolithography. Focused ion beams can directly remove material, or even deposit material when suitable pre-cursor gasses are applied at the same time. For example, this technique is used routinely to create sub-100 nm sections of material for analysis in Transmission electron microscopy [3].

Functional approaches seek to develop components of a desired functionality without regard to how they might be assembled. Molecular electronics seeks to develop molecules with useful electronic properties. These could then be used as single-molecule components in a nanoelectronic device. For an example see rotaxane. Synthetic chemical methods can also be used to create what forensics call synthetic molecular motors, such as in a so-called nanocar [1, p. 40].

Speculative subfields seek to anticipate what inventions nanotechnology might yield, or attempt to propose an agenda along which inquiry might progress. These often take a big-picture view of nanotechnology, with more emphasis on its

societal implications than the details of how such inventions could actually be created. Molecular nanotechnology is a proposed approach which involves manipulating single molecules in finely controlled, deterministic ways. This is more theoretical than the other subfields and is beyond current capabilities. Nanorobotics centers on self-sufficient machines of some functionality operating at the nanoscale. There are hopes for applying nanorobots in medicine, but it may not be easy to do such a thing because of several drawbacks of such devices. Nevertheless, progress on innovative materials and methodologies has been demonstrated with some patents granted about new nanomanufacturing devices for future commercial applications, which also progressively helps in the development towards nanorobots with the use of embedded nanobioelectronics concepts [2, p. 98].

The Center for Nanotechnology in Society has found that people respond to nanotechnologies differently, depending on application – with participants in public deliberations more positive about nanotechnologies for energy than health applications – suggesting that any public calls for nano regulations may differ by technology sector.

Література:

1. "Cover Story – Nanotechnology". Chemical and Engineering News 81 (48): 37–42.
2. Kahn J. Nanotechnology / J. Kahn // National Geographic, 2006 (June). – P. – 98–119.
3. Voevodina O. S. English for biotechnologists and biologists / O. S. Voevodina, O. Y. Nesterova, A. R. Sadykova : учеб. пособие. – Ижевск : Изд-во «Удмуртский университет», 2012. – 375 с.

УДК 338.43:330.322(477)

IMMUNOLOGY AS A STUDY OF HUMAN'S IMMUNE SYSTEM

Коломейцева О.Д. – студентка групи БТ 2/1

Науковий керівник – Саламатіна О.О., доцент кафедри іноземних мов МНАУ

Inside your body there is an amazing protection mechanism called the immune system. It is designed to defend you against millions of bacteria, microbes, viruses, toxins and parasites that would love to invade your body. To understand the power of the immune system, all that you have to do is to have a look at one's death. That sounds gross, but it will show you important things about your immune system.

When something dies, its immune system (along with everything else) shuts down. In a matter of hours, the body is invaded by all sorts of bacteria, microbes, parasites... None of these things are able to get in when your immune system is working, but the moment your immune system stops the door is wide open. Once you die it only takes a few weeks for these organisms to completely dismantle your

body and carry it away, until all that's left is a skeleton. Obviously your immune system is doing something amazing to keep all of that dismantling from happening when you are alive. When a virus or bacteria (also known generically as a germ) invades your body and reproduces, it normally causes problems. Generally the germ's presence produces some side effect that makes you sick. For example, the strep throat bacteria (*Streptococcus*) releases a toxin that causes inflammation in your throat. The polio virus releases toxins that destroy nerve cells (often leading to paralysis). Some bacteria are benign or beneficial (for example, we all have millions of bacteria in our intestines and they help digest food), but many are harmful ones; they get into the body or the bloodstream [2].

The job of your immune system is to protect your body from these infections. The immune system protects you in three different ways. First and foremost, it creates a barrier that prevents bacteria and viruses from entering your body. Then, if a bacteria or virus does get into the body, the immune system tries to detect and eliminate it before it can make itself at home and reproduce. Thirdly, when the virus or bacteria is able to reproduce and start causing problems, your immune system is in charge of eliminating it. The key primary lymphoid organs of the immune system are thymus and bone marrow, and secondary lymphatic tissues such as spleen, tonsils, lymph vessels, lymph nodes, adenoids, and skin. In good health thymus, spleen, portions of bone marrow, lymph nodes and secondary lymphatic tissues can be surgically removed without much harm to humans [4, p. 168].

The actual components of the immune system are cellular in nature and not associated with any specific organ. They are widely present in circulation throughout the body. There are many diseases that, if you catch them once, you will never catch again. Measles is a good example, as is chicken pox. What happens with these diseases is that they make it into your body and start reproducing. The immune system gears up to eliminate them. Cells recognize the virus and produce antibodies for it. This process takes time, but the disease runs its course and is eventually eliminated.

The immune system protects organisms from infection with layered defenses of increasing specificity. In simple terms, physical barriers prevent pathogens such as bacteria and viruses from entering the organism. If a pathogen breaches these barriers, the innate immune system provides an immediate, but non-specific response. Innate immune systems are found in all plants and animals. If pathogens successfully evade the innate response, vertebrates possess a second layer of protection, the adaptive immune system, which is activated by the innate response. Here, the immune system adapts its response during an infection to improve its recognition of the pathogen. This improved response is then retained after the pathogen has been eliminated, in the form of an immunological memory, and allows the adaptive immune system to mount faster and stronger attacks each time this pathogen is encountered [2].

Both innate and adaptive immunity depend on the ability of the immune system to distinguish between self and non-self molecules. In immunology, self molecules are those components of an organism's body that can be distinguished

from foreign substances by the immune system. Conversely, non-self molecules are those recognized as foreign molecules. One class of non-self molecules is called antigens (short for antibody generators) and is defined as substances that bind to specific immune receptors and elicit an immune response [3].

A vaccine is a weakened form of a disease. It is either a killed form of the disease, or it is a similar but less virulent strain. Once inside your body your immune system mounts the same defense, but because the disease is different or weaker you get few or no symptoms of the disease. Now, when the real disease invades your body, your body is able to eliminate it immediately [2].

Many diseases are caused when the immune system behaves incorrectly. Immunologists try to understand how and why the immune system malfunctions and causes disease. Such diseases can be broadly classified into three categories. Immunodeficiency occurs when parts of the immune system fail to respond adequately to a harmful foreign substance or organism. Autoimmunity occurs when the immune system attacks the very tissue it is meant to protect; due to failure of the immune system to recognize its tissues as being “self”. Hypersensitivity occurs when the immune system responds inappropriately (sometimes too intensely) to harmless compounds [1].

Clinical immunologists are responsible for diagnosing and treating human patients with immunological disorders. They spend most of their time either in the laboratory conducting research to develop new therapies or diagnostic techniques, or else based in clinics discussing patient treatment strategies. Immunological research has helped scientists understand the potential causes of many immunological diseases, and enabled them to develop treatments and cures. Immunologists perform a critical role in developing therapies to prevent transplant rejection in organ transplant patients. By understanding how a transplant becomes rejected, immunologists are now able to use drugs to suppress the immune system, which becomes a barrier to achieving a successful outcome. Immunologists have manipulated the body’s ability to identify and respond to an invading foreign organism and have developed vaccines to prevent and control subsequent infections. Infectious diseases account for more human suffering in the world than any other cause [3].

Over the years, the endless efforts of scientists working on the immune system have led to the recognition of Immunology as a complete and extensive discipline of medicine. However, the borders of Immunology as a discipline are overlapping with many other clinical and basic sciences. Some scientists are worried that it will become increasingly difficult to know who, or what, an immunologist is. Whatever effect this may have on the future of Immunology as a discipline, it is clear that Immunology and its techniques will remain a very important part of the medical and biological sciences.

Література:

1. <http://www.icuadelaide.com.au/files/primary/physiology/immunology.pdf>
2. <http://www.helmborg.at/immunology.pdf>
3. <http://www.sacema.com/uploads/Essential-Clinical-Immunology.pdf>

4. Voevodina O. S. English for biotechnologists and biologists / O. S. Voevodina, O. Y. Nesterova, A. R. Sadykova : учеб. пособие. – Ижевск : Изд-во «Удмуртский университет», 2012. – 375 с.

УДК: 811.111

THE TAX SYSTEM OF UKRAINE

Лебедева А.А. – студентка групи ЗЕД 3/1

Науковий керівник – Тишечкіна К.В., к.філол.наук, доцент кафедри іноземних мов МНАУ

In this article, I reviewed the tax system in Ukraine. Defines the purpose of the tax system in Ukraine. And reviewed major taxes and fees.

Key words: taxes, tax system, Ukraine, payments.

In Ukraine the system of the taxation, taxes and levies, both nation-wide, and local, are imposed exclusively by laws which are issued by the highest legislative body of the state – the Verkhovna Rada of Ukraine [1].

Local authorities are given the power to impose or abolish local taxes and levies and to define the order of their payment according to the list and within the boundary rates established by laws of Ukraine. The tax system of Ukraine includes 135 payments, which is the worst rate in the world.

From 1 January 2011 entered into force the new Tax code of Ukraine which significantly changed the system of taxation in Ukraine. With the adoption of the new code repealed several Laws of Ukraine, decrees of the Cabinet of Ministers of Ukraine, decrees of the Verkhovna Rada of Ukraine and decrees of the President of Ukraine. The new code changed the amount and composition of state and local taxes and fees. According to the Tax code in Ukraine currently (as of 01 January 2016) there are 11 taxes and fees, including 7 national and 4 local. In Ukraine there is a system of national pension and social insurance which provides regular insurance payments must be made by legal entities and private persons. In spite of the fact that such payments are not taxes or levies, they have an obligatory character. The system of the national insurance includes pension insurance, unemployment insurance, temporary disability insurance and insurance against incapacitating occupational accident or disease [2].

The main body, which oversees compliance with tax laws, the accuracy of calculation, completeness and timeliness for payment of taxes and levies, is the State Tax Administration of Ukraine and its divisions. Some types of taxes and levies are controlled by the State Customs Service of Ukraine and the Pension Fund of Ukraine, and payments in the national pension and social insurance system - by the Pension Fund of Ukraine and relevant Social Insurance Funds. The tax system of Ukraine can be represented in the form of three basic subsystems:

-the subsystem of taxation of legal entities;

- subsystem taxation of individuals;
- fees state funds[1].

All these subsystems are closely related to each other, they constitute some of the structural elements: direct taxes, indirect taxes, and other taxes and fees.

In 1997 was adopted the Law of Ukraine "On amending the Law of Ukraine "On taxation system", which had outlined a new edition of the Law "On taxation system". 2010 adopted Tax code of Ukraine according to which in Ukraine are charged:

- national taxes and charges (mandatory payments);
- local taxes and fees (obligatory payments).

National taxes and fees are established by the Verkhovna Rada of Ukraine and collected throughout the territory of Ukraine. Local taxes and fees, collection procedure and the procedure of payment shall be established by village, settlement, city Councils of people's deputies in accordance with the list and within the limits of the rates set by laws of Ukraine. The municipal tax, fee for Parking of vehicles, market fee, fee for issuance of a warrant for the apartment, the fee for a permit for placement of objects of trade and sphere of services, gathering from owners of dogs are required to establish in the presence of taxable items or conditions associated with the introduction of these taxes and fees. Research by the world Bank and the auditing company Price Water House Coopers shows that the tax system of Ukraine remains one of the worst in the world for at least the last six years [2].

The tax system is one of the main elements of the economic system of the state in a market economy. It represents the main instrument of state influence on the development of the national economy, definition of priorities of social and economic development. It is therefore imperative that the tax system of Ukraine has been adapted to new social relations, consistent with international experience. Despite this, the new tax law until the present time not fully formed and not fully suited to the new conditions. Its main shortcomings are the following: excessive hardness, confusion, the presence of a large number of benefits for different categories of taxpayers, stimulate the growth of efficiency of production, acceleration of scientific and technological progress, the introduction of advanced technologies or increase the production of consumer goods [3].

Література:

1. <http://mybiblioteka.su/10-38465.html>.
2. https://uk.wikipedia.org/wiki/Податкова_система_України.
3. http://ua-referat.com/Податкова_система_України.

