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## **Іншомовна компетентність – платформа професійного розвитку в XXI столітті**

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## **E-HRM RESEARCH AND PRACTICE IN MODERN UKRAINE**

### **TRENDS IN HR AND TECHNOLOGY**

Technology is moving at “warp speed” and HR must keep up! Technology will continue to be integral to all business functions, and HR must use technology to continually redefine their services toward driving productivity. Some of the emerging trends that will have a significant impact on HR and on its ability to deliver strategic HR services are emerging technologies, the influence of outsourcing, and the increased focus on determining HR’s effectiveness. HR will be required to ensure that the organization is aware of the advantages of these tools and provide training and education to ease the transition. These new tools will enable employees to access their own information as opposed to going to HR. So a manager who has a problem first will try and solve it using the tools available on his or her desktop before calling HR. Greater access to technology. This increase will require HR to ensure that the appropriate security measures are in place and to be highly diligent in terms of the types of access and who gets access. Continued optimization of current systems. This will mean that HR must Contingency planning. HR will be involved in ensuring that plans are in place to deal with disasters, including getting employees back to work and providing them with the appropriate emotional support. Heightened awareness of HR data privacy. Government privacy legislation will continue to increase. To be effective, HR will be required to develop business knowledge with respect to the key drivers of organizational productivity, become cognizant of costs associated with enhancing the efficiency and effectiveness of the workforce, and be capable of selecting the appropriate technology to conduct HR administration.

HR technology has evolved from paper and pencil to PCs to electronic databases to being integrated with company-wide enterprise systems. Web-based technology has been an important development in enabling HR to reduce transactional activities and increase customer and strategic services. The main components of HRIS systems are employee administration, recruitment, time and attendance, training and development, pension administration, employment equity, performance evaluation, compensation and benefits administration, organizational management, health and safety, labour relations, and payroll interface.

The main functions of HRIS are creating and maintaining employee records, compliance reporting, HR planning and forecasting, talent management, strategic alignment, and enhancing decision making.



The role of the HR professional has changed fundamentally as a result of technology. The core competencies that have developed are mastery of HR technology, strategic contribution, personal credibility, HR delivery, and business knowledge.

To choose an HRIS, organizations engage in a three-step process. The first step is the adoption phase, whereby organizations carry out a needs analysis to determine requirements. The second step is the implementation phase, where project teams are created, the software is tested, and privacy and security concerns are addressed. The third step is the institutionalization phase, where training and change management activities are highlighted.

The more popular Web-based self-service applications are employee self-service (ESS) and manager self-service (MSS). Some benefits derived from these applications are a reduction in administrative costs, reduction in process steps, enhanced HR service delivery, and increased employee satisfaction.

Current technology trends that will impact HR are outsourcing, advances in technology, and a continued focus on measuring the value that HR brings to the organization. Digital technologies facilitate greater integration and flexibility, thus allowing employees to have great voice and share their work experience. Technology is poised to disrupt HR and redefine the future of human resource department. As HR continues to adopt the change, the enterprise will become smarter. Employee engagement and culture management drives HR in ever-changing landscape.

## REFERENCES

1. G. Dessler, J. Griffiths, and B. Lloyd-Walker, *Human Resources Management*, 2nd ed. Frenchs Forest, New South Wales: Pearson Education Australia, 2004, pp. 97–99.;
2. Ruël H., Bondarouk T. (2014) e-HRM Research and Practice: Facing the Challenges Ahead. In: Martínez-López F. (eds) *Handbook of Strategic e-Business Management*. Progress in IS. Springer, Berlin, Heidelberg;
3. Heikkilä, J. P., & Smale, A. (2011). The effects of ‘language standardization on the acceptance and use of e-HRM systems in foreign subsidiaries. *Journal of World Business*, 46(3), 305–313.;
4. [https://financesonline.com/6-technological-trends-redefine-human-resource-management/Gartner Inc.](https://financesonline.com/6-technological-trends-redefine-human-resource-management/Gartner%20Inc.;);
5. [www.gartner.com](http://www.gartner.com) Forrester Research;
6. [www.forrester.com](http://www.forrester.com) International Data Corporation;
7. [www.siia.com](http://www.siia.com) International Association for Human Resource Information;

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## **ANALYSIS ON GLOBAL EDUCATION SYSTEM THROUGH DIGITIZATION**

This Digital Strategy for Schools (the Strategy) sets out the vision of the Department of Education and Skills (the Department) to insert Information and Communications Technologies (ICT) in instructing, learning and evaluation in Irish essential and post-grade schools in the period 2015-2020. The Programmed for Government (2011-2016) focuses on coordinating ICT all the more profoundly into the training system. The Strategy maps out how this dedication can be acknowledged and the routes in which schools to expand and improve instructing, learning, and evaluation practices can utilize ICT.

This Strategy underwrites the meaning of ICT as "an assorted arrangement of innovative instruments and assets used to impart, and to make, disperse, store, and oversee data". While this Strategy recognizes the development of more up to date terms, for example, advanced innovations, computerized learning apparatuses, computerized gadgets and advanced taking in, the term ICT is utilized all through this record.

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## **USING FAIRY TALES AS A MEANS OF ENRICHING PRIMARY SCHOOL PUPILS' ENGLISH VOCABULARY**

Updating the content of education is a key component of reforming education in Ukraine. One of the strategic aims of reforming the content of education is the developing not only pupils' knowledge, skills, abilities, but also mastering their creative activity and competences at various educational levels.

In primary school it is important to interest pupils in studying English, to cause their positive attitude to the subject, to motivate the necessity and importance of

mastering English as a unique means of intercultural communication and solving the most common problems of their life [1].

One of the important tasks of teaching primary school pupils English is to master lexical competence, because junior pupils have greater ability and readiness to learn a large number of lexical units. The primary school age is the age of becoming a child's personality. Scientists consider that the organized influence on a child during primary school age gives the opportunity to master English speaking quickly and easily [19]. The issues of teaching the vocabulary of foreign languages were considered by many researchers, such as I. Bim, V. Bukhbinder, N. Gez, Ye. Passov, S. Shatilov, V. Shatskiy, I. Zimniaya and others.

According to the program, the initial stage of teaching a foreign language is extremely important and provides forming English phonetic, lexical, grammatical and spelling skills, as well as skills in listening, speaking, reading and writing.

One of the most important aspects of developing language skills is enriching primary school pupils' vocabulary. English teachers actively use fairy tales for it.

English fairytales are one of the most important sources of early English teaching. Studying tales interests children, affects their emotional state: reduces anxiety, gives food for perception, empathy and speaking with their favorite characters, for their own creativity. Dramatization of fairy tales helps to develop pupils' consciousness, create friendly atmosphere of communication in the classroom, which is so necessary at the lesson for both a teacher and pupils.

Using the fairy tales in the classroom is aimed at improving pupils' English-speaking activity. Tales are also one of the important means of moral education and they contribute to the involving pupils into the English-speaking countries culture as well as sharing knowledge about the cultural heritage of the countries that allows children to participate actively in the dialogue of cultures. The main thing is the use of fairy tales contributes to the forming pupils' linguistic competence [2].

So, using the fairy tales during teaching English in primary school improves the process of mastering the English lexical competence of primary school pupils, developing new vocabulary using English fairy tales during studying at primary school.

## REFERENCES

1. Власюк Л. С. Казка як засіб формування позитивної мотивації при вивченні англійської мови: методична розробка / Л. С. Власюк, Н. Л. Савчук, Ж.І. Куровська // Міський методичний кабінет. – Нововолинська загальноосвітня школа І-ІІІ ступенів №4, 2014. – 116 с.
2. Лінінська Ю.Л. Використання казки на уроках іноземної мови ваочаткових класах: посібник для вчителів англійської мови / Ю.Л. Лінінська. – Полонне, 2015. – 37 с.
3. Обухова Л. Ф. Возрастная психология : учебник / Л. Ф. Обухова. – М.: Издательство Юрайт ; МГППУ, 2011. – 460 с. – Серия : Основы наук.

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## **THE ART OF BLOCKCHAIN**

A blockchain, originally block chain, is a continuously growing list of records, called blocks, which are linked and secured using cryptography. Each block typically contains a cryptographic hash of the previous block, a timestamp and transaction data. By design, a blockchain is inherently resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way". For use as a distributed ledger, a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks, which requires collusion of the network majority.

Blockchain was invented by Satoshi Nakamoto in 2008 for use in the cryptocurrency bitcoin, as its public transaction ledger. The invention of the blockchain for bitcoin made it the first digital currency to solve the double spending problem without the need of a trusted authority or central server. The bitcoin design has been the inspiration for other applications.

The credit and debits payments company MasterCard has added three blockchain-based APIs for programmers to use in developing both person-to-person (P2P) and business-to-business (B2B) payment systems. CLS Group is using blockchain technology to expand the number of currency trade deals it can settle.

VISA payment systems, Mastercard, Unionpay and SWIFT have announced the development and plans for using blockchain technology.

Prime Shipping Foundation is using blockchain technology to address issues related to the payments in the shipping industry, seeking 150 million USD to develop their proprietary PRIME Token.

Nikolai Hampton pointed out in Computerworld that "There is also no need for a "51 percent" attack on a private blockchain, as the private blockchain (most likely) already controls 100 percent of all block creation resources. This has a set of particularly profound adverse implications during a financial crisis or debt crisis like the financial crisis of 2007–08, where politically powerful actors may make decisions that favor some groups at the expense of others. and "the bitcoin blockchain is protected by the massive group mining effort. It's unlikely that any private blockchain will try to protect records using gigawatts of computing power — it's time consuming and expensive." He also said, "Within a private blockchain there is also no 'race'; there's no incentive to use more power or discover blocks

faster than competitors. This means that many in-house blockchain solutions will be nothing more than cumbersome databases."

## REFERENCES

1. "Blockchains: The great chain of being sure about things". The Economist. 31 October 2015. Archived from the original on 3 July 2016. Retrieved 18 June 2016. The technology behind bitcoin lets people who do not know or trust each other build a dependable ledger. This has implications far beyond the crypto currency.
2. Jump up Morris, David Z. (15 May 2016). "Leaderless, Blockchain-Based Venture Capital Fund Raises \$100 Million, And Counting". Fortune. Archived from the original on 21 May 2016. Retrieved 23 May 2016.

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## SOCIAL SUPPORT OF FAMILY-TYPE CHILDREN'S HOME

Family-type children's homes - are families, that can include husband and wife or it can be a single person, who decided to take 5 and more children, who are orphans and foster and take care of them. Social support of family-type children's homes – are a type of social work, what involves cooperation between social specialist (group of them) and specialists of law, psychology, pedagogic, economic, medical and information sources aimed at providing a good quality of functioning family-type children's home. Social support of family-type children's homes are form of the government's way of family support, the main point of this is to protect children's interests. The special way of family type of children's homes appeared a long time ago, since Kiev Rus, but the first family-type children's home in Ukraine appeared at 1994. The first family-type children's home in Ukraine is still working [1, c.73]. Social support of family-type children's homes begins from the official decision from center of social service, that is based on agreement between local government and corresponding family, about permission for creating a family and sending children to them. At the beginning of social support the center of social service have to make opinion about needs of every child separately. It will be necessary to pay attention to physical and mental health, lag in development, disablement and bad habits (smoking, drugs, alcohol). All of this is the major step for planning social support. The plan can change depending on timing and age of child. At first the plan is created for every month,

then for every half a year, then for every year. The plan includes two approaches, this is working with family to influence the right way of fostering and the second way is individual work with children. The plan includes economic, law, psychology, medical and pedagogic help. The main role of social worker in the time of planning is: making a good relationship between social worker and parents; trying to see if parents are competent and finding out what help they need; orientation on individual needs. In this case, social workers analyze children's needs depending on their health, education, emotional and behavioral development, social adaptation, self-service problems and their way of cooperation with family and sociality. Then social worker needs to absorb and realize if parents are able to take care of children's special needs and be competitive in this. By the way, adaptation period for children usually takes 1 month, 3 months, 6 months or 12 months. That's why social workers have to inspect families every week at first, when the family-type children's home has just started work, next three month they visit family once or twice a week, and then it's one time a month. Later they visit them if it is needed. Social worker should prepare all information about social support of family-type children's homes for the leadership once a year. Social support is finished when family-type children's homes stop their functioning. It is the few reasons why family-type children's home can stop working: when children come back to their own parents; when children become 18 years old; adverse conditions for fostering and living together (such as illness of one of the parent, bad relationship with children, lack of responsibility); death of one of the parent. At the end of the social support of family-type children's home the report of results and reasons of family-type children's home ending have to be created [2, c.160].

## REFERENCES

1. Пеша І. В. Дитячі будинки сімейного типу як особлива форма сімейної опіки над дітьми-сиротами та дітьми, позбавленими батьківського піклування // Український соціум. – 2003. – № 1 (2). – С. 72–80.
2. Посібник для соціальних працівників щодо підготовки та соціального супроводу прийомних сімей та дитячих будинків сімейного типу: У 2-х кн. / Г. М. Бевз, Бондаренко Т. В., Комарова Н. М., Пеша І. В. та ін. - К.: Держсоцслужба, 2006. – Кн. 2. 180 с.

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## **POLLUTION NUMÉRIQUE: L'IMPACT VIRTUEL SUR L'ENVIRONNEMENT EST TRÈS DANGEREUX**

Nos vies numériques aussi ont une empreinte carbone.

Le monde virtuel a un impact bien réel sur la planète: les nouvelles technologies de l'information et de la communication consomment environ 10% de l'électricité mondiale. C'est peu par rapport aux énergies fossiles, mais suffisamment important pour représenter un enjeu écologique sérieux. D'autant plus que, pour l'instant, seuls 42% de la population mondiale ont accès à Internet. A l'échelle mondiale, Internet consomme l'équivalent de 120 tranches de centrales nucléaires. Les 100 sites les plus visités consomment autant que 3077 foyers [1].

Il y a deux types de consommation d'énergie. La consommation statique d'abord, quand votre appareil est allumé mais que vous ne vous en servez pas. La solution dans ce cas est de faire s'endormir les composants qui ne sont pas utilisés. La consommation dynamique est liée à l'usage de l'appareil: 80% de la consommation d'un téléphone portable est dynamique. On va alors plutôt chercher à adapter la puissance aux besoins réels: par exemple, le traitement de texte n'a pas besoin de la même puissance que regarder une vidéo sur Internet.

Pour se donner un ordre d'idée, on peut résumer en disant qu'Internet fait appel à trois types d'équipements: les équipements terminaux (ordinateurs, mobiles...), les réseaux (fibre, ADSL, réseaux mobiles...) et les centres de données, qui forment la colonne vertébrale du cloud [2]. Chacune de ces familles d'équipements consomme environ 40 GWh en continu.

La virtualisation des services provoque une explosion du trafic Internet et peut faire craindre que le système finisse par saturer. Les utilisateurs imposent une pression très forte sur les services en réseau et donc une consommation énergétique forte.

Selon les chercheurs, quelques gestes simples permettent d'arriver à réduire notre empreinte carbone. C'est pourquoi des logiciels à faible coup énergétique appelés green programming se développent actuellement. En France notamment, on œuvre activement à la convergence des transitions numérique et écologique susceptible d'engendrer des innovations «vertes» ou «intelligentes» au service de la soutenabilité (compteurs «intelligents», réseaux «intelligents», villes «intelligentes»). Des solutions pour les particuliers commencent aussi à arriver: des radiateurs numériques, des chaudières numériques, des chauffe-eaux numériques...[2]

Il est sans doute moins polluant de faire durer du vieux matériel que de le mettre au rebut alors qu'il fonctionne. L'obsolescence programmée dans le numérique est un vrai problème. Heureusement on voit des initiatives comme le Fairphone en Hollande: un smartphone abordable, fabriqué avec des pièces interchangeables et des métaux extraits dans des conditions humainement convenables.

A la conclusion, il faut dire, que l'écologie entend nous rappeler combien nous pesons sur les écosystèmes terrestres et nous invite, pour notre propre bien, à réduire cette empreinte avant que nos sociétés ne cèdent sous son poids.

### LITTÉRATURE

1. 1. Электромагнитное загрязнение [Electronic resource]. – Режим доступа: <http://ecology.md/page/elektromagnitnoe-zagrizhenie> – Date of access: 03.02.2017.
2. Как уменьшить свое негативное влияние на окружающую среду [Electronic resource]. – Режим доступа: [https://rodovid.me/soznatelnoe\\_potreblenie/kak-umenshit-svoe-negativnoe-vliyanie-na-okruzhayuschuyu-sredu.html](https://rodovid.me/soznatelnoe_potreblenie/kak-umenshit-svoe-negativnoe-vliyanie-na-okruzhayuschuyu-sredu.html) – Date of access: 03.02.2017.

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### CONSUMER PERCEPTION AND BUYING DECISIONS (THE MACARONI STUDY)

The project “consumer perception and buying behavior (the Macaroni study)” is basically measures the development of perception through different variables and identify those factors which stimulate buying decision of consumer. Among various variables which effect consumer buying pattern I choose AWARENESS and AVAILABILITY of the product as two main variables which have strong effect on popularity and sale of Macaroni product. As my research is totally based on qualitative method that's why I choose quota sampling technique and collect data by interviewing house wives resides in different areas of Ahmadabad (Gujarat, India). The reason of choosing only housewives as respondent is that housewives can give true insight factors which hinder the popularity of Macaroni



products in India. Focus group discussions have been conducted to extract findings. 30 housewives have been interviewed and their responses have been analyzed.

The main findings which come up after pursuing my research on Macaroni is that awareness about different cooking method is largely effect on the sale of the product and so the popularity of product is also effecting and hypothesis 1 is been accepted.

Whereas availability of product does not have strong effect on the popularity of product as well as sale is not effecting and so hypothesis 2 is rejected.

It is recommended for Macaroni producers to create awareness among consumer about product itself and its usage and cooking methods by launching awareness programme about the product.

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## **THE EVOLUTION OF THE METHODS OF SOLVING DIOPHANTINE EQUATIONS**

The indeterminate or Diophantine equations are the main subject of mathematical discipline such as the theory of numbers. They have been known since ancient times and scientists were engaged in their research during all historical development of mathematical science. Solving equations in integers is one of the most ancient mathematical problems. All the time there was a need to find methods for solving Diophantine equations as there is no general method of solving such equations.

Diophantine equations are called algebraic equations with several unknowns, all coefficients of which integers are, and unknown variables can acquire only integer values. Usually such equations have more than one unknown, and therefore they are also called indeterminate. The simplest linear Diophantine equation is the equation of the form:

$$ax + by = c, \text{ where } a, b, c \in \mathbb{Z}, \quad (1)$$

that is, the indeterminate equation of the first degree with two unknowns [4]. The method of scattering, the method of continued fractions, the method of reduction to congruence relation and so on are the most common methods for solving equations of this kind.

The method of scattering has been known since ancient times. The hints of the general solution of Diophantine equations of the first degree were first noticed in

the writings of the Indian astronomer *Aryabhata* (476-550), the solving of such equations was more precisely laid out by Indian mathematicians *Brahmagupta* (598-668) and *Bhaskara* (1114-1185). The general method of solving Diophantine equations of the first degree with integer coefficients in integers was called the scattering method in India, because the indeterminate equation is reduced to a chain of equations, the coefficients of which in absolute value decrease with each time, until one of them attain the unit [3].

The indeterminate equation (1) is considered in the book of French mathematician *Claude-Gaspard Basche de Meziriac* (1581-1638) in the 17<sup>th</sup> century and its solution is reduced to a sequential calculation of incomplete particles and consideration of approach fractions. The continued fractions to the solution of such equations were applied in an obvious form by *Joseph-Louis Lagrange* (1736-1813) in the 18<sup>th</sup> century [1].

The method of reduction to congruence relation for solving linear Diophantine equations appeared much later than the method of continued fractions, namely in the 18<sup>th</sup> century beginning with *Johann Carl Friedrich Gauss* (1777-1855) [2].

Diophantine equations can also be of higher degrees and for their solving we have to apply such methods as the method of using prime factorizations, the method of comparison remainders from division left and right parts on a certain number, method of the infinite descent etc.

So, there are various methods for solving the Diophantine equations that appeared and improved during the entire historical development. As the general method of solving such equations does not exist, in this article we have considered the most common methods for solving indeterminate equations.

## REFERENCES

1. Бородин О. И. Теория чисел / О. И. Бородин. – Вид. 3-е, перероб. і доп. – К.: Вища школа, 1970. – 273 с.
2. Бухштаб А. А. Теория чисел / А. А. Бухштаб. – М.: Гос. уч.-пед. из-во министерства просвещения РСФСР, 1960. – 374 с.
3. Глейзер Г. И. История математики в школе VII-VIII кл.: пособие для учителей / Г. И. Глейзер. – М.: Просвещение, 1982. – 240 с.
4. Математическая энциклопедия. Т.2. Д-Коо / Гл. ред. И. М. Виноградов. – М.: «Советская Энциклопедия», 1979. – 1104 с., ил.

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## **THE SIGNIFICANCE OF FORMING STRATEGIC COMPETENCES IN THE PROCESS OF LEARNING LANGUAGES IN THE UNIVERSITY**

Quite recently, the tendency has been formed to develop strategic competences in the course of language learning. Strategic competences are connected with the ability to make decisions independently, to complete tasks efficiently, to answer questions quickly, to build a logical sequence of actions, to try out different means for solving any problems, whether in learning or in communication, to overcome difficulties of mutual understanding when communication breakdowns occur etc.

Strategy is understood as "a purposeful and controlled line of behavior chosen by the individual to complete the task that he / she sets himself / herself, or with which he / she encounters" [2].

In conditions of teaching languages, the content of the concept of "strategic competence" can be explained in two aspects: with an emphasis on **communicative** strategies whose main goal is to overcome any problem of communication in an intercultural society, and with emphasis on **learning** strategies that are an instrument for mastering the language as a whole and often considered as a wider concept – "the ability to learn".

**Communicative** strategies are understood as "speech means that the speaker uses to mobilize his resources, activate skills to meet the needs of communication and successfully accomplish the tasks in the most understandable and most economical way" [2], that is, in fact, the strategy is identified with communicative competence in this or that situation. This approach is also confirmed by the fact that strategic competence is also called "compensatory" – according to its main function – compensation for ignorance of the language, and also because of psycho-physical factors (overwork, inattention, etc.). Compensatory means of communication can be introductory words and phrases, verbosity, repetitions, pauses, evasion of answers or assumptions. Similarly, strategic competence is identified with "activity" competence, where the core must be a kind of action, and only then, respectively, its result. This **positive** result is the main aim of language teaching, based on the different abilities (to plan, to achieve and to develop) [1]. All these operations are vital for every person, and the ability to properly implement them, as a rule, brings up a person who is able to build his life's strategy in accordance with the circumstances.

Regarding **learning** strategies, according to the American researcher R. Oxford, training strategies are "the operations used by students to learn, remember, reproduce and use the relevant information" [4, p. 44]. That is, they are arbitrary or involuntary processes that occur in the main human brain and reproduce it. This is proved by the fact that the backbone for scientific development, which is based on

the study of educational strategies, has resulted in "the development of cognitive psychology since the mid-fifties of the last century, proclaimed a person an active subject of knowledge of reality" [3, p. 253].

Both communicative and learning strategies are on the list of major components of professional training at the university, as far as they relate to fulfilling occupational functions, managing information search, as well as to organizational goals. And finally, in the process of development of the strategic competence, the language teacher is faced not only with educational and communicative tasks, but also with organizational, psychological problems or sociocultural issues.

## REFERENCES

1. Державний стандарт базової і повної загальної середньої освіти від 17. 01. 2004 // Іноземні мови в навчальних закладах. – 2004. - №1. – С. 10-20
2. Загальноєвропейські Рекомендації з мовної освіти: вивчення, викладання, оцінювання / Наук. ред. українського видання С.Ю. Ніколаєва. - К.: Ленвіт, 2003. - 273 с.
3. Сторонська О.С. Формування стратегій вивчення іноземної мови як науково-методична проблема / О.С. Сторонська // Науковий вісник Чернівецького університету. – Чернівці : Видавничий дім «Родовід», 2014. – Вип. 692 – 693 : Германська філологія. – С. 253 – 256.
4. Oxford R. Language Learning Strategie: What Every Teacher Should Know / Rebecca Oxford. – Boston : Heinle & Heinle, 1990. – 368 p.

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## APPROACHES TO FOREIGN LANGUAGE TEACHING IN UKRAINE AND PORTUGAL: COMPARATIVE ANALYSIS

Students' academic mobility programmes provide us with a unique opportunity to gain new experience abroad. Students are able to get acquainted with various approaches to teaching different subjects at prominent European universities. During the first semester, I studied English language and literature at Faculty of Arts at the University of Porto (Portugal). Thus, the aim of this article is to compare foreign language (FL) teaching approaches in Ukraine and Portugal.

From my own experience in the University of Porto, I can state that approaches to FL teaching in Portugal slightly differ from those in Ukraine. Portuguese teaching system has some key differences when compared to the Ukrainian one. The most notable difference is the grading system. In the University of Porto,

students don't get evaluated on their performance in class, instead, they are only expected to attend and take notes. Therefore, the grading system in Portugal (depending on the methods used by the teacher) can either be just one final exam or, be various (usually two) written evaluations throughout the semester. If a student doesn't get the minimum grade to pass the class, he or she can request a retake exam, which will give them another opportunity to improve their grades. There is also the possibility of some teachers asking the students to create small or medium-sized essays that will go towards the final evaluation score. Group projects are likewise available for a teacher to use, with the intent to test the student's knowledge throughout the semester while promoting teamwork and communication by making them work together.

In contrast to the Ukrainian system, the teachers in Portugal give free will to their students. If a student needs or wants to, he or she can choose to not go to a class and not have repercussions for their actions. However, this is limited by a maximum of 25% absences of all total classes, which means, if a student doesn't attend, at least, 30% of all classes, he or she will fail. Another interesting aspect is that, unlike in Ukraine, in Portugal when you miss a class and the respective course material that was taught, the student is not obligated to retake the class that was missed, instead, they are encouraged to catch up on the material by themselves, promoting a sense of responsibility and studying on their free time.

One aspect of the Portuguese education system that intrigued me is the methods used by English teachers. It's important to note that most English teachers in the Faculty of Arts are of English descent, which makes a prominent difference when learning certain aspects of the language, such as pronunciation. It's important to note that these teachers are very dynamic. They mainly give lectures to a medium-sized classroom of about 30 to 40 students. The teacher would start his or her lecture by warming up activity, e.g. by mentioning a recent topic from the news and try to incorporate it with the material taught in that class. Consequently, this always created a spark of interest in the students, as it was never a repetition of previous classes. Generally, this also created a debate among the students at the start of the class, leading to a more energetic audience.

The teachers also use methods similar to the ones used by Ukrainian teachers, such as a PowerPoint slideshow and written course material to support the lessons. Every student is expected to have their own course material, which they could print at home. This material would serve as a basis for the teacher to advance the lesson. However, the lessons were never strictly confined to following what was written. Generally, the teacher would opt to make the lessons more dynamic, such as creating small puzzles for the students to do, or short-duration games to teach certain grammatical aspects of the English language. This proved very effective, as it was possible to observe students' amusement and energy during the English classes.

Thus, we can make the conclusion that approaches to FL teaching in Portugal differ from those in Ukraine and contribute to developing learner autonomy.

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## **CLOUD COMPUTING PLATFORMS: COMPARATIVE ANALYSIS**

Cloud computing is an information technology (IT) paradigm that enables ubiquitous access to shared pools of configurable system resources and higher-level services that can be rapidly provisioned with minimal management effort, often over the Internet. Cloud computing relies on sharing of resources to achieve coherence and economies of scale, similar to a public utility.

“Cloud” is a metaphor for the Internet that hides all technical details. According to IEEE (The Institute of Electrical and Electronics Engineers), published in 2008, "Cloud computing is a paradigm in which data is constantly stored on servers on the Internet and temporarily cached on the client side, for example on personal computers, gaming consoles, laptops, smartphones, etc." [3].

The term "cloud" itself comes from telephony, because telecommunication companies, which until the 1990s offered mainly dedicated point-to-point transmission schemes, began to offer virtual private networks (VPNs) with comparable quality of service, but with much lower costs. By redirecting traffic to achieve optimal use of channels, they were able to use networks more efficiently.