Левіт Н.В. – студентка групи БТ 2/1

Науковий керівник – Саламатіна О.О., доцент кафедри іноземних мов МНАУ

Biochemistry, sometimes called biological chemistry, is the study of chemical processes in living organisms, including, but not limited to, living matter. Biochemistry governs all living organisms and living processes. By controlling information flow through biochemical signaling and the flow of chemical energy through metabolism, biochemical processes give rise to the incredible complexity of life. Much of biochemistry deals with the structures and functions of cellular components such as proteins, carbohydrates, lipids, nucleic acids and other biomolecules although increasingly processes rather than individual molecules are the main focus. Biochemistry is the branch of science that explores the chemical processes within and related to living organisms. It is a laboratory based science that brings together biology and chemistry. By using chemical knowledge and techniques, biochemists can understand and solve biological problems. Biochemistry focuses on processes happening at a molecular level. It focuses on what's happening inside our cells, studying components like proteins, lipids and organelles. It also looks at how cells communicate with each other, for example during growth or fighting illness. Biochemists need to understand how the structure of a molecule relates to its function, allowing them to predict how molecules will interact. Over the last 40 years biochemistry has become so successful at explaining living processes that now almost all areas of the life sciences from botany to medicine are engaged in biochemical research. Today the main focus of pure biochemistry is in understanding how biological molecules give rise to the processes that occur within living cells which in turn relates greatly to the study and understanding of whole organisms [3, p. 125].

Among the vast number of different biomolecules, many are complex and large molecules (called biopolymers), which are composed of similar repeating subunits (called monomers). Each class of polymeric biomolecule has a different set of subunit types. For example, a protein is a polymer whose subunits are selected from a set of 20 or more amino acids. Biochemistry studies the chemical properties of important biological molecules, like proteins, and in particular the chemistry of enzyme-catalyzed reactions. The structure of proteins is traditionally described in a hierarchy of four levels. The primary structure of a protein simply consists of its linear sequence of amino acids. Secondary structure is concerned with local morphology (morphology being the study of structure). Some combinations of amino acids will tend to curl up in a coil called an α -helix or into a sheet called a β -sheet; some α -helices can be seen in the hemoglobin schematic above. Tertiary structure is the entire three-dimensional shape of the protein. This shape is determined by the sequence of amino acids. In fact, a single change can change the entire structure. The alpha chain of hemoglobin contains 146 amino

acid residues; substitution of the glutamate residue at position 6 with a valine residue changes the behavior of hemoglobin so much that it results in sickle-cell disease. Finally, quaternary structure is concerned with the structure of a protein with multiple peptide subunits, like hemoglobin with its four subunits. Not all proteins have more than one subunit. The biochemistry of cell metabolism and the endocrine system has been extensively described [1, p. 43]. Other areas of biochemistry include the genetic code (DNA, RNA), protein synthesis, cell membrane transport, and signal transduction. Biochemical processes mediate the interaction of cells with their environment and are responsible for most of the information processing inside the cell. Networks of interacting proteins underlie many of these processes. Three major types of biochemical processes are distinguished: metabolic pathways are sequences of chemical reactions, each catalyzed by enzymes, where certain product molecules are formed from other small substrates. Metabolites are usually small molecules while enzymes are proteins. Signal transduction networks are pathways of molecular interactions that provide communication between the cell membrane and intracellular end-points, leading to some change in the cell. Signals are transduced by modification of one protein's activity or location by another protein. Gene regulation circuits determine whether or not a particular gene is expressed at any particular time. Transcription factors, proteins that promote or repress transcription, either directly or indirectly bind regulatory DNA elements. Metabolic, transduction and regulatory circuits are interleaved and integrated. For example, gene regulation circuits are fed by external signals transmitted by signal transduction pathways. The high complexity of these systems makes their proper understanding difficult [2, p. 116].

So, researchers in biochemistry use specific techniques native to biochemistry, but increasingly combine these with techniques and ideas from genetics, molecular biology and biophysics. There has never been a hard-line between these disciplines in terms of content and technique. Today the terms molecular biology and biochemistry are nearly interchangeable. So, biochemistry covers a range of scientific disciplines, including genetics, microbiology, forensics, plant science and medicine. Because of its breadth, biochemistry is very important and advances in this field of science over the past 100 years have been staggering. It's a very exciting time to be part of this fascinating area of study. The life science community is a fast-paced, interactive network with global career opportunities at all levels. The Government recognizes the potential that developments in biochemistry and the life sciences have for contributing to national prosperity and for improving the quality of life of the population. Funding for research in these areas has been increasing dramatically in most countries, and the biotechnology industry is expanding rapidly.

Література:

1. Fruton, J. S. Proteins, Enzymes, Genes : The Interplay of Chemistry and Biology/J. S. Fruton. – Yale University Press : New Haven, 1999. – 56 p.
2. Kohler R. From Medical Chemistry to Biochemistry : The Making of a Biomedical Discipline / R. Kohler : Cambridge University Press, 1982. – 278 p.
3. Voevodina O. S. English for biotechnologists and biologists / O. S. Voevodina, O. Y. Nesterova, A. R. Sadykova : учеб. пособие. – Ижевск : Изд-во «Удмуртский университет», 2012. – 375 с.

УДК 811.112

DIE GESCHICHTE DER SCHWEINEHALTUNG IN DEUTSCHLAND

Ленчук І.І. – студентка групи Т1/2

Науковий керівник – Марковська А.В. к.філол.наук, доцент кафедри іноземних мов МНАУ

Die Geschichte der Schweinehaltung begann vor rund 10.500 Jahren. Das Hausschwein gilt nach dem Haushund und mit Rind, Schaf und Ziege als frühes Haustier des Menschen.

Lange Zeit gingen Forscher davon aus, dass die Domestizierung des Wildschweins etwa 8500 v. Chr unabhängig voneinander in zwei Kulturräumen erfolgte: in China und im Vorderen Orient, vermutlich in der Region des fruchtbaren Halbmonds. Von dort seien Schweine im Zusammenhang mit der Migration dann in andere Regionen gebracht worden, unter anderem nach Europa. Neue Forschungsergebnisse von Wissenschaftlern der Universität Oxford aus dem Jahr 2005 scheinen diese Theorie zu widerlegen.

DNA-Analysen bei 686 Wild- und Hausschweinen aus verschiedenen Kontinenten ergaben, dass die Domestizierung in mehreren Regionen der Welt unabhängig voneinander erfolgt sein muss. So wurden abweichende DNA der Schweine in Mitteleuropa, Italien, Nordindien, Südostasien und auf südostasiatischen Inseln wie den Philippinen gefunden. Ein Zentrum früher Domestizierung könnte auf dem Gebiet des heutigen Deutschland gelegen haben. Bislang war man von nur einer asiatischen und zwei europäischen *Sus scrofa*-Unterarten ausgegangen, nun geht man von mindestens sieben aus. Die asiatischen Schweine entstammen dem Bindenschwein *Sus scrofa vittatus* das als ausgestorben gilt.

In Europa dagegen blieb das Hausschwein – begünstigt durch den Waldreichtum und das feuchtere Klima – der wichtigste Fleischlieferant. Mit einem Bestand von heute 191 Millionen Tieren ist es nach China der weltweit zweitgrößte Schweinefleischproduzent.

Im 18. Jahrhundert führten die Engländer wahre Speckschweine aus ihren chinesischen Kolonien ein und entwickelten sie weiter. 1860 kamen die fetten Rassen "Large White" und "Middle White" nach Deutschland und eroberten die Herzen und Mägen der Bevölkerung. Die moderne Schweinezucht begann. Seit

den späten 1950er-Jahren bevorzugten die Deutschen allerdings mageres Fleisch: Die Schweine wurden länger, dünner und erhielten ein zusätzliches Rippenpaar. Mittlerweile gibt es weltweit über 700 verschiedene Rassen, fast 300 davon sind allerdings vom Aussterben bedroht. Dafür erobert mittlerweile ihre Urform, das Wildschwein, die Innenstädte.

Im 18. Jahrhundert wurden Hausschweine in Deutschland auf dem Land tagsüber noch auf die Weide getrieben und nur über Nacht im Stall gehalten. Im Herbst wurden sie nach der Getreideernte auf die Stoppelfelder gelassen, wo sie nicht nur Getreide fraßen, sondern auch im Boden nach Kleintieren wühlen durften. Daneben gab es auch noch die Mast im Wald mit Eicheln und Bucheckern. Im Winter blieben die Schweine generell im Stall und wurden mit gekochten Kartoffeln, Rüben und durch Wasser verdünnten „Branntweinspülicht“ gefüttert. 1874 wurden die Schweinerassen in Deutschland in folgende Gruppen eingeteilt:

- Marschschweine
- Deutsche Landschweine
- Gekreuzte Hausschweine
- Englische Rassen

In der Schweineproduktion werden heute zu mehr als 90 Prozent Hybridschweine eingesetzt.

Література:

1. Електронний ресурс. – http://www.zuechtungskunde.de/artikel.dll/geschichte-schweinzueku2-07_ODg4MDAw.PDF
2. Електронний ресурс. – <http://www.br.de/themen/wissen/schwein-hausschwein-wildschwein-landwirtschaft100.html>
3. Електронний ресурс. – <http://d-nb.info/982372450/34>

УДК 338.43:330.322(477)

CANCER DISEASES: THE PROBLEMS OF DIAGNOSIS AND TREATMENT

Лі В.М. – студентка групи БТ 2/1

Науковий керівник – Саламатіна О.О., доцент кафедри іноземних мов МНАУ

The theme of this report is devoted to such devastating disease as cancer. Information about cancer and its consequences is given in the report. Also cancer symptoms, diagnosis and types of treatment are considered.

Cancer is a class of diseases characterized by out-of-control cell growth. There are over 100 different types of cancer, and each is classified by the type of cell that is initially affected. Cancer harms the body when altered cells divide uncontrollably to form lumps or masses of tissue called tumors. Tumors can grow and interfere with the digestive, nervous, and circulatory systems and they can release hormones that alter body function. Tumors that stay in one spot and

demonstrate limited growth are generally considered to be benign. More dangerous, or malignant, tumors form when two things occur: a cancerous cell manages to move throughout the body using the blood or lymphatic systems, destroying healthy tissue; that cell manages to divide and grow, making new blood vessels to feed itself in a process called angiogenesis [3, p. 225].

Cancer cells differ from normal cells in many ways that allow them to grow out of control and become invasive. One important difference is that cancer cells are less specialized than normal cells. That is, whereas normal cells mature into very distinct cell types with specific functions, cancer cells do not. In addition, cancer cells are able to ignore signals that normally tell cells to stop dividing or that begin a process known as programmed cell death, or apoptosis, which the body uses to get rid of unneeded cells. Cancer cells are also often able to evade the immune system. Although the immune system normally removes damaged or abnormal cells from the body, some cancer cells are able to “hide” from the immune system [3, p. 227].

Cancer is a genetic disease, it occurs when a cell’s gene mutations make the cell unable to correct DNA damage and unable to commit suicide. Similarly, cancer is a result of mutations that inhibit oncogene and tumor suppressor gene function, leading to uncontrollable cell growth. Carcinogens are a class of substances that are directly responsible for damaging DNA, promoting or aiding cancer. Tobacco, arsenic, radiation such as gamma and x-rays, the sun, and compounds in car exhaust fumes are all examples of carcinogens. Cancer can be the result of a genetic predisposition that is inherited from family members. It is possible to be born with certain genetic mutations or a fault in a gene that makes one statistically more likely to develop cancer later in life. As we age, there is an increase in the number of possible cancer-causing mutations in our DNA. This makes age an important risk factor for cancer. Several viruses have also been linked to cancer such as: human papillomavirus, hepatitis B and C, and Epstein-Barr virus, Human immunodeficiency virus (HIV) – and anything else that suppresses or weakens the immune system – inhibits the body’s ability to fight infections and increases the chance of developing cancer [3, p. 226].

Early detection of cancer can greatly improve the odds of successful treatment and survival. Physicians use information from symptoms and several other procedures to diagnose cancer. Imaging techniques such as X-rays, CT scans, MRI scans, PET scans, and ultrasound scans are used regularly in order to detect where a tumor is located and what organs may be affected by it. Extracting cancer cells and looking at them under a microscope is the only absolute way to diagnose cancer. This procedure is called a biopsy [1, p. 72].

Cancer symptoms are quite varied and depend on where the cancer is located, where it has spread, and how big the tumor is. Some brain tumors tend to present symptoms early in the disease as they affect important cognitive functions. Pancreas cancers are usually too small to cause symptoms until they cause pain by pushing against nearby nerves or interfere with liver function to cause a yellowing of the skin and eyes called jaundice. Symptoms also can be created as a tumor grows and pushes against organs and blood vessels. Swollen or enlarged lymph

nodes can be a symptom, although lymph nodes can also become swollen when fighting infection (cold or flu). As cancer cells use the body's energy and interfere with normal hormone function, it is possible to present symptoms such as fever, fatigue, excessive sweating, anemia, and unexplained weight loss. However, these symptoms are common in several other maladies as well. For example, coughing and hoarseness can point to lung or throat cancer as well as several other conditions [1, p. 68].

Cancer treatment depends on the type of cancer, the stage of the cancer (how much it has spread), age, health status, and additional personal characteristics. There is no single treatment for cancer, and patients often receive a combination of therapies and palliative care. Treatments usually fall into one of the following categories: surgery, radiation, chemotherapy, immunotherapy, hormone therapy, or gene therapy. Surgery is the oldest known treatment for cancer. If a cancer has not metastasized, it is possible to completely cure a patient by surgically removing the cancer from the body. Radiation treatment, also known as radiotherapy, destroys cancer by focusing high-energy rays on the cancer cells. This causes damage to the molecules that make up the cancer cells and leads them to commit suicide. Radiotherapy utilizes high-energy gamma-rays that are emitted from metals such as radium or high-energy x-rays that are created in a special machine. Early radiation treatments caused severe side-effects because the energy beams would damage normal, healthy tissue, but technologies have improved so that beams can be more accurately targeted. Radiotherapy is used as a standalone treatment to shrink a tumor or destroy cancer cells, and it is also used in combination with other cancer treatments. Chemotherapy utilizes chemicals that interfere with the cell division process – damaging proteins or DNA – so that cancer cells will commit suicide. These treatments target any rapidly dividing cells, but normal cells usually can recover from any chemical-induced damage while cancer cells cannot. Chemotherapy is generally used to treat cancer that has spread or metastasized because the medicines travel throughout the entire body. Chemotherapy treatment occurs in cycles so the body has time to heal between doses. However, there are still common side effects such as hair loss, nausea, fatigue, and vomiting. Immunotherapy aims to get the body's immune system to fight the tumor. Local immunotherapy injects a treatment into an affected area, for example, to cause inflammation that causes a tumor to shrink. Systemic immunotherapy treats the whole body by administering an agent such as the protein interferon alpha that can shrink tumors. Immunotherapy can also be considered non-specific if it improves cancer-fighting abilities by stimulating the entire immune system, and it can be considered targeted if the treatment specifically tells the immune system to destroy cancer cells. Several cancers have been linked to some types of hormones. Hormone therapy is designed to alter hormone production in the body so that cancer cells stop growing or are killed completely. Some leukemia and lymphoma cases can be treated with the hormone cortisone. The goal of gene therapy is to replace damaged genes with ones that work to address a root cause of cancer: damage to DNA. For example, researchers are trying to replace the damaged gene that signals cells to stop dividing with a copy of a working gene. Other gene-based

therapies focus on further damaging cancer cell DNA to the point where the cell commits suicide [2].

In conclusion it should be said that cancer is one of the most complex and devastating diseases that claim the life of many humans. Today there are one in three people worldwide who are affected by cancer, and almost 60% of these people will almost certainly die.

Література:

1. Berry G. U. How is cancer diagnosed? / G. U. Berry // American Cancer Society, 2013. – P. 67–73.
2. “Targeted Cancer Therapies”. NCI. 2014-04-25.
3. Voevodina O. S. English for biotechnologists and biologists / O. S. Voevodina, O. Y. Nesterova, A. R. Sadykova : учеб. пособие. – Ижевск : Изд-во «Удмуртский университет», 2012. – 375 с.

УДК 811.111

THE ADVANTAGES OF OCEAN ENERGY IN THE WORLD

Мардзявко В.А. – студент групи Ен 2/1

Науковий керівник – Марковська А.В. к.філол.наук, доцент кафедри іноземних мов МНАУ

Ocean energy

The world's ocean may eventually provide us with energy to power our homes and businesses. Right now, there are very few ocean energy power plants and most are fairly small. But how can we get energy from the ocean?

There are three basic ways to tap the ocean for its energy. We can use the ocean's waves, we can use the ocean's high and low tides, or we can use temperature differences in the water. Let's take a look at each

Wave Energy

Kinetic energy (movement) exists in the moving waves of the ocean. That energy can be used to power a turbine. In this simple example, to the right, the wave rises into a chamber. The rising water forces the air out of the chamber. The moving air spins a turbine which can turn a generator.

When the wave goes down, air flows through the turbine and back into the chamber through doors that are normally closed.

This is only one type of wave-energy system. Others actually use the up and down motion of the wave to power a piston that moves up and down inside a cylinder. That piston can also turn a generator.

Most wave-energy systems are very small. But, they can be used to power a warning buoy or a small light house.

Another form of ocean energy is called tidal energy. When tides come into the shore, they can be trapped in reservoirs behind dams. Then when the tide drops, the water behind the dam can be let out just like in a regular hydroelectric power plant.

Tidal energy has been used since about the 11th Century, when small dams were built along ocean estuaries and small streams. The tidal water behind these dams was used to turn water wheels to mill grains.

In order for tidal energy to work well, you need large increases in tides. An increase of at least 16 feet between low tide to high tide is needed. There are only a few places where this tide change occurs around the earth. Some power plants are already operating using this idea. One plant in France makes enough energy from tides (240 megawatts) to power 240,000 homes.

Ocean Thermal Energy Conversion (OTEC)

The idea is not new. Using the temperature of water to make energy actually dates back to 1881 when a French Engineer by the name of Jacques D'Arsonval first thought of OTEC. The final ocean energy idea uses temperature differences in the ocean. If you ever went swimming in the ocean and dove deep below the surface, you would have noticed that the water gets colder the deeper you go. It's warmer on the surface because sunlight warms the water. But below the surface, the ocean gets very cold. That's why scuba divers wear wet suits when they dive down deep. Their wet suits trapped their body heat to keep them warm.

Power plants can be built that use this difference in temperature to make energy. A difference of at least 38 degrees Fahrenheit is needed between the warmer surface water and the colder deep ocean water.

Література:

1. Електронний ресурс. – <http://www.renewableenergyworld.com/ocean-energy/tech.html>
2. Електронний ресурс. – <http://worldoceanreview.com/en/world-1/energy/renewable-energies/>
3. Електронний ресурс. – http://srren.ipcc-wg3.de/report/IPCC_SRREN_Ch06.pdf
4. Електронний ресурс. – <http://oceanenergy.ie/>

5. Електронний ресурс. – <http://www.boem.gov/Renewable-Energy-Program/Renewable-Energy-Guide/Ocean-Wave-Energy.aspx>

УДК 811.111

THE DEVELOPMENT OF UKRAINIAN-CANADIAN RELATIONS

*Мужилкіна К.М. – студентка групи Ен 2/1
Науковий керівник – Марковська А.В. к.філол.наук, доцент кафедри
іноземних мов МНАУ*

No secret, that not so long ago Ukraine had very weak connections with other countries in the world. But at present the situation has changed for the better.

As now Ukraine is a sovereign state it establishes new relations with the countries throughout the world.

Ukraine is one of the members of the United Nations Organization and participates in the work of many international organizations.

We have wide relations with Canada in economics:

Canada was the first among the western states that recognized the state independence of Ukraine.

Canada opened its embassy in Kiev in April 1992, and the Embassy of Ukraine in Ottawa opened in October of that same year.

Canada and Ukraine have Free trade Agreement to promote growth and prosperity in Ukraine.

The structure of exports from Ukraine to Canada - copper wares, mineral fuel, oil and refining products, nuclear reactors, boilers, machinery.

Ukraine is a top-priority country within the region for the Military Training Cooperation Program (MTCP). Canada supports the NATO-Ukraine Joint Working Group through the provision of language, staff officer, and peacekeeping training for Ukrainian military and civilian personnel.

Also, science closely connects Ukraine with Canada :

In the future Ukraine will launch space rockets from Canadian territory.

We have wide relations with Canada in culture:

It is interesting that the largest Easter egg in the world located in Vegreville, Canada. The egg was built in 1974 by Ron Resch.

It's very important to mention that many people who are Ukrainians by origin live in Canada. So we have particular relations with this country.

Many of the Ukrainians living now in Canada and other English-speaking countries don't lose connections with Ukraine. Some famous Ukrainian Canadians: Dave Andreychuk- hockey player,

Isydore Hlynka-Ukrainian Canadian community leader, Kelly Olynyk, basketball player.

Література:

1. Електронний ресурс. – https://en.wikipedia.org/wiki/Canada%E2%80%93Ukraine_relations
2. Електронний ресурс. – http://www.canadainternational.gc.ca/ukraine/bilateral_relations_bilaterales/index.aspx?lang=eng
3. Електронний ресурс. – <http://canada.mfa.gov.ua/en/ukraine-%D1%81%D0%B0/trade>

УДК 811.111

TOURIST LONDON FOR UKRAINIANS – 2016 THE YEAR OF ENGLISH LANGUAGE IN UKRAINE

Муратов М.Є. – студент групи Ен 2/1

Науковий керівник – Марковська А.В. к.філол.наук, доцент кафедри іноземних мов МНАУ

2016 year of English language in Ukraine, so it's best time to visit the capital of Great Britain- London.

London is popularly considered as one of the most favored holiday destinations among the tourists.

The range of tourist attractions in London has over the years sought to make London the most preferred and favored choice of the tourists in every season. If you want to indulge into the aroma and taste the European flavor then, a visit to London is a must for you. With an extensive range of tourist attractions, London can safely be termed as a tourism retreat for the tour lovers. London with its great charm and appeal never fails to offer a slice of happiness to its tourists. A tour to London is sure to offer you with the most memorable tour experience of your life.

London can well be termed as one of the most contemporary cities of the world with its rich and historical attractions. Beautiful historical constructions and historic monuments have rather turned London to a historical place of visit. The city of London indeed would offer you with the finest bend of the old and the new. The city with a range of tourist attractions in the forms of parks, gardens, and grand monuments has a lot to offer you while on a London visit.

The land of diverse attractions, London is a melting pot of different traditions and customs. The tourists' attractions of London hold in it the biggest charm and appeal of the city. The major tourist attraction hosts the old charm with the contemporary lifestyle in perfect blend.

Top London Tourist Attractions:

London Bridge: One of the historical constructions, the London Bridge has strived to become and still remains a top tourist attraction of London. A major

tourist attractor, the bridge since its inception has been appealing tourists in the same force.

London Eye: A tour to London without a visit to London Eye is a trip incomplete. London Eye is the tallest Ferris wheel in Europe and is also referred to as Millennium wheel. Taste the flavor of excitement in your London tour with a trip to the London Eye.

Big Ben: An iconic landmark of London, the Big Ben has almost become synonymous with the tradition and custom of London. The 150 year old clock tower appeals and attracts the tourists like none other. A visit to London is never considered complete without a visit to Big Ben. A night view at the illuminated clock tower is sure to take you to a complete new world of dreams.

The London tourist attractions are not only restricted to the above-mentioned tourist destination. The city of London is also adorned with many other destinations of tourist attractions. Let us have a look at some of the tourist attractions in London:

- Hyde Park
- Tower Bridge
- St Paul's Cathedral
- London Dungeon
- Madam Tussuad's
- Buckingham Palace

Plan a tour to London to taste the best holidaying experience as the city lays for you the best blend of modernism and traditionalism with its diverse range of tourist attractions in London.

Література:

1. Електронний ресурс. – <http://www.6london.com/tourist-attractions-in-london/>

УДК 338.43:330.322(477)

NATURE, STRUCTURE AND REPRODUCTION OF VIRUSES

Омельяненко Д. Ю. – студентка групи БТ 2/1

Науковий керівник – Саламатіна О. О., доцент кафедри іноземних мов МНАУ

Virology is the study of viruses and virus-like agents: their structure classification and evolution, their ways to infect and exploit cells for virus reproduction, the diseases they cause, the techniques to isolate and culture them, and their use in research and therapy. Virology is often considered as a part of microbiology.

A major branch of virology is virus classification. Viruses can be classified according to the host cell they infect: animal viruses, plant viruses, fungal viruses, and bacteriophages (viruses infecting bacteria, which include the most complex viruses). Another classification uses the geometrical shape of their capsid (often a helix or an icosahedron) or the virus's structure (e.g. presence or absence of a lipid envelope). Viruses range in size from about 30 nm to about 450 nm, which means that most of them cannot be seen with light microscopes. The shape and structure of viruses has been studied by electron microscopy, NMR spectroscopy, and

X-ray crystallography. A virus is a small infectious agent that can replicate only inside the living cells of organisms. Viruses infect all types of organisms, from animals and plants to bacteria. Since the initial discovery of the tobacco mosaic virus in 1898, about 5.000 viruses have been described in detail, although there are millions of different types. Viruses are found in almost every ecosystem on Earth [2, p. 108].