Here are some examples of cloud services: Mail services, Webpages hosting, Computer games servers, Data storage and analyze services.

Cloud computing software and infrastructure are made available to users according to the following business models: Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS) [2].

Since its launch in 2006, the concept is deeply ingrained in a variety of IT industry segments and has become increasingly important in practice. In early 2008, Eucalyptus became the first open-source API to deploy a private cloud. At the beginning of 2008, OpenNebula was the first open source project to deploy private and hybrid clouds.

### **Cloud computing platforms.**

A large number of companies provide cloud computing services around the world: from regional firms to international companies. The biggest «players» on this market are: Google Cloud Platform, Amazon Web Services and Microsoft Azure.

Table 1.

*Cloud platforms*

	<b>Amazon Web Services</b>	<b>Microsoft Azure</b>	<b>Google Cloud Platform</b>
<b>Created in, year:</b>	2006	2010	2011
<b>Number of services:</b>	70	60	50
<b>Number of data centers:</b>	14	38	6
<b>Market share, %:</b>	31%	11%	6%

Table 2.

*Popular cloud computing services*

	<b>Google Cloud Platform</b>	<b>Amazon Web Services</b>	<b>Microsoft Azure</b>
<b>Virtual machines</b>	Compute Engine	EC2	Virtual Machines
<b>Webpages hosting</b>	App Engine	Elastic Beanstalk	Cloud Services
<b>Container systems</b>	Container Engine	EC2 Container Service	Container Service
<b>Databases</b>	Cloud Bigtable	DynamoDB	CosmosDB
<b>Data analyzing</b>	BigQuery	Redshift	SQL Database
<b>Data processing</b>	Cloud Functions	Lambda	Functions
<b>Big Data</b>	Cloud Datastore	DynamoDB	Cosmos DB
<b>Data storage</b>	Storage	S3	Blob Storage

The cloud computing services mentioned above offer trial periods. Typically, the trial period lasts 1 year [1].

Given the multitude of cloud platform offerings and the robust level of service that they provide, we can conclude that cloud computing has become an important technology in today's IT world and its role is likely to grow in the future.

**REFERENCES**

1. Вакалюк Т. А. Огляд існуючих моделей хмарних послуг для використання у вищих навчальних закладах / Т. А. Вакалюк // Тези доповідей VIII Міжнародної науково-технічної конференції «Інформаційно-комп'ютерні технології – 2016» (22–23 квітня 2016 р.). – Житомир: ЖДТУ, 2016. – С. 215-217.

2. Вакалюк Т. А. Можливості використання хмарних технологій в освіті / Т. А. Вакалюк // Актуальні питання сучасної педагогіки. Матеріали міжнародної науково-практичної конференції (м. Острог, 1-2 листопада 2013 року). – Херсон: Видавничий дім «Гельветика», 2013. – С. 97–99.
3. Карл Хевітт, "ORGs for Scalable, Robust, Privacy-Friendly Client Cloud Computing", IEEE Internet Computing, №. 12, (Вересень - Жовтень 2008). – Массачусетський технологічний інститут, С. 96-99.

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## **SECRETS OF THE MIDDLE AGES. WHO WERE THE KNIGHTS: GREAT WARRIORS OR SIMPLE ROBBERS?**

There are a lot of theories or, even, legends about the knights. Most researchers called them courageous warriors, king's valiant servants, gallant gentlemen of beautiful ladies, who had to face many dangers. The other opinion is that the knights were very greedy and cruel robbers, who made their wealth with weapons, and the main activities were robberies.

One way or another, the knights are a great part of medieval history. We can frankly say, they, like a real military power, had written our history. But, in fact, who were those knights and why are there so many opinions about their nature.

First of all, we need to say that a knight was a great feudal lord, who had to participate in different wars. The knights could easily refuse their involvement, if they saw that the battles would bring them nothing; because their entire equipment cost a lot – helmet, shell, shield, spear, sword – they paid much gold to be able to fight. Knights entered a fight when they were absolutely certain that the victory would bring them money, jewels or, even, new lands. So, the main benefits those feudals had from the war were glory, wealth, land, etc.

But, it is enough to just have nice weapons? A good knight needs to know how to use them perfectly from the childhood. That is why they had to train every day and train hard. Small boys had to learn to wear heavy armor since they were 6-8 years of age. About 500 years ago, there were no schools for knights. The son of a lord or a knight was sent away to live at another lord's household, where he would start as a page. His main duty was to serve the lord and his family their meals; he was educated by observing knights' behavior and good manners. At the age of 14, these young men became squires and were allowed to accompany their lords. If a squire was good enough, he could aspire to be a knight, and there was a very complex ceremony to confer knighthood. After such a ceremony, their real way of a knight would begin – they could take part in wars and campaigns.



As for their military tactic, there are also lots of theories and questions. It is too difficult to say how they waged a war, because in Europe at that time the knights were left to themselves. It was one of the most important reasons why some wars were lost. The knights were not the only ones who took part in campaigns. Every knight brought with him a significant number of servants, armed with spears and axes, who formed infantry units. There is a lot of information in various sources indicating that the knights didn't take good care of their own infantry. If they wanted to engage a deserving enemy, the knights could ride over their own soldiers with horses. Furthermore, there was no military discipline. A knight was a single warrior, a professional since birth. He knew that he had to be the first one and in a fight, he tried to show his bravery as much as he could. However, the knights were not in a hurry to die, and they preferred to run away or surrender to captivity rather than be killed.

The knights were known not only for their campaigns, however. The Middle Ages were permeated with the spirit of highly valued knightly valor. No less important was the knight's faith. They swore to protect the weak, be brave in battle, love their homeland (we can see it in the traditional chivalry literature), and remain morally pure.

Analyzing all given above facts, we can sum up that the era of the knights had a distinct culture that influenced the medieval way of life. Although the knights were robbers and captured cities, they were above all a military force behind European countries, and they always tried to protect their native state.

## REFERENCES

1. Щепкин Е. Н. Рыцарство // Энциклопедический словарь Брокгауза и Ефрона: в 86 т. (82 т. и 4 доп.). — СПб., 1890—1907.
2. Жарков С. В. Рыцари: первая полная энциклопедия. — М.: Эксмо; Яуза, 2016. — 672 с.: ил. — Серия «Лучшие войны в истории»

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## USE OF GAMES IN TEACHING ENGLISH GRAMMAR

There are many ways how to define the concept of grammar. For example Thornbury [6] uses definition from Longman's *Active Study Dictionary* in which grammar is described as the rules by which words change their forms and are combined into sentences. Also Bruder and Paulston [1] give a similar definition of grammar; it is described as "*the possible forms and arrangements of words in phrases and sentences.*" Harmer [5] concludes that to be proficient in grammar means to know how the grammatical elements can be tied together to form the

chains of words. Thornbury [7] then mentions that “*grammar is partly the study of what forms (or structures) are possible in a language.*” It is also suggested that grammar is closely connected with syntax and morphology and finally, we can express and articulate meaning by grammar. Grammar can be regarded from the different perspectives – for example as spoken and written grammar (both have its typical features).

The role of grammar in language teaching was observed and discussed by many authors. Teachers at primary and secondary schools cannot avoid teaching grammar because it is included in language curriculum and syllabus. Also the course books are partly based on grammar – pupils start with easy basic issues and the level of difficulty rises with the age.

Moreover, learning grammar is really important to achieve the higher levels of the language. On the other hand, the word grammar could be horrifying for students. It could be a hardnut to crack for the teacher to persuade pupils that learning grammar could be fun. However, it depends on the teacher how s/he solves this problem. S/he need not follow traditional methods in teaching grammar like setting the rules, filling the grammar exercises or testing, but s/he can use another amusing way – games.

Games are definitely the most natural way of learning something. Playing is the most effective method for young learners. Through playing they meet with their environment, understand many principles of how things work, and it is easy for them to remember something which is connected with pleasure, fun or amusement. Even though games are often associated with fun, we should not lose sight of their pedagogical value, particularly in foreign language teaching and learning. Games are effective as they create motivation, lower students’ stress, and give language learners the opportunity for real communication.

According to Haldfield [2], “a game is an activity with rules, a goal and an element of fun.... Games should be regarded as an integral part of the language syllabus”. This definition highly evaluates the importance of games in teaching. It shows that games serve not only as an ‘amusing activity’, but also as a technique to carry out many pedagogical tasks.

Classifying games into categories can be difficult because categories often overlap. Hadfield [2] proposes two ways of classifying language games. First, language games are divided into two types: linguistic and communicative games. Linguistic games focus on accuracy, such as supplying the correct antonym. Communicative games presuppose successful exchange of information and ideas. He also offers to classify language games into many more categories: sorting, ordering, or arranging, information gap games, guessing, search games, matching games, labeling, exchanging games, board games, role play games.

According to Lee [3], games can be classified into ten categories: structure games which provide experience of the use of particular patterns of syntax in communication; vocabulary games in which the learners’ attention is focused mainly on words; spelling, pronunciation games; number games; listen-and-do games; games and writing; miming and role play; discussion games.

Riedle emphasizes the advantage of games in improving learners’

achievements: “We are teaching a new generation of students, which requires unconventional teaching strategies to be put into practice in the classroom. And when schools use games, student benefits speak for themselves – a greater desire to learn and higher test scores” [4].

In brief, games prove to be a useful tool in language teaching. Games not only motivate learners and create a friendly atmosphere, they are aimed at developing all language skills. Consequently, games can motivate, promote learners’ interaction, improve their acquisition and increase their achievement.

Games can be a very worthwhile teaching element. A successful game is successful because of the reason that it is based on specific time allocation, it has clear relevance to the material, there is appropriateness to all members of the class, and ultimately, the enjoyment of the learners is increased through their active engagement with the language.

### REFERENCES

1. BRATT PAULSTON, Christina a Mary NEWTON BRUDER. Teaching English as a Seccnd Language.: Technigues and Procedures. 1. vyd. Cambridge, Massachusetts: WINTHROP PUBLISHERS, INC, 1976.
2. Hadfield J. Beginners’ communication games / J.Hadfield. – Longman, 1999.
3. Lee W. R. Language teaching: Games and Contests / W.R.Lee. – Oxford: Oxford University Press, 1991.
4. Riedle C. Web 2.0: helping reinvent education / C.Riedle, 2008. – Available at: <http://www.thejournal.com/articles/21907>.
5. HARMER, J. The Practice of English Language Teaching. Fourth edition. 2. vyd. Harlow: Pearson Education Limited, 2007.
6. THORNBURY, Scott. Active Study Dictionary. Longman, 2001.
7. THORNBURY, Scott. How to Teach Grammar. Oxford: Harlow, England: Pearson Education, 1999.

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### THE EXPEDIENCY OF PLAYING THE LOTTERY IN TERMS OF THE THEORY OF PROBABILITY

Lotteries have always been in great demand among people. On average, in the US alone people spend more than 30 billion dollars a year on lotteries. The history of lotteries begins in the 17<sup>th</sup> century in Genoa, Italy. Every 6 months, the citizens of the city used to change two members of the local authorities. This position wasn’t elected, but rather chosen by drawing lots. The names of 120 Council members were written on separate sheets of paper, and the citizens randomly drew

out 2 sheets. The candidates whose names were written on the papers took new positions. Eventually, the citizens started making bets on candidates. Such an entertainment became very popular, and many didn't want to wait for the election to be able to bet. Consequently, in 1700 names were replaced by numbers, and players were asked to guess 5 numbers randomly. The more numbers gamblers guessed, the more money they would receive. Lotteries quickly spread throughout Europe, and then to North America [1, c. 104].

The primary goal of the article is to understand how a lottery works, who profits from it and whether it is possible to make money off a lottery in the long run. It isn't the same as just making money in a lottery. To make money in the long run means that we build a strategy of a game in such a way that we constantly win more money than we lose. To understand if it is possible to build such a strategy, we should consider some mathematical terms related to the theory of probability.

The classical definition of probability of a random event is as follows: the probability of a random event  $A$  is equal to the ratio of the number of possible cases  $m$  favourable to the event  $A$ , to the number of all equally possible events  $n$  [2, c. 15]. For example, if only one ticket out of 10 wins, the probability that you will buy the winning ticket is 1:10. In turn, the expected value helps you understand the real price of the ticket. If the ticket costs more than its expected value, we will lose in the long run. If the price is less than the expected value, we will win. Let's see how we can find the expected value using the following example.

Imagine that you are offered to play such a game. You are given a ticket that can win 3 million dollars. There are 5 000 000 tickets, and there is only one winning ticket. Other 4 999 999 tickets will not pay you even a single cent. For this ticket you are asked to pay only \$1. If we buy a ticket, we will receive 3 million dollars with a probability of 1:5 000 000. With a probability of 4 999 999:5 000 000 we will get nothing. To calculate the expected value we have to multiply the winning amount of money by the probability of winning, and then add all these numbers. For our case

$(1:5\,000\,000) \times 3\,000\,000\$ + (4\,999\,999:5\,000\,000) \times 0\$ = 3\,000\,000:5\,000\,000 = 0.6\$$ . Therefore, the expected value of the ticket is 60 cents. This is the real price of our ticket. But we have to pay 1\$ for the participation in this game, which is 40 cents more than the real value of the ticket. That means that this game will not be profitable for us. On average, we will lose 40 cents on each ticket. So, to win a lottery you just have to find a lottery, where the expected value of a ticket is more than its price. But it's harder than it seems because such lotteries have existed very rarely, and nowadays they probably do not exist at all. If the price of a ticket in a lottery is less than its expected value, the owner of the lottery will be in the red. Thus, it will not be profitable for the owner of the lottery. By the way, not only lotteries, but also other gambling activities such as casino and slot machines are built on the same principle. That is why everybody can win only in a short run. But the longer you play, the more likely you will be in the red.

However, there were some interesting examples when the price of a lottery ticket was less than its expected value. The following story is about an American lottery "WinFall". Most lotteries have a so-called jackpot. This is the biggest prize

that can be won. This prize increases for as long as nobody wins. The owners of the lottery noticed that people were losing interest in their lottery because the jackpot hadn't been won for a long time. They changed the rules. When jackpot reached 2 000 000 \$, the jackpot was divided among those people who had won any prize. During regular runs, the expected value of a ticket was 79.8 cents, while the price of it was 2\$. Therefore, those tickets weren't quite profitable, as the price of a ticket was 2.5 times more than its expected value. But when the jackpot reached 2 000 000 \$, the expected value increased to 2.98\$, which is almost one and a half times more than the price of a ticket. While it seems that it cannot make sense for the owners of the lottery to offer this, we must not forget that during regular runs the expected value was too small, and people lost much more money than they won. Profitable days contributed to the popularization of the lottery, so the owners were still in the black. The first person to understand it, was a student of Massachusetts Institute of Technology, who worked on the project about comparative characteristics of lotteries in different states. He formed a group of friends, and they developed a strategy for winning a lot of money in a lottery. They were buying large quantities of tickets. At first, they bought a thousand tickets. Over time, they were buying tens of thousands of tickets. Later, the number of clubs buying tickets in this manner began to grow sharply, along with the number of tickets that were bought each time, while the methods allowing to win even more money became more advanced. Such clubs were called cartels and they were spending up to 300 000\$ on tickets on profitable days. As a result, they used to win enormous amounts of money [1, c. 110-114].

But nowadays we have computers, and it isn't a problem to find the expected value of a huge number of lotteries over a short period of time. The owners of lotteries understand it. That is why a chance to find profitable lotteries is close to zero. So, there is only one simple advice on how you can play a lottery without any risk of losing money. Everyone can use it, even without the knowledge of the probability theory. You should just not play the lottery, and you will never be in the red.

## REFERENCES

1. Ellenberg, Jordan. How not to be wrong: the power of mathematical thinking. – The Penguin Press, New York, 2014 – 421 p.
2. Gorroochurn, Prakash. Some Laws and Problems of Classical Probability and How Cardano Anticipated Them. – [Электронный ресурс]. – Режим доступа: <https://pdfs.semanticscholar.org/585d/02819ba518d15520067192a2c67e1700d7de.pdf>

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## **CONTROLLING THE ACTIVITY OF PEOPLE'S DEPUTIES: SURVEY RESULTS**

Events of the Euromaidan and the Anti-Terrorist Operation in the east of our country indicate that the young people of Ukraine are ready to take radical steps to protect our state, but when it comes to the evolutionary development of democratic processes, are they really ready to advance democratic institutions in Ukraine in a consistent and methodical way as it is required in the long run? Simple observation brings us to the negative answer.

In our opinion, the low level of students' participation in political life is caused by poor awareness of the ways a citizen can control the government. In order to test this hypothesis, we conducted a survey, the description and results of which are presented in this article. The purpose of the study is to identify the causes of low political activity of youth, which will allow to develop ways to increase it.

In order to identify the correlation between the level of knowledge, positive attitude and readiness for participation in political processes, we formulated five questions that determine the corresponding variables:

1. What are the duties of the deputy of a local / district council?
3. Would you like to be a deputy?
4. If not, why?
5. Are you a member of any political party, NGO or a similar organization?
6. Do you plan to run for a political office?

The survey was conducted with 55 students of Zhytomyr National Agroecological University.

The survey was carried out by students majoring in Political Science at Zhytomyr Ivan Franko State University. The results are presented below. The answers to the first question indicate a low level of students' awareness of the scope of responsibilities of deputies of local and district councils. The respondents were supposed to tick off the options they considered to be valid, three false options were designed as control questions. The table demonstrates the results:

Option	Respondents, %
Maintain communication with the voters	53%

Inform voters of the activity of the counsel on implementing its plans and programs	67%
Participate in mass events	67%
Study public opinion	71%
Represent the interests of citizens in court	25%
Inform the counsel of the voters' needs and demands	67%
Have office hours allotted to communicating with the voters	33%
Build playgrounds	51%
Process requests filed by members of the territorial community	60%
Provide financial assistance to voters	20%

The results demonstrate that students expect their deputies to study the public opinion, inform the council of the needs of the community, participate in mass events, inform voters of the activity of the council in implementing plans and programs. However, these obvious answers were ticked off by no more than 67% of the respondents.

The second and the third questions of the survey were aimed at discovering the attitude of students in the political life that takes two forms: running for a deputy office or controlling the government as an active community member. The distribution of answers to the question "Would you like to be a people's deputy?" is the following: among 48 valid answers, 37 were negative and 11 were positive.

Table 3 shows the results of the respondents' answers to the question specifying the reasons for unwillingness to run for a people's deputy's office. It turned out that the majority of respondents (21) do not want to run for an office because they believe that they will not be able to make a difference due to various external factors, namely they will be held back.

Option	Number of respondents	%
I do not believe that I can change something	8	20, 51
I do not believe that I will be given something to change	21	53, 85
No money or time	5	12, 82
I have no interest in what is happening	8	20, 51

Questions 4 and 5 were aimed at determining the level of readiness to control the authorities. 95% of respondents are not members of any political party, non-profit organization or a trade union. 86% of respondents do not plan to run for a political office in the future.

Thus, the results of the questionnaire indicate a low level of students' awareness of the ways of controlling the activities of deputies, generally negative attitude

regarding their ability to control the authorities, and a low level of readiness for any action to control the activity of people's deputies. The hypothesis of correlation between the level of awareness, positive attitude and willingness to control the authorities requires further survey of students highly involved in various forms of political activity. Should the abovementioned correlation be high, we can draw the conclusion that it is possible to increase the citizens' engagement by introducing the respective educational programs and trainings at the state level.

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## **SPONSORSHIP AS AN ELEMENT OF MARKETING STRATEGY**

Developing a marketing strategy is vital for any business, that's why searching for modern approaches and improving the old ones are becoming urgent issues in the field of business. In terms of marketing, sponsorship is viewed as mutually beneficial cooperation among market players, based on the implementation of joint communication projects. Analysing sponsorship marketing as a complex business project can be explained due to its attractiveness for both, the consumer and industrial markets [1].

Sponsorship is a system of mutually beneficial contractual relations between the sponsor, who is the supplier of resources and services and the recipient, a party that receives them in the person of individuals, groups, organizations in order to achieve sponsorship of certain marketing communication purposes [2].

The techniques of forming marketing strategies have progressed incredibly far and nowadays sponsorship offers the possibility of achieving several marketing strategy goals at once.

1. Enhancing Image and Shaping Consumer Attitudes. Companies are often looking for ways to improve how they're perceived by their target audience. For example, Coca-Cola is always looking for ways how to generate a positive influence of their products in the minds of their consumers.

2. Building Brand Awareness. You can spend a lot of money on printing advertisements or on audio and television commercials, but you'll spend a lot less and perhaps achieve a better result if you can simply put your product in the hands of potential consumers.

3. Driving Sales. Sponsorship that is oriented to sales promotion can be an extremely powerful advertising tool. This objective allows sponsors to showcase their product attributes.

4. Increasing Reach. A good sponsorship doesn't only allow you to make contact with potential buyers and customers, but it can also promote that priceless marketing tool – word of mouth [3].



5. Creating Positive Publicity and Heightening Visibility. Every sponsor seeks for wide exposure in both electronic and printed media and positive publicity helps to create heightened visibility of products and services. Various media covering the event sometimes include sponsors' names or photos.

6. Differentiating From Competitors. Sponsorship allows smaller companies to compete with industry giants.

7. Generating New Leads. Sponsorship proposals that indicate opportunities for hospitality, are always attractive for companies. The company may include special exclusive network settings such as VIP receptions or golf tournaments that provide opportunities to meet key customers and strengthen business relationships [1].

So, sponsorship is a powerful tool for strengthening the company's reputation, improve the image of the corporation, it is an opportunity to express their position in society or in respect of current social issues.

## REFERENCES

1. Гаркавенко С.С. Маркетинг: підручник. / С. С. Гаркавенко — Київ: Лібра, 2002. — 705 с.
2. Learn How Sponsorship Is a Key to Powerful Marketing – [Електронний ресурс] - Режим доступу: <https://www.thebalance.com/sponsorship-a-key-to-powerful-marketing-2295276>
3. 5 reasons sponsorships a brilliant marketing strategy – [Електронний ресурс] – Режим доступу: <https://rigani.com.au/5-reasons-sponsorship-is-a-brilliant-marketing-strategy/>.

***V. Dulko, V. Knysh***

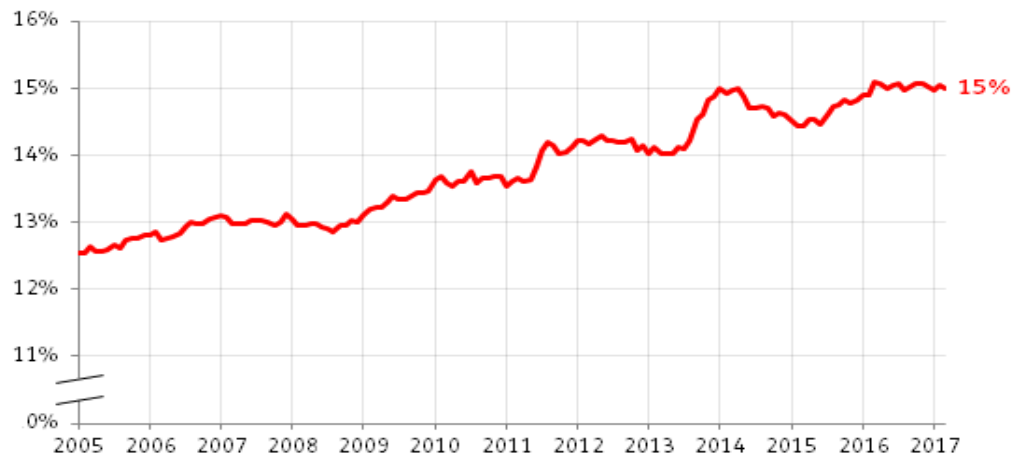
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## GIG ECONOMY: GOOD OR BAD INFLUENCE ON THE ECONOMY OF THE STATE?

The “gig economy” is an accurate description of the state of the modern market; though the Bureau of Labor Statistics has admitted difficulty in counting the exact number of independent contractors and contingent workers, Intuit estimates that “gig” workers represent 34 percent of the workforce and will grow to be 43 percent by 2020 [1].

The gig economy is a way of working that is based on people having temporary jobs or doing separate pieces of work, each paid separately, rather than working for an employer [2].

More and more people in the UK are becoming self-employed, and now around 15% of workers fall into this category. The increase has been happening for over a decade [3].



#### Self-employment as a proportion of the total in employment, UK

For the unemployed, the gig economy represents both opportunity and challenge. Because lots of small, part-time jobs are available, even non-full-time employed workers can find gigs to help make ends meet. However, because gigs and contracts are more affordable for employers, it's also harder to find the full-time jobs they crave—despite loving the internet and being open to nontraditional career opportunities, millennials are still traditionally minded, with 91 percent wanting full-time work [1].

Meanwhile, workers in the gig economy are classed as independent contractors. That means they have no protection against unfair dismissal, no right to redundancy payments, and no right to receive the national minimum wage, paid holiday or sickness pay [4].

Young people crave new experiences and new opportunities, especially when they aren't sure what they want to do. The gig economy gives them that opportunity without demanding excessive sacrifices or risks. It remains to be seen whether the gig economy is a good thing or a bad thing for economic development overall, but for millennials, it's certainly both. For cash-strapped young workers striving to find a good full-time job, the gig economy can be frustrating, but for more established millennials, or those who want a diversity of experiences, the gig economy is the perfect opportunity to achieve those goals [1].

#### REFERENCES

1. Alton, L. Why The Gig Economy Is The Best And Worst Development For Workers Under 30 / L. Alton // Forbes. – 2018. – Mode of access: <https://www.forbes.com/sites/larryalton/2018/01/24/why-the-gig-economy-is-the-best-and-worst-development-for-workers-under-30/2/#41dafcb85b96> . Date of access: 16.03.2018.
2. Cambridge Dictionary. Mode of access: <https://dictionary.cambridge.org/ru/%D1%81%D0%BB%D0%BE%D0%B2%D0%B0%D1%80%D1%8C/%D0%B0%D0%BD%D0%B3%D0%BB%D0%B>

- 8%D0%B9%D1%81%D0%BA%D0%B8%D0%B9/gig-economy#translations.  
– Date of access: 16.03.2018.
3. O'Leary, J. Who's working in the 'gig economy'? / J. O'Leary, S. Boulwood // The UK's independent factchecking charity. – 2017 – Mode of access: <https://fullfact.org/economy/whos-working-gig-economy/>\_\_\_\_– Date of access:16.03.2018.
  4. Wilson, B. What is the 'gig' economy? / Wilson, B. // BBC News. – 2018 – Mode of access: <http://www.bbc.com/news/business-38930048>. – Date of access:16.03.2018.

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## **THE RUBIK'S CUBE AS A VISUAL TEACHING TOOL AT A PHYSICS LESSON**

Pupils and students nowadays spend a lot of time online and are used to simple and appealing explanation of any information through short videos or fun illustrations. Therefore, the traditional teaching methods are becoming less engaging by the minute. Thus, the problem of motivating students and pupils remains front and center. The teaching means and tools should correspond to the age of students and their interests, they should draw their attention and increase learning motivation, as well as help illustrate complicated concepts with elegant and simple examples [1 : 335]. In this article we focus on the ways of using the Rubik's cube to introduce new learning content in physics, namely the theory of evolution of our Universe. The Rubik's cube will serve as a teaching tool to introduce a new topic through inductive reasoning that starts with non-abstract, sensory and emotional perception and transforms into intellectual activity – reasoning and conclusion [2 : 42].