Virus particles (known as virions) consist of two or three parts: the genetic material made from either DNA or RNA, long molecules that carry genetic information; a protein coat that protects these genes; and in some cases an envelope of lipids that surrounds the protein coat when they are outside a cell. The average virus is about one-hundredth the size of the average bacterium. Viruses cause a number of diseases in eukaryotes. In humans, smallpox, the common cold, influenza, herpes, polio, rabies and AIDS are examples of viral diseases. Viral infections in animals provoke an immune response that usually eliminates the infecting virus. Immune responses can also be produced by vaccines [3, p. 212]. However, some viruses including those causing AIDS and viral hepatitis evade these immune responses and result in chronic infections. Antibiotics have no effect on viruses, but several antiviral drugs have been developed. The origins of viruses in the evolutionary history of life are unclear: some may have evolved from plasmids – pieces of DNA that can move between cells – while others may have evolved from bacteria. The evolution of viruses, which often occurs in concert with the evolution of their hosts, is studied in the field of viral evolution. While viruses reproduce and evolve, they don't engage in metabolism and depend on a host cell for reproduction. The often-debated question of whether they are alive or not is a matter of definition that does not affect the biological reality of viruses. Viruses are an important natural means of transferring genes between different species, which causes genetic diversity and evolution directly. It is thought that viruses played a central role in the early evolution, before the divergence of bacteria, archaea, and eukaryotes, at the time of the last universal common ancestor of life on Earth. Viruses remain the largest repositories of live unexplored genetic diversity on Earth. Viruses have a genetic connection with the flora and fauna of the Earth. According to recent studies, the human genome on more than 32% consists of the virus-like elements, transposons, and their residues. With the help of viruses can occur so-called horizontal gene transfer (xenology), i.e. the transfer of genetic information is not of immediate parents to their offspring, and between two unrelated (or even belonging to different types of) individuals. Thus, in the genome

of higher primates there is a gene encoding a protein sintsitin, which is believed to have been adscititious retrovirus [1].

So, viruses are important for research in molecular and cellular biology as they are simple systems that can be used to control and study of cell function. The study and use of viruses yielded valuable information about various aspects of cell biology, for example, viruses used in genetic research, and they helped us to come to an understanding of the key mechanisms of molecular genetics, such as: DNA replication, transcription, RNA processing, translation, protein transport. Geneticists often use viruses as vectors for the input of genes in the studied cells. This allows you to force the cell to produce alien substances, as well as to study the effect of the entry of a new gene into the genome. Similarly virotherapy use viruses as vectors for treatment of various diseases, as they act selectively on cells and DNA. This gives hope that the virus will be able to help in the fight against cancer and will find their application in gene therapy. For some time, scientists have resorted to Eastern phage therapy as an alternative to antibiotics, and the interest in such methods increases, as currently some pathogenic bacteria showed high resistance to antibiotics.

Biosynthesis of foreign proteins other infected cells is the basis of some modern industrial methods for producing proteins, such as antigens. Recently some commercial methods viral vectors were obtained and medicinal proteins are currently in clinical and preclinical trials.

Література:

1. Гапон Д. «Фильтрующиеся вирусы». Открытие в гранях времени / Д. Гапон // Наука и жизнь. – 2015.

2. Casjens S. Desk Encyclopedia of General Virology / B. W. J. Mahy, M. H. V. Van Regenmortel. – Boston : Academic Press, 2010. – 210 p.

3. Voevodina O. S. English for biotechnologists and biologists / O. S. Voevodina, O. Y. Nesterova, A. R. Sadykova : учеб. пособие. – Ижевск : Изд-во «Удмуртский университет», 2012. – 375 с.

УДК 001.895:37.011

FORMATION OF INNOVATIVE DEVELOPMENT OF EDUCATION IN UKRAINE AND ITS IMPLEMENTATION ISSUES

Петрова А. П. – студентка групи А6/1

Науковий керівник – Артюхова О.В., к.пед.наук, доцент кафедри іноземних мов МНАУ

У цій статті порушується питання інноваційної системи освіти та визначаються проблеми, що утворюються при її застосуванні.

This article raises the question of innovative education and defined the problems generated during its application.

At the present stage of social development education presents a major area of human activity, which is closely connected with all other realms of public life. The ability of the education system to meet the needs of the individual and society in high-quality educational services determines the prospects of economic and spiritual progress of the country [1].

The formation of an independent Ukrainian state and its progressive economic development strengthening civil society need adequate ambitions and noble goals of highly educational system. As everywhere in the modern world the importance of education is an important factor in the formation of a new quality of economy and social life which increases with the increasing influence of human capital [2].

By scientist's definition of current stage of development of education in Ukraine is characterized by educational innovation aimed at preserving the achievements of the past and at the same time by modernizing of the education system according to the requirements of time, the latest achievements of science, culture and social practices (V.Andruschenko). All this is done within the framework of Ukraine's accession to the Bologna process and the transformation of the education system to the requirements [3].

One of the objectives of educational policy is the formation of a qualitatively new system of education. A characteristic feature of modern pedagogy is the ability to upgrade, that is innovative, because education can not overcome the crisis without reforming accordance with the requirements of the time. Innovation in education is crucial response to the challenges of our time, which provides the flexibility of the education system, and its openness to new (as in the technology and in philosophical aspects) competitiveness. Innovative educational policy in Ukraine is formed at the national level. Its implementation is ensured regulatory framework and innovative processes associated with the creation of a new theory and practice of education, which is supporting research in the branch of educational innovation as the science of creating pedagogical innovation, implementation and development of the educational community [1].

We are in the ocean of information that is fundamentally impossible to organize, build, turn to the knowledge in a traditional sense – a certain ideological foundations of motivation actions and events, that occur in everyday life. The main task today – to teach children to use the wealth of information.

The problem of organization and conduction of educational activities particularly acute for high school because, in addition to their own educational process, higher education should provide and develop research of capacity and knowledge-intensive production, which has a state significance.

"Teacher" to the "student" should be less and less a source of information only, and more - a source of spiritual and intellectual impulse, which leads to action. The role of science is the creation of educational technology, adequate on the level of public knowledge. In these conditions especially true importance is the development of professional skills of teachers, their creative skills, which can effectively carry out methodical activity in pedagogical changing conditions, and for different situations. However, the actual pedagogical practice, this transition

doesn't occur professional, contradictory, and often in the absence of training in such activity, which should be carried out through a series of scientific, methodical consultations and actions, where the main leaders of the teacher are changes of the learning process which should be methodical centers institutions of education.

Bundle teacher in professional practice is the result of circumstances: on the one hand, they are largely due to the system of methodical preparation of teachers, teacher which traditionally exists in terms of teacher education, to methodical activity that does not provide, as a rule, the relationship of science and practice; ignoring the real needs of the individual and the social order of society. On the other hand the lack of practitioner knowledge and skills; thorough mechanisms of inclusion teacher in designing modern educational process is not conducive to the development needs of teachers in improving their own methodological expertise [2].

At this stage it is obvious that the traditional school is focused on transferring knowledge and skills, not time in terms of their capacity. But much of the knowledge, that children learn, was won by mankind 200-400 years ago. Modern school insufficiently developed abilities required of graduates to self-determination in their own world, made informed decisions about their future, which are activity and mobile agents on the labor market.

Understanding the present situation of the state and prospects of the development vector of modern education requires constructive understanding of the educational process, based on the fact that education should focus not on the transfer of static knowledge, but rather a form of technology of the information on which students can receive their own and adequate current pace of global development knowledge.

At present the task of teaching methods, in my opinion, is to combine "classic" approaches of learning with modern innovative technology. Only in this context we can expect positive results.

Education should be interpreted as a complex process of innovation in the development of society. We must change our understanding of the role of education and science in Ukraine, because we live in a world where is the possibility of the Internet, a variety of capabilities, can provide material benefits as everyone can play an important role [0].

Література:

1. Концепція інноваційного розвитку ЗНЗ [Електронний ресурс] <http://undip.org.ua> – Режим доступу до ресурсу http://undip.org.ua/photo/konceptiya_innovatsiyного_rozvytku_ZNZ.pdf
2. Сірий Є.В. Інноваційний розвиток освіти в Україні: розгортання проблеми та засадницькі орієнтири [Електронний ресурс] Ошибка! Недопустимый объект гиперссылки. – Режим доступу до ресурсу <http://www.socd.univ.kiev.ua/sites/default/files/library/elopen/aktprob.11.65.pdf>
3. Старовойт О.В. Інноваційні стратегії розвитку освіти [Електронний ресурс] <http://novyn.kpi.ua> – Режим доступу до ресурсу http://novyn.kpi.ua/2009-3-2/02_Strovojt.pdf

Serhiy Kvit: Education is a process of universal innovative development of society [Електронний ресурс] <http://old.mon.gov.ua> – Режим доступу до ресурсу <http://old.mon.gov.ua/en/news/39483-serhiy-kvit-education-is-a-process-of-universal-innovative-development-of-society>.

УДК: 811.111

MARK CARNEY: EU EXIT IS 'BIGGEST DOMESTIC RISK'

*Пронько В. – студент групи Е 2/2
Науковий керівник – Ганніченко Т. А., к.пед.наук, доцент кафедри іноземних мов МНАУ*

The poor trade data marks the worst performance since the height of the global financial crisis in May 2009.

However, analysts cautioned that the data might have been affected by the longer-than-usual Chinese Lunar New Year holidays.

With China often referred to as "the engine of global growth", the weaker global demand for its goods is read as an indicator of the general global economic climate.

Analysis: Karishma Vaswani, Asia Business Correspondent

China has often been called the factory of the world, but that narrative may now be changing.

As global demand slows down, China is selling less to the world, but it is also buying less from the world.

True - Tuesday's trade figures may have been affected by a longer than usual Chinese New Year period last month, which meant workers were on holiday and factory owners may have brought orders forward or delayed them.

But these February numbers will continue to put pressure on China's leaders as they grapple with the worst growth rates in 25 years on the mainland.

The referendum on whether Britain should remain in the European Union is to be held on Thursday, 23 June.

"We will not be making, and nothing we say should be interpreted as making, any recommendation with respect to that decision," Mr Carney said.

Mr Carney appeared in front of the cross-party Treasury Committee to discuss the economic and financial costs and benefits of the UK's EU membership.

Referring to a Bank of England report on the EU, Mr Carney concluded EU membership had "likely increased the dynamism of the UK economy and correspondingly its ability to grow without generating risks to the Bank's primary objectives of monetary and financial stability".

However, Mr Rees-Mogg said this could be attributed to reforms made under Margaret Thatcher.

"It is speculative and beneath the dignity of the Bank of England to be making speculative, pro-EU comments," Mr Rees-Mogg said.

The MP said that he was concerned the Bank was focused more on the positive aspects of EU membership than the negative, adding that it was guilty of "political partisanship" over Europe.

Mr Carney rejected Mr Rees-Mogg's statements as "wholly unfounded" and said: "With respect, what concerns me is your selective memory."

The governor said that he had not discussed what he was going to say on Tuesday with Mr Cameron. "I have not had conversations with the prime minister about what I might say about the European Union."

Analysis

Read Kamal's blog in full

Mr Carney said risks from an EU exit included the Bank's ability to control inflation, a fall in the pound and banks moving abroad.

However, if Britain votes to leave the EU, Mr Carney said the Bank "will do everything in our power to discharge our responsibility to achieve monetary stability and financial stability".

He said that there were measures that the Bank of England could take in the short term to support the financial system but said he could not rule out the possibility that there could be issues with stability.

'Outside remit'

Commenting on the short-term impact of an EU exit, Mr Carney said: "There could be lower levels of activity because of the degree of uncertainty that could affect investment and household spending. Reasonable expectations during a period of uncertainty."

However, he said it would not be possible to say what the longer term impact of leaving the EU would be on Britain. "We are not forming a view because it's outside our remit," Mr Carney said.

Mr Carney was also questioned about the financial sector's reaction to an exit.

He said: "One would expect some activity to move, certainly there's a logic to that and there are views that have been expressed publicly and privately by a number of institutions that they would look at it, and I'd say a number of institutions are contingency planning for that possibility."

On Monday, the Bank of England pledged to offer extra funding to the financial market before and after the June vote, in case uncertainty put pressure on the banking system.

Література:

1. <http://www.bbc.com/news/business-35703813>
2. Robert Carbaugh. International Economics, 10th edition.
3. Varian. Intermediate Microeconomics: A Modern Approach.
4. Financial Analysis Tools and Techniques: A Guide for Managers.

THE PROBLEM OF INVESTMENT RISK

Резниченко К. – студентки групи ФІ/І

*Науковий керівник – Тішечкіна К.В., кандидат філологічних наук,
доцент кафедри іноземних мов МНАУ*

The main goal of this paper is the problem of investment risk.

Key words: investment risk, Investment activity, reduction of risk, the distribution of risk.

У статті деталізується поняття інвестиційного ризику, досліджується його класифікація, розглянуто розвиток і деякі практичні аспекти щодо методів запровадження інвестиційних ризиків в Україні.

Ключові слова: інвестиційний ризик, інвестори, ризик.

Counteraction of investment risks involves, first of all, establish the maximum acceptable level of risk for individual transactions relating to the implementation of the project. This level is set in the context of certain types of transactions, taking into account the investment behavior of owners, that is their attitude to investment risk.

The risk exists only on events that are forecast are expected in the future. If the event occurred, then the risk is no longer in question. Risk as a criterion for deciding investor occurs when investment is planned only exists as a future project.

Risk - is the probability (threat) now losing some of their resources, loss of income or of additional costs in the implementation of certain production or financing activities.

Investment risk - a possibility or likelihood of full or partial failure to (non-receipt) results expected by investors for investment.

The system measures to ensure the implementation of investment projects important place belongs to neutralize project risks. Different types have different degrees of risk control. Identify the level of control risk is difficult, but necessary to determine possible ways of neutralizing their negative effects.

In implementing the investment policy of moderate risk level limit values of individual transactions according to experts, are:

- For operations with valid size loss - 0.1 (the planned operation of uninsured risk on it must be rejected if one case out of ten can be lost all the estimated amount of income);

- For transactions of a critical size of losses - 0.01 (in one case a hundred - lost amount of estimated gross income);

- Transactions with the size of disastrous losses - 0,001 (in one case out of a thousand - lost all the capital invested in the project due to collapse).

There are some methods for reducing investment risks:

- 1) prevent the risk;
- 2) valuation risk;
- 3) risk sharing between project participants;
- 4) reduction of risk;
- 5) insurance risk.

The method of risk prevention is to develop internal measures which completely exclude the risk of a particular type of project, including:

- Avoiding the use of high volumes of debt;
- Failure by excessive use of investment assets in the form of low.

Rationing risk - is used for those risks that are beyond their acceptable level, ie investment operations in the area of critical and catastrophic risk. Normalization is realized by the company installing the system of internal regulations, which may include the following indicators:

- Limit the amount of borrowed funds used for the implementation of real investment projects;
- The minimum amount of investment assets in highly liquid form.

The distribution of risk between the participants of the project involves the partial transfer of risk partners in individual investment transactions.

Main types of risk sharing:

- The distribution of risk between the participants of the project;
- The distribution of risk between now and the suppliers of raw materials;
- The distribution of risk between the parties to leasing transactions.

Reduced risk - a reduction in the probability and amount of loss by reserving funds for unforeseen expenses. The main directions of this method:

- Formation of reserve (insurance) fund company;
- Formation of reserve funds target;
- Formation of reserve amounts of financial resources in investment budgets.

All these methods reduce investment risk are internal methods for the direct enterprise using internal mechanisms. The choice of internal methods of alternative provides a high degree of administrative decisions that are independent of other entities, as well as the possibility of internal factors account the financial capacity of the enterprise and influence internal factors. However, the disadvantages of these methods have limited financial and human resources company and the inability to use this form to neutralize certain types of project risks.

Terms economic uncertainty in which investors have to act, caused by the effects of risk factors or another on their future profits. Investment risks threatening decrease in profits compared to the possible or even losses. Therefore, when making decisions on issues related to investment management firms, banks or investment funds must necessarily take into account the impact of investment risk.

Література:

1. Udalykh O. Upravlinnya investitsiynoyu diyalnistyu / The Teaching posibnik / Kyiv, 2006, pp. 289.
2. Borsch L.M.: Investitsii in Ukraini: mill, the problem i run/ L. M. Borsch // Kiev: knowledge, CCW 2002, pp.318.
3. Gunskey B.V. Investitsiyni processes in global seredovischi, Kiev: Naukova Dumka. 1998, pp. 390.
4. V. Shevchuk, P. Rogozhin, Foundations investitsiynoi diyalnosti, Kiev: genesis. 1997; pp. 272.
5. O.V.Savchuk Teoriya i practice otsinki effektivnosti investitsiy in Ukraïni //O.V.Savchuk//Ekonomika Ukraine . 2003, № 12, pp. 19-25.

УДК: 811.111

THE BUDGET OF UKRAINE FOR 2016

*Сіліна А., Самбуренко К. – студенти групи ФІ/І
Науковий керівник – Ігнатенко Ж.В., викладач кафедри іноземних мов
МНАУ*

The Verkhovna Rada of Ukraine adopted the State Budget of Ukraine for 2016. It was supported by 263 MPs.

Before the vote, Prime Minister of Ukraine Arseniy Yatsenyuk stressed that several years ago the tax on salary, single social contribution (SSC) had been a burden on business, the employee and the employer. Now, he emphasized, the SSC will be cut twofold - from 41% to 22%.

"Anyone hardly believed that our fiscal decentralization, which was widely criticized, including by the Parliament members, would provide an opportunity to increase the revenues of local budgets by 40%. And this is the money to be spent on hospitals, on schools, on infrastructure", accentuated Arseniy Yatsenyuk.

"We have finally reached understanding in the issues of both collection and reimbursement of value added tax. We have adopted the new system of VAT administration and a new public system of reimbursement of the value added tax. And it's your and our joint achievement", he stressed.

Arseniy Yatsenyuk emphasized that the Government supports "all the proposals of parliamentary factions designed to ensure economic stabilization of the country." In particular, he noted, to finance the activities of the MFA the planned amount worth UAH 200 million is added with UAH 124 million.

Also, on the proposal of the Radical Party, the Government takes a decision on the establishment of an export credit agency, the founder of which should be Ukreximbank.

In addition, at the suggestion of MPs there is planned to allocate UAH 400 million for the State Emergency Service and the program to provide mammographers will be restored.

Arseniy Yatsenyuk reminded that this year social standards had grown by 13% for pensioners and by 19% for the public sector. The following year, there has been planned 12% increase of social standards.

"I am well aware that we will continue work not only on this budget but on all the reforms, in tax, health care and education sectors. We proceed with the work all together step by step. Throughout 22 months none believed that the country would make progress. I remain optimistic that we are capable to carry out reforms, we are capable to achieve the result, if we are united. Unity is the key for Ukraine to be successful and a strong Ukrainian state in the European family," Arseniy Yatsenyuk

IMF agrees Ukraine's state budget for 2016, decision on third EFF tranche expected in late Jan-Feb - Jaresko

Jan 11 - The International Monetary Fund (IMF) has praised the law on the national budget of Ukraine for 2016 and a package of laws adopted with it, but for the positive decision of the fund on the issue of the third tranche under the EFF program to Ukraine Kyiv needs to fulfill obligations in the field of anti-corruption and other structural reforms, Ukrainian Finance Minister Natalie Jaresko has said.

"The IMF agreed that the adopted budget as a whole complies with the program objectives," she told the Ekonomichna Pravda edition (the Economic Truth).

"When making the decision on providing Ukraine with the next tranche, the IMF management will assess the fulfillment of all preconditions and structural beacons, which should have been implemented by the end of December 2015, but not just the matter of passing the national budget for 2016," Jaresko said.

The minister said in case of the successful implementation of such conditions the fund board of directors might hold a meeting on the issue of the third EFF tranche in late January-February.

Література:

1. The Verkhovna Rada of Ukraine. [Електронний ресурс] / The Verkhovna Rada of Ukraine, 2016, – Веб-сайт, – Режим доступу : http://rada.gov.ua/en/search_out?search=Search&submit=Budget – Мова англ., укр., рос. - Дата останнього доступу: 28.02.2016

2. Kyiv Post. [Електронний ресурс] / Kyiv Post, 2016, – Веб-сайт, –Режим доступу : <http://www.kyivpost.com/article/content/kyiv-post-plus/ukraines-parliament-rejects-budget-resolution-for-2016-391241.html> – Мова англ. - Дата останнього доступу: 28.02.2016

3. Interfax-Ukraine. [Електронний ресурс] / Interfax-Ukraine, 2016, – Веб-сайт, – Режим доступу : <http://en.interfax.com.ua/news/economic/316506.html> – Мова англ. - Дата останнього доступу: 28.02.2016

УДК: 811.111

THE DEMOGRAPHIC CRISIS IN UKRAINE

Скрипник Д. Є. – студент групи ЗЕД 2/1

*Науковий керівник – Тішечкіна К.В., кандидат філологічних наук,
доцент кафедри іноземних мов МНАУ*

This paper deals with existing situation in demographic crisis in Ukraine. The aim of the work – search dynamic changes of demographic indices in Ukraine; find strategic ways for making better demographic situation in country. Conclusion regarding – the demographic crisis, which is going through Ukraine for the last ten years, means one of major, real, potential threats national safety of Ukraine in social and humanitarian sphere. Loss of human capital because of mortality significantly influent on economical, military and intellectual potential of States. Key words: demographic crisis, aging, population, human capital, mortality.

The Analysis of patterns and tendencies of changes major indicators of community health in European country aria shows, that major demographic process in European country characterized “Aging” of people, decrease level of birth, decrease total fertility rate for the last ten year and in the same time, decrease total level of infant and maternal mortality, stabilization and some increase of average expected life expectancy. Amid considerable territorial differentiation of indicators in some countries, including CIS, we can see, negative dynamic some indicators of public health.

Most population of European region (55,8%) living in countries of European united (EU), about thirds (31,3%) – CIS countries. Ukraine whit population of (45 633,6 thousand people) taking 8th rare place among region countries [1].

Dynamic of population shows decries number of people in country on 2 823,5 thous. Peop (from 48 457,1 thous. Peop in 2002 to 45 633,6 thous. Peop on 01.01.2012). According to the forecast of the United Nations (UN), if this dynamic would keep, number of people in Ukraine decreases to 39 million in 2030. According to UN demographic report, Ukraine has lowest level of population growth in whole world. During the last decadee the proportion of the working population in the structure of total Ukraine's population was unstable.

From 2002 to 2008 this indicators increase (from 57,8% to 60,4% respectively) from 2008 and for today – (though slightly) decrease(from 60,4% in 2008 to 59,8% as of 01.01.2012) [2].

One of the main causes of the demographic crisis which Ukraine is going through in recent decades is loss of human capital because of mortality, that significant influent on economical, military and intellectual potential of the country.

Dynamic of total coefficient mortality in Ukraine for last decade characterized uncertain increase from 12,1% in 1990 to 16,7% in 2005, from 2005 – gradual decrease indicator of mortality. Comparatively with 2010 level of mortality in 2011 decrease from 15,2% to 14,5%. In 2011 the highest level of

mortality was fixed in Chernihiv region (18,5%), lowest – in Kiev (9,6%). Should be noted the highest level of mortality observed among working population, among which observed over mortality phenomenon. Comparatively with EU countries excess men mortality in Ukraine in age group 30 – 44 years old is 4,9 times and women – 3,2 times [4].

In Ukraine for the period from 1990 special coefficient of men mortality in age group 20 – 69 years old increase in 1,2 – 1,9 times and women in 1,1 – 1.2 times. Largest increase coefficient of mortality fixed of population with age group 30 – 34 years old in which growth rate higher in women (in 2,1 times) comparatively with men (in 1,9 times). On second place of growth rare population mortality indicators was age group 35 – 39 years old, where the men growth rate amounted 80% and woman – 89%. The third place in terms of growth specific mortality in men takes the age group 40 – 44 years old (77%) and women – 25 – 29 years old (73%). Too quite high growth special coefficient of mortality (in 1,5 times) observed in men in age group 25 – 29 and 45 – 54 years old, in women – 40 – 44 years old [3].

That way, demographical situation in Ukraine determined by features correlations between dynamic of mortality and birth, which continue for last decade, consequence of this become the aging population with forecast trends to deepen this. Should say, from 2002 to 2011 reached improvements in mortality indicators due implementation strategy cross-sectoral approach to combating non-communicable diseases, warning mortality and optimize a health system which has the following main areas:

- improve the quality of life,
- prevention and reduction of occupational disease
- improve sanitary-epidemiological , ecological situations
- development of the medical industry and reforming Health system

Література:

1. Гнибіденко І. Ф. Демографічні аспекти національної безпеки України / І. Ф. Гнибіденко // Формування ринкової економіки : зб. наук. праць (Спец. вип. «Управління людськими ресурсами: проблеми теорії і практики»). Т. 2, Ч. II. – К. : КНЕУ, 2007. – С. 140–152.