While solving the Rubik's cube, the teacher asks the students to think what factors they need to consider to find the working algorithm. The answer is: the position of the pieces, their color, cluster pattern etc. If you start rotating the layers randomly from the original state, the order will decrease and the disorder will increase, and at a certain moment the disorder will reach its maximum. If we draw the parallel with our Universe, the original state of the Rubik's cube is the cosmological singularity, that is the state of the Universe at the moment of the Big Bang. Currently the scientists do not know what exactly is happening at the point of singularity, and what forces or circumstances caused the Big Bang. The force that causes the Rubik's cube to go from singularity to maximum entropy is the movements of the person solving the puzzle. In contrast to the Universe, the

Rubik's cube is an open system, while the Universe cannot be viewed as an isolated, closed or open system, being infinite and expanding, and thus not falling under the traditional definitions of the macrocosm. A closed system exchanges energy with the external world. An isolated system does not exchange energy or matter with the external world. The Rubik's cube is a great illustration of the creationist idea stating that the Big Bang was caused by the external force of the Creator, and the Universe is viewed as a closed system. We will further use the Rubik's cube to illustrate the main theories of the future of our Universe. The first theory is that after expanding to the maximum capacity the Universe will collapse to the state of singularity. In order to visualize the process, the teacher solves the cube into its original position. The second theory is the heat death of the Universe suggested by Rudolf Clausius. It reads that following the state where all energy is evenly distributed, the mechanical movement will run down. In order to illustrate this, the teacher solves the puzzle into a logical pattern other than the original state.

By means of analyzing, solving and dissolving the Rubik's cube the teacher draws the parallels and illustrates the contrast between the complicated notions of entropy, singularity, open and isolated thermodynamic systems, as well as the theories of the Big Bang and the Heat Death of the Universe, while gradually taking the students from the point of mere interest to the point of discovery and understanding. Therefore, the Rubik's cube is a powerful tool to visualize new material while ensuring feedback and engaging the learning audience.

## REFERENCES

1. Slaktionin V.A. Pedagogics : Manual for Students of Pedagogical Universities / V.A. Slaktionin, I.F. Isayev, Ye.N. Shyyanov; editor – V.A. Slaktionin. – M. : Akademia, 2002. – 576 p.
2. Matsko L.I., Matsko O.M. Ritorika: Manual. – 2<sup>nd</sup> edition, Kyiv, Vyshcha shkola, 2006. – 311 p.

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## COMMUNICATIVE APPROACH IN FOREIGN LANGUAGE TEACHING

The process of communication and its different aspects are the basic issues of Foreign Languages Methodology which have been studied and analyzed by scientists for many years.

As K. Johnson and K. Morrow point out, the communicative approach differs from more traditional approaches in which the attention is focused on the learning of structural competence in foreign language teaching [1, p.10].

K. Johnson, a British Methodologist, states that there are two communicative approaches in foreign language teaching:

- 1) the perfect organization of the curriculum;
- 2) methodology.

Indeed, the first approach determines what to study following the communicative principle and the other one shows how and by means of which methods to make language learning more effective.

Communicative approach is oriented on language learning through communication. The characteristic features of communicative approach in language teaching are the following:

- 1) the communicative orientation of all types of learning;
- 2) “learner-centered approach”;
- 3) “the whole-person approach”;
- 4) educational materials are submitted according to the functional principal;
- 5) the main types of work are:
  - a) pair work (dialogue);
  - b) group work (polylog);
- 6) nontraditional relation to mistakes [1, p.70].

However, the communicative approach of foreign language teaching is often an object of criticism because it encourages pupils to make mistakes. The reason of such mistakes is ambiguous. Firstly, this is what the student is taught by a teacher who believes that accidental mistakes of grammar or pronunciation do not matter.

Secondly, the pupil can be involved in a communicative situation, to which he wasn't prepared and, trying to realize it, makes mistakes. This fact shows the relation and the reaction to these mistakes [2, p. 82].

In general, it is believed that the use of communicative tasks in the process of foreign language teaching is complex. Foreign language teaching should be directed at developing learners' ability to use the language correctly in real communicative situations.

## **REFERENCES**

1. Johnson K., Morrow K. Communication in the Classroom. – Longman Group, 1992. – 140p.
2. Widdowson G. Teaching language as Communication. – Oxford University Press, 1990. – 168p.

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## **THE IMAGE OF A POLITICIAN APPEALING TO YOUNG PEOPLE**

In modern-day Ukraine, due to corruption and the image of the Ukrainian politics, respect for our deputies has disappeared before it ever emerged, especially when it comes to the young voters. This is one of the reasons for the young people not participating actively in the democratic processes of our country.

The purpose of our study was to contribute to the development of a positive image of modern politicians through studying the views of young people on what a Ukrainian political figure should be.

For the purpose of our research we conducted a survey with 50 students who were asked to look through several sets of photographs and choose the most appealing person from each set. The photos were arranged into sets according to the following criteria:

- 1) glasses (absent or present);
- 2) style of clothes (classic or casual);
- 3) facial expression (composed or smiling);
- 4) age (twenties or sixties);
- 5) age (forties or fifties);
- 6) age (thirties);
- 7) appearance (handsome / pretty or unattractive);
- 8) hair style (classic or modern).

Based on the information collected we discovered the following tendencies:

- 1) in 58% of cases youth chooses people without glasses;
- 2) in 66% of cases students choose a classic costume style;
- 3) in 40% of cases young people prefer a serious man, and in 26% – more laid-back and frivolous;
- 4) in 72% of cases young people choose a person aged 25;
- 5) in 74% of cases young people choose persons aged 40;
- 6) in 56% of cases young people choose men aged 25 and in 44% they choose women;
- 7) in 50% of cases students prefer a man with a beard;
- 8) in 64% of cases people with classic hair choices are chosen.

Thus, according to the results of the survey, a deputy for young people is a male of 35-40, preferably with a beard, wearing a classic outfit, with a classic hair style and no glasses, looking restrained. The results of the survey are presented in the table below:

*Table 1.  
Summary of Survey results*

Answer Question	1	2	3	4
1	6	15	7	22
2	12	7	10	21
3	5	13	12	20
4	2	10	5	26
5	7	14	6	23
6	14	6	14	16
7	7	8	25	10
8	11	7	4	28

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## **SOCIAL ADVERTISING AS AN IMPORTANT COMPONENT OF MODERN SOCIETY**

Social advertising is one of the tools to improve the management of various social spheres in our society. Social advertising is an important and inalienable element of socialization.

The problem of social advertising in Ukraine is quite acute. The European agencies use new creative and effective approaches in social advertising. For example, to reduce the number of victims on the roads in the US they installed special indicator panels. They showed the quantity of days the driver could spend in the hospital. In 2016, the Traffic Safety Administration of Ukraine presented a video on adherence to the traffic rules Minus 1 [1]. The studies on the effect of low advertising were not performed but, unfortunately, the video was not often shown on television [2].

In conclusion, a well-designed social advertising is an appeal to change the social norms and standards the people think and behave. It also can influence on

the positive development of different social groups, their moral and ethical values and the formation of social responsibility.

## REFERENCES

1. Сидоренко І. Чому соціальна реклама за кордоном дієвіша, ніж в Україні [Electronic resource] / І. Сидоренко. – Access mode: <https://life.pravda.com.ua/health/2017/09/5/226249/>
2. Статистика по ДТП в Україні гірша, аніж рік тому: шокуючі дані [Electronic resource]. – Access mode: [https://24tv.ua/statistika\\_dtp\\_v\\_ukrayini\\_girsha\\_anizh\\_rik\\_tomu\\_shokuyuchi\\_dani\\_n879332](https://24tv.ua/statistika_dtp_v_ukrayini_girsha_anizh_rik_tomu_shokuyuchi_dani_n879332)

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## NEWSJACKING AS AN ALTERNATIVE TO A TYPICAL MARKETING STRATEGY

Newsjacking is a real time marketing. Newsjacking is the practice of taking advantage of current events or news stories in such a way as to promote or advertise one's product or brand [1]. Newsjacking is defined as the practice of leveraging trending and popular news stories to increase media mileage. The term itself was popularized in the book "Newsjacking: How to Inject Your Ideas into a Breaking News Story and Generate Tons of Media Coverage" by Marketing and PR Expert and bestselling author David Meerman Scott [2]. In our world, news is breaking every second and marketers have a chance to benefit from it. More and more, marketers are using newsjacking to create a tidal wave of traffic around their brand.

According to S. Burke there are two types of Newsjacking. The first is educational in intent. In this context, the marketer is utilizing a trending topic in order to create content that works to educate their audience in a more entertaining, relatable and interesting way. The second one is Newsjacking for publicity and entertainment purposes [3].

A marketer should follow the next three rules to effective Newsjacking [3].

1. *Choose the right news story.* You can't Newsjack every story. You can't Newsjack most of them actually. That's OK. Just keep an eye on the trends, know your brand well enough to know what works and what does not, and do not force it.

2. *Be timely.* David Meerman Scott suggests that the right time to Newsjack is just before the story gains momentum and journalists start searching for more information.



3. *Think Critically.* This is where most brands seem to fall down on. You need to learn to be critical about what your stories are.

If you want to succeed in this area, then you should:

1. *Pay attention to your site.* When people view your newsjack, they may stick around on your site for a while afterward, discovering more of your content.

2. *Enhance the range of social reach.* Every event has a hashtag these days. Many outlets turn to Twitter to catch reactions and context. Promoting content using hashtags others are tweeting with will to maximize your reach.

3. *Add variety to your content strategy.* You should focus on news happening around the world as it may provide a number of ideas which will help you to improve your site.

4. *Keep your brand involved in current conversations.* Monitoring what is being said online is an opportunity to react and engage. Using a monitoring create alerts for important keywords in the news or on social media.

The flipside of being bold is necessary. Poor newsjacking can bring major PR blunders on social media. Tragic stories often dominate the news. Obviously, brands attaching themselves to these situations must exercise caution.

Newsjacking can be a fast and easy way to generate attention for your brand. The key is to use tools that help you listen closely to the web and social media for the right opportunities, as well as help you react quickly.

## REFERENCES

1. Oxford Living Dictionary [Электронный ресурс] – Режим доступа: <https://en.oxforddictionaries.com/definition/newsjacking> – Дата доступа: 01.03.2018
2. Scott D.M. Newsjacking. How to Inject Your Ideas into a Breaking News Story and Generate Tons of Media Coverage [Электронный ресурс] – Режим доступа: <https://www.davidmeermanscott.com/books/newsjacking> – Дата доступа: 05.03.2018.
3. Burke S. 15 examples of the Good, the bad and the ugly of Newsjacking [Электронный ресурс] – Режим доступа: <http://www.getspokal.com/15-examples-of-the-good-the-bad-and-the-ugly-of-newsjacking/> – Дата доступа: 09.03.2018

## **PHRASEOLOGISCHE EINHEITEN MIT DEM WORT „DER WEG“ IN DER DEUTSCHEN SPRACHE**

Der Weg ist eines der globalsten Raumkonzepte. Seine Forschung wurde in verschiedenen linguistischen und kulturellen Richtungen (Semiotik, Kognition, Lexikologie, Kulturwissenschaften, Religionswissenschaften) durchgeführt. Der Raum als makro-konzeptuelle Formation war für viele Sprachwissenschaftler von Interesse und wurde in verschiedenen Aspekten untersucht. So, V. Gak [1] forschte räumliche Nominierungen im strukturell-semantischen Aspekt, und die Semiotik des Weltraums war Forschungsthema solcher Wissenschaftler wie V. Toporov, V. Ivanov Y. Lotman, Y. Stepanow und anderer.

Der Zweck dieses Artikels besteht darin, die phraseologischen Einheiten zu analysieren, die das Wort „der Weg“ enthalten. Die Wissenschaftler behaupten, dass die Phraseologie „ein Spiegel ist, in dem die nationale Identität der linguokulturellen Gemeinschaft identifiziert wird“ [3, S. 9].

Es ist bekannt, dass das Wort „Weg“ verschiedene Bedeutungen in der deutschen Sprache haben kann: (1) Pfad oder Verkehrsweg; (2) Richtung; (3) Reise oder Wanderung; (4) Entfernung; (5) Art und Weise. Wir werden in diesem Artikel die phraseologischen Einheiten gemäß diesen Bedeutungsschattierungen betrachten.

Wie die Analyse der deutschen phraseologischen Einheiten zeigt, es gibt nicht so viele Phraseologismen zu der Bedeutung Pfad oder Verkehrsweg, weil gerade diese Bedeutung die Hauptbedeutung des Wortes „Weg“ ist. Aber die bekannteste Redewendung „Alle Wege führen nach Rom“ gibt es sowohl in der deutschen als auch in der ukrainischen Sprache.

Besonders viele Beispiele können wir zu der zweiten Bedeutung des Wortes „der Weg“ – Richtung anführen. Hier kann man die phraseologischen Einheiten mit der Bedeutung „jemandem oder sich selbst helfen, unterstützen“ oder „jemanden oder sich selbst stören“ absondern: auf der rechten (richtigen) Weg bringen (leiten); jemandem etwas mit auf den Weg geben; oder jemandem den Weg verlegen (versperren, vertreten); sich jemandem in den Weg stellen; vom rechten Weg(e) abbiegen (abgehen, abgleiten, abkommen, abirren, abweichen). Es gibt auch Phraseologismen mit neutralen Bedeutung: auf Weg und Steg (überall), jemanden den Weg freigeben.

Zu der dritten Bedeutung gehören: sich auf den Weg machen, den Weg unter die Füße (zwischen die Beine nehmen) und die Einheiten mit der Bedeutung „sterben“: der letzte Weg, der Weg, den wir alle gehen müssen, den Weg alles Fleisches (Irdisches, Zeitlichen) gehen.

Eine relative Bedeutung der Entfernung hat die phraseologische Einheit: bis zu etwas ist noch weiter Weg.

Aber besonders viele phraseologische Einheiten gehören zu der fünften Gruppe Art und Weise: auf diesem (direkten, glatten, gütlichem, halben, kaltem, krummem, falschem, unrechtem, bestem) Weg sein; er ist nicht gut bei Wege; etwas in die Wege leiten; sich auf halbem Wege treffen; etwas in die Wege leiten; etwas ohne Weg und Steg machen. Die Phraseologismen haben sowohl positive, als auch negative Bedeutungen.

Die Verwendung der phraseologischen Einheiten im Sprechen macht die Sprache ausdrucksvoller und reicher, deshalb ist es sehr wichtig, im Fremdsprachenunterricht dieses Thema zu berücksichtigen.

### **LITERATUR**

1. Гак В.Г. Языковые преобразования. - М.: Языки русской культуры, 1998. – 768 с.
2. Німецько-український фразеологічний словник / Упор. В.І. Гаврись, О.П. Пророченко. – в 2-х т. – Т. 2. - К. : Радянська школа, 1981. – С. 305-308.
3. Телия В.Н. Русская фразеология. Семантический, прагматический и лингвокультурологический аспекты. - М.: Языки русской культуры, 1996. – 288 с.

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### **EUPHEMISMS AS A MEANS OF MANIPULATION IN POLITICAL DISCOURSE**

Political discourse is an important factor in social and cultural life. Political communication plays a decisive role in the process of shaping public opinion and is a powerful means of speaking influence on the listener. New words are important components in the political discourse, because of the need to nominate new realities and the need to use vial units for the nomination of problem phenomena. That's why there always are notions in political language, which are euphemised. Euphemisation is a process of the substitution of a mild, undirect or vague expression for one thought to be offensive, harsh or blunt.

Euphemisms have a significant manipulative potential, caused by such factors:

- euphemisms conceal the true nature of the phenomenon through the creation of a neutral or positive connotation (the hidden method of transmission of the information);

- the recipient usually does not have time to distinguish euphemisms from the context and comprehend them;
- a small part of the recipients is aware of the phenomenon of euphemism (philologists, journalists); without knowing the essence of the phenomenon itself, it is impossible to understand whereby this phenomenon can manipulate people.

Euphemisms as a means of manipulation are often used precisely in political discourse because of the constant desire of politicians to influence the mass consciousness. A kind of "political diglossia" appeared in modern English, and thus there are two different languages - the language of official propaganda and ordinary language [5]. Through its orientation towards achieving a certain pragmatic effect, modern political communication is impossible without the use of euphemisms of an argotheistic character and the so-called "doublespeak" (and broadcast), which have become widespread due to the means of mass media. For example: *special action (the rounding up and murdering of the Jews)*, *to steer it (to dishonestly affect the placement of business)*, *stool pigeon (a police informer)*, *surgical strike (a bombing raid)*, *stoppage (a strike by employees)* [3].

The use of ideological euphemisms in the field of politics is aimed at achieving the approval of a certain organization of the society through propaganda and planting views that are beneficial to the ruling political regimes [4]. In this aspect, they are very close to diplomatic euphemisms.

Euphemisms replace words and expressions that are undesirable for interlocutors in a particular situation and could cause negative reaction. Euphemisms have a neutral connotation and correspond to the main goal of the process of euphemisation - to avoid conflicts in communication and to hide negative facts. The administration of the United States President is successful in using the phenomenon of euphemisation of the language. For example: *"outliers (states like North Korea and Iran); man-made disasters, countering violent extremism (terrorism); former clients of Obama Justice Department of lawyers (detainees in Guantanamo); issue (a great problem)*.

Political euphemisms can be divided into military-political, diplomatic and ideological [2]. The main factors causing the phenomenon of political euphemism are: 1) a high level of social culture and public behavior; 2) the ideology and mentality of society; 3) commercial interest in a person as a potential client [1].

Ideology, propaganda, manipulation of consciousness, informational and psychological effects are integral elements of communication. Policies and the media use euphemisms in order to achieve and realize their own goals for the demonstration facts and events in those tones that are in line with their subsequent strategies and interests. The use of euphemisms is often explained by the desire to be politically correct, since the ideology of political correctness is the main feature of English-language political discourse. However, not all people can recognize in euphemisms the ability to manipulate the mind of the recipient. Usually this fact is successfully concealed.

## REFERENCES

1. Baskova, Yuliia. 2006. "Evfiemizmy kak Sriedstvo Manipulirovaniia v Yazykie SMI (na Matierialie Russkogo i Angliiskogo Yazykov)". PhD diss., Krasnodar. <http://www.bibliofond.ru/view.aspx?id=62492>.
2. Velykoroda, Vira. 2007. "Semantychni ta Funktsionalno-Prahmatychni Kharakterystyky Evfemizmyv v Anhliiskii Movi". PhD diss., Lviv
3. Holder R. W. Oxford Dictionary of Euphemisms / R. W. Holder. – Oxford : Oxford University Press Inc., 2008. – 432
4. Tkhir, Vira. 2004. "Osoblyvosti Utvorennia Politychnykh Evfemizmyv (na Prykladi Ideolohichnykh Evfemizmyv)". *Humanitarnyi Visnyk. Seriia: Inozemna Filolohiia* 8: 313–315. Cherkasy
5. Trietiakova, Tatiana. 2004. "Opyt Lingvistichieskogo Analiza Argumentatsyi v Politichieskom Dialoge". *Kommunikatsiia i Obrazovaniie*, 299–320. Sankt-Pietierburg: Sankt-Pietierburgskoie Filosofskeie Obshchestvo

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## MOVING GAMES AS A MEANS OF TEACHING PRIMARY SCHOOL PUPILS ENGLISH

Nowadays reforming the educational system requires new generation of English teachers for new Ukrainian primary school. In the teaching of English there are various ways to optimize learning activities. One of the most effective means in teaching primary school pupils English is moving games [4].

This issue was examined by many teachers, psychologists and scientists: D. Elkonin, A. Spivakovska, H. Lublinska, A. Bohush, I. Zymnia, A. Panova, L. Vyhotsky, T. Oliynyk). In the opinion of these authors, the game is a unique activity that is not only exerts a great influence on the child's mental development, but also transforms learning into a joyful process and promotes the learning certain linguistic material, the forming the skills of foreign-language pupils' speaking [2].

The problem of using moving games in the process of developing junior pupils' speaking skills is important, because at present it is not enough for pupils to have the amount of theoretical knowledge, they need practical skills in English communication in various life situations, critical and creative thinking.

The moving game activates the children's desire to contact each other and the teacher, creates conditions for equality in the language partnership, destroys the traditional barrier between the teacher and the child. The game allows being timid, unsure of yourself, to talk to children and thereby overcome the barrier of

uncertainty. During games pupils master the process of English-speaking communication, including the ability to start a conversation, to support it, to agree with the opinion or to refute it.

Almost all time during the moving game its participants (both speakers and listeners) should be active because they should understand and remember the partner's replica, the actions, correlate it with the situation and response to it [3].

The games are classified according to several principles, for example according to a kind of activity games are divided into: moving, intellectual (mental), labor, social, psychological [1].

Moving games is a difficult moving, emotionally colored activity. It is determined by precisely established rules that help to reveal its final or quantitative result. It is one of the most important means of comprehensive education of junior schoolchildren. A characteristic feature of moving games is the complexity of the influence on the body and on all aspects of a child's personality. During a game physical, mental, moral, aesthetic and labor education is simultaneously carried out.

Gaming activity at the English lesson is very important. The first-formers love moving games, puzzles, crossword puzzles and competitions. Therefore, a teacher's task is to create an atmosphere of friendship, trust [4].

## REFERENCES

1. Виготський Л.С. Гра і її роль у психологічному розвитку дитини // Питання психології: – 1966 – №6. – С.17-24.
2. Гра на уроці англійської мови як засіб підвищення пізнавальної активності молодших школярів [Електронний ресурс]. – Режим доступу: [[http://bagachka1.at.ua/publ/gra\\_na\\_uroci\\_anglijskoji\\_movi\\_jak\\_zasib\\_pidvish\\_hennja\\_piznavalnoji\\_aktivnosti\\_molodshikh\\_shkoljariv/1-1-0-10](http://bagachka1.at.ua/publ/gra_na_uroci_anglijskoji_movi_jak_zasib_pidvish_hennja_piznavalnoji_aktivnosti_molodshikh_shkoljariv/1-1-0-10)]
3. Дипломна робота: Методика навчання рухливим іграм в початкових класах [Електронний ресурс]. – Режим доступу: [<https://www.ronl.ru/diplomnyye-raboty/pedagogika/171767/>]
4. Ігри у вивченні іноземної мови (реферат) [Електронний ресурс]: [[http://5ka.at.ua/load/inozemni\\_movi/igri\\_u\\_vivchenni\\_inozemnoji\\_movi\\_refe\\_rat/22-1-0-22656](http://5ka.at.ua/load/inozemni_movi/igri_u_vivchenni_inozemnoji_movi_refe_rat/22-1-0-22656)]

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## **PRESIDENTIAL ELECTIONS 2019: THE STUDY OF STUDENTS' SOURCES OF INFORMATION AND KNOWLEDGE**

With the pending presidential elections in Ukraine scheduled for 2019, it is important to know where young people derive information about the elections and whether they are ready to make an informed choice.

Therefore, the purpose of our research is to find out what information sources young people use in everyday life, and which of them they consider to be reliable. Two objectives were pursued:

1. To determine the sources that young people study to learn political news, and to find out which ones they consider the most trustworthy.
2. To find out whether the respondents know who the owners of these media sources are.

The research was carried out in the form of a survey conducted by students of Political Science at Zhytomyr Ivan Franko State University, and supervised by S.V. Rudnytskyi, Doctor of Political Science, associate professor, and Kseniya Petrivna Gavrylovska, Candidate of Psychological Sciences, associate professor, who assisted the students at the final stage of analyzing and interpreting the survey results.

The respondents were asked three questions designed specifically for the purpose stated above. The first two questions were aimed at establishing the sources of information and their trustworthiness from the perspective of the respondents. The options listed the most common sources: internet, television, newspapers, radio and friends or relatives. The third question was a matching task: the respondents were asked to match the most popular mass media and their owners.

The respondents included 55 first- and second-year students (aged 17 to 20) at Zhytomyr National Agroecological University. The survey results are presented in the diagrams below. It was discovered that 38% of the interviewed derive most of the information about politics from the Internet, 42% of the respondents consider this source to be the most reliable. It is an obvious choice, since young people tend to spend almost 90% of their free time online. 33.5% of the respondents acquire information from TV, and 35.5% trust this media. 18% of students obtain

information from friends, and 23% consider this the most reliable source. Only 7% stated that they read newspapers, and 11.6% trust them. A total of 4% of the respondents listen to the news in the radio, and 7.3% find this source reliable. This once again proves that the latter information sources are not relevant when it comes to young people.

As for the students' awareness of the owners of most influential mass media, none of the respondents succeeded in matching them to the sources they controlled. Some participants (14.5%) chose not to answer this question. Considering the importance of this data, namely the ability of the mass media owners to control public opinion, we find the results of this part of the survey extremely disturbing:

- 34% of students are aware that Rinat Akhmetov is the owner of "Today Multimedia", "Ukraine" TV channel, "Segodnya" website (segodnya.ua);
- 44% of students know that Ihor Kolomoyskyi is the owner of "1 + 1" and the "UNIAN" agency;
- 34% of students know that STB, ICTV, Novy Kanal are owned by Victor Pinchuk.

38.2% of the respondents believe that the media property of Rinat Akhmetov belongs to Serhiy Kurchenko.

Having analyzed and summarized the results of the research, we can state that young people obtain information about politics from the Internet and consider it the most reliable source. Few people know the names of the people in Ukraine who own or control the most influential Ukrainian media. Students rarely read newspapers or listen to the radio. Many of them trust friends and relatives, despite the fact that such information may be distorted or subjective.

The results of the survey demonstrate that young people are not thorough in collecting and analyzing the information they process to make an informed decision during the pending presidential elections.

Table 1. Sources of information

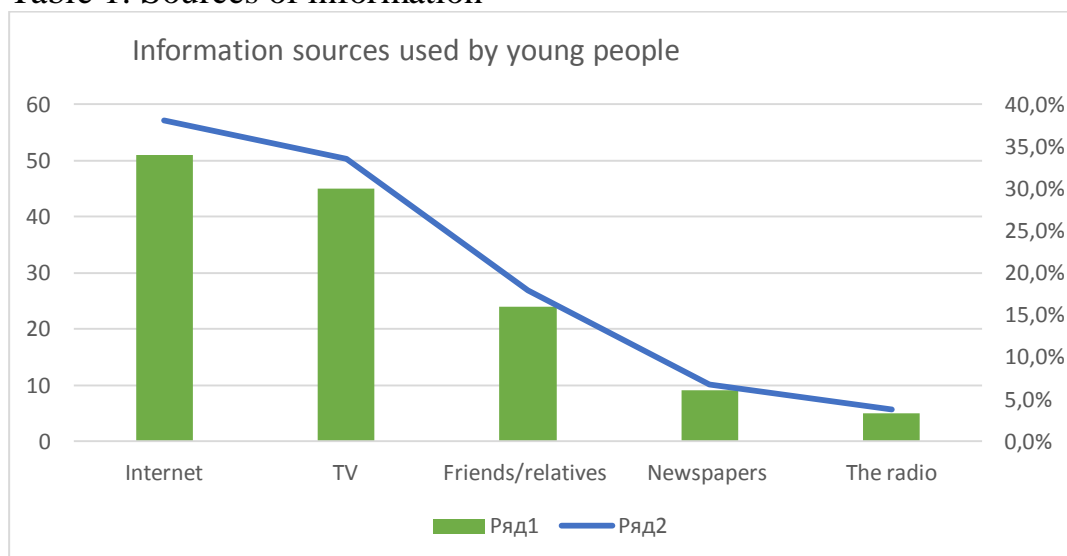
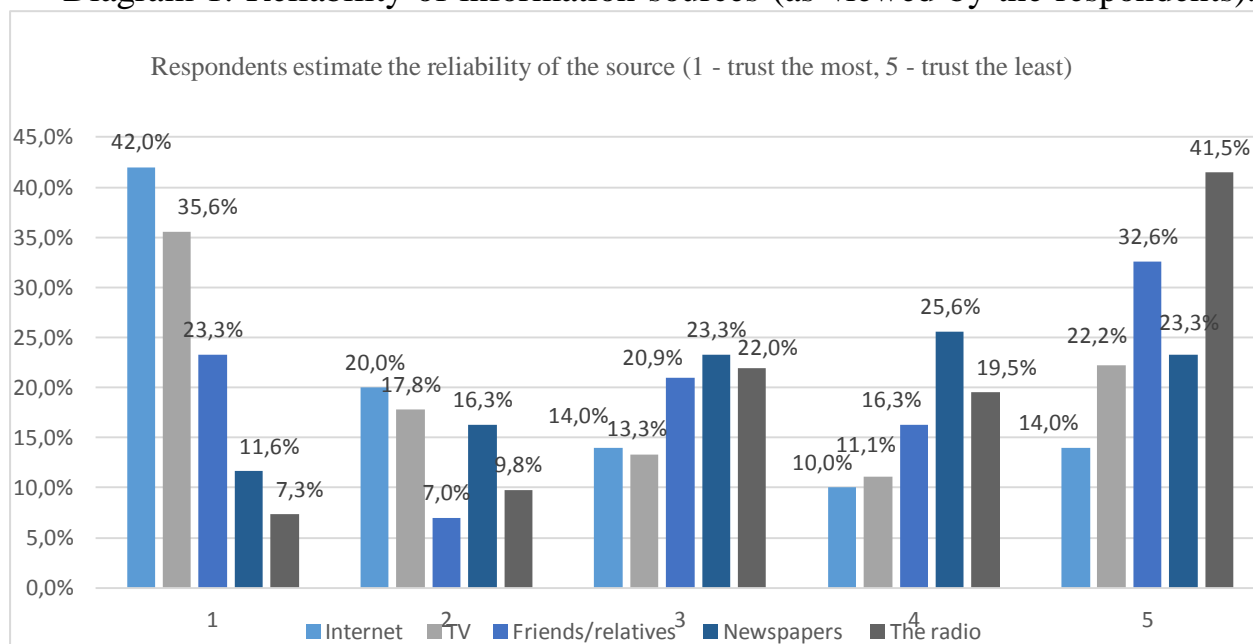




Diagram 1. Reliability of information sources (as viewed by the respondents).



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## DIE UKRAINE UND DAS UKRAINISCHE VOLK IM FOKUS DER ERFORSCHUNGEN VON J. CH. VON ENGEL

Während der Entwicklung des ukrainischen unabhängigen Staates ist es notwendig, den historisch bedingten Weg des ukrainischen Volkes, seinen Status in der Welt, die Beziehungen zu Westeuropa, die Reflexion seines Lebens, seiner Kultur sowie Geschichte durch Vertreter anderer Länder in den vergangenen Jahrhunderten gründlich zu erforschen. Die Analyse des Werkes von Johann Christian von Engel «Die Ukraine und die ukrainischen Kosaken», das das Thema der Geschichte und Kultur der Ukraine betrifft, ist von einer großen Bedeutung für die Entwicklung der historischen Wissenschaft der Ukraine.

**Das Ziel des Artikels** besteht in der Feststellung von charakteristischen Besonderheiten der Erforschung der Geschichte der Ukraine sowie des ukrainischen Volkes in den Werken von Johann Christian von Engel.

Johann Christian Engel wurde in der Region namens Spysch in einer protestantischen bürgerlichen Familie geboren. Zuerst lernte er in Leutschau, danach absolvierte er die Akademie in Petersburg. Seit dem Jahre 1788 studierte er die Geschichtswissenschaften an der Göttinger Universität. Engel interessierte sich für Philosophie und Geschichte. Während des Studiums an der Universität war Engel von Schlözer betreut, in dem er unter seiner Leitung wichtige Kenntnisse über die Geschichte der Ukraine gewann. Im Jahre 1791 war er mit der

Dissertation in der lateinischen Sprache fertig. Die Dissertation hieß «*Commentatio de religione veterum Hungarorum*», in der die ukrainischen Kosaken einen wichtigen Platz einnahmen. Sein zweites Werk über die Ukraine war die «Geschichte von Halitsch und Wladimir», das 1792-1793 in zwei Bänden veröffentlicht wurde. Die beiden Bücher wurden zu einem Fundament für die grundlegende Arbeit von Engel «Geschichte der Ukraine und der ukrainischen Kosaken», welche im Jahre 1796 in der deutschen Sprache in Halle veröffentlicht wurde. Dieses Werk belegt im wissenschaftlichen Nachlaß des Wissenschaftlers eine besondere Stelle. Die Monographie wurde zur Spitze der westlich-europäischen Geschichtsschreibung der Geschichte der Ukraine in der Aufklärungsperiode [2, S. 6].

Das Buch beginnt mit der Einleitung, in der Engel beweist, dass es von einem großen Forschungsinteresse ist, die Geschichte der Ukraine aus einer gesamteuropäischen Perspektive zu betrachten. Dann interpretiert Engel den Namen «Ukraine» und die Zeit seines Erscheinens. Er schreibt, dass Litauen das Großherzogtum Kiew besog und es in eine Grenzprovinz umsetzte, die eine Mauer zwischen Litauen und den Invasoren-Tataren bildete. Man nannte diese Provinz als Peripherie, weil sie an der Grenze lag. Auf solche Weise erschien der Name (die «Ukraine») und seit dieser Zeit beginnt die Geschichte des Landes, das diesen Namen bekam [4, S. 367].

In der Einleitung stellte Engel die Periodisierung der Geschichte der Ukraine, die in Europa vorwiegend bis zur Neuzeit gebraucht wurde. Man unterscheidet drei Perioden:

1.«Die Ukraine unter der Leitung von Litauen» (in den Jahren 1320-1569), die untere Grenze – die Kämpfe in Irpin, wo Gedimin Kiew besog, und die obere Grenze – die Lubliner Union, unter der alle ukrainischen Länder dem Staat Polen unterlagen.

2.«Die Ukraine unter der Leitung von Polen»(in den Jahren 1569-1654).

3.«Die zwischen den Polen und Russen geteilte Ukraine» (in den Jahren 1654-1795) [1, S. 51-52].

Zusammenfassend muss es betont werden, dass sich das Werk von Engel über die Geschichte der Ukraine von seinen Vorgängern vor allem dadurch unterscheidet, dass es professionell ohne Mythologisierung geschrieben wurde. Der Historiker machte einen analytischen Ansatz zur Analyse von Literaturquellen, systematisierte und erforschte den gesamten Stoff der Geschichte der Ukraine von der Antike bis zum Ende des 18. Jahrhunderts, in der Periodisierung der Geschichte der Ukraine erarbeitet wurde. Das heißt, dass die vorliegende Monographie unter den Werken seiner Zeitgenossen das vollständigste Werk ist, einen viel größeren Zeitraum umfasst, auf einer großen Quellenbasis beruht sowie logisch strukturiert ist. Trotz einiger Unstimmigkeiten, widersprüchlicher Meinungen sowie Schätzungen muss die vorliegende wissenschaftliche Arbeit unbedingt in der ukrainischen Sprache übersetzt werden.

## LITERATURVERZEICHNIS

1. Brytskyi P.P., Bochan P.O. Die Deutschen, Franzosen und Engländer über die Ukraine und das ukrainische Volk in den 17.-18. Jahrhunderten. – Chernivtsi: Tekhnodruk, 2011. – 308 S.
2. Brytskyi P. P. Die Angaben der deutschen Wanderer und Boten – eine wichtige Quelle der Geschichte des ukrainischen Volkes / P. P. Brytskyi, P. O. Bochan // Pamiat stolit. – 2003. – № 6. – S. 4-10.
3. Lytvynenko M. A. Die Notizen der Wanderer Ende des 18. Jahrhunderts – Anfang des 19. Jahrhunderts wie eine Quelle der Geschichte der Ukraine / M. A. Lytvynenko // Pytannia istorii SRSR. – 1974. – Vyp. 18. – S. 100-108.
4. Nalyvaiko D. S. Mit den Augen des Westens: Die Rezeption der Ukraine in Westeuropa in 11.-18. Jahrh.. / D. S. Nalyvaiko. – K. : Osnovy, 1998. – 578 s.
5. Sichynskyi V. Die Fremden über die Ukraine. – K: Dovira, 1992. – 255 s.

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## WHAT MOTIVATES GENERATION Z?

“Socially awkward generation”, “Information is readily available”, “Spoilt for choice” – it is all about Generation Z. These are the results of the issue about “how your generation is different from previous generations” based on the conducted survey of American students. Ukrainian students also believe that the main differences are: “they are wiser, we are smarter”, “emotionally stable”, “with liberal views” and “open-minded” according to own research.

They are considered “native netters”, socially and politically far more liberal in regards to multiculturalism and have been exposed to more multicultural aspects of life. On the other hand, Gen Z is likely to be more pessimistic about stability due to the fact that they grew up with the backdrop of terrorism and the global recession. It quickly taught them – nothing should be taken for granted, making this generation the most conscious and the best investors. That is why it is also called PostMillennials, iGeneration, Plurals or Homeland Generation.

There are no precise dates for Gen Z, but most sources define them as people who were born in 1995-2012. However, each generation is determined not by years, but by differences in views, values, beliefs, needs and behavior patterns because they grow up in the same socio-historical environment.

If today Gen Z makes up 1 percent of workforce, this number is projected to grow to 7 percent of workers by 2020.

For Gen Z the greatest motivation is opportunities for advancement (34%), the next ones are money (28%) and the significance of work (23%), while Gen Y is

primarily motivated by money (38%), followed by the possibility of promotion (30%) and the importance of work (15%).

Ukrainian students had multiple choice and determined money as one of the biggest motivators (70%), but we believe that this is due to insufficient provision of money now and the desire to be self-dependent, followed by the possibility of self-improvement (38 %), career growth (30%) and meaningful work (24%).

According to the survey conducted by the American organization Randstad, Gen Z is highly motivated by the thought of one day starting its own businesses – 17%. This younger generation is also much more in tune with their marketing IQ, intrinsically knowing what would sell.

Ukrainian students answered that they would work only for themselves (68%), while others did not have such intentions (27%).

Therefore, it is worth focusing on maintaining this entrepreneurial spirit by offering Gen Z employees projects that are directly related to the success of the company and by giving them a dose of autonomy. They like to see the evolution of an idea from inception to tangible impact.

It is commonly known that Gen Z representatives can work on multiple tasks simultaneously, quickly and efficiently shift from one to another. 54% of Ukrainian students can do this easily, for the rest some efforts need to be made (41%).

As it was already mentioned, unlike Gen Y (38%), only 28% of Gen Z said money would motivate them to work harder and stay with their employer longer, as the younger generation wants to demonstrate their creativity and skills by making money of secondary importance.

Contrary to the assumption that younger workers want “constant connection” to technology, the majority of Gen Z respondents say they prefer in-person communications with managers (51%), as opposed to emailing (16%) or instant messaging (11%). Ukrainian students also prefer personal communication (70%), while social networks and instant messaging amount to 30% each.

They want to talk face to face and know that their words are heard, as well they expect some feedback.

Thus, the manager should establish relationships with employees, show a sufficient interest in their personal growth and seek to improve their strengths.

Even more than Gen Y, Gen Z is hypersensitive to ageism. They believe that the workplace should be less about age and more about ideas and contributions. They are eager to learn and aware of their status as newbies to business, but they want the chance to be heard and taken seriously, not staying aloof.

It is worth giving them an idea of the impact that their work has on a company.

52% of Gen Z also report that honesty is the most important quality for being a good manager, so they should not embellish the truth and hide information.

Therefore, Gen Z is the people who are more liberal in all aspects of human life; they are ultrafast in seeking out and assimilating of information, as well as more deliberated over political, economic and social issues. Although iGeneration is not well-investigated, but according to the data, it already differs from the previous one and begins to take actively working places. So for managers there is a

difficult task – to find the necessary leverage to motivate Gen Z. Here are some tips:

- To ensure personal growth to a greater extent than wage growth;
- To give freedom of action and opportunity to see the final result of their work;
- To establish relationships and help find themselves at work;
- To give a possibility to demonstrate their creative abilities;
- Not to discriminate by age.

## **REFERENCES**

1. 6 Secrets to Managing Gen Z Right /Genevieve Fish/ – 2016. – Source: <http://www.mydomaine.com>.
2. Millennial Branding and Randstad US Release First Worldwide Study Comparing Gen Y and Gen Z Workplace Expectations /Dan Schawbel/ – 2014. – Source: <http://millennialbranding.com/>.
3. Raw data for generation Z – 2016. – Source: <http://gamificationplus.uk>.
4. Who are Generation Z and how can we best motivate them? /Shane Fumagall/ – 2016. – Source: <http://gamificationplus.uk>.

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## **PARTICIPATION OF AMERICAN MILITARY VOLUNTEERS IN THE ANGLO-BOER WARS OF 1899-1902**

Anglo-Boer War of 1899 – 1902 was the British invasive war against the Burundian republics of Orange and Transvaal, one of the first wars of the era of imperialism. In this war, Great Britain sought to expand and unify its colonial possessions in Africa, to capture the fields of diamonds and gold [1, p. 130].

The "civilized" war had its charm for certain people who saw the battle as a kind of invigorating blood adventure. And in the Boer army there were many foreigners who took up arms for the sake of actual war, but, nevertheless, most of the volunteers joined the Boers, sincerely wishing to help the cause of the republics [3, c. 220]. Soon after the outbreak of the war, in America an entire movement emerged to assist the Boers and send the Doberians to South Africa. The states of Illinois, Ohio, Indiana, Missouri, Wisconsin, Michigan and Minnesota were particularly active. The movement faced rigorous opposition of D.Paunsefot, the

British ambassador in Washington, and the American government [2, c. 171]. The Anti-British sentiment was also widespread among Americans of Irish and German descent. In connection with the war, mass protests against the Anglophile policy of the republican government were held in the USA [2, p. 172]. Promoting the seizure of the Boer republics by Britain, the American imperialists profited from the war. During the war years, the export of goods from the United States to England and its South African colonies increased significantly. The American government ignored repeated protests of the Boers on this matter. While the US uprated the neutrality of the Aligned Movement of the English aggression in South Africa, the United States forced England to make very important concessions to them [2, c. 175].

None of the foreigners who served in the Boer army received cash compensation. They were supplied with horses, food and equipment at the expense of the government at the rate of 35 pounds per volunteer. Before getting permission to join the commando and issuing equipment, the volunteer was obliged to take an oath of loyalty to the Republic [3, c. 222]. Most Americans spent the first months of the war in the Boer commandos, and did not attempt to create their own detachment. Twenty people joined the Irish brigade, organized by Colonel Blake. Blake and his people took part in almost all showdowns in Natal [3, c. 228]. During the Natal campaign, John Hassel organized a squad of American Scouts. After spending five years in exploratory and hunting expeditions in various parts of South Africa, Hassel had an excellent knowledge of the country, which distinguished him from other commanders of the foreign legion. John Shea was the Lieutenant of Scouts, having gained military experience back in the Spanish-American War. Shea tried to introduce an American army system in the Boer army, but his attempt failed miserably. The American Scouts were joined by about half a dozen American correspondents who put down their pen to take up their rifles, including George Parson of Collier's Weekly. Among the Americans who fought in the Boer commando, was Otto von Lossber, born in Germany and trained in the German army. Already a citizen of America, he participated in the Puerto Rican campaign. Arriving in the Transvaal in March 1900, a month later he was already in control of the artillery that crushed Colonel Broadwood near Sannas Post [3, c. 229]. Dozens of foreign officers arrived in the country in order to obtain command posts in order to gain fame and experience, but none of these burghers met the needs of the campaign. The Boers considered their system of warfare to be the most suitable for these conditions and only laughed at the proposals of foreign officers to teach them something. Every European officer was kindly received in Pretoria and camps, but he was offered to enroll as an ordinary burgher. Before the war, the Boers had a small number of foreigners, but they did not play a special role. Several European officers, on behalf of the governments of the republics, trained young Boers in artillery, and this activity was really valuable, but repeated statements by the British press that each commando was headed by a foreign officer were completely untrue [3, p. 220].

So, despite the resistance of the authorities, American volunteers, supporters of the Boers still showed a desire to fight for the interests of the like-minded people.

## REFERENCES

1. Давидсон А.Б. Непомнящий Н. Н. Южно – Африканская Республика. Весь мир в одной стране – М. : Вече, 2010. – 320 с.
2. Никитина И. А. Захват бурских республик Англией (1899 – 1902 гг.) М.: Наука, 1970. – 218 с.
3. Тодер О. Народ дядюшки Пауля. Трансвааль и Оранжевая Республика в англо – бурской войне 1899 – 1902 годов Донецк: 2012. – 246 с.

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## UNSATURATED AMIDES AND THEIR SYNTHESIS ACCORDING TO THE WITTIG REACTION

Organic synthesis makes possible the synthesis of the number of compounds with new properties and the ability of application in the different spheres of life.

Unsaturated compounds and their derivatives are the bases of polymeric materials. Amides of the unsaturated hydrocarboxylic acids as carriers of alkene linkage are one of possible variants for the synthesis.

In the Wittig reaction (a synthesis of unsaturates with double linkage  $C = C$ ) phosphonium salts and their products that are formed under the influence of alcididenphosphoranes or phospholipids are used.

Phosphonium salts are the product of phosphines-organic halogen derivatives interaction. Phosphonium salts containing amido groups (non-substituted or substituted) are required for the preparation of unsaturated amides with the help of this method. It is possible to get such phosphonium salts from the amides of chloroacetic or bromoacetic acids.

The synthesis of phosphonium salts was realized due to acylation, particularly, bromoacetyl bromide acylation of benzocaine. In the same way we got such amides due to chloroacetyl chloride or bromoacetyl chloride acylation of corresponding amines.

## REFERENCES

1. Маеркер А. Реакция Виттига / А. Маеркер // Органические реакции. – М.: Мир, 1967. - т. 14. – С. 287 - 382.
2. Смит В., Бочков А., Кейпл Р. Органический синтез / В. Смит, А. Бочков, Р. Кейпл // Наука и искусство: Пер. с англ. – М.: Мир, 2001. – 573 с.

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## **AUDITORY ILLUSIONS IN MODERN FILM INDUSTRY AND MUSIC**

Auditory illusions are one of the most entertaining phenomena, based on the peculiarities of the structure of our brain. Unlike optical illusions, they are not so easy to recognize. The listener hears either sounds which are not present in the stimulus, or "impossible" sounds. Auditory illusions highlight areas where the human ear and brain, as organic survival tools, differ from perfect audio receptors (for better or for worse).

Pitch is a perceptual property of sounds that allows their ordering on a frequency-related scale, or more commonly, pitch is the quality which makes it possible to judge sounds as "higher" and "lower" in the sense associated with musical melodies.

However, one cannot model pitch as a one-dimensional phenomenon. A problem with such a model is that it cannot account for perceived similarities between pitches that are not next to each other on a one-dimensional scale. An octave is the interval between two pitches when the frequency of one equals twice the frequency of the other. All notes of a certain type coincide if one views the helix from above. The helix becomes a circle, specifically, the chroma circle.

In 1964 Roger Shepard surmised that if one could take pitch height out of the equation, listeners would hear only chroma. He created what have come to be known as Shepard tones — tones that have specific chroma (C, B-flat, etc.) but no specific height. When listeners hear an ascending chromatic scale using Shepard tones, they hear the scale constantly rising, but never getting any higher in reality.

As a side effect the Shepard tone by its nature builds tension and suspense, hence it is used in music, movies, video games etc. For example it is very commonly used in electronic dance music. As the so called 'build-up' in progressive dance music is a very important aspect of the musical structure, the Shepard tone can be used as an effect to raise the song's energy to a certain level.

It was used in the ending of the song "Echoes" from the album Meddle (1971) by English rock band Pink Floyd. There a Shepard tone fades out to a wind sound, which creates special mood. Also, the Austrian composer Georg Friedrich Haas uses a Shepard tone effect towards the end of his orchestral piece in vain (2000/02).

In the film The Dark Knight and its follow-up The Dark Knight Rises, a Shepard tone was used to create the sound of the Batpod, a motorcycle which the



filmmakers didn't want to change gear and tone abruptly but to constantly accelerate. Richard King, the sound designer behind *The Dark Knight*, said that "Chris [Nolan] had the idea that it should never shift, that it should keep ascending in pitch like an unstoppable force, we had an idea to use a concept called The Shepard Tone." The team later captured the sounds from electric race cars and Tesla models to find the base pitch to create the Bat-Pod's Shepard Tone.

It is being used a lot in Hans Zimmer productions (*Interstellar*, *Dunkirk*). For example, in the *Dunkirk*, a Shepard tone is used to create the illusion of an ever increasing moment of intensity across intertwined storylines.

## REFERENCES

1. Shepard, Roger N. (December 1964). "Circularity in Judgements of Relative Pitch". *Journal of the Acoustical Society of America*. 36 (12): 2346–53. doi:10.1121/1.1919362.
2. Deutsch, Diana (1986). "A musical paradox" (PDF). *Music Perception*. 3: 275–280. doi:10.2307/40285337.
3. Lerdahl, Fred (2001), *Tonal Pitch Space*, Oxford University Press, ISBN 0-19-505834-8

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## IMPACT OF GOODS AND SERVICE TAX (GST) ON INDIAN ECONOMY

The Goods and Services Tax (GST) is a vast concept that simplifies the giant tax structure by supporting and enhancing the economic growth of a country. GST is a comprehensive tax levy on manufacturing, sale and consumption of goods and services at a national level [1]. The Goods and Services Tax Bill or GST Bill, also referred to as the Constitution (One Hundred and Twenty-Second Amendment) Bill, 2014, initiates a Value added Tax to be implemented on a national level in India. GST will be an indirect tax at all the stages of production to bring about uniformity in the system.

On bringing GST into practice, there would be amalgamation of Central and State taxes into a single tax payment. It would also enhance the position of India in both, domestic as well as international market. At the consumer level, GST would

reduce the overall tax burden, which is currently estimated at 25-30%. Under this system, the consumer pays the final tax but an efficient input tax credit system ensures that there is no cascading of taxes- tax on tax paid on inputs that go into manufacture of goods [2].

To avoid the payment of multiple taxes such as excise duty and service tax at Central level and VAT at the State level, GST would unify these taxes and create a uniform market throughout the country. Integration of various taxes into a GST system will bring about an effective cross-utilization of credits. The current system taxes production, whereas the GST will aim to tax consumption.

Experts have enlisted the following benefits of GST:

1. It would introduce two-tiered One-Country-One-Tax regime.
2. It would subsume all indirect taxes at the center and the state level.
3. It would not only widen the tax regime by covering goods and services but also make it transparent.
4. It would free the manufacturing sector from cascading effect of taxes, thus by improve the cost-competitiveness of goods and services.
5. It would bring down the prices of goods and services and thus by, increase consumption.
6. It would create business-friendly environment, thus by increase tax-GDP ratio.
7. It would enhance the ease of doing business in India.

Why no to GST?

8. However, the question is: is the picture as rosy as it is portrayed?
9. Wall Street firm Goldman Sachs, in a note 'India: Q and A on GST
10. — Growth Impact Could Be Muted', has put out estimates that show that the Modi Government's model for the Goods and Services Tax (GST) will not raise growth, will push up consumer prices inflation and may not result in increased tax revenue collections [3].

11. There appears to be certain loopholes in the proposed GST tax regime which may be detrimental in delivering the desired results. They are:

12. India has adopted dual GST instead of national GST. It has made the entire structure of GST fairly complicated in India. The centre will have to coordinate with 29 states and 7 union territories to implement such tax regime. Such regime is likely to create economic as well as political issues. The states are likely to lose the say in determining rates once GST is implemented. The sharing of revenues between the states and the centre is still a matter of contention with no consensus arrived regarding revenue neutral rate.

13. Chief Economic Advisor Arvind Subramanian on 4 December 2015 suggested GST rates of 12% for concessional goods, 17-18% for standard goods and 40% for luxury goods which is much higher than the present maximum service tax rate of 14%. Such initiative is likely to push inflation.

14. The proposed GST structure is likely to succeed only if the country has a strong IT network. It is a well-known fact that India is still in the budding state as far as internet connectivity is concerned. E-commerce does not leave signs of the transaction outside the internet and has anonymity associated with it. As a

result, it becomes almost impossible to track the business transaction taking place through internet which can be business to business, business to customer or customer to customer. New techniques can be developed to track such transactions but until such technologies become readily accessible, generation of tax revenue from this sector would continue to be uncertain and much below the expectation. E-commerce has been insulated against taxation under custom duty moratorium on electronic transmissions by the WTO Bali Ministerial Conference held in 2014 [4].

15. Communication is considered to be necessity and one cannot do without communication. In modern times, communication has assumed the dimension of telecommunication.

16. The proposed GST regime appears to be unfavorable for telecommunication sector as well [5].

17. The proposed GST regime intends to keep petroleum products, electricity, real estate and liquor for human consumption out of the purview of GST. It is a well-known fact that petroleum products have been a major contributor to inflation in India. Inflation in India depends on how the government intends to include petroleum products under GST in future.

18. Electricity is essential for the growth and development of India. If electricity is included under standard or luxury goods in future then it would badly affect the development of India. It is said that GST would impact negatively on the real estate market. It would add up to 8% to the cost of new homes and reduce demand by about 12%.

The proposed GST regime “would be capable of being levied on sale of newspapers and advertisements therein”. This would give the governments the access to substantial incremental revenues since this industry has historically been tax free in its entirety” [6]. Asian countries which implemented GST all had witnessed retail inflation in the year of implementation [6, 7].

The proposed GST regime is a half-hearted attempt to rationalize indirect tax structure. More than 150 countries have implemented GST. The government of India should study the GST regime set up by various countries and also their fallouts before implementing it. At the same time, the government should make an attempt to insulate the vast poor population of India against the likely inflation due to implementation of GST. No doubt, GST will simplify existing indirect tax system and will help to remove inefficiencies created by the existing current heterogeneous taxation system only if there is a clear consensus over issues of threshold limit, revenue rate, and inclusion of petroleum products, electricity, liquor and real estate. Until the consensus is reached, the government should resist from implementing such regime.

## REFERENCES

1. The Economic Times (2009) Featured Articles from the Economic Times.
2. Gst India (2015) Economy and Policy.
3. Mehra P (2015) Modi govt.’s model for GST may not result in significant growth push. The Hindu.
4. Sardana M (2005) Evolution of E- Commerce In India Part 3.

5. TRAI (2015) Highlights of Telecom Subscription Data as on 28th February.
6. Patrick M (2015) Goods and Service Tax: Push for Growth. Centre for Public Policy Research (CPPR).
7. SKP (2014) GST: Impact on the Telecommunications Sector in India.

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## **ECOLOGIZATION OF AGRICULTURAL PRODUCTION**

In the twentieth century there was a rapid transformation of agriculture into agro-industrial production with all the consequences of mechanization and chemicalization. The industrialization of agrocomplexes, the widespread use of mineral fertilizers and pesticides, increased the specific productivity of artificial ecosystems, but reduced their environmental friendliness and the ecological quality of agricultural products [1]. To overcome this trend, a set of measures is needed that, in addition to the requirements of greening, characteristic of industry, also includes:

- limiting the use of salt forms of mineral fertilizers and replacing them with specially transformed organic fertilizers;
- minimization of the use of pesticides and maximum replacement with their biological pest control agents;
- exclusion of hormonal stimulants and chemical additives when feeding animals;
- extreme caution in the use of transgenic forms of agricultural plants and other products of genetic engineering;
- application of the most gentle methods of processing the land.

Modern methods of greening are increasingly used in agriculture.

The practice of applying these methods has shown that they contribute to an increase in the production of agricultural products. But not all methods are safe for humans, animals, plants [2].

I would like to note that forcing the implementation of conservation and nature-improving methods and measures allows, along with the environmental effect, to obtain significant economic benefits. The main reasons for the transition to ecological agriculture are as follows: 1) ecological food crises of the last decade and growing distrust of conventional products. A huge number of preservatives and chemicals contained in most products, led to illnesses, decreased immunity; 2) public unrest about the harm of genetically modified components contained in food products.

In recent times, there have been clearly visible significant changes in the management of this sector of the economy:

- 1) the creation of sustainable systems for the cultivation of organic matter;
- 2) protection of the environment and conservation of biodiversity;
- 3) careful quality control to ensure the consumer's confidence in the acquisition of environmentally friendly products;
- 4) the need to clearly adhere to EU standards for participating in the export of food products to the European market [2].

Along with high ecological and economic efficiency, the greening of agriculture also has a huge social effect. This is manifested, first of all, in improving the health of the population as a result of increasing consumption of organic agricultural products, reducing pollution of water and land resources, and the air basin.

## REFERENCES

1. Ecologization of agrarian production: modern challenges and perspectives of development [Electronic resource]. – Режим доступа: [http://eapk.org.ua/sites/default/files/eapk/15\\_05\\_43-47.pdf](http://eapk.org.ua/sites/default/files/eapk/15_05_43-47.pdf) – Date of access: 19.02.2018.
2. Беларусь хочет внедрять в АПК безотходные технологии со щадящим режимом потребления ресурсов [Electronic resource]. – Режим доступа: <http://agriculture.by/news/apk-belarusi/belarus-hochet-vnedrjat-v-apk-bezothodnye-tehnologii-so-schadjaschim-rezhimom-potreblenija-resurov> – Date of access: 25.02.2018.