2. Пирожков С. І. Демографічний фактор у глобальній стратегії розвитку України / С. І. Пирожков // Демографія та соціальна політика. – 2004. – № 1–2. – С. 5–20.

3. Про рішення Ради національної безпеки і оборони України від 19 вересня 2007 року «Про заходи щодо подолання демографічної кризи та розвитку трудових ресурсів потенціалу України» : Указ Президента України від 19.09.2007 р. № 895/2007 // Офіц. вісник Президента України. – 2007. – 24 вересня, № 30. – С. 97.

4. European mortality database (HFA-MDB) / Regional Office for Europe WHO. – Copenhagen, 2008 [Електронний ресурс]. – Режим доступу : <http://www.euro.who.int/mortdb>. – Назва з екрана.

УДК 001.895:37.011(477)

INNOVATIVE DEVELOPMENT OF EDUCATION IN UKRAINE: INNOVATION POLITICS AND PRINCIPLES

Смірнова С. – студентка групи А 6/1

*Науковий керівник – Артюхова О.В., кандидат педагогічних наук,
доцент кафедри іноземних мов МНАУ*

This article is devoted to the questions of innovative development of Ukraine because of the integration process of Ukrainian educational system into the European space. It spares the light to the innovation politics and the principles of innovative development of education.

In the globalized social and cultural environment and interdependence of the world there are new requirements to the level of a national education system. The process of integration of Ukrainian system of education into European and world educational space is connected with the rethinking of national experience, the search for mechanisms of adaptation of positive foreign experience to modern realities, as stated in the National doctrine of education development of Ukraine in XXI century (from 2002), the Program of action for the implementation of provisions in Bologna Declaration in system of higher education and science of Ukraine (2004), the Law of Ukraine "About higher education" (from 2012) and other legislative acts.

Quality of life and educational potential of the Ukrainian society is largely determined by the level of education and culture of the population, its ideological orientation and spiritual development. These factors affect the degree of accordance of Ukrainian society in national and global universal processes of progressive development. Education that meets the current needs of society and the labor market, is a powerful adaptive potential in changing society to the contemporary socio-economic realities that becomes the major condition successful and sustainable community development.

In developed countries educational infrastructure in the context of innovative development brought to an active innovation politics as a purposeful system of actions of an innovative nature, which ultimately tends to have a high innovation rating. First of all, innovation politics is proved and tested itself as the Foundation for building the overall strategy of the company, its marketing and financial politics. World practice rich experience in the development, restructuring, reform of the educational system. However, every case in a particular time in a particular country, society is special.

Higher education institutions must deal with not only basic and applied research, but also in the development of the content of advanced educational

programs leading to knowledge and skills needs, search of new educational technologies, new ways to manage the educational process and its activities. High school is one of the strategic resources of the country.

A combination of politics aimed at improving the quality of education focused on the knowledge economy with leading world models for its implementation allows to integrate the interests of the state, society, time. All this can be done in so called as doctrine or the concept of innovation development of education in Ukraine. It is quite distinctive the obvious to focus on the development of those initiatives that aim to overcome the problems and stagnation of trends in the educational system and educational environment of Ukraine.

Innovation polics should cover all activities of higher educational institutions, be responsible for its development, increase of competitiveness. All the versatility of the formation and implementation of innovative polics of the higher school should be subject to certain formative principles that will ensure consistency and self-sufficiency, and along with it, the effectiveness of innovative development. As such, may be deemed to be:

- the unity of scientific and educational processes, management activities and their focus on the development of society;
- optimal combination of government regulation and self-government;
- formation of innovative projects in priority areas of research;
- support of leading scientists, scientific teams, scientific and pedagogical schools are able to provide leading level of education and scientific research;
- carrying out full cycle of research and development, services;
- support of entrepreneurship in the scientific part;
- integration of science and education in the international community;
- formation of network structures in the organization of innovation and research activities.

Innovation polics as a tool of development management in any organization is a crucial factor of innovative activity, an important element of the innovation process in organizations. It should contribute to the disclosure of the innovative potential, creation of innovative behavior of the staff.

The innovative complex of higher education consists of University education and research centers, the core of which are the universities directly interacting with innovative infrastructure in experimental productions, research and production centres, etc.

Within the educational-scientific innovation complexes is implemented as:

- improving the competitiveness of higher education institutions as a whole;
- ensuring high quality of preparation of experts;
- conduct research that meets the requirements of innovative strategy of development of the state;
- implementation of a common system of quality management of scientific and educational activities, and efficient telecommunications environment.

Innovative development of education is based on the direction of education development and custom-developed principles, on the basis of which must be

system changes to ensure accessibility, quality, continuity and investment attractiveness. Among them we can highlight:

- the principle of priority development of education;
- the principle of design of innovative development ;
- the principle of openness of education and public;
- the principle of continuity of education;
- the principle of strategic investment ;
- the principle of innovation educational environment.

Educational innovations and their implementation shape the future of education as a public institution. Understanding of the progressive role of education in social development, a natural setting and trying to get each national innovation polics of the university with a target focus was a polics of growth, scientifically sound, reasonable educational technology and risk in research activities. In practice, this model is not so easy to implement. National education, based on its rich traditions and progressive global experience, going that route, though difficult overcoming objective and subjective difficulties.

Literature:

1. Zaritskaya M.V. Innovative development of education: international and Ukrainian aspects. –Dnepropetrovsk: "Perspective", 2014. – 116 p.

2.Seriy E.V. Innovative development of education in Ukraine: problems of deployment and zasadniczych guidelines. – K. Actual problems of sociology, psychology, pedagogy: proceedings of the. No. 11, 2010. – P. 65-77.

3. The spirit and Letter No. 19. University autonomy. Special edition. K., "Spirit and Letter", 2008. – 368 p

4. Dichkivska I.M. Innovative pedagogical technologies. – K., Academy, 2004. – 352 p.

5. Innovative people: Ukraine on the path to European integration// Agora. Release 5, 8, 6-7.

6. Harold Silver Managing to Innovate in Higher Education// British Journal of Educational Studies. 1999. vol. 47. – p. 145-156.

УДК: 811.111

FINLAND: THE SICK MAN OF EUROPE?

Тимофєєва Т. – студентки групи Е 2/2

Науковий керівник – Ганніченко Т.А., кандидат педагогічних наук, доцент кафедри іноземних мов МНАУ

Is Finland now officially "the sick man of Europe"?

That dismal description comes from the country's own Finance Minister, Alexander Stubb.

New figures for the economy's performance in 2015, showed that it managed to avoid a fourth consecutive year of declining economic activity. Even so, it was very lacklustre growth and the longer picture remains pretty bleak.

The broadest measure of that, GDP, is still about 7% below the high it reached at the end of 2007, just before the global financial crisis.

Most, though not all, eurozone countries have got back to those earlier levels and a bit above. Even one country that was bailed out, Ireland, is among those relatively strong performers.

Finland's disappointing performance has also shown up in the unemployment figures, which rose from 6.2% of the workforce in early 2008 to 9.5% in the most recent figures.

Finland's economy

- GDP in 2015: €207bn (\$231bn; £150bn) - eighth biggest in the eurozone (*Source: IMF*)
- GDP per capita: €37,893 (\$42,195; £27,504) - fifth in the eurozone, just ahead of France and Germany (*Source: IMF*)
- Population: 5.5 million - 10th in the eurozone
- Two pillars of the economy have been in decline in recent years - the timber industry and Nokia
- High-profile companies today include dairy producer Valio, Angry Birds maker Rovio, and Kone, which manufactures lifts and escalators
- The country spends heavily on education, training and research - investment which delivers one of the best-qualified workforces in the world
- Finland is the only Nordic EU member to use the euro as its national currency

Read more: [Finland country profile](#)

Listen: [Business Daily: Finland's long economic winter](#)

There has been another external problem, this one supplied by one of Finland's neighbours, Russia. Not for the first time, trouble across the eastern border has made itself felt in the domestic Finnish economy.

The collapse of the Soviet Union in the early 1990s hit Finnish exports. So have the more recent problems in Russia, which were the result of lower oil prices and Western sanctions related to the crisis in Ukraine. Russia's trade retaliation against the EU has also hit Finland, as it banned some EU imports. To take one example, for the country's leading dairy business, Valio, that was a serious blow.

There are other issues that can't be blamed on bad luck descending from overseas. The population is ageing. That means a lower proportion of the population is working, generating wealth and paying income taxes.

There is also an issue with competitiveness. One measure is known as unit labour costs. According to data from the Organisation for Economic Co-operation and Development, that rose by 25% between 2007 (just before the crisis) and 2014.

Література:

1. <http://www.bbc.com/news/business-35656150>
2. Kotler, Keller. Marketing Management 6th edition
3. Investment Philosophies: Successful Strategies and the Investors Who Made Them Work

THE BANKING SYSTEM OF THE UNITED STATES

Ткачук А. – студентка групи Е 2/2

*Науковий керівник – Ганніченко Т.А., кандидат педагогічних наук,
доцент кафедри іноземних мов МНАУ*

In 20 century allocation in banking system central level in many advanced countries of the world is not only natural phenomenon , but also an obligatory condition of achievement of high economic development.

The legal status of central banks, their status in the advanced countries is determined by the legislation. In many countries the basic act which regulates activity of the central banks, the act of the supreme validity is the law. In law about the banks their structure, the basic tasks , function and the competence, the order of relations with bodies of legislative and executive authority, the state controls is determined. In legal acts which determine the status of central banks, their duties in spheres of management of monetary circulation, currency transaction, functioning of credit system will be worn out.

In the countries where legislation acts submission of central banks directly to parliaments' is stipulated, with the help of the certain procedures are possible acceptance of decisions with wich regulatory authorities undertake to promote central banks in the decision of the certain problems, in fulfilment of a monetary and credit policy. Except for it, the legislation of some counties provides the reporting central banks before parliaments. For example, Federal Reserve System gives to the Congress of USA the report about the activity two times per one year. Central bank of Germany and Japan give report in the parlament annually.

Central banks in the majority of the countries of the world constantly are supported support of the state. Central banks are capable to register all payment operations, qualitatively to carry out transfers mutual duties of bank. Central bank makes macroeconomic supervision, the control of functioning of all bank system, and also of activity of each bank separately.

The role of central bank is different countries is not identical. In particular , the big value plays a skill level of participants of payment attitudes , wich will carry out depository operations. There are differences both in legal base and in approaches of the different states to fulfilment by subjects of the market financial activity.

The banking system of the United States of America consists of the Federal Reserve System, commercial banks, savings and loans associatios, mutual savings banks, and credit unions.

Commercial banks in the United States include money centres, regional, local and foreign banks .Their operations are generally similar to those of banks in other countries.

One of the specific characteristics of American banks is that they cannot own securities for their own account exept in the case of foreclosure on a defaulted loan. Another particular requirement to the activities of commercial banks is that

they must distinguish their commercial activities from their trust activities, i.e. information obtained by one bank department cannot be transmitted to the another one.

When funds deposited into a demand deposit or checkable deposit account at a commercial bank, they are immediately available on demand. Checks can be written on the account and are honored by the bank on presentation. However, the bank does not hold the funds on deposit until the check is written. Banks are business and the goal of their operations is to make a profit. Therefore, they must make use of the funds deposited with them, primarily by making loans and purchasing securities. How funds on deposit can be used for lending and at the same time be available on demand requires an understanding of fractional reserve banking.

As the central bank in the United States, the Fed is responsible for fulfilling a number of functions, such as providing banking services to the Treasury and approving bank mergers. Another very important function and the one that attracts most attention is conducting monetary policy. This is the attempt by the Fed to influence the course of economic activity by affecting the reserves of the banking system. The reserve position of the banking system in turn affects the money supply, interest rates, and the economy. By making money and credit hard to obtain, or expensive, the Fed tries to reduce inflationary pressures in the economy. Alternatively, by making money and credit plentiful and inexpensive, the Fed attempts to stimulate the economy.

Література:

1. https://en.wikipedia.org/wiki/Banking_in_the_United_States
2. Toma, Mark (February 1, 2010). "Federal Reserve System". EH. Net Encyclopedia. Economic History Association. Archived from the original on 2011-01-22. Retrieved 2014-02-20.
3. History of Investment Banking in the US and Britain — An Overview. Shrewd-Investments.com. December 24, 2009.
4. Law Remakes U.S. Financial Landscape. The Wall Street Journal. Retrieved 2014-02-20.