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## THEORETICAL AND METHODOLOGICAL BASIS OF THE MACHIAVELLIANISM STUDY

The problem of "machiavellianism" drew the attention of the psychologists who conduct research in the field of social psychology not so long ago. The concept of "machiavellianism" was originally introduced to refer to political activities that neglect morality. In daily use this term, usually applied in figurative meaning, correlates with the concepts of deceit and treachery. Nowadays, this pattern of behavior has been studied in psychology as a phenomenon, and the term was used for designation of corresponding personal characteristics, not related to political science. In psychological science, those who first studied the

phenomenon of Machiavellianism were the American psychologist G. Christie and his student F. Hayes, and the Russian psychologist V. Znakov.

It should be noted that attention to the notion of "Machiavellianism" in recent years significantly increased in the context of the development of life views and ideals. It can be observed through a significant increase in the number of publications on this and related issues: V. Marks, D. Would. Katunin, L. I. Ryumshina, I. Ilyin, L. V. Orlova, A. V. Karakulova, etc. However, in recent scientific psychological research, there is actually no comprehensive and systematic study of the relationship between machiavellianism and the behavioral strategies used by the person in the process of socio-psychological adaptation in modern society.

Throughout the student age, the problems of communication, understanding and self-determination are particularly relevant: in this period the mastery of the full range of adult social roles takes place (civil, professional, etc.). This period is marked by the beginning of the "economic" activity and creation of family. The disposition to manipulation can be quite a negative factor affecting the success in solving youth's vital task (finding a close friend, choosing a life partner, vocational training, etc.).

As the relationship between the level of machiavellianism and the peculiarities of interpersonal relations between students is not sufficiently studied, it contributes to the significance of the research under study.

In our research, we analyze the peculiarities of interpersonal relationships of senior students and different levels of Machiavellianism.

Machiavellianism is a tendency toward manipulative behavior. The "tendency to manipulate others" is used to signify readiness to make use of other person to achieve certain goals. The belief that people can and must be manipulated can turn into a style of behavior. If a person starts using the strategy of manipulating everywhere, regardless of the situation and the partners of interaction, then we can talk about fixing this form of behavior. This fixation can be manifested in interpersonal interaction and interpersonal relationships.

Interpersonal relationships are a set of relationships that are formed between people in the form of feelings, judgments and appeals to each other. Interpersonal interaction is the psychic contact of two or more people that has an influence on their behavior and positional mindset. It can also be defined as a system of interdependent individual actions, a way to implement a joint activity under certain conditions. Interpersonal interaction is also interpersonal communication - direct interaction of an individual with other individuals. In interpersonal communication the person chooses certain strategies. The strategy of communication is defined as a general scheme of actions of participants in the communicative process, the general plan to achieve the goal by the interlocutors. It is also necessary to take into account other components of the communicative strategy, namely, the motivational component (whether the goal is achieved by only one participant of the communication or both of them), the network component (communicative mindset can be humanistic or manipulative), the procedural component (lies in the nature of constructing communication and

manifests itself as a certain relationship between dialogue and monologue). Interpersonal relations occupy a significant place in the life of an adolescent.

On the basis of the theoretical analysis of this problem, a theoretical model of the study of the relationship between the level of machiavellianism and youth's choice of the strategy of their interpersonal relationships was suggested.

Consequently, boys and girls with high level of machiavellianism are suspicious of other people, demonstrate selfishness and aggressiveness in interpersonal relationships. With regard to sexual differences in the construction of interaction, young men more often demonstrate their strength (influence), use other people's weaknesses to their own advantage, while young women use indirect methods of influence, such as demonstration of helplessness and flattery.

Boys and girls with average level of machiavellianism in interpersonal relationships use mixed strategy of behavior. They are able to cooperate, can be characterized as gullible, are not easily influenced by other people and are not able to perform leading roles in a relationship. Young men tend to self-presentation, they are ready to cooperate, taking leadership position in a relationship and are resistant to outside influence. Girls are resistant to thoughts and hidden influences, manifest trust in relationships and have positive disposition towards others.

Girls and boys with low level of machiavellianism in interpersonal relations are friendly, altruistic and show submission to the interlocutor. Boys are truthful, ready to listen and obey the leader and prone to fall under influence. Girls are also not prone to cheating, show trust, can rely on the interlocutor and fail to notice the hidden influence on their behavior and world perception.

## REFERENCES

1. Андреева Г.М. Общение как взаимодействие // Психология влияния / хрестоматия под ред. Усманова В. - СПб.: Питер, 2001. - 512 с.
2. Братченко С.Я. Диагностика склонности к манипулированию // Братченко С.Л. Диагностика личностно-развивающего потенциала-методическое пособие для школьных психологов. Псков: Издательство Псковского областного института повышения квалификации работников образования, 1997. - С. 56-62.
3. Доценко Е. Л. Психологическое определение манипуляции / Е. Л. Доценко. // Психологический журнал, 1993. - т.14, №4-с. 132
4. Знаков В. В. Методика исследования макиавеллизма личности / В. В. Знаков. // Сибирский психологический журнал. 2001. - № 14-15. - С. 122-128
5. Знаков В. В. Макиавеллизм, манипулятивное поведение и взаимопонимание в межличностном общении / В. В. Знаков. // Вопросы психологии, 2002. - №6, - с. 45 - 59.
6. Собчик Л. Н. Диагностика индивидуально-типологических свойств и межличностных отношений: практическое руководство / Л. Н. Собчик. - СПб. : Речь, 2003. - 96 с.

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## **TAX AVOIDANCE AND TAX EVASION BY MULTINATIONAL CORPORATIONS IN UKRAINE: METHODS, SCALE AND TAX OPTIMIZATION**

To most executives, scholars, and teachers, global taxation may appear to be an obscure topic. But actually, it is central to global decision-making because most foreign direct investments and global operations these days are biased by tax considerations. Our world fragmented into more than 190 nations is in tension with multinational corporations (MNCs) that look upon the entire planet as their blank canvas and fall prey to the temptations of using different tax-avoidance and tax-evasion techniques. Of course, it is executives' fiduciary duty to maximize shareholder value by taking every advantage of provisions and loopholes available under various countries' laws. But the tax-avoidance phenomenon, amounting to hundreds of billions each year, affects global operations, supply chains, and location decisions – placing this issue at the heart of global strategy.

MNCs, as well as large companies, are often considered to be less likely to avoid taxes or have fewer opportunities to do so than, for instance, small businesses. This is due to the fact that medium and large firms are not only required to keep accounting under the law, but also cannot even operate properly without accounting for purely objective reasons. However, none of these factors have place in Ukraine. Accounting in many companies is duplicated: next to the official balance sheet there is the true one for the owner. Public joint stock companies are unpopular. Instead, large 'oligarchic' companies, for the most part, have actual immunity from genuine control by law enforcement and tax authorities. As a result, they can avoid taxes much easier.

In international practice, there are a lot of different both legal and illegal ways of tax burden reductions: transfer pricing, royalty payments, intracorporate loans, concealment of income, and so on. Implementations of these or other techniques are quite logical: profits maximization. However, it is important to say that tax-evasion methods (illegal tax avoidance) are usually applied only by those who have either nothing left to lose, or influential friends, as litigations or bad news on the issue may result in the stock prices fall and the outflow of investors. Therefore, most MNCs prefer applying tax-avoidance techniques. And our country is not an exception [1].

According to my research, there are three main tax-avoidance methods that have become very popular among MNCs in Ukraine. The first and the largest one is the use of offshore schemes. Here Ukraine has not lagged far behind from the world trends. By applying this approach the biggest 50 MNCs in our country



shifted approximately 15 billion dollars (38% of the total exports) to subsidiaries located in lower-tax jurisdictions in 2015. Transferring money to offshore states, such as Ireland or Bermuda, has become one of the routine tasks for financial managers. Under the alternative calculations of the Global Financial Integrity – the international organization – about 116 billion dollars were withdrawn from Ukraine without tax deductions during 2004-2014. The second technique consists in avoiding VAT: the idea is that the goods are repeatedly resold and exported, and as a result, the exporter refunds the VAT, and the supplier disappears without paying the tax. This method helped MNCs to hide about 3 billion dollars in 2016. And the last approach, but not the least, is profit shifting through so-called ‘conversion centers’. The use of such centers for tax avoidance became one of the most widespread money laundering schemes in our country. A ‘conversion center’ is a company that was created for a single purpose – construction of a ‘financial corridor’ (artificial firms, banks, accounts, documents) for shredding funds into parts and final withdrawal of cash for a client without paying any taxes. This clear fraud is widely used by MNCs that operate in Ukraine, and amounts to about 3-5 billion dollars every year. The overall loss of the Ukrainian budget is between 100 and 160 billion in national currency per year. This money could be spent on education or some social projects, but thanks to the obsolete legislation and not careful control by the fiscal bodies someone continues using the loopholes for generating additional interests [2].

The numbers are huge. Our government loses billions of dollars every year. Thus, tax optimization is inevitable. However, the first step in this difficult task is to fight corruption, as it can annul any changes. Tax avoidance through the use of tax havens is a world-scale problem. Therefore, improving tax law with some sort of bans on money transfers that have not been approved by the state bodies or the implementation of the double taxation may have even worse effects on the economy: companies might go further into the ‘shadow’ or leave the market altogether. That is why struggling against offshore jurisdictions is not a top priority. The first challenge, I guess, consists in the elimination of the corrupt Tax Police that turns a blind eye to the facts of violations. The creation of an independent analytical service for financial investigations, whose employees will cooperate with ‘The big four’ auditors and look for illegal tax avoidance and ‘conversion centers’, will surely have a good impact. Toughening the criminal liability for tax avoidance, as well as, the accession of Ukraine to the Common Reporting Standards – the mechanism of automatic exchange of tax information – will also increase tax revenues.

Ways out are diverse, but actions are infrequent. Ukraine needs money: there is a war going on in the east of the country and reforms are awaiting their time. Tax optimization is an easy way to gain that money. However, it has to be done properly, as we all know perfectly well what the results of bad state initiatives can be.

## REFERENCES

1. Corporate tax avoidance by multinational firms / Library of the European Parliament. 2013. Source: [http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2013/130574/LDM\\_BRI\(2013\)130574\\_REV1\\_EN.pdf](http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2013/130574/LDM_BRI(2013)130574_REV1_EN.pdf)
2. Порівняльний аналіз фіскального ефекту від застосування інструментів ухилення/уникнення оподаткування в Україні / В. Дубровський, В. Черкашин. 2017. Source: <http://rpr.org.ua/wp-content/uploads/2017/09/Instrumentariy-uhilyannya-vid-splati-podatkov-2017.pdf>

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## DEVELOPMENT OF CRITICAL THINKING OF UNIVERSITY STUDENTS AS A PEDAGOGICAL PROBLEM

Rapid development of modern society presupposes deep intellectual development of the individual. It is education in this sense that is a significant element in the progress of the economy and society, since it is precisely this that appears as an instrument of personality formation that is able to explore, to search new ways of solving problems, to doubt the established statements, to produce own ideas. In the period of availability of information, it is much more valuable not simply to know, but to use knowledge and acquire skills. One of these skills, assigned to the key competencies of the 21st century, is critical thinking.

The need for critical thinking has been felt in the post-Soviet school for quite a long period, since, according to S. Terno, all the pedagogical imperatives have collided and today we still continue to face, even now, the large inertial force of the Soviet education system that aimed to form a controlled consciousness and reproductive thinking capable mainly of reproducing information [3]. Later, the negative consequences of this educational approach became revealed, which brought corresponding consequences at the present stage of the societal development.

Critical thinking has a large number of definitions that characterize it as a productive and positive activity (S. Brookfield); purposeful and balanced (D. Halpern); skeptical perception of the generally accepted, controlled, purposeful and meaningful (R. Paul, L. Elder); independent (D. Cluster); justified (E. Glaser); intellectually ordered (M. Scriven, R. Paul); historically and socially conditioned (R. Dumein), rational and reflexive (American National Council for Learning Critical Thinking); evaluating, open, self-regulating judgment, the cognitive process of man (P. Fanchione); the process of matching (V. Ruggiero);

professional interpretation and assessment of observations, (M. Scriven); type of thinking, carrying out analysis, evaluation, organization of information (R. Johnson); as the process of obtaining, searching, analyzing, evaluating, conceptualizing and synthesizing information for the development and formation of thinking, which is accompanied by self-awareness and the ability to creatively apply this information, considering all the risks (Ildrim); smart and analytical approach to existing techniques, methods (V. Bolotov); reasoned and logical, based on personal experience and proven facts (T. Voropai, I. Zagashev, S. Zaire-Bek, O. Tyaglo). Most scientists believe that the essence of critical thinking is the evaluation of information by the recipient [1].

The presence of a large number of definitions of the term "critical thinking" reflects the topicality of this phenomenon, since the possession of critical thinking forms a basis for a person's independence of thinking; the ability to process a large amount of information in a short time and with maximum efficiency; the ability to ask non-standard questions; the ability to argue [2]. All this will give an opportunity to form an individual, which is difficult to manipulate, to impose an opinion on; which can find a way out of a difficult situation in the shortest possible time. People with a developed critical thinking will be guided by personal experience, take into account the opinion, evaluation and experience of others, make more balanced and considered decisions and formulate their own position.

Critical thinking is very important for university students because they have to get ready for efficient and creative professional activity. Thanks to the use of different techniques of developing critical thinking, the learning process can be more meaningful and creative, which will bring much greater results than traditional academic tasks. It is very important that future specialists in different fields of science, engineering, medicine, finance etc, acquire profound skills of critical thinking. This is associated also with the age-specific features of thinking, with the fact that young adults have a growing need for self-knowledge, self-realization, a critical attitude to the world around them. The learning process is based on relations of cooperation between the teacher and students.

It should be taken into account that the development of critical thinking is not only an issue of personal and intellectual growth, but it is also connected with the development of conscious citizenship, responsibility for the whole community.

## REFERENCES

1. Громова Н. М. Проблема критичного мислення у працях вітчизняних та зарубіжних дослідників // Психологія педагогічного процесу. — 2014. — № 3 — С. 133 — 136.
2. Клустер Д. Что такое критическое мышление / Девид Клустер // Русский язык. — 2002. — № 29. — С. 3.
3. Терно С. Світ критичного мислення: образ та мімікрія // Історія в сучасній школі. — 2012. — № 7 — 8.

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## **THE LANGUAGE GAME IN ENGLISH-LANGUAGE PRINTED MASS MEDIA (ONLINE VERSION)**

At present, in the conditions of world globalization people are constantly under the influence of modern mass media. Therefore, it is not accidental that such an important role is assigned to the mass media in the society.

The language of the mass media, especially the newspaper press and its online version, is a topic that gives the opportunity for debates and many people are interested in it in our time. Particular attention should be paid to the title of the newspaper article, as it corresponds to the lexical-evaluation theme of the text. In modern mass media, there is a tendency to increase informativeness, communicative significance and accessibility. To implement this topic, it is necessary that the media texts are affordable to a mass audience, i.e. they should be close to its speech [2, p.187].

That should be facilitated by the presence of language constructs of cultural information in the newspaper headline that would encourage reflection and activation of the recipient's knowledge, because the aim of modern newspaper communication is not only to inform the reader, but it is also to define certain ideas, to influence the addressee and his emotional state.

To do this, the language has a rich, diverse arsenal of stylistic turns, the content of which includes expressiveness, emotionality and imagery. The language game or a pun has all these qualities. The language game is a lexico-semantic device based on the comic use of polysemy or the outward similarity of one word or phrase with another and it contributes to the formation of an evaluation plan for the whole text [3, p.260].

Exploring a number of texts of online versions of popular printed editions from Australia, the USA and Great Britain [4, 5, 6], we were able to identify some patterns of the use of language games in their headings. So, we can meet in punning formations:

1. Polysemy: *Understanding comes with time* (comical effect is that the word "time" here means both the time and the name of the magazine);

2. Homonymy: *The police officer has a fine time with traffic violator* (the language game manifests itself in the polysemy of the word "fine": «прекрасный/замечательный» и «штраф»). As the title refers to a police officer and a traffic offender, the ambiguous comic situation is immediately visible);

3. Paronomasia: *Iron Man Steals the screen – surehitiswelddone* (in the title the similarity in the sound of the words "steal" and "steel", and also "well" and "weld" is played);

4. Phraseological units: *Much ado about muffin at BA* (humorous effect arises in connection with the destruction of the familiar phraseological unit "*Much ado about nothing*");

5. Morphological transpositions: *MEXXima effect* (in this title, the name of the popular brand of youth clothing is played out).

Thus, the pun is a very complex mechanism, the necessary elements of which are various linguistic phenomena (homonyms, paronomasia, polysemy, phraseological turns, etc.), that can be often found in the modern press.

The peculiarity of the use of the word game in the publicistic heading is determined by the genre necessity and the ability to reflect whole layers of the sociocultural experience in a compressed verbal form [1, p.34].

It should also be noted that the process of instant recognition, given by the game form of the newspaper headline, requires a certain level of knowledge of social, cultural, economic and political life of the publishing country of a certain information source.

## REFERENCES

1. Каламбур в СМИ // Сборник научных трудов. Выпуск 5. – Анапа, 2007. – С.32 – 36.
2. Костомаров В.Г. Языковой вкус эпохи. Из наблюдений за речевой практикой масс-медиа / В.Г.Костомаров. – СПб: Златоуст, 2002. – 187 с.
3. Типичная схема смысловой реализации заголовочного приема игры слов в публицистическом тексте (на примере спортивного англоязычного комментария) // Вестник Санкт-Петербургского государственного университета. Серия 9. Филология, востоковедение, журналистика. Вып.2 (ч.II). Июнь 2007. – СПб: 2007. – С.259 – 263.
4. <http://www.dailytelegraph.com.au>
5. <http://www.nytimes.com>
6. <http://www.timesonline.co.uk>

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## THE ROLE OF PROFESSIONALLY ORIENTED FOREIGN LANGUAGE FOR THE BORDER GUARDS' TRAINING

At the present stage of the development of the State Border Guard Service of Ukraine one of the most important tasks is training of qualified specialists able not

only to perform service duties, but also to conduct professional communication in a foreign language.

First of all, the process of officers' professional communication, unlike of other professional groups, involves interaction of representatives of various, often completely unrelated cultures. Thus, the language is verily an essential tool of border guard's professional activity. Secondly, when performing service duties border guard officers directly interact with foreigners crossing the state border. It requires certain skills of fluent foreign language communication in order to overcome communication barriers, avoid conflicts and exercise professional tasks [1]. Furthermore, the linguistic competence level is a high qualification indicator of both a separate individual and the whole law enforcement sector, consequently influencing the image of the state in general. Thirdly, the security and protection of the state border, as well as any sphere of activity, has its own specific lexical units and terms, the usage of which makes it possible to communicate on professional topics and exchange other specific service information. The border guard officer must possess the knowledge of military and technical terminology, modern military equipment, different types of weapons, etc [2].

The analysis of structural features and other specific peculiarities of border guard service terminology gives grounds to assert that most of them are difficult to translate due to the absence of complete interlingual correspondence between special and general notions [3]. Also, one cannot ignore the fact that Integrated Border Management, extension of international cooperation with the UN, OSCE, EU and NATO, realization of Ukraine's national interests in the sphere of security and defense are impossible without high level of foreign language professional competence.

The role of professionally oriented foreign language is extremely important in the process of training of border guard service stuff as it improves the efficiency of the service work, facilitates the extension of Ukraine's ties with other states and its integration into the world community.

## REFERENCES

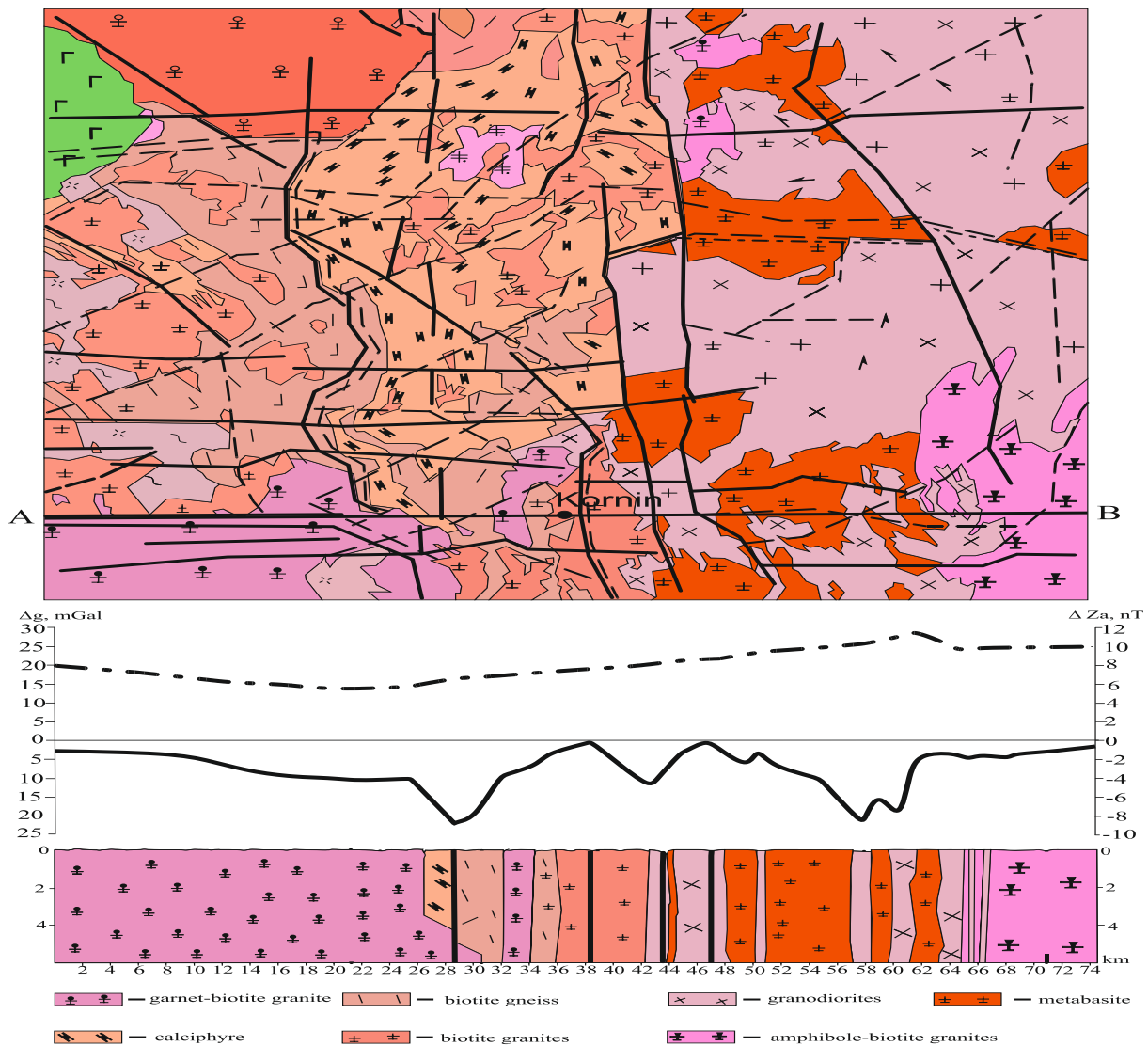
1. Гришкова Р.О. Формування іншомовної соціокультурної компетенції студентів нефілологічних спеціальностей : Монографія. – Миколаїв : Вид-во МДГУ ім. Петра Могили, 2007. – 215 с.
2. Барандич С.П. Пономаренко З.В. Зелінська Л.Ю. Іншомовна підготовка працівників правоохоронних органів та сектору безпеки: матеріали всеукраїнської науково-практичної конференції (21 квітня 2017 року). – К.: Національна академія прокуратури України, 2017. – 89 с.
3. Волобуєва О. Ф. Психолого - лінгвістичні аспекти іншомовного спілкування офіцерів-прикордонників в особливих умовах діяльності /О.Ф. Волобуєва // Збірник наукових праць №35. Частина II / гол. ред. В.О. Балашов - Хмельницький : Вид-во Нац. акад. ДПСУ, 2006. - С. 79-85.

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## **GEOLOGICAL INTERPRETATION OF POTENTIAL FIELDS FOR THE UKRAINIAN SHIELD**

Creating a geological section from the geophysical data is an important task for many purposes. These include geological mapping, search for mineral resources, monitoring of dangerous geological processes and others. The area of research is located within the Ukrainian shield. Regional geological modeling can be done from the data of the gravity survey. Areas of different crystalline rocks were identified due to the density characteristics, tectonic disturbances were traced from the gravitational data. Magnetic data had greater contrast of values and allowed to reveal more detailed geological structures. The combination of geological information with the data of potential fields made it possible to build a geological section. The area of the study is located on the right bank of the Dnipro river. This territory belongs to the depositional plain of the north-eastern part of the Ukrainian Shield. The type of relief is defined as plain that is not much different in an altitude. The geological structure involves complicated dislocated Precambrian rocks and loose sheets of Meso-Cenozoic formations. The crystalline basement is a deeply eroded and folded much granitized formation, complicated by a large number of tectonic disturbances.

The method of mass consecutive accumulation was used for the modeling of section on density. This approach is close to the physical processes of moving substances. The gradual accumulation of magnetic susceptibility was used to determine the geological boundaries due to the common interpretation of potential fields and established the distribution of the physical parameters. The geological section was created based on these data and geological information (Fig. 1). Structural maps containing Precambrian boundaries and disjunctive violations were built.



**Figure 1: Tectonic framework of the Ukrainian Shield**

These gravity and magnetic data have been interpreted and supplemented by the results of geological drilling. The task of the magnetometry was to identify areas of different composition and magnetic properties of crystalline rocks, identification and traceability of tectonic disturbances.

The area of research has structural fold-blocked configuration of the Ukrainian Shield (2003). In structural terms the study area can be divided into two parts the eastern and the western ones. The frontier of these blocks is Skvyrska fault zone, which is close to the town Kornyn. In the north it coincides with Brusylivsky fault.

This fault zone plays a key role in forming of geological area. It separates the western and eastern tectonic blocks. They are called Teteriv-Kocherovsky and Makariv-Fastivsky, respectively. The western block is made up mostly of garnet-biotite, biotite granites and gneisses. The eastern block is structurally very different from the western one. Its structure serves as a prime example of ultrametamorphism and granitization processes. The basic geotectonic structure in this block is created by a large body of metabasites located among granitoids.



In general, the magnetic field of the researched area has negative values. Increasing field is associated with granite (biotite, garnet-biotite, amphibole-biotite). The lowest magnetic values describe the placement of metabasites, gneiss and granodiorites. Gravity field is characterized by positive values. The most positive indicators were observed in granodiorites.

The interpretation of potential fields and geological data allowed to a full study of the structure of the area. Gravity data have identified a common geological structure. The latitudinal interpreted profile has defined two tectonic foundation blocks: the western and the eastern ones. Magnetic profile singled out a number of vertical units that are associated with the processes of metamorphism and granitization.

## REFERENCES

1. State Geological Map of Ukraine, scale 1: 200,000 (Fastiv). - Kyiv. Ministry of Ecology and Natural.

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## NEOLOGISM AS A LINGUISTIC PHENOMENON

According to Global Language Monitor, around 5,400 new words are created every year; it's only the 1,000 or so deemed to be in sufficiently widespread use that make it into print [1].

Oxford Dictionary of English defines neologism as “a newly coined word or expression that may be in the process of entering common use but has not yet been accepted into mainstream language” [2]. Neologisms are often directly attributable to a specific person, publication, period, or event. There is no criterion for judging how long the neologism takes to be accepted by the public. If it does, it is not the point though, because the reason why it becomes recognized is of more importance. Different ways of creation of neologisms are distinguished in Modern English:

1. Derivation is adding a prefix or suffix to an existing word (for example, *realisation, monogamish*).
2. Back formation is the inverse of the above. The noun *sleaze*, for example, was back-formed from “*sleazy*” in about 1967. A similar process brought about *pea, liaise, enthuse, aggress and donate*.
3. Compounding is the juxtaposition of two existing words. Typically, compound words begin life as separate entities, then get hitched with a hyphen, and eventually become a single unit (*fiddlestick, claptrap*).

4. Repurposing is taking a word from one context and applying it to another. Thus, *the crane*, meaning *lifting machine*, got its name from the long-necked bird, and *the computer mouse* was named after the long-tailed animal.

5. Conversion is taking a word from one-word class and transplanting it to another. The word “*giant*” was for a long time just a noun, meaning *a creature of enormous size*, until the 15th century, when people began using it as an adjective.

6. Eponyms are words named after a person or place. You may recognise *Alzheimer’s*, *atlas*, *cheddar*, *diesel*, *sandwich*, *mentor*, *wellington* and *boycott* as eponyms – but did you know that *gun*, *dunce*, *bigot*, *bugger*, *cretin*, *currant*, *hooligan*, *marmalade*, *maudlin*, *maverick*, *panic* are too?

7. Abbreviations are some words that you might not have known started out longer are *taxi/cab* (both from taximeter cabriolet), *goodbye* (God be with you).

8. Onomatopoeia is the creation of a word by imitation of the sound it is supposed to make. Plop, barf, cuckoo, bunch all originated this way.

9. Reduplication is the repetition, or near-repetition, of a word or sound. To this method we owe the likes of *flip-flop*, *goody-goody*, *boo-boo*, *helter-skelter*, *picnic*, *claptrap*, *hanky-panky*, *hurly-burly*, *lovey-dovey*, *higgledy-piggledy*.

10. Error. Misspellings, mishearings, mispronunciations and mistranscriptions often lead to new forms in conjunction with other mechanisms. *Scramble*, for example, seems to have originated as a variant of *scrabble*; but over time, the two forms have taken on different meanings, so one word has now become two [1].

So, neologisms are newly coined terms, words, or phrases, that may be commonly used in everyday life but have yet to be formally accepted as constituting mainstream language. Neologisms represent the evolving nature of the English language [3].

## REFERENCES

1. Bodle A. How new words are born / A. Bodle // The Guardian [Electronic resource] – Mode of access: <https://www.theguardian.com/media/mind-your-language/2016/feb/04/english-neologisms-new-words> – Date of access: 18.03.2018
2. Oxford Dictionary of English. Great Clarendon Street, UK: Oxford University press, 2003.
3. 54 Great Examples of Modern-Day Neologisms – Online Editing and Proofreading Services. Affordable Editors and Proofreaders [Electronic resource] – Mode of access: <https://www.vappingo.com/word-blog/great-examples-of-neologisms/> – Date of access: 18.03.2018

## **ÖSTERREICHISCHE VARIANTE DER DEUTSCHEN SPRACHE**

Wenn man von Österreich spricht, fallen den meistens vielleicht die deutsche Sprache mit ihren Eigenarten, denn von den 7.6 Millionen Einwohner des Landes sind 98% Österreicher, die zur deutsche Sprache als Muttersprache bekennen. Österreichisches Deutsch, gleichbedeutend mit österreichischem Hochdeutsch und österreichischem Standarddeutsch, bezeichnet die in Österreich gebräuchliche Varietät der neuhochdeutschen Standardsprache. Sie ist wie die beiden anderen nationalen Standardvarietäten, Schweizer Hochdeutsch und bundesdeutsches Deutsch, aus der sächsischen Kanzleisprache hervorgegangen. Das österreichische Deutsch verfügt, wie die anderen beiden nationalen Standardvarietäten, über einen spezifischen Wortschatz, spezifische Redensarten, und Besonderheiten in Grammatik, Aussprache (sowohl Phonologie als auch Intonation) und Rechtschreibung (soweit dies die Reform von 1996 zulässt) und ist auch statistisch durch das Fehlen oder seltenere Auftreten bestimmter Elemente des außerhalb Österreichs verwendeten Deutsch charakterisiert [1]. Das österreichische Standarddeutsch ist von der Umgangssprache und den in Österreich gebräuchlichen bairischen und alemannischen Dialekten abzugrenzen.

Die nationalen Variante der deutschen Sprache haben viele nationale und ausländische Sprachwissenschaftler in ihren Arbeiten betrachtet: G. Stepanow, Y. Shluktenko, U. Ammon, I. Reiffenstein, P. Wiesinger.

In Österreich haben sich – wie in der Schweiz und im Süddeutschen Raum – die Mundarten sehr gut erhalten, und im Alltag wird gewöhnlich auch nur Mundart gesprochen. Die Wissenschaftler behaupten, dass es vier Gruppen der Bevölkerung gibt: zu der ersten Gruppe gehören die Menschen, die Dialekte sprechen, aber sie können auch Hochdeutsch verstehen und wenig sprechen, zu der zweiten – die, die nur Dialekte sprechen, die dritte Gruppe spricht nur Hochdeutsch und spricht keine Dialekte überhaupt, und zu der vierten Gruppe gehören die Menschen, die sowohl Hochdeutsch, als auch Dialekte sprechen. In den Städten ist die Hochsprache natürlich mehr im Gebrauch als auf dem Land. Diese scharfe Trennung der beiden Sprachebenen, das strenge Auseinanderhalten von Mundart und Hochsprache, die funktionale „Unterbelastung“ der Hochsprache hat noch eine andere Auswirkung. Da die Hochsprache meist nur eine „bessere“ Sprache ist, wird sie auch weniger „abgenützt“. Die Unterschiede gibt es in Phonetik, Grammatik, und im Wortschatz.

Die phonetischen Besonderheiten: „ei“ wird wie „oa“ oder „aa“ ausgesprochen: zwei Steine – (im Westen – zwoa Stoana, im Osten – zwaa Staana), es gibt auch solche Verkürzungen: haben [ho:m], leben [le:m], ich – i, zu Hause – zrhäus. Es gibt auch einige grammatische Besonderheiten: in der ersten Person Singular fehlt die Endung –e: ich geh', ich fahr'; einige starke Verben haben Besonderheiten im

Stammvokal: er fährt, er läuft, ich nimm, du nimmst, er nimmt; ich gib, du gibst, er gibt; du-Form im Imperativ hat die Endung –s: gehs, kommst [2].

Aber sehr viele Unterschiede gibt es im Wortschatz. Das bezieht sich besonders auf Bereiche der Amtssprache: der Nationalrat – der Bundesrat, unterfertigen – unterschreiben, die Stempelmarke – die Gebührenmarke, die Exekution – Pfändung. Besonders reich an Unterschiede sind die Benennungen von Lebensmitteln: Erdäpfel – Kartoffeln, Paradeiser – Tomaten, Marillen – Aprikosen, Kren – Meerrettich, Powidl – Pflaumenmus, Topfen – Quark, Schmalz – Schweinefett, Mehlspeise – Süßspeise, Obers – Sahne. Den Österreicher fällt auf, dass viele Formen, die er in der Mundart gebraucht, in der Hochsprache andere Formen haben, wie zum Beispiel: das Ekk – die Ecke, der Schneck – die Schnecke, der Bitte – die Butter. Das Wort schauen ist in Österreich besonders landläufig und ersetzt oft das Wort sehen, z.B. in Österreich – gut ausschauen bedeutet gut aussehen [2].

Das ist alles sehr interessant zu wissen und das benutzen, wenn Sie nach Ausland fahren und gut Deutsch kennen. Das hilft Ihnen, besser die Österreicher zu verstehen.

### **LITERATUR**

1. Ruth Wodak: Wir sind nicht Duden-Land. In: Wiener Journal, Juni 1994, S. 26-27.
2. Wiesinger P. Die deutsche Sprache in Österreich // Wiesinger P. (Hrsg.) Das österreichische Deutsch. – Wien / Köln / Graz, Böhlau Verlag, 1988. – S. 9-31.

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### **TYPES OF EMOTIONAL RESPONSE TO SOCIAL ADVERTISEMENT**

Human activities and behaviour always create some positive or negative impression. Emotions are mental processes that occur in one's brain and are reflected as satisfaction or dissatisfaction of some needs.

Emotions motivate people to do some work, to gain some knowledge, to perform certain deeds or, on the contrary, to prevent them from doing so.

Emotions are often considered as internal mental processes and the way they are reflected. Emotions appeared as a result of evolution of human nervous system in order to ensure better adjustment to life. They are bivalent or, in other words,

positive and negative. Emotions occur when people face certain situations in life; these are emotions that make people show various behaviour reactions. Emotions are fundamental phenomena of human psyche. They are connected with the functioning of hemispheres of the brain and the right hemisphere in particular. Some impulses reach the subcortex, for example, hypothalamus, where the direct effect of an organism's basic needs is formed; people experience these needs subjectively in the form of emotions. Scientists have found that there are certain nervous structures in the subcortex (hypothalamus), which are called pleasure centres, suffering centres, aggression centres, etc.

The classification of fundamental emotions was developed by C. Izard [1; 2] who singled out the following emotions:

- interest-excitement (a positive emotion which effects motivation and development of skills, stimulates curiosity and cognition processes);
- joy (a positive excitement which can occur due to the necessity to satisfy certain needs, or as a result of lessening the impact of negative factors);
- distress-anguish (an emotion caused by some losses in life; it is reflected in such feelings as loneliness, self-pity, unimportance);
- anger (an emotion which takes place when person's behaviour does not coincide with certain moral and ethical norms);
- disgust (an emotion which, as a rule, accompanies anger and is reflected in a strong desire to get rid of an object, considered to be unpleasant at the moment);
- contempt (an emotion that occurs together with depersonalization of a person or a group of people);
- fear (an emotion caused by a message about a real or imagined danger or unpleasant event, or by an expectation of failures);
- surprise (an emotion which takes place as a result of rapid rise in the functioning of nervous system, after getting some unpredictable information);
- shame (an emotion caused by the fact that *de facto* one's behaviour differs from the accepted standards, as well as anticipation of harsh, negative, condemning attitude from other people);
- guilt or remorse (this emotion is similar to shame, yet it differs from it, as it occurs when moral or aesthetical violations take place, usually when people feel their own responsibility).

People experience emotions in different spheres of their life, while facing some problem or trouble of a kind which everybody is familiar with.

Nowadays, social advertisement is one of the means used to increase the effectiveness of regulation of social processes taking place in the society. Within this context, social advertisement is aimed at transmitting socially meaningful information in order to shape public opinion to important issues, social norms and modes of behaviour, and, what is of the greatest importance, to involve citizens in searching for the solution of topical social problems [3].

At the moment, despite a number of popular public issues social advertisement has received very little attention in our country and it remains one of the most actual points of the research.

## REFERENCES

1. Изард К. Психология эмоций. – 1999.
2. Изард К. Эмоции человека: Пер. с англ. – М. : Изд. Ун-та, 1980. – 440 с.
3. Жаров С. Понятие социальной рекламы [Электронный ресурс] / С. Жаров. – Режим доступа: <http://www.socreklama.ru>. – Загл. с экрана.

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## THE ROLE OF EXPLICATION AND ITS TRANSLATION IN THE NATIONAL-CULTURAL SPACE OF THE MUSEUM ON THE EXAMPLE OF THE WORLD LOCAL EXPOSITION

An integral part of the cultural heritage of any country is the museum, which becomes the center of intercultural communication when it is visited by foreign tourists. In particular, this applies to museums located in small towns of our country, as Mir Castle. The Museum exposition of Mir Castle includes architecture, museum items, scientific and auxiliary materials, information technologies [2].

The obligatory component of the exposition hall in the museum is an explication – a short written support for the museum exposition, tells visitors about the content and history of the exhibited works [3]. Such text is oriented not only to the bearer of the same culture, but also to the bearer of a foreign language and culture.

Explication has syntactic, lexical and pragmatic features. Its text is close to the publicistic style, as it consists of short sentences and phrases without verbs and each individual text has a heading. It forms an idea of historical events. Since a foreign visitor to a museum can misunderstand or not perceive certain definitions, as they belong to a foreign culture the linguistic-cultural translation is important.

Let us analyze some linguistic-cultural words-realities that require a special approach, using the example of the explication of the text "Portrait Hall". The main purpose of the translation is to understand the context and the meaning of the word in the source language. As a result, two main groups of words can be singled out, the first of which does not require special interpretations, the second of which requires obligatory explanations: proper names and everyday realities.

The first group includes such phrases as Урецкая мануфактура – Uretskaya manufactory, замок в Мире – the castle in Mir. Geographical names are not translated, but sometimes explanations are given for the names of places that have changed in the course of history. Own names are also presented in explication by the names of the owners of the castle, artists, architects, etc. Михаил Казимир Радзивилл (Рыбонька) – Mikhail Kazimierz Radziwill (Rybonka) – Prince and

owner of the Mir Castle. The second group includes words that refer to the Belarusian national culture and are familiar to the speakers of the Russian and Belarusian languages. When translating the phrase "зеленым адамашком", was involved a descriptive translation – "silk fabric, which was produced in France." Here we also need to clearly understand the meaning of the word in the original language, which in the dictionary explains the origin of the name of the fabric from the word "Дамаск" (a city in Asia where Adamashk was first produced). All listed lingvo-cultural phrases carry a national flavor, help to learn more about the culture of the Belarusian people and its mentality. An important task in the translation of explications is to preserve the pragmatic function and preserve communication [1], as well as using the method of transliteration with an explanation.

### REFERENCES

1. Данилова, И.И., Голубева М.М. Перевод реалий текстов музейного этикетажа / И. И. Данилова, М. М. Голубева // Актуальные проблемы гуманитарных и естественных наук. – 2016. Часть 2. С.215.
2. Мирский замок – 15 лет ЮНЕСКО [Electronic resource]. – Режим доступа: ([http://socnews.by/public\\_disc/2015/12/02/article\\_16638](http://socnews.by/public_disc/2015/12/02/article_16638)) Date of access: 10.03.2018.
3. Словарь музейных терминов [Electronic resource]. – Режим доступа: (<http://www.museum.ru/rme/dictionary.asp?38>) – Date of access: 20.03.2018.

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### INFLUENCE OF GENDER STEREOTYPES ON PUPILS' CAREER CHOISE

Nowadays when people have access to any kind of information everyone can easily choose his own way including professional one. It is an important issue to determine your sphere of activity where every person can show oneself as good as possible. Sometimes it's hard to do it even at present days of information availability. Our modern society which is quite stereotypical tries to put boundaries of some professional stereotypes on every young person, divides the spheres of activity into "male" and "female" ones.

Even at present days when issues of gender equality and gender itself are much discussed and approved in Ukraine still many people have that stereotypical thinking which can hardly be eradicated. That is why when young people have to choose their future profession they face particular dilemma: on the one hand, there

are their own interests and talents in particular spheres of activity and on the other hand, there is a social approval of those spheres of activity which are prestigious and popular in separate parts of Ukraine. Gender aspect is very important here as well. Chosen activity must conform to the person's gender otherwise such person won't be approved by society and can be excluded according to the gender criteria.

That is why taking gender aspects into account is relevant in career choosing issues as it will help every person to do what one is really interested in and where one feels the most comfortable, can easily express himself.

Gender is our social sex which defines person's behavior in society. According to generally accepted rules and social norms there are certain models or gender roles for men and women which relate to different spheres of life.

Gender stereotypes are the views of male and female role in professional sphere and their place in social hierarchy. Gender stereotypes cause labor market misbalance, i.e. concentration of one gender people in boundaries of particular occupation[1, p. 108].

A research was conducted in Zimbabwe by the company Mapfumo, Chireshe and Peresuh (2002). It was discovered that men and women choose their profession according to the stereotypes. Hence male professions are engineer, builder, electrician, locksmith, driver, guard, etc. Female professions are nurse, cook, teacher, secretary and housewife. All above is connected with stereotypes which society imposes on people [2, p. 25].

Research which was conducted by Puja (2001) in Tanzania displays that women when choosing a profession "stick" in female stereotypical activities such as cooking, taking calls, nursing, social work, etc. and men are still the ones who get more leading workplaces. Thus, both men and women comply with gender stereotyping by being involved into gender stereotypical professions[2, p. 28].

Considering the influence of school on pupils' self-determining as for their future career we may note the maintenance and retention of confirmed gender stereotypes in modern society. That is why implementation of gender approach to the practice of education must take place which will help to extend the social space for comprehensive development of every pupil's personality.

## REFERENCES

1. Ремонтова А. А. Гендерный фактор профессионального становления студентов / А. А. Ремонтова // Вестник Поволжской академии государственной службы. – 2012. – №3. – С. 106–111.
2. Nicolao, Judith Simon The effects of gender stereotyping on career choice among secondary school students in Dar Es Salaam / J. S. Nicolao. – Tanzania: University of Tanzania, 2014. – 108 p.
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5403118/>



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## **ADVERTISING IN MODERN WORLD**

It's hard to imagine our life without advertising. The origin of the term "advertising" comes from Latin and is translated as a *resume to scream, scream, call, loudly deny* [3]. It is considered to be the way to attract the attention of customers in order to sell a product or service and profit.

As a result of various life situations, the subject of advertising is not only goods and services, but also the firms themselves, and personalities (e.g. bankers, artists, politicians). Increasingly, advertising is used to promote economic, political, environmental, social and religious ideas. Advertisers exert direct influence over media content with the help of usual human psychological factors to encourage people to buy a product [2].

Advertising has a wide impact on different social groups depending on their hobbies and preferences. It is unlikely that teenagers and retirees are interested in information about baby diapers and chewing gum [1]. Advertising creates a special festive atmosphere around the product and reveals its uniqueness through various images.

## **REFERENCES**

1. DNS GB. Цікаві факти про рекламу [Electronic resource]. – Access mode: [http://www.dnsgb.kiev.ua/obslugovuvannja\\_vidannja\\_dnsgb.html](http://www.dnsgb.kiev.ua/obslugovuvannja_vidannja_dnsgb.html)
2. Реферат. Вплив реклами на суспільство [Electronic resource]. – Access mode: <http://bukvar.su/marketing/138243-vliyanie-reklamy-na-obshchestvo.html>
3. Реклама та її вплив на підсвідомість споживачів [Electronic resource]. – Access mode: <https://blogs.dyvys.info/2017/06/30/reklama-ta-yiyi-vplyv-na-pidsvidomist/>

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## **KEY POINTS OF MARKETING THEORY**

The purpose of this article is to present a brief overview of the marketing study outcomes and interpretation of the key points of marketing theory. The interpretation will be aimed at emphasizing the practical importance of marketing today.

The key components of any marketing strategy are target market (a group of customers to satisfy) and product mix (product, price, place, and promotion). These components make the following objective all businesses need to fulfill: to increase the number of customers so as to increase sales.

Business consultant Evan Carmichael identified the three main purpose of marketing: capture the attention of a target market; facilitate the prospect's purchasing decision; provide the customer with a specific, low-risk and easy-to-take action. Since marketing is the cornerstone of every business, the overall objective is to sell more products or services.

Marketing is best identified using what are called the 4 P's or a mix of marketing: Product, Price, Promotion, and Place. Starting with *products*, companies have many procedures they must undertake to ensure their products are ready for selling. The first stage is called the "ideation stage," where the idea for the product is conceived. Then, marketing departments usually test new product concepts with focus groups and surveys to ascertain interest levels among potential buyers. If the interest level is high, marketers may then sell products on a limited basis to track sales. If product sales are high, products are then rolled out on a national level. Before products go to the market, companies must decide what styles, sizes, flavors, and scents they should sell and the packaging designs they should use.

*Price* is also tested through focus groups and surveys. Companies must know the optimal price to sell their products to achieve maximum return. One way to determine price is to set it at a level comparable to competitors; that is if the company can recover all associated product expenses and still make a profit.

*Promotion* pertains to brochures, ads, and information which companies use to generate interest in their products. For more complex concepts, companies may promote their wares at trade shows. Promotions usually have two purposes: generate leads for sales reps or initiate actual purchases.

*Place* in marketing nomenclature is the distribution. It is how and where products are sold. Consumer product companies, for example, sell to wholesalers who, in turn, sell to retailers.

The supply, demand, and elasticity have a direct impact on marketing decisions. The low demand may point to the necessity for better promotion of products and services simply because the consumers may turn out to know too little about the product, or be unaware of it at all. There would be little wonder if our specific product is not in demand, even though our competitors sell the same one very successfully. The idea of market segmentation (naming and segmenting) is how not to lose the focus. For this purpose, identifying most promising consumers is really a critical part of marketing activities.

So, the complex reality of today's economic life requires a comprehensive knowledge and profound understanding of the marketing theory. The great variety of specific marketing decisions the businesses have to make in day-to-day life always relies not only on our specific accumulated experience and skills, but also on our learning process and ability to filter and make use of specific marketing information in every particular case, be it a small family business or a large corporation.

## REFERENCES

1. <http://www.evancarmichael.com/top-5-marketing-books-entrepreneurs-top5books/>
2. <http://www.bestreferat.ru/referat-31312.html>

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## PSYCHOLOGICAL CHARACTERISTICS OF ADULTS IN CONTEXT OF LEARNING ENGLISH

Present development of European integration processes in Ukraine sets new priority areas of educational activity. One of these priorities is learning a foreign language, especially English. English is one of the most commonly used languages in the world, which is most often used in international events. In this regard, the English language remains among the priority for the learning of foreign languages not only by students but adults as well.

Thus, the aim of our article is to research psychological characteristics of adults in terms of learning English. In this perspective arises the problem of the psychological characteristics of mature adults. Having analysed the latest research and publications on the problem, we have come to the conclusion that several scientists have engaged in the study of psychological and psycho-physiological peculiarities of different age groups, including N.Gorbunova, L. Panova,

O. Pometun, S. Shatilov, S. Maksimenko and others. Unfortunately, most scholars have paid attention in their studies to the particularities of teaching children of school age or students. The question of psychological peculiarities of adult education is not enough referred to. Only some of the features of adult learning of a foreign language are considered in the works of T. Grigoryeva, R. Efimova, G. Burdenyuk .

By mature adults we understand people of 40-60 years of age who have certain academic, career or business interests abroad. This age group is characterized by intellectual, productive, professional, socially active and conscious attitude towards the surrounding world and himself. A person prior to this period is professionally competent, achieves certain skills and job titles, has considerable experience and a definite position in society. Nowadays a mature adult has a central place in the social and age structure of society, it focuses on the main levers of the state, social and economic mechanism [2, p.157-162].

On the other hand, this age group has its own psychological characteristics, which in some way affect the process of mastering any knowledge, including English. An adult person is able to critically analyze his or her own educational activity, he/she can independently determine the purpose of education, realize his/her desires and opportunities, choose the methods, forms and means of training, evaluate and adjust the results of educational activity. Therefore, the awareness of these features and their proper consideration for the effective organization of the adult learning process in English is relevant.

The analysis of psychological and pedagogical scientific literature, as well as own experience, allows us to assert that during the period of mature adult life a person has accumulated considerable life and professional experience, which he/she has a desire to share. Motivational aspects of professional and career development are very advanced, and, therefore, in today's conditions, the motivation to learn English and the formation of English lexical competence are formed. Despite a certain decrease in some age-old psycho-physiological functions, intellectual abilities and verbal functions continue to develop actively during this period, which will contribute to the achievement of positive results in the study of English [1].

Thus, taking into account the psychological characteristics of adults we have come to the conclusion that a mature adult wants and can learn, develop and study a foreign language, in our case, the English language, and the accumulated experience (life, professional, communicative, linguistic) will help him/her to do it.

## REFERENCES

1. Ефимова Р. Некоторые особенности обучения взрослых иностранному языку/ Р. Ефимова [Электронный ресурс] // Режим доступа: [http://www.pglu.ru/lib/publications/University\\_Reading/III/uch\\_2008\\_III\\_00039.pdf](http://www.pglu.ru/lib/publications/University_Reading/III/uch_2008_III_00039.pdf).
2. *Learning with Adults: A Critical Pedagogical Introduction* Leona M. English and Peter Mayo, 2012 Sense Publishers. – 276 p.

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## **CREATION OF E-PETITION SERVICE USING THE DJANGO FRAMEWORK**

In the fast changing world of informational technologies it is very important to meet the requirements of the day and introduce new, more effective and up-to date means to solve task set. With development and growth of Internet new approaches and mechanisms to electronic participation of the citizens in the life of their country, city, office, and university appear. One of such approaches is electronic petitions mechanism.

E-petitions – are collective claims of students and employers of the university to corresponding structures of the university on the issues of the improvement of infrastructure, services providing, organization of leisure and other issues connected with the certain university [1].

Such project needs modern and powerful toolkit to work out web-applications with rational usage of human and time resources. One of such instruments is Django web-framework. Django is a high level, opensource framework of a new generation for the development of applications in the programming language Python [2].

Django`s main advantages are:

**Object-relational mapping** – is programming technology that connects the data base with concepts of Object-oriented programming languages and that provides API for work with data base. ORM affords creation, updating, getting and deleting objects.

**Automatic construction interface for administrating.** After working out of new project Django automatically creates it for models administrating. In the interface given, objects can be created, updated, changed or deleted according to the models described.

**Extended templates system with tags and inherits.** Template in Django is usually used to create HTML. Markers and simple logical constructions (template tags) that form document view can be found in the template. Template pre-processor supports values setting, logical constructions, filters directly into HTML template.

**Detailed documentation.** Django`s official site includes detailed documentation of the whole framework. For convenience, documentation is divided into parts, corresponding to the main ones. There is an alphabet indicator and navigation on modules.

**Great world community of developers.** Thousands of developers over the world work out projects in Django. That is why if there are any difficulties in some

issues understanding, it's easy to find answers through thematic blogs, forums, Q&A services, etc.

Petition must gain not less than 100 signatures during a month for its further consideration by corresponding people. Electronic petitions consider issues which are of university authorities concern. When the petition attains the required number of signatures, the responsible person must review it and provide a response which will be published on the website.

The mechanism of e-petition can improve students' and teachers' life and work in the university in the future.

## REFERENCES

1. Електронна петиція в Україні [Electronic resource] Access mode: [https://uk.wikipedia.org/wiki/Електронна\\_петиція\\_в\\_Україні](https://uk.wikipedia.org/wiki/Електронна_петиція_в_Україні).
2. Django [Electronic resource] Access mode: <https://uk.wikipedia.org/wiki/Django>

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## DIGITALE MEDIEN IN DER SCHULE

Ob soziale Netzwerke, Smartphones, Apps oder Games – der Umgang mit digitalen Medien ist für Schüler längst zur festen Größe im Alltag geworden. Viele Schulen versuchen dieser Entwicklung gerecht zu werden, indem sie digitale Medien zum Thema machen oder Tablets, Whiteboards, Learning Games in den Unterricht mit einbeziehen. Dahinter steht die Erkenntnis, dass der Einsatz digitaler Medien in vielerlei Hinsicht lernförderlich und berufsvorbereitend sein kann. Die Entwicklung von mobilen Geräten macht es außerdem möglich, dass die Arbeit mit digitalen Medien nicht mehr nur an einen Ort, wie zum Beispiel an den Computerraum der Schule, gebunden ist, was neue, mobile und kreative Möglichkeiten des Lernens eröffnet. Oft wird außerdem beobachtet, dass die Aufmerksamkeit und Motivation steigt, wenn digitale Medien in den Unterricht miteinbezogen werden [1].

Es gibt drei positive Möglichkeiten:

1. Die Möglichkeit, Informationen vernetzt, multimedial und interaktiv aufbereitet zu präsentieren;
2. Die Möglichkeit zur computervermittelten Kommunikation;
3. Die Möglichkeit, digitale Produkte mittels netzbasierter Arbeitsumgebungen gemeinsam zu entwickeln und zu gestalten.

Anders gesagt als bei Schulbüchern bieten digitale Medien die Möglichkeit, den Schülern Inhalte multimedial, interaktiv und miteinander vernetzt zu

präsentieren. Durch die Vernetzung kann der Schüler Informationen außerdem selbstgesteuert und entsprechend seiner Vorkenntnisse und Interessen suchen.

Neben der Informationsvermittlung stellen digitale Medien außerdem Tools für die Kommunikation und die vernetzte Zusammenarbeit bereit, z.B. durch Diskussionsforen, Chats, Wikis oder Google Docs. Damit unterstützen digitale Medien auch das projektorientierte Lernen, bei dem die Schüler in Gemeinschaft gezielt Problemlösungen erarbeiten und diesen Prozess dabei immer wieder zu strukturieren lernen.