УДК: 811.111

COLLIDERS ARE USED FOR ACCELERATING

Трененков В.І. – студент групи Ен 2/1

Науковий керівник – Ігнатенко Ж.В., викладач кафедри іноземних мов МНАУ

Colliders are used for accelerating particles to very high kinetic energy and letting them impact with other particles. There are a lot of purposes of using this device.

The main purpose of using this device is accelerating particles to very high kinetic energy and letting them impact with other particles in order to create a conditions of universe's creation, causes of Big Bang. Second purpose, not less important, is to find alternative sources of energy and resources, creating anti-substance and testing some theories.

There are a lot of Hadron Colliders in the world but the main is placed in Geneva in CERNE. It's called Large Hadron Collider (LHC), because the size of this collider is 25 696 meters.

There are some gossips about Large Hadron Collider (LHC). The main gossip tells us that LHC has been captured by Zionist Occupation Government. Their intentions are different. Someone says that they want to develop controlled black holes in order to use them as weapons of mass destruction. Other one says that they want to find unique resource to enslave humanity (which only media and credits in banks can do). And the last one is the most strange, it tells us that they want to create "A God Particle" in order to finish Human Complementation Project which will help them to create one mind, a new evolution of humanity. Better do not trust to those gossips but who knows.

Also, Collider has two sides as a coin. The good one and the bad one.

According to all theories, hypotheses including Big Bang Theory which created universe, substance originally comes from nonexistence, vacuum voids, etc. (eventually known as energy). So it might be a mechanism of the return to the point of start, exit the substance from life, returning to the original energy. That means that during a non-successful experiment it can be reverse reaction of creation.

The Mistake during accelerating particles and impacting them can lead to big collapse, causing untold destruction, or can even create a black hole.

As I said collider explores atoms and their interaction with each other, this kind of researches could lead to creating a new of weapon in order to start a war.

So at one time collider is unpredictable and unstable device but it has opportunities to serve people not like a weapon of destruction but like a tool of the future. Collider will be useful if it works for all humanity, not for one of them, not for war or money.

Due to collider we can achieve more than we could ever imagine. Unlimited resources, fuel, new engines maybe even we could explore a new dimensions, time

travels. Studying the structure of Atom, we can treat a lot of illnesses well, find a lot of synthetic materials and many other useful things.

So as I said before collider is unstable, but humanity needs this thing for the future and safety life. People must think about their future, they are investing money in wrong ways. They invest sport, politics, war companies etc. This is useless. They don't even know for how long oil and gas are left. Is it for 200-100 years? Or maybe even 50-30 years?

We should have a road to a new world, even if this road will be thorny. Time to leave all behind. As proverb says "Nothing ventured, nothing gained".

УДК: 811.111

THE DEVELOPMENT OF THE BAKING INDUSTRY IN UKRAINE

Трум О. – студент групи Б 1/1

Науковий керівник – Ганніченко Т.А., к.пед.наук, доцент кафедри іноземних мов МНАУ

Statement of the problem and its connection with important scientific and practical tasks. The baking industries has an important social and strategic role in society. It is to ensure the production of bread and bakery products according to quality standards and at an affordable price in the volumes necessary to meet the needs of the population. The share of the baking industry in total food is 8.4%, and the share of bread products in the diet of the population is 15% [1].

The baking industry is one of the leading sectors of the food industry of Ukraine. A feature of this area that 99% of its products are produced in Ukraine. This situation has arisen due to the fact that this product has a small implementation period of 1-2 days. This means that production equals consumption. This industry has a great impact on the social and economic life of the population. But her attention is paid less in comparison with other industries. Accordingly, it has a number of problems that have led to reduced demand for these products. One of the major problems is the poor state of the technological base of enterprises, due to inadequate funding of the sector. The baking industry the necessary investments to expand production, improve the quality of the final product and the introduction of new technologies. But the amount of investment is reduced because of the unattractiveness of the industry to investors. Therefore, the main source of investment is the company. The relevance of the study lies in the analysis of investment attractiveness of the baking industry of Ukraine and the selection of the key problems in the production of bakery products.

Analysis of recent researches and publications. Features of the development of the baking industry and investment attractiveness of the sector was explored in own scientific works of V.M. Kalashnikov [2], O.O. Filina [3], M.F. Plotnikova, [4], O.B. Bokii [5]. However, study of present status of the baking industry investment attractiveness requires further development. The aim of the article is the analysis of investment attractiveness of the baking industry of

Ukraine, for both domestic and foreign investors, as well as identifying the problems of production of bread and bakery products

The main part. In Ukraine there is a high percentage of consumption of bakery products in comparison with European countries. Per day in Europe consume 120 grams of bread, and in Ukraine – 277 grams. This feature is incorporated in the historical development of Ukraine. Bread is considered a staple for Ukrainian. It is located in the diet of people daily, so be sure that he was not only delicious, but also useful. At first glance it may seem that the bread is the bread and nothing original here cannot be invented. But some bread is popular, and some not.

Modern Ukrainian market of bakery products consists of 75% of medium and large industrial enterprises, the remaining 25% are enterprises of consumer cooperation and small private sector [6]. In the baking industry of Ukraine, there are currently about 400 large bakeries, about 500 small businesses and more than 100 mini-bakeries [7].

In Northern Ukraine leader in the production of bakery products is the city of Kiev. By its territory there are two large public companies "Kyivkhib" and "Bread investments", which are recognized leaders bakery market of Ukraine.

In Western Ukraine the market leader in bread is a public joint stock company "Concern Khibprom" founded in 2003 with headquarters in the city of Lviv. The concern is 7,3% of the grain market and in the top five of the largest bakery companies in terms of market share and net income.

In Central Ukraine, the most influential company that controls the bakery market in Ukraine is AAT "Dneproges", which is located in Dnipropetrovsk, which unites 18 companies producing 70% of bread at the local market. One such enterprise is PLC "Krivorozhleb", which is the largest producer of bakery products in Krivoy Rog. At the moment the company is actively developing and expanding its product range.

In Southern Ukraine is one of the largest industrial production of bakery products – PLC "Odessa loaf" is located in Odessa. On the basis of PLC «Odesa loaf» trademark was introduced Bulkin in 2003 to create products which contribute to foreign manufacturers that implement domsova to test the mixture for baking bread, other ingredients, such as "Lesaffr (France), "Leypurin" (Finland) and others. In Ukraine it is not just the competitions best bakers Cup Lesaffr (France). Potential investors are invited specialists - technologists, executives at leading companies in Europe for the exchange of experience. According to experts of the enterprises of these products is more competitive and demand of the population [8].

Conclusions. The baking industry has a low level of investment attractiveness. This is not a stable economy; reduced consumption of the products, and the consequent reduction in production, outdated technological equipment of enterprises that require immediate update, but due to lack of funds may not be exercised; the growth of prices for flour and fuel-energy resources; low quality of the final product. But despite the difficulties, in Ukraine, there are companies bakery products, which cooperate with foreign manufacturers and its products are

demanded by population. In order to improve the situation on the market of bakery products, it is first necessary to make changes to the legislative framework and to strengthen the funding of the sector by the state. This will increase the investment attractiveness of production and the flow of domestic and foreign investment. The investment attractiveness of the baking industry requires more research on the classification of factors influencing investment attractiveness, as well as methods of investment appraisal in the baking industry.

Література:

1. Pavliv O. V. (2009) Analiz stanu khlibopekars'koyi haluzi Ukrayiny.
2. Калашников В. М. Фактори, що впливають на обсяг попиту на хліб та хлібобулочну продукцію [Електронний ресурс] / В. М. Калашников – Режим доступу: http://www.rusnauka.com/ONG_2006/Economics/17895.doc.htm.
3. Філіна О. О. Ефективність виробництва хлібобулочної продукції [Електронний ресурс] / О. О. Філіна. – Режим доступу: [file:///C:/Users/HP/Downloads/Pav_2013_23_15%20\(2\).pdf](file:///C:/Users/HP/Downloads/Pav_2013_23_15%20(2).pdf).
4. Плотникова М. Ф. Специфика развития предприятий хлебопекарной промышленности [Электронный ресурс] / М. Ф. Плотникова. – Режим доступу: <http://ej.kubagro.ru/2007/05>.
5. Бокій О. В. Інвестиційно-інноваційна інфраструктура ринку продукції хлібопекарської галузі [Електронний ресурс] / Бокій О. В. – Режим доступу: <file:///C:/Users/HP/Downloads>.
6. Литвиненко Л. Хлеб – всему голова, или о том, как нынче живетя отечественным хлебопекам / Л. Литвиненко // Компании и рынки. – 2006. – №12. – С. 26–28.
7. Прокіп М. І. Стан хлібопекарської галузі в Україні [Електронний ресурс] / М. І. Прокіп. – Режим доступу: <http://nauka.kushnir.mk.ua/?p=70527>.
8. Бокій О. В. Інвестиційно-інноваційна інфраструктура ринку продукції хлібопекарської галузі [Електронний ресурс] / Бокій О. В. – Режим доступу: <file:///C:/Users/HP/Downloads>.

УДК 811.111

ORGANIC FOOD PRODUCTS IN AGRICULTURE

Тупчій Д. Ю. – студентка групи А 2/1

Науковий керівник – Марковська А.В., к.філол.наук, доцент кафедри іноземних мов МНАУ

Certified organic products are those which have been produced, stored, processed, handled and marketed in accordance with precise technical specifications (standards) and certified as "organic" by a certification body. Once conformity with organic standards has been verified by a certification body, the product is afforded a label. This label will differ depending on the certification

body but can be taken as an assurance that the essential elements constituting an "organic" product have been met from the farm to the market. It is important to note that an organic label applies to the production process, ensuring that the product has been produced and processed in an ecologically sound manner. The organic label is therefore a production process claim as opposed to a product quality claim.

Environmental benefits of organic agriculture Land management has a significant impact on the environment. Conventional agriculture prioritizes high yields and does little to harmoniously interact with and preserve its immediate environment. These practices can result in widespread environmental degradation, commonly resulting in soil erosion, water, soil and air pollution, biodiversity loss, and desertification. They also contribute to global warming – agriculture today accounts for more than thirteen percent of global anthropogenic greenhouse gas emissions.² Conversely, organic agriculture uses an individualized approach to land management that emphasizes preservation of a land's natural ecosystem, while consuming less energy and reducing the risks of pollution common to conventional agriculture. Organic agriculture, therefore, seeks to offer a responsible alternative to conventional practices in the face of ever-growing concerns over climate change and environmental degradation.

Furthermore, organic agriculture rejects the use of genetically modified organisms or products, including plants and animals, although the possible risks posed by such products are debated widely (and in some cases such as in the EU and Tunisia, exceptions are provided for some veterinary medical products). This is because organic principles consider that the use of GMOs de-emphasizes biodiversity and is an unnatural addition to the gene pool of cultivated crops, animals and micro-organisms living on farms. As a result, the exclusion of GMOs applies to every stage of production, processing or shipping of organic products. There is the risk that GMOs may enter organic products through cross-pollination. Organic farms can thus only ensure that there has been no intentional use of GMOs in their products.

Consumer protection is another cornerstone of organic agriculture. Consumers prefer organic products to those made on conventional farms because they know that organic products avoid synthetic pesticides and fertilizers, are good for the environment, and are perceived to produce foods that are healthier and taste better. Strong regulatory frameworks, whereby the government verifies organic certifications, are necessary for consumers to trust the products they purchase. Finally, organic agriculture can contribute to food security. Although the global food supply is adequate, 850 million people still go hungry. In addition, the cost of food has risen dramatically in the past decade and there is less genetic diversity in our foods due to conventional agricultural methods. Consequently, large populations are increasingly exposed to the risk of food shortage due to disease and poverty. Organic agriculture may have the potential to meet these challenges. Considering the fact that organic methods do not require expensive chemical inputs, organic production is considered a more accessible means for rural farmers to become self-sufficient. Organic agriculture also improves access to food by

reducing risks of disease, increasing biodiversity and productivity over the long term, and providing a means for local production and access to food. Advocates for conventional farming argue that organic farming decreases yields. Organic advocates, on the other hand, believe that yields are equal to those of conventional farms over the long term and that it is a more sustainable system because the health of the environment must be factored into any agriculture measurements.

Organic foods are foods produced by methods that comply with the standards of organic farming. While said standards differ worldwide, organic farming in general features practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Some pesticides and fertilizers can be used in growing food that's called organic while others can't. In general, organic foods are also not processed using irradiation, industrial solvents, or synthetic food additives. Demand for organic foods is primarily driven by concerns for personal health and for the environment.