Obwohl der Vorteil des Einsatzes digitaler Medien in der Schule im Lernem immer wieder hervorgehoben wird, werden digitale Medien faktisch von einer Mehrheit der Lehrer immer noch eher selten eingesetzt. Oft werden von Seiten der Lehrer vor allem folgende Bedenken für einen reibungsfreien Unterrichtsablauf geäußert: die Schüler werden durch digitale Medien vom Unterricht abgelenkt; Themen werden nur oberflächlich verarbeitet; Plagiate werden bei der Informationsrecherche verwendet.

Denn digitale Medien können zwar gewisse Hilfen anbieten, sie sind aber nur einer der Bausteine eines erfolgreichen Lernprozesses und müssen sinnvoll in Unterrichtsprojekte eingebettet werden [1].

Der Einsatz von digitalen Medien an der Schule bietet vielfältige kreative Lernmöglichkeiten.

## **LITERATUR**

1. Мультимедиа технологии в образовании [Электронный ресурс]. – Режим доступа: <https://for-teacher.ru/technique/78-multimedia-tehnologii-v-obrazovanii.html> – Дата доступа: 20.03.2018.

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## **PACKAGING AS A MARKETING TOOL**

Packaging has always been an important element of marketing tool of each company. It has two functions: to protect and contain the product.

Until the beginning of the last century, the role of packaging was usually limited to the protection of the goods contained therein. Authority to promote the goods was vested only in the label contained in the package. Packaging of "Unwind Biscuit", presented in 1899 is considered to be the first package designed to promote the product.

The design of the packaging for most products must be developed in much the same way as a product promotional campaign. Although each package is designed,

developed and promoted in its own way, there are several standard approaches to make the use of packaging as a marketing tool successful. The following items must be taken into consideration: the product type and the function of its packaging; marketing channels that you intend to use for this product; the main consumer of the goods; the relationship with the packaging of other goods in the product line; the way of using the product by the consumer.

Promotion and advertising of goods and its packaging is very important because some studies show that consumers often buy by image and perception [1].

Packaging colour and how it can affect sales by consumers' subconscious colour associations are being investigated by a number of advertising companies. Without exceptions, advertisers know that colours affect the subconscious of people, and that each colour produces a certain psychological reaction (positive or negative).

Red is the colour of passion, blue is the colour of tranquility, yellow represents the sun and prosperity, green is a symbol of peace and hope, orange creates a feeling of warmth, comfort, joy, fun, pink is the colour of tenderness and friendliness, it reduces internal and external aggression.

Studies show that coffee from a blue coffee pot is perceived as having a mild flavour, coffee from a yellow coffee pot as a weak one, coffee from a brown coffee pot as too strong and coffee from a red coffee pot as a drink with a rich taste and aroma [2].

So, the colour of the package has a significant impact on the choice of consumers and should be chosen very carefully.

An important point to keep in mind when creating packages is that in order to please the outer look we must not forget about the quality of the product. Regardless of how interesting it looks visually, the main task is to deliver the order to the client in undamaged condition.

So, good packaging requires research on target markets, retail environment and external environment, including social change and technological developments.

## **REFERENCES**

1. Никитин В. «Одежка», по которой встречают любой товар // Дело. Восток + Запад. 1999.
2. Самойлов М.В. Упаковка товаров: пособие / М.В. Самойлов, М.А. Зильберглейт, А.А. Губарев. – Минск : БГЭУ, 2009.



## **AN INVESTIGATION INTO THE HISTORY OF TRADITIONAL FASHION**

The **topic** of the project is traditional fashion and its impacts and meanings in the modern days. Specifically, how different cultures have similarities in fashion traditions and self-expression through clothing. This area of interaction is chosen for the project because people usually look and investigate the differences in cultures, but it is important to see their resemblances, especially from the days of the past.

This project is created for the international community specifically in our school to make everyone praise the diversities and similarities of our cultures and also to make us aware of them not only in hobbies or food preferences but the sameness within our communities that go way back in time.

The **goal** is to create a modern clothing piece that will combine two cultures that are somehow relatable to us. I chose Ukrainian and African cultures. Since I am Ukrainian and have more knowledge about my own culture, I decided to choose it to compare it with a culture that I don't know much about. African culture interested me because I like to learn how to dance all the different dances from African countries and I love the music. In order to achieve this I made a fashion piece that includes patterns and elements from traditional costumes. My global context is Personal and cultural expression because people used clothing to express themselves in any century at any time.

I have prior knowledge in this area as I have seen some images from Ukrainian history in literature books that show what people wore. I also used to do Ukrainian national dance for 6 years, which introduced me to the culture's authentic costumes. Prior knowledge for making clothing I got from art class and some members from my family who used to create different wear from a variety of materials and fabrics.

In Kiev, Ukraine, I visited an exhibition called "In Progress". It was a fashion project of the Ukrainian dress-code during the independence times. The exhibition was a story of the community, country and people. It really inspired me and gave me a lot of knowledge and ideas for my product. The project was challenging for me because I've never designed clothing before and it was difficult to put two cultures that have so much in them in one small piece. One of the resources that I thought was really significant, was a book (Kara-Vasylyeva, Tetyana. *Ukrainska Vishivka: Albom*. Mystectvo, 1993.). It had a short history of the ornaments and examples of what they represented and why they were made. Other resources that I've used were internet web-sites in both Ukrainian and English languages.

The first stage of my project was to brainstorm the different options for designing the product and what patterns to use and what they would mean/represent for the audience. Then I started sketching the different options. I

looked at patterns that meant something to me and could represent not only myself but my generation. When I was drawing, I saw what I liked best and decided on my final idea. The jacket has Ukrainian embroidery from Kiev's region and two African patterns. One reflects the love of relatives and community, where the circle represents the household and the dot is the family. This pattern represents the unity. The other pattern represents a belt that was worn by warriors when they went to fight. It shows braveness and fearlessness. When deciding what colors will be used, I tried to find the ones that had similar meanings in both cultures to show the similarities of the community. For example, in both nations, red is a festive color that has a powerful effect to it. It is also one of the most popular colors that can be seen in the ornaments. After finalizing my idea, I started sewing on the embroidery. I used a machine. After I was done with the Ukrainian part of my product, I used fabric markers to paint on the jacket. I decided to add lace near the embroidery to make the jacket stand out more. The lace that I used was once part of a Ukrainian, old, traditional table cloth.

One of the self-management skills that I practiced quite a lot was overcoming distractions. The other important skill that I used was to plan out important assignments and deadlines.

My **final product** was a denim jacket that combined elements of Ukrainian and African cultures. In response to my goal I joined traditional fashion from very different places and found similarities in them. The patterns complimented each other and added an interesting meaning to the piece. I created an original product on history of traditional fashion which is one of my interests. The jacket has an embroidery pattern on both sides of the sleeves in red, white, grey and black colors and white lace on the top and the bottom of the embroidery. The African symbols are drawn also on the sleeves above the Ukrainian part of the jacket and at the back.

One of the **criteria** was to provide a viewer with an original, cultural but yet modern piece of clothing and 6 people that were asked, said that they would wear the product. Some were also able to understand what cultures were being incorporated. One of the other criteria was to make sure that the product is interesting to look at and visually appealing. The people who were asked had positive feedback on the way the product is presented and some said that they found it interesting how the two cultures are combined in one piece.

Completing this project extended my understanding of the topic in a significant way because now I know different traditional clothing pieces not only in different cultures but also regions and what all of them mean. The research helped me learn the differences and similarities of historical costumes and make my project more relatable to the audience because of combining completely different cultures in one thing.

**Inquirers** - the IB learner profile was used quite a lot throughout the whole project because research was one of the key elements to succeed. Throughout the project I investigated the history of cultural fashion and techniques of how to show it on the piece of clothing. It was important to learn not only independently but ask others who might have more experience at certain things. For example, when I

started sewing, I asked for a bit of help from a person who is a professional sewer, at the beginning because I didn't have that much experience with it before, only the basics.

**Knowledgeable** - developing understanding of the topic throughout the past month was crucial to be able to understand what was worn earlier and what it meant and how to do something. Without knowing what patterns there are in African culture, I wouldn't be able to paint something meaningful from Ukrainian culture on the jacket.

**Open-minded** - it is always good to stay open-minded especially to be able to understand different points of view and different types of information that is being found. Especially since my topic included two cultures it was useful to be able to appreciate their traditions and meanings.

**Risk-takers** - when learning about something new and then trying to create it it's good to challenge yourself and take risks to be able to achieve the set goal. For example, when I was sketching the ideas, they looked interesting, but it didn't mean that the jacket would look exactly the same and at the beginning. I was not sure what colors would correspond with each other. The risk here would be to create something that doesn't have a meaning and that doesn't look aesthetic. Also understanding of the purpose from the audience was important which was also one of my criteria specifications.

**Reflective** - when developing anything it's essential to reflect on what was done and how to improve it. Taking suggestions from others and their opinion and self-reflecting is a key to a good result.

## REFERENCES

### *Ukrainian part:*

Святокум, Наталя. "Мовою барв, орнаментів і крою. Український народний костюм." *UaModna*. N.p., 30 July 2015. Web. 5 Oct. 2017. <<http://www.uamodna.com/articles/ukrayinsjkyy-narodnyy-kostyummovoyu-barv-ornamentiv-kroyu/>>.

UDW. "Types and Symbols of Ukrainian Embroidery Ornaments." *Ukrainian Dance World*. N.p., 17 Apr. 2015. Web. 3 Nov. 2017. <<http://www.ukrainiandanceworld.com/single-post/2015/04/17/Types-and-symbols-of-Ukrainian-embroidery-ornaments>>.

### *African part:*

"Clothing of African Cultures." *Fashion Encyclopedia*. N.p., n.d. Web. 2 Nov. 2017. <[http://www.fashionencyclopedia.com/fashion\\_costume\\_culture/Early-Cultures-African/Clothing-of-African-Cultures.html](http://www.fashionencyclopedia.com/fashion_costume_culture/Early-Cultures-African/Clothing-of-African-Cultures.html)>.

"Get to Know a Bit More about Kente Cloth." *Kente Twist*. N.p., 31 Aug. 2009. Web. 22 Nov. 2017. <<https://kentetwist.wordpress.com/2009/08/31/get-to-know-a-bit-more-about-kente/>>.

### *Embroidery part:*

Hart, Jenny. "Embroidery How To - Split Stitch." *Sublime Stitching*. N.p., n.d. Web. 30 Nov. 2017. <<https://sublimestitching.com/pages/how-to-split-stitch>>.

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## **FORMATION OF MANAGERS' PERSONALITY IN MODERN CONDITIONS**

The work of an enterprise depends on how the personality of the director is formed. Nowadays, to succeed in the market it is not enough to apply the usual techniques, it is necessary to search constantly and find new, more optimal ways of achieving results. That is why manager's development is the matter of survival and development of organizations. Being a leader seems to be easy and simple, since you can issue orders, point out errors and command. Personality and characteristic traits are also important factors. Being in charge of a group of people involves more than just being a good leader or getting on well with others. In order to feel the essence of management, it is necessary to direct all efforts to solve the tasks by using the team, its capabilities and abilities.

Today a new generation of business people is characterized by independence of thinking, mobility (both physical and intellectual), pragmatism. Accordingly, the accents of the manager's functions change and he or she becomes more than a boss i.e. a leader, a coach, a mentor [1]. The manager should be more flexible and more fundamental than his team. A leader must be someone your subordinates and your superior can count on.

A number of basic skills are required for a manager:

1. To set goals correctly, make timely decisions and concentrate the efforts of the team to achieve the desired result.
2. To gain the right people and lead them to the result i.e. to manage communication.
3. To manage not only "manually", but also create systemic mechanisms of organizational work.
4. To generate ideas [2].

In conclusion, we can say that in today's world the standard models of management adopted at the time of Frederick Taylor would no longer work. The modern manager must be one step ahead, be able to think unconventionally and develop constantly.

## **REFERENCES**

1. Режим доступу: <http://olegchirkov.ru/materialy/stati/razvitie-rukovoditeley.html>
2. Режим доступу: <http://bbcont.ru/business/stanovlenie-rukovoditelya-sovety-nachinayuszim-upravlencam.html>

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## **RATIONAL AND IRRATIONAL NUMBERS**

This problem has always attracted the attention of famous mathematicians. It has been studied by many scientists such as Pythagoras, Johann Carl Friedrich Gauss, Thomas Bradwardin, Gerolamo Cardano and others.

A rational number is a part of the whole expressed as a fraction, a decimal or a percentage. A number is rational if we can write it as a fraction where the top number of the fraction and the bottom one are both whole numbers. The term rational is derived from the word 'ratio' because the rational numbers are figures which can be written in the ratio form.

Every whole number, including negative numbers and zero, is a rational one. This is because every whole number 'n' can be written in the form  $n/1$ . For example,  $3 = 3/1$  and therefore 3 is a rational number.

Numbers such as  $3/8$  and  $-4/9$  are also rational because their numerators and denominators are both whole numbers.

Recurring decimals such as  $0.26262626\dots$ , all integers and all finite decimals, such as  $0.241$ , are also rational numbers.

Alternatively, an irrational number is any number that is not rational. It is a number that cannot be written as a ratio of two integers (or cannot be expressed as a fraction).

For example, the square root of 2 is an irrational number because it cannot be written as a ratio of two integers.

The square root of 2 is not a number of arithmetics: no whole number, fraction, or decimal has a square of 2. Irrational numbers are square roots of non-perfect squares. Only the square roots of square numbers are rational.

Similarly  $\pi$  is an irrational number because it cannot be expressed as a fraction of two whole numbers and it has no accurate decimal equivalent.

$\pi$  is an unending, never repeating decimal, or an irrational number. The value of  $\pi$  is actually  $3.14159265358979323\dots$ . There is no pattern to the decimals and you cannot write down a simple fraction that equals  $\pi$ .

Euler's Number (e) is another famous irrational number. Like  $\pi$ , Euler's Number has been calculated to many decimal places without any pattern showing. The value of e is  $2.71828182845904523\dots$  and keeps going much like the value of  $\pi$ .

The golden ratio (whose symbol is the Greek letter " $\phi$ ") is also an irrational number. It is a special number approximately equal to 1.618 but again its value is never ending:  $1.61803398874989484820\dots$

Consequently, this problem is very important for the study of mathematics as well as the derivation of the notion of number as the main component of this science.

## REFERENCES

1. <https://mathsdoctor.co.uk/revision-help/gcse/number/rational-and-irrational-number/>
2. В. А. Ильин, В. А. Садовничий, Бл. Х. Сендов. Вещественные числа // Математический анализ / Под ред. А. Н. Тихонова. — 3-е изд., перераб. и доп. — М.: Проспект, 2006. — Т. 1. — 672 с.

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## GRAMMATICAL PROBLEMS OF TRANSLATION FROM THE ENGLISH LANGUAGE TO RUSSIAN ON THE EXAMPLE OF THE ARTICLES

Translation is an integral part of the activities of a modern specialist who speaks foreign languages. However, because of the discrepancy between the linguistic systems of the English and Russian languages in the translation process we face certain difficulties, which are conditionally divided into lexical and grammatical. Reproduction of the same grammatical form of the original is not the goal of the translation, since its purpose is to convey the meaning of the source text. One of the differences between the grammatical structures of English and Russian is the presence in the English language of such grammatical phenomenon as the article, which must not simply be taken into account in the translation process, but somehow transformed [1]. Since English articles are not directly analogous to the Russian language, in most cases they are simply omitted during the translation:

*I've got a friend. – У меня есть друг.*

The indefinite article refers to an unknown object, which means that it can be translated by the Russian indefinite pronoun «какой-то»:

A man gave her this parcel. – *Какой-то мужчина отдал ей этот сверток.* The definite article, on the contrary, indicates something familiar to us, so it can be transmitted with the help of the demonstrative pronouns «этот» или «тот»:

*He is the student who helped me yesterday. – Это тот самый студент, который помог мне вчера.*

The English language is characterized by a strict «fixed» word order, the change of which only in some cases can be used for highlight the «new, unknown» in the utterance. This function, as is known, is performed by an indefinite article,

which indicates new information or the object previously unknown to us. Since in Russian the new information is usually goes at the end of the sentence, the sentence: «*A boy entered the room*» we translate as: «*В комнату вошел мальчик*». And the sentence: «*The boy entered the room*» will be translated as: «*Мальчик вошел в комнату*», because the definite article usually indicates the «old», already known information, which usually is usually given at the beginning of the sentence in Russian [1].

The indefinite article a/an often has the meaning «one», so one of the options for translating the sentences of the type: *I have a book*. – У меня есть одна книга.

The definite article is often used as a means of emphatically amplifying a word or phrase in a sentence. At the same time, it seems to acquire the meaning of an excellent degree and is usually translated by a suitable adjective in the superlative degree:

*Now the researchers are studying the influence of coffee growing on the food chain of the bee with the goal of being able to save these insects.* – Сейчас исследователи изучают влияние кофейных плантаций на пищевую цепь пчелы, преследуя при этом самую главную цель, а именно: сохранить количество этих насекомых.

Using an article, the author implies additional sense to the text he generates, and to achieve the adequacy of translation, it is necessary to take into account all the shades of meaning that the author would like to convey.

## REFERENCES

1. Грамматические трудности при переводе английской литературы. [Электронный ресурс]. – Режим доступа: <https://blog.accent-center.ru>.– Дата доступа: 10.03.2018.

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## VANDERBILT'S CONTRIBUTION INTO THE ECONOMIC GROWTH OF THE USA

After the end of the Civil War the USA was divided and the world looked at American democracy as a failed experiment. But what people didn't realize was that a new era had dawned. The nation entered an age of advancement and a new generation of leaders emerged. The Rockefellers, the Vanderbilts, the Carnegies, the Fords were the first generation of so called the entrepreneurial rock-stars. They were the ones who set the standards for the American Dream. These were great men with a vision that nobody else had. Therefore, over the next 5 decades that

small group had changed the history of the USA. The American economy was linked by railroads, fueled by oil and built by steel. It is important to mention that one of the first men who could build his own empire was Cornelius Vanderbilt [2, p. 19-27].

The aim of the article is to elucidate, generalize and determine Vanderbilt's contribution into the formation of the new generation of entrepreneurs propelling the United States to greatness. This theme was researched by such scientists as H.W. Brands (historian), T.J. Stiles (Vanderbilt's biographer) and Ted Turner.

For the first time in the country's short existence the man most capable of leading America was not a politician he was a self-made man. At the age of 16 Cornelius Vanderbilt bought a small ferry-boat with a \$100 loan. He quickly gained a reputation of a rigorous businessman willing to use any means necessary to go ahead. His single ferry soon became a fleet of ships transporting goods and passengers to every corner of the growing country. Vanderbilt became so synonymous with shipping that his nickname was the Commodore. Vanderbilt recognized that the most profitable thing was transporting goods from one place to another. Consequently, over the next 40 years he had built the largest shipping empire in the world [2, p. 145-158].

Work was underway on the first transcontinental railroad and the Commodore realized that its completion would transform America slashing cross-country travel time by months. Vanderbilt saw his future. He sold all the ships and invested everything he had in railroads. His decision to invest heavily in rail was paid off. Vanderbilt became the richest man in America with the net worth of over 68 million dollars that is the equivalent of 75 billion today [1, p. 145-148].

Railroads soon crisscrossed America tying together the country in a way that just 15 years earlier was unimaginable and providing over 180,000 jobs. Laying tracks became American's engine for unprecedented growth. Vanderbilt created the Grand Central Depot in the heart of New York. It was the most ambitious urban construction project America had ever seen. Actually, it was a physical symbol of the size and power of Vanderbilt's railroad empire [1, p. 341-346].

Analyzing all given above facts, we can sum up that Vanderbilt became an example for the businessmen. He didn't think in terms of money he thought in terms of winning. Commodore Cornelius Vanderbilt grew up poor but had created a railroad empire making him the richest man in the country.

## REFERENCES

1. T.J. Stiles. The First Tycoon: The Epic Life of Cornelius Vanderbilt. – 2009. – 525 p.
2. М. Клеппер, Р. Гунтер. Сто Великих Богачей. – Вече. – 2006. – 429 с.



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## **ALGEBRAIC CURVE OF THE FOURTH DEGREE**

Plane algebraic curve of the fourth degree is a line, which can be defined by algebraic equation of the fourth degree relative to Cartesian rectangular coordinate system.

Quatric plane curves include: lemniscate of Bernoulli, Cassini oval, conchoid of Nicomedes, limaçon of Pascal, rose curve, cardioid and many others.

Curves of the fourth degree are widely spread, they are used in manufacturing and construction. They have some quite interesting properties. Though we don't notice these curves in our everyday life, it is hard to imagine our life without them.

Let's consider the usage of quatric plane curves in everyday life, machinery, physics and other areas.

In machinery, among other factors, the lemniscate is used as a transition curve on a short radius curve which is applied to railroad tracks in mountainous areas and tramways.

An example of lemniscate usage in physics may be seen in equipotential lines of force, created by two parallel currents which flow through infinitely long conductors in area which is perpendicular to them.

According to Bonat, lemniscate is a curve possessing the same properties as point mass that comes out of a state of rest under the influence of gravity and runs the arc of this curve at the same time as it runs the corresponding bisecant. The centerpoint of the lemniscate thus coincides with the starting point of the point mass that moves and its axis makes a  $45^\circ$  angle with its vertical line.

Cardioid has a different application in machinery. Eccentrics are shaped like cardioids. Sometimes it is used in gears designing. Draftsmen are quite familiar with cardioid, it occurs as a result of reciprocating action of engine pistons.

Cassini's ovals were discovered when people were trying to specify Earth's orbit. Jean-Dominique Cassini supposed that Earth's orbit is shaped as oval, not ellipsis, as it was proposed by Johannes Kepler.

Conchoid of Nicomedes is widely used in maths. This line was used for doubling the cube and finding the trisection of a cube. It is used for joining tangent and normal lines to curves and also for geometrical solution of the third degree equations.

Limaçon of Pascal is widely used in mechanics. It is used as a line for tracing out the outline of the eccentric, if it is necessary that the axis which roams through the profile, performs harmonious oscillations.

One of the components of mechanism for lifting and lowering the semaphore is traced round the limaçon of Pascal. Eccentric, that is traced round the limaçon, is

quite efficient, as the speed of lifting or lowering the lever though being minimal at the beginning of movement reaches its maximum in the middle of the semaphore movement. It grants jerkless movement of the lever of semaphore with insignificant starting and ending joggles and also it lightens work against momentum and friction and especially it can be noticed at the initial activity of the drive.

The rose curve was used while studying the shape of leaves and flower petals.

As you see, curves of the fourth degree are widely spread and though we don't notice these curves in our everyday life, it is hard to imagine our life without them.

## REFERENCES

1. Маркушевич А. И. Замечательные кривые. – М.: Краснопролетарская, 1951. – 23 с.; 1978., - 48 стр. с илл.
2. Савелов А. А. Плоские кривые. / А. А. Савелов / М.: Физматгиз, 1960 – 294 с.

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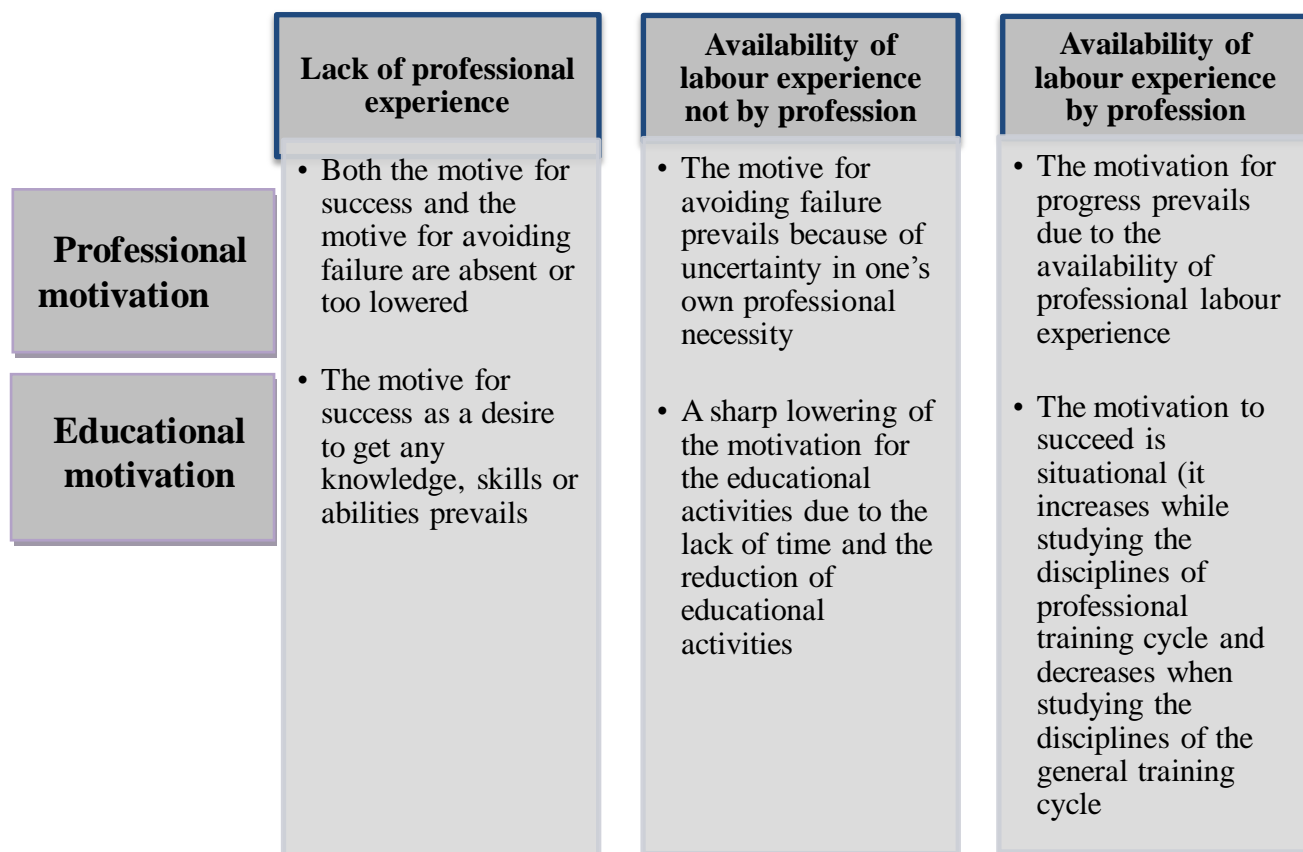
## THEORETICAL MODEL OF DEVELOPING PROGRESS MOTIVATION OF STUDENTS WITH DIFFERENT PROFESSIONAL EXPERIENCE

Adolescence is a period of one's personal and professional self-determination. That's why the role of the development of young people motivation at this time increases greatly. Modern psychology pays special attention to studying progress motivation as person's desire to succeed [2]. The motivation for progress is realized in person's desire to make efforts for having best results in that sphere which is considered to be the most important and significant [1].

We paid special attention to the relation of students' progress motivation to their experience of professional activities and we made a suggestion that the students with different professional experience would show their progress motivation both in educational and professional activities quite differently [3].

The students' motive for success as certain desire to get some knowledge, skills and abilities in their educational activities prevails in the motivation structure of those who lack some professional experience. Instead of this the motive to get some progress as well as the motive to avoid failure is completely absent (or excessively reduced) in one's professional activities.

We expect for the sharp lowering of the motivation for educational activities due to the lack of time and reduction of the educational activities. We also hope for the predominance of the motive to avoid failure in professional activities due to the uncertainty as to the ordered number of professionals.



*Pic. 1 Theoretical model of the development of progress motivation of students with different professional experience*

Students with some experience of work by speciality have the motivation to succeed in both spheres – educational and professional. However the progress motivation will have a situational character in students' educational activities.

Thus the experience of professional activities contributes to the development of professional motivation but it can slow down the manifestation of progress motivation in education. It should be noted that the theoretical model is based on the analysis of scientific literature and piloting researches. The empirical substantiation of the given assumption is based on the studies on the motivation structure of students with different labour experience.

## REFERENCES

1. Гордеева Т.О. Мотивация достижения: теории, исследования, проблемы. – М. : Смысл: Академия, 2006. – 336 с.