Література:

1. Електронний ресурс. – <http://www.fao.org/organicag/oa-faq/oa-faq2/en/>
2. Електронний ресурс. – <http://www.fao.org/docrep/016/i2718e/i2718e.pdf>

УДК 341.24:37.011:33.02(477)

INTERNATIONAL REGULATIONS ON EDUCATION AND ITS IMPACT ON PUBLIC POLICY IN THE FIELD OF EDUCATION UKRAINE

Часник М. – студент групи А 6/1

Науковий керівник – Артюхова О.В., к.пед.наук, доцент кафедри іноземних мов МНАУ

Висвітлено питання впливу міжнародних нормативно - правових актів про освіту на формування державної політики в галузі освіти України. З'ясовано зміст поняття «освіта». Охарактеризовано основні шляхи розвитку міжнародного співробітництва в галузі освіти. Наголошено, що Національною доктриною розвитку освіти визначено завдання, а саме: вихід вітчизняної освіти на ринок світових освітніх послуг та поглиблення міжнародного співробітництва.

Article deals with the impact of international regulatory - legal acts on education on public policy in the field of education in Ukraine. It was found the concept of "education". Characterized basic ways of international cooperation in education. Emphasized that the National Doctrine of education development defined task, namely, out of home education on the world market of educational services and deepening international cooperation.

Trends in social development to globalization shape new era of interaction among nations, peoples, nations. Globalization processes influencing the

management, production, trade, labor market, political structures, other public institutions and processes. In this context, the most influential factors are development information, science and education. The transition from industrial to human science and information technology, the expansion of cultural and information contacts between peoples and states, increased competition between them lead to the integration processes of national education to European and world educational space.

V. Kremen, considering the educational policy of Ukraine in the context of the requirements of the XXI century, emphasizes that education - is a complex, multi-system, which develops, mutates under the influence of time, social and many other factors. During the modernization of national education, we need to take into account the integration processes in European and world education [1].

The main ways of international cooperation in education was formulated in the early years of independence. In a strategy paper on education - State National Program "Education" (Ukraine XXI century) tasked to create and implement a long-term program of cooperation in education, development of effective mechanisms of entry to educational and scientific programs of UNESCO and other international organizations, foundations, etc., and also with foreign countries create joint centers of education, international agreements on nostrification educational documents and qualifications of professionals and workers and so on[2].

National Doctrine of Education identified the following problem: out of national education in the world market of educational services, deepening international cooperation to enhance the participation of educational institutions, scientists, educators and teachers, pupils and students in projects of international organizations and communities. "The state assumes the obligation to participate in projects and programs of the Council of Europe, UNESCO, European Union, UNICEF and other international organizations", - emphasized in the National Doctrine.

The international community has worked out a series of regulations, which set international standards in education. According to international law, some of them, such as resolutions and declarations are not binding, others (treaties, covenants, conventions) are legally binding if they are ratified by the supreme legislative body of the state. This provision enshrined in Article 9 of the Constitution of Ukraine, which states that "international treaties ratified by the Verkhovna Rada of Ukraine are part of the national legislation of Ukraine" [3].

International acts as part of national legislation and resolutions, conventions that have the status of recommendation documents, mostly affecting public policy in education. Defining methodological provisions of international legal instruments already used as the basis of Ukrainian legislation, which declares education a priority area of socio-economic, spiritual and cultural development of society.

It was under the influence of international regulations strategic goal of the state policy in the field of education in Ukraine is ensuring the availability of quality education for life; education of generations of democratic world who value and defend civil rights and freedoms with respect for the traditions, culture, religion and language of communication of the world and so on [4].

Література:

1. Кремень В. Г. Освіта і наука в Україні — інноваційні аспекти: Стратегія. Реалізація. Результати — К.: Грамота, 2005. — 448 с.
2. Державна національна програма «Освіта» (Україна ХХІ століття). — К.: Райдуга, 1994. — 61 с.
3. Законодавчі акти України з питань освіти / Верховна Рада України, Комітет з питань науки і освіти. — К.: Парламент. вид-во, 2004. — 404 с.
4. Журавський В. С. Болонський процес: головні принципи входження в Європейський простір вищої освіти — К.: ІВЦ «Вид-во «Політехніка», 2003. — 200 с.

УДК 001.895:378.1(477)

INNOVATIVE DEVELOPMENT OF HIGHER EDUCATION AND EDUCATIONAL STRATEGY IN THE CONTEXT OF INTEGRATION INTO THE EUROPEAN UNION

Шевченко М.В. – студентка групи А 6/1

Науковий керівник – Артюхова О.В., к.пед.наук, доцент кафедри іноземних мов МНАУ

Summary. *Considered educational strategy of innovative development of higher educational institutions of Ukraine to the EU integration. Higher educational institutions of Ukraine can and should be among the best known European and world universities under the condition of innovation development path. For the realization of these objectives should focus state educational policy, serving as the basis for the choice of innovative strategy of universities in Ukraine.*

Analysis of recent research and publications.

Special attention is studying the prospects of Ukraine-EU cooperation in education and science researchers are paying attention H.Artemchyk, A.Halahan, V.Zhuravskyu, V.Orlova.

But despite the significant number of publications devoted to the transformation of higher education, further studies need to consider the problems of the most promising in the current economic, social and political trends of higher education institutions in Ukraine.

The article is an educational strategy of innovative development of higher educational institutions of Ukraine to the EU integration.

Presenting main material:

Ukraine signed the Bologna Declaration, aimed at structural reform of national higher education systems and the creation of a single European educational - scientific area, opens one of the directions of Ukraine's integration into Europe. We were given a real opportunity to gain equal status in the European

educational space, which determines the development of our country for a generation to come. The participation of higher education in Ukraine Bologna transformations should be directed to its future development and acquisition of European features.

This requires the solution of many important Universities of tasks including: the modernization of the state system of monitoring the quality of training; in institute establishment of quality management system training; development of new forms of documentation; creating teaching of training highly qualified specialists; Modernization funding schemes; involvement of students in the management of educational process in universities; development of academic mobility.

Of particular importance in the credit system becomes self-organization of students associated with the creative use of knowledge acquired by the students and providing them with the necessary teaching literature.

Credit system on the one hand is democratize and individual the learning process, and on the other - requires quality content to absorb higher education and this ensure recognition of learning outcomes in different schools and countries.

The strategic priorities of higher education in innovative development concepts Ukraine are:

a) providing innovative orientation of the education system by: increasing computerization of universities; enhance science, technology and innovation institutions and increased its budgetary founding; the formation of innovative structures in education; reform the higher education system to meet the requirements of European standards and the preservation of national cultural and intellectual traditions;

b) increase the efficiency of the domestic sector research and development in order to strengthen its role in providing innovative development of national economy through: integration of the university sector research and development into the global innovation system, promoting international partnerships in science, technology and innovation; increasing the share of scientific and technical research in universities aimed at creating new innovative products; world market consideration when determining the priority directions of science and technology and innovation;

c) ensure the expanded reproduction of knowledge through the integration of higher education, academic research institutions and industry by: increasing public sector research and development; the concentration of resources in priority areas of science and technology and innovation, to create conditions for the organization of high-tech production in Ukraine; strengthening cooperation of Education, creating the type of research universities in the leading universities; motivate the process of training, development of distance learning.

Experience of leading American, British and Australian universities shows that so-called "academic capitalism" is one of the main means of improving the efficiency and quality of educational and scientific activities.

Development and application of innovative learning technologies in terms of Ukraine's accession to the European education system and diagnostics of quality of

knowledge in universities have systemic, which allows for the relationship between all elements of the educational process, improves its handling and teaching.

Conclusions. So, the strategic priorities of higher education in Ukraine is the transformation indicators of quality educational services. This transformation process must be based on the following principles:

First, the idea of a national higher education, the content of which is the conservation and enhancement of national educational traditions. Higher education designed to raise national of Ukraine, harmoniously developed personality for which the need for fundamental knowledge and in improving education and vocational levels associated with patriotism;

Secondly, the development of higher education should be subject to the laws of market economy, that of the distribution of labor law variability of labor law and competition, as the economic sector is extremely important in shaping the logic of social development. However, you must consider while equally important factors - social, political, spiritual life, cultural, moral and psychological values. Much of the problems accumulated in the system of higher education, primarily related to unbalances in these factors complex social change;

Thirdly, the development of higher education should be seen in the context of global trends in the development of educational systems, including taking into account the integration processes.

Література:

1. Basic principles of higher education in Ukraine in the context of the Bologna process.Ch.3. (Experience TNPU them. V. Hnatiuk) / Ed. VV Hrubinka. - Ternopol: Vyd.TNPU them V.Hnatyuka, 2005, S.207.

2. Dmytrychenko MF, Khoroshun BI Bologna process - no alternative // 64 scientific conference of teaching staff, graduate students and K. universytetu.- structural units: NTU, 2008-C. 347-352.

3. Shaugter S. Academic Capitalism and the New Economy / S. Shaugter, G. Rhoades. – U.S.A.: The John Hopkins University Press, 2009. – 384 p.

4. Yazvinska AM The use of innovative educational technologies in the context of the introduction of credit-modular system of educational process // 63 scientific conference of teaching staff, graduate students and university department. - K., NTU, 2007.-S.347-349.

УДК: 811.111

ECONOMIC CRISIS

Шляхова Т. – студентка групи ЗЕД 1/2

Науковий керівник – Тишечкіна К.В., кандидат філологічних наук, доцент кафедри іноземних мов МНАУ

The paper deals with economic crisis. In this paper I describes a causes of,development and the consequences crisis.The main this paper it is information and warning people.I recommend that one should take into account the root causes to oust its reoccurrence in future.

Key words: economy, crisis, current, balance , loans, dollars.

The current financial crisis has become an earthquake to the world's economic system. Have started in the USA, it has rapidly overcome the boundaries of the States and has spread over the Europe and Asia, bringing unemployment and financial recession along. One can hardly say whether it will last long or is going to slump. The following remains obvious, if we don't want its recurrence in future, we should investigate its root causes now. The issue is dealt by Pilipenko A.G., Vagonova A.A., Amosha A.I.

The world economic system endures times of prosperity as well as followed by inevitable declines. The circulating scheme is characterized by the rise of manufacturing and it is following recession, thus permitting to keep to the world financial and economic balance order. No one in the world was ready to take the burdens of the economic crisis on the shoulders and to resist its unpredictable consequences. In spite of the fact, almost everybody understood how important it is to examine the reasons of it.

In my opinion there are several important factors to discuss, which obviously have affected the present economic situation. First of all it is the spendthrift lending or, in other term, the so-called housing price bubble. Every family buying a house can take a loan from the bank, which should be given back. In order to return money to the bank, the family first of all should take the house it can afford. Otherwise it will not be able to pay the money back. In the recent years the prices on real estate have been so high and raising so quickly like a bubble. It has resulted in the fact that people started taking loans, which they can't pay off. Many banks' borrowers got unable to make their mortgage payments. As a result, the mortgage market was undermined.

This was just the beginning. One of the consequences was the fall of prices on real estate. The institutions and businesses depending on real estate prices or making money on real estate underwent the risk and suffered losses. To such companies belong Freddie Mac and Fannie Mae. It was the blow to the financial system in general, which led to the problems in other pecuniary stocks. This process, started with the bank system and led to the banking liquidity crisis, affected all financial and economic sectors of business all over the world.

Another reason of the present economic crisis is the unrestricted emission of American dollars. The emission of the most wide-spread world currency was strictly controlled by the government of the USA. Each dollar had gold equivalent in the gold reserve of the States. Purchasing capacity of it corresponded to the quantities of products manufactured. That's not how things stack any more up today. As a result while the USA was losing its positions on the world market, the dollar was weakening in the world.

To sum it up one can say that the root cause of the current economic crisis lie in the ineffective policies of the economic and financial sectors of the leading and developing countries in the world. One should take into account the root causes to oust its re-occurrence in future.

Література:

1. Pilipenko A.G., Vagonova A.A: Crisis / Pilipenko A.G., Vagonova A.A. – K: University Press, 2011. – 87 p.
2. Amosha A.I.: Crisis in our life / Amosha A.I.-Dnipropetrovsk : Economy literature, 2013. – 392 p.

Наукове видання

**Матеріали студентської конференції Миколаївського національного
аграрного університету**

м. Миколаїв,
24 березня 2016 р.

Технічний редактор: К.В. Тішечкіна

Формат 60x84/16. Ум. друк. арк. 8,5
Тираж 100 пр. Зам. №__

Надруковано у видавничому відділі
Миколаївського державного аграрного університету
54020, м. Миколаїв, вул. Паризької комуни, 9

Свідоцтво суб'єкта видавничої справи ДК № 4490 від 20.02.2013 р.