2. Хекхаузен Х. Мотивация и деятельность / Х. Хекхаузен. – 2-е изд. – СПб. : Питер; М. : Смысл, 2003. – 860 с. – (Серия "Мастера психологии").
3. Савиченко О.М. Вікові особливості регуляції поведінки спортсменів у юнацькому віці / Ольга Савиченко // Психологічні перспективи. – 2008. – Вип. 12. – С. 134-142.

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## DIE DEUTSCHEN PHRASEOLOGISMEN IN DER WERBUNG

Werbung ist ein Teil unseres Alltags und es ist nicht verwunderlich, dass Werbetexte auch ein beliebtes linguistisches Forschungsfeld sind. Das Interesse richtet sich auf alle sprachlichen Beschreibungsebenen (z.B. Phonologie, Wortbildung, Orthographie, Textkonstitution usw.). Ein auffallendes Merkmal stellen in der Werbesprache in linguistischer Hinsicht Phraseologismen dar. Das Untersuchungsproblem des vorliegenden Artikels wurde schon mehrmals von solchen gelernten Wissenschaftlern wie Andrea Hemmi [3: 15], Balslimke P. [1: 22], Burger H., Buhofer A., Sialm A. [2: 25] behandelt. Es bleibt aber trotzdem aktuell: die Phraseologismen werden in der Werbung besonders gern verwendet.

Wie aus der Analyse hervorgeht, entnehmen die Werbetexter die Phraseologismen aus der Alltagssprache und benutzen sie in kaum abgeänderter Form als Werbung. Dies hat positiv zur Folge, dass ein schnelles, unproblematisches Textverständnis möglich ist. Die Phraseologismen, die referentiell sein können, bestehen beispielsweise aus einem Verb und Subjekt. Sie können noch Objekte mit sich führen oder einen vollständigen Hauptsatz bilden: „*Bis das Blut in den Adern gefriert*“ (*das Blut in den Adern gefriert*) (im Buchhandeln). Weiterhin erscheinen verbale Phraseologismen. Sie enthalten ein Verb und können somit auch Prädikatsfunktion übernehmen, z.B.: KFZ: „*Der lässt auch noch ihr Portmonee gut aussehen*“ (*etwas gut aussehen lassen*). Außerdem treten nominative Phraseologismen auf, welche als Subjekt, Objekt oder auch ggf. als Attribut erscheinen können. Zum Beispiel: KFZ: „*Hinterlässt nichts als ein gutes Gefühl*“ (*ein gutes Gefühl hinterlassen*).

Bei der normalen Verwendung der Phraseologismen dominieren die phraseologischen Einheiten und Funktionsverbgefüge, die gewisse Eigenschaften des Produkts pointieren und es als ein besonderes Ereignis darstellen: Nivea: „*Von dir kriege ich nie genug*“; Veneto: „*Urlaub großgeschrieben*“; Peugeot: „*Sein riesiges Panorama-Glasdach, (...) und seine großzügige Ausstattung machen jede Fahrt zum Erlebnis*“; Polo: „*Hier steht der Spaß im Mittelpunkt*“. Oft werden die Qualität des Produktes und seine Zuverlässigkeit in den Mittelpunkt gestellt: Liebherr: „*Sachverstand aus erster Hand*“. Einen viel versprechenden Klang haben die folgenden Phraseologismen in den Anzeigen: „*die Sonne ins Leben bringen*“, „*die*

*Flügel verleihen*“, „*intensive Eindrücke schaffen*“, „*das Leben in vollen Zügen genießen*“ und „*es mit allen Sinnen erleben*“. Zahlreich sind in den Werbeanzeigen, vor allem in dem laufenden Text, die Modelbildungen und Zwillingsformen. Wie es bereits erwähnt wurde, sind die Modelbildungen sehr beliebt, da sie an jede Marke angepasst und produktspezifisch angewendet werden können; vgl.: „*Rund um den Globus*“, „*Tag für Tag*“, „*Schritt für Schritt*“, „*mehr Leistung*“, „*aus Leidenschaft*“, „*gegen Wind und Wetter*“, „*Tag und Nacht*“.

Der Stellenwert phraseologischer Redewendungen in der Werbung ist nicht zu leugnen, im Gegenteil ist dieser Aspekt besonders herauszustellen. Phraseologismen tragen schließlich eine hohe Funktion in der Werbung und gern werden sie verwendet, welches wiederum beweist, wie wichtig diese sind und dass es zum Teil kaum möglich wäre, manche Werbungen ohne selbigen Einsatz gut zu vermarkten [2: 25].

### LITERATURVERZEICHNIS

1. Balsliemke P. Der Kunde ist König! Zur Verwendung der Phraseologismen in der Anzeigenwerbung. // Baur/Chlosta/Piirainen Wörter in Bildern-Bilder in Wörtern / P. Balsliemke. – Essen, 1999. – B.1. – 78 S.
2. Burger H. Handbuch der Phraseologie / H. Burger, A. Buhofer, A. Sialm. – Berlin, New York : Walter de Gruyter, 1982. – S. 192.
3. Hemmi Andrea. Es muß wirksam werben, wer nicht will verderben. Kontrastive Analyse von Phraseologismen in Anzeigen-, Radio- und Fernsehwerbung / Andrea Hemmi. – Bern, Berlin, Frankfurt am Main : Peter Lang, 1994. – 146 S.

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### UKRAINIAN FAR-RIGHT PARTIES AND ANTI-SEMITISM

Nowadays the international community is declaming any displays of anti-semitism. In 1991 Ukraine proclaimed its democratic vector, its foundations are not compatible with any displays of xenophobia and anti-semitism. In terms of legislation, there are well-established methods which prevent such phenomena. However, the strengthening of the positions of the far-right parties has become the future of modern society and the distinctive feature of anti-semitism.

The topicality of this research is presented by spreading unreliable data about the level of anti-semitism in Ukraine. It is worth mentioning that the experts have

made predictions for recent years about the possible increase in anti-semitic actions.

Since the establishment of an independent Ukrainian state, the senior government officials have clearly shown that anti-semitism will not become a part of an official state policy. Particularly, L. Kravchuk in his speech which was devoted to Babyn Yar 50th anniversary emphasized that Ukraine would not keep back the truth about the tragedy. He recognized it as genocide and noted that not only the Nazis were guilty of the tragedy but also the people who had not done anything to prevent it [5, p. 75].

The period of V. Yushchenko's tenure as the President of Ukraine certainly brought many positive achievements for the Ukrainians in the ideological sphere. At the same time V. Yushchenko showed the world the pro-European position of Ukraine. In this context, it's worth noting V. Yushchenko's attitude towards the Jews, for example, awarding a rank of Heroes of Ukraine to R. Shukhevich and S. Bandera, a part of Ukrainian Jewry perceived it as an expression of anti-semitism. But some representatives of Ukrainian Jews had different views on this topic. Thus, Y. Zisels has not blamed the President's orders and argued in favour of R. Shuhevuch and S. Bandera as those who are associated in Ukraine with the fight against Communism and the Soviet power but not as anti-semitism [3].

Over the period of independent Ukraine, a number of political parties have emerged, whose ideologies are expressed in anti-semitic positions. The most vivid and powerful among them was the All-Ukrainian Union 'Freedom' (Svoboda). The aggravation of anti-semitic rhetoric was observed in the 2000s. In summer 2004, the party leader of 'Freedom' (Svoboda), O. Tiahnybok allowed himself anti-semitic statements, where in fact, he called for Ukraine to be defended from the Muscovites and Jews, the UPA soldiers fought with. The judicial investigation was initiated, which resulted in O. Tyahnybok being expelled from the faction 'Our Ukraine' (Nasha Ukraina) [6, p.186-187]. In 2011 'Freedom' (Svoboda) proceeded to more large-scale events such as the campaign 'Uman without Hasids' but Cherkasy country administrative court prohibited this political meeting [4]. In 2012 'Freedom' (Svoboda) won the parliamentary election and attracted much public attention. Everybody was waiting for Svoboda's development path, whether it would become less radical or vice versa – it would cease to conceal the true views (including xenophobic ones). J. Zisels believes that the success of All-Ukrainian Union 'Freedom' (Svoboda) in 2012 parliamentary elections is not related to the growth of anti-semitic and xenophobic attitudes, but to the Ukrainians' disappointment in government.

The theme of anti-Semitism is used by Ukrainian mass media during pre-election campaigns, additionally far-right parties and their opponents use it in different ways. As concerns the most influential party 'Freedom' (Svoboda), its leaders try to avoid anti-semitic expressions during pre-election speeches. The former mayor of Uzhhorod, S. Ratushniak (one of the candidates for presidency in 2010) thanks to his anti-semitic expressions has become popular among some population groups. However, his hatred of the Jews didn't bring him success because only 0,12 % electors voted for him [2].

Anti-Semitism in the Ukrainian real life does not contribute to political success. On the contrary, parties that were prioritizing over anti-semitic rhetoric could not overcome even the minimum barrier to become the members of the Parliament. The most authoritative among Ukrainian far-right parties is 'Freedom' (Svoboda), but its leader forfeited for his sharp statements towards the Jews, and that's why before the elections the party tried to avoid any comments on the Jewish theme.

## REFERENCES

1. Круглий стіл «Правий радикалізм у сучасній Україні: між владою та суспільством» [Електронний ресурс] // Форум націй. – Режим доступу : <http://www.forumn.kiev.ua/newspaper/archive/134/kruhlyi-stil-«pravyi-radykalizm-u-suchas-nii-ukraini-mizh-vladoyu-ta-suspilstvom».html>
2. Лихачев В. Антисемитизм в контексте кампанії по виборам президента України – 2010 [Електронний ресурс] / В. Лихачев // Євроазіатський єврейський конгрес. – Режим доступу : <http://eajc.org/page18/news15802.html>
3. Лихачев В. Антисемитизм в Україні, 2016 [Електронний ресурс] / В. Лихачев // Євроазіатський єврейський конгрес. – Режим доступу : <http://eajc.org/page18/news56148.html>
4. Лихачев В. Место антисемитизма в идеологии и пропаганде ВО «Свобода» [Електронний ресурс] / В. Лихачев // Євроазіатський єврейський конгрес. – Режим доступу : <http://eajc.org/page18/news41210.html>
5. Найман А. Отрицание Холокоста и противодействие неонацизму в Украине / А. Найман, Л. Измайлова // Сборник научных трудов. – Запорожье: ДИВО, 2004. – С. 71-78.
6. Шеховцов А. Всеукраїнське об'єднання «Свобода»: проблема легітимності боротьби за владу [Електронний ресурс] / А. Шеховцов // Україна модерна. – 2013. – № 20. – Режим доступу : <http://uamoderna.com/images/archiv/2013-20/Shekhovtsov.pdf>

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## GRAPH THEORY IN LOGICAL PROBLEMS

The first work on the graph theory belongs to Leonard Euler and it was published in 1736. Firstly, graph theory was used only for certain logical tasks and puzzles. But already in the 19th century it became clear that graph theory could be used to construct molecular and electrical circuits. Wide application of the graph

theory has also been found in programming (any block diagram can be specified by the graph) and in genetics (for the decoding of DNA) and in other fields.

We will consider several problems that are convenient to solve with the help of graph method. To begin with, let's remember what a graph is. If there are several points and lines on the plane and each of them connects a pair of given points, then we could say that the graph is specified. A graph is a finite set of points and arcs that connects these points. Each vertex has its own index and it is determined by the number of edges that converge to this vertex.

Let's consider **the problem of Euler** (1707 – 1783).

*The city of Königsberg is located on the banks of the Pregel River and on two islands. Different parts of the city connect 7 bridges. Every Sunday residents of the city walk around the city. Is it possible to devise a way in which they could walk around the city, crossing each of the 7 bridges only once? [2]*

A graph that can be passed by a continuous motion, without passing the same edge twice is called unicursal. Euler proved that if the graph is unicursal, it should have no more than 2 vertices of the odd index. So, it can be seen from **Figure 1** that the desired route does not exist, because all 4 vertices have an odd index.

Let's consider **the Poisson problem**. It is believed that, after being interested in this task, Siméon Poisson (1781-1810) began to work in mathematics and devoted all his life to it.

*Someone has 12 pints of wine and wants to gift half of that amount, but he does not have a jug of 6 pints. He has two jugs: one for 8, the other for 5 pints. How to pour 6 pints of wine into a jug of 8 pints? What is the smallest number of transitions needed to be done?*

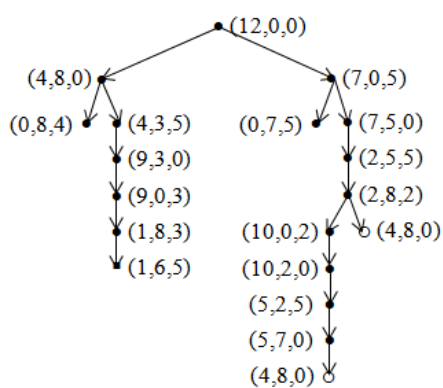


Figure 2

In **Figure 2**, you can see all the possible options for filling wine jugs. A triple of numbers denotes three jugs. The first number indicates the number of pints in a jug that holds 12 pints, the second number is the number of pints in a jug that holds 8 pints, and the third number is the number of pints in a jug that holds 5 pints.

The figure shows that only one variant of such a transfusion is possible (the second option is reduced to it, but the number of transfusions will be much larger). And the smallest number of transfusions that you need to do consists of 6 shifts.

That is, you need to do the following:

- pour wine from a 12-pint jug to an 8-pint (4,8,0);
- from 8-pint to 5-pint (4,3,5);
- from the 5-pint back to the 12-pint (9,3,0);
- pour 3 pints from 8 pints to 5 pints (9,0,3);

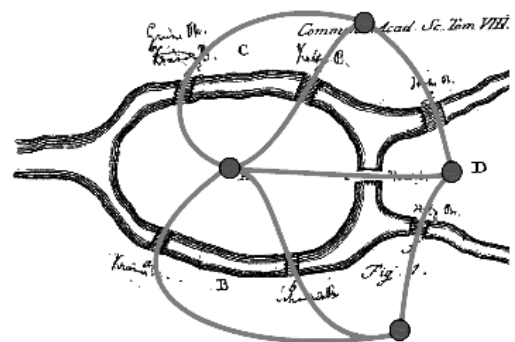


Figure 1



- pour wine from a 12-pint to an 8-pint jug (1,8,3);
- pour a portion of the wine into a 5-pint jug (1,6,5).

There are many similar tasks. All of them can be generalized as follows: let's have two empty jugs with a volume of  $a$  and  $b$  liters and you need to dial from the river exactly  $c$  liters of water. If the number  $c$  is not divisible by the largest common divisor of the numbers  $a$  and  $b$ , then this cannot be done. If  $c$  is divided into the largest common divisor of the numbers  $a$  and  $b$ , then in this case the problem always has a solution. Similarly, the solution will exist if the numbers  $a$  and  $b$  are relatively prime.

We see that in the Poisson problem we need to use empty jugs of 8 and 5 pints to draw 6 pints of wine. We know that 8 and 5 are relatively prime numbers, then we see that the problem has a solution. In order to determine if there is a solution to the problem, it does not matter how much wine was originally.

The next known task which can be solved with the help of the graph theory tells us **about a wolf, a goat and a bag of cabbage**.

*Carrier (C) must transfer through the river a wolf (W), a goat (G) and a bag of cabbage (B). But the boat is so small that the carrier can take with himself only one of the objects. In addition, the cabbage cannot be left with the goat, and the goat with the wolf. How to make a ferry? [0]*

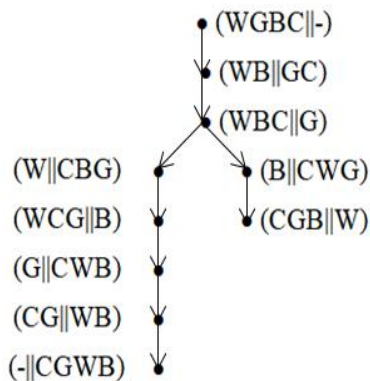


Figure 3

For this task, we will also construct the scheme (Figure 3). We see that the problem has two solutions, in particular, the carrier is enough to perform the following steps: first take the goat to another bank, then return and pick up either a bag or the wolf. If the carrier will be near the bank of the river, then the goat will not eat cabbage, and the wolf will not eat a goat. Next, the carrier takes the goat and takes it to the opposite bank, where either the wolf or the bag is taken, respectively. Then he has to pick a goat and then all the objects will be transmitted

through the river.

The method of graphs can solve various problems in logic. Let's consider the following:

*Three daughters of Yaroslav the Wise - Anne, Anastasia and Elizabeth (Elisiv) - became queens of different countries: Norway, Hungary and France. One of them became the wife of King Harald Sigurdsson, the second - King Henry I, and the third - King Andrew I. Anne's husband was not Harald, and he was not the king of Hungary. The wife of Harald was not Anastasia. Henry was not married to the Queen of Hungary. The task is to recover spouses and countries if in Scandinavian sources you do not find the names Anastasia and Anna.*

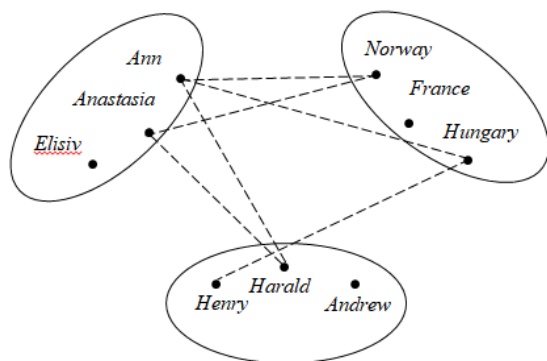


Figure 4

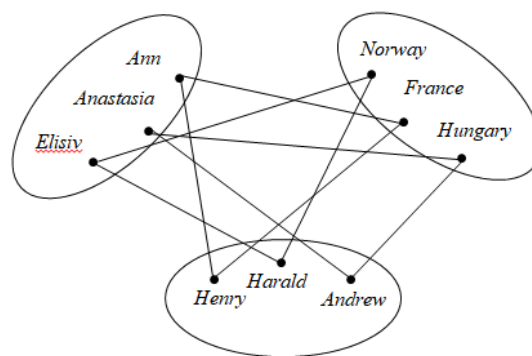


Figure 5

In **Figures 4 and 5**, the vertices of the graph are indicated by the dots, in this case there are 9. The dotted edges denote those vertices that are not in a certain relation, and the edges denoted by the usual line represent the relation between the vertices.

**Figure 4** shows all the conditions specified in the task. Then we argue this way: the Queen of Norway is neither Anna nor Anastasia, so Queen of Norway is Elisabeth, and her husband is Harald. Then Henry is Anna's husband and King of France. And, of course, Anastasia's husband is Andrew, and Anastasia is the Queen of Hungary. The answer to the task can be seen in **Figure 5**.

We reviewed the use of graphs to solve some logical problems. This approach can be used to solve problems in mathematics of increased complexity with students of the primary school.

## REFERENCES

1. Барболин М. П. Головоломки и графы / М. П. Барболин // Квант. – 1975. – № 2. – С. 61–63.
2. Болтянский В. Плоские графы / В. Болтянский // Квант. – 1981. – № 7. – С. 13–18.
3. Оре О. Графы и их применение / Остин Оре. – Москва: Мир, 1965. – 174 с.

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## STROKES FOR THE DIPLOMATIC ACTIVITY OF THE UPR GOVERNMENT IN EXILE IN THE EUROPEAN COUNTRIES DURING THE WARSAW-PARISIAN PERIOD (1924-1940)

After the signing the Riga Treaty of Peace in 1921, the international situation for the Government of the UPR (Ukrainian People's Republic) in exile significantly deteriorated. At the end of 1923 – early 1924 all official diplomatic

embassies and missions were eliminated. The period from 1924 to 1940 is called the Warsaw-Parisian period of the SC UPR (the State Centre of the Ukrainian People's Republic). His peculiarity was that the foreign policy activity of our diplomats was at that time of a purely public nature [3, p. 42].

Warsaw and Paris were powerful centers of diplomatic work of the new period of foreign policy activity. The majority of the government residents in the emigration settled there after the abolition of their shelter in Tarnow (Poland). Chairman of the Directorate, Chief Otaman Symon Petliura settled in Paris, which made it possible to intensify international contacts [1, p. 18]. There he became an editor and publisher of the *Tryzub* (weekly journal), which often described events in occupied Ukraine, urgent issues of the UPR, Ukrainian emigration in general, and world politics [2, p. 11]. Poland supported the SC UPR and the congresses of Ukrainian emigrants were held on its territory.

Diplomatic activity in the European countries during the study period was carried out with the enthusiasm of former leaders of official diplomatic missions. Czechoslovakia was a scientific and cultural center of Ukrainian emigrants. There were also many diverse scientific institutions founded on the reliance of our diplomats. Due to the Ukrainian Ambassadors, relations with Britain and Germany intensified significantly. In Italy, for example, Eugene Onatsky was active in social work [2, p.10].

Ukrainian diplomacy established tight connections with various public entities of foreign states (in particular, France), and also managed to sign a memorandum on the state-building of the Carpathian Ukraine at the Munich Conference (1938).

To sum up, relations with powerful world states of that time continued to be maintained during the Warsaw-Parisian period of negotiations. Representatives of the Government of the UPR in exile lived and worked in the vast majority of the European countries. There they launched a wide public political activity, and thus attracted attention of the world community to the Ukrainian issue.

## REFERENCES

1. Лівицький М.А. ДЦ УНР в екзилі між 1920 і 1940 роками / М. А. Лівицький. – В-во «Українське інформаційне Бюро» : Мюнхен-Філадельфія, 1984. – 72 с.
2. Мартинюк Н. Нариси дипломатії екзильного уряду УНР у країнах Європи (1924-1940) / Н. Мартинюк // Суспільні науки: історія, сучасність, майбутнє: матеріали Міжнародної науково-практичної конференції (м. Київ, Україна, 5-6 травня 2017 року). – Київ : ГО «Київська наукова суспільствознавча організація», 2017. – С. 9-13.
3. Українська політична еміграція 1919-1945: Документи і матеріали. – Київ : Парламентське вид-во, 2008. – 928 с.

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## **DER EINFLUSS VON EMOTIONEN AUF DIE GESUNDHEIT DES MENSCHEN**

Hast du schon einmal innegehalten, und dich gefragt, wie du für gewöhnlich reagiert, wenn etwas nicht so läuft, wie du es dir vorstellst? Und ob deine Reaktion wirklich hilft, dein Unwohlsein zu vermindern, oder ob sie das genaue Gegenteil bewirkt? Tatsache ist, dass wir oft nicht wissen, wie wir negative Emotionen effektiv regulieren können.

Welche Emotionen Krankheiten verursachen? Schmerzen im Nacken verursachen solche Emotionen wie Dickköpfigkeit, Sturheit, die Unfähigkeit Sichtweisen anderer einzunehmen. In den Schultern – Sorgen und Belastungen, das Gefühl fehlender Klarheit oder Kontrolle. Rückenschmerzen – Oben: das Gefühl nicht geliebt zu werden; Mitte: Schuld, Bedauern, Rache; Unten: (finanzielle) Sorgen & Druck. Hüftschmerzen – Unentschlossenheit, Angst davor falsche Entscheidungen zu treffen. Knieschmerzen – Arroganz, Stolz und Ego, Unnachgiebigkeit, Sturheit, Dickköpfigkeit. Knöchelschmerzen – Schuld, Druck, Sorgen, Das Gefühl nicht voranzukommen. Herzschmerzen – Wut, Hass, geringes Selbstwertgefühl, Liebeskummer. Leberschmerz – Ärger, Kritik, Zorn, Angst vor Konfrontationen. Milzschmerzen – Trauer, Einsamkeit, Sorgen, Verwirrung, Unentschlossenheit. Nierenschmerzen – Angst, Panik, Schuld, Reue, Bedauern. Magenschmerzen – Abscheu, Ekel, Enttäuschung, Unsicherheit.

Und wie lassen sich negative Emotionen effektiv regulieren? Überwinden Negativität hilft: Freude, sie ist eine emotionale Reaktion auf eine schöne Situation, eine liebenswerte Person oder auf Erinnerungen. Sie beruht auf den Erlebnissen, an die wir noch lange gern zurückdenken; Dankbarkeit, Dankbar zu sein für all die guten Dinge im Leben, ist eine positive Emotion; Gelassenheit, Es gibt keine Schuldgefühle und keine Sorgen – nur Ruhe und Zufriedenheit; Interesse - unseren Leidenschaften nachzugehen, ist ebenfalls ein sehr angenehmes Gefühl; Heiterkeit, Vergnügt zu sein und zu lachen ist eine der auffälligsten positiven Emotionen; Inspiration, Inspiriert werden wir durch Menschen, die Gutes oder Außergewöhnliches leisten, das vorher unmöglich schien; Erstaunen, Wir geraten in Erstaunen, wenn wir ein Naturspektakel beobachten oder manchmal auch bei hoher Kunst; Liebe, Es tritt verstärkt auf, wenn wir mit diesen Menschen die anderen positiven Emotionen gemeinsam erleben. Gemeinsame Leidenschaften, gemeinsame Heiterkeit oder gemeinsames Staunen über die Wunder der Natur.

Um schwierige Zeiten zu durchstehen, ist es sehr hilfreich, sich an Quellen positiver Emotionen zu nähren, und das innere Gleichgewicht wiederherstellen zu können. Nicht immer sprudeln diese Quellen in unserem Umfeld, sodass sie auf

den ersten Blick ersichtlich wären. Aber sie sind da. Um sie zu finden, ist es essenziell, in der Lage zu sein, unsere Emotionen auszudrücken und um Hilfe zu bitten. Dabei dürfen allerdings nicht vergessen, dass die abschließende Verantwortung für den Umgang mit unseren Emotionen allein bei uns selbst liegt. Aber wenn wir vermeiden wollen, dass aus unserem Unwohlsein ein chronischer Zustand wird, besteht die einzige Möglichkeit darin, den Kopf zu heben und dem Problem die Stirn zu bieten.

## **LITERATUR**

1. 10 Positive Emotionen, die dein Leben verbessern [Elektronische Ressource]. – Modus den Zugriff auf die Ressource: <https://www.healthyhabits.de/10-positive-emotionen-die-dein-leben-verbessern/>
2. Wie lassen sich negative Emotionen effektiv regulieren? [Elektronische Ressource]. – Modus den Zugriff auf die Ressource: <https://gedankenwelt.de/wie-lassen-sich-negative-emotionen-effektiv-regulieren/>

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## **INTERACTIVE TEACHING AS A MEANS OF THE DEVELOPMENT OF COMMUNICATIVE COMPETENCES**

In modern schools, there is an active rejection of the dominance of formal language exercises, and more and more teachers contribute to the communicative skills of students and help them to master linguistic, verbal and non-verbal means of communication, that is, instruction becomes communicatively directed.

The development of communicative competences depends on linguistic, speech, socio-cultural and sociolinguistic knowledge, skills and personal evaluation attitudes that ensure the entry of an individual into another society and contribute to its socialization in a foreign environment.

One of the means of developing student's communicative competences in an academic setting is interactive learning.

The essence of interactive learning is that the learning process is carried out through the constant active interaction of all its participants. This is a form of interaction (collective, group, pair, co-operative learning), in which both the student and the teacher are equal participants, who understand what they are doing, reflect on what they know, can and do [2].

Interactive teaching means active teaching and when studying an active student is constantly in a state of search, wants to get an answer to a question, needs information to solve a problem, or contemplates along with other methods by using

the method of the task. Interactive teaching is carried out on the basis of appropriate techniques, for example: role-plays, work in rotational triples, situational modeling, peer-teaching, small-group work, etc.

The technique "Roles in group learning" includes many varieties, one of which is situational modeling. Situational modeling is a kind of role-playing game in which all the roles are clearly defined and understood by the students. This technique contributes to the development of communication skills in situations close to life, as well as to the development of students' skills to participate in social activities. The working procedure typically involves 6 steps: choosing the topic and the basic situation for modeling; game planning, distribution of roles; unification of students in small groups; providing students with information and clear instructions; independent analysis of the situation by students; organization of discussion of the proposed situation.

When using situational modeling difficulties can arise at the initial stage of the activity connected with lack of initiative. So, it is important that the students would actively participate in the discussions and try to minimize their appeal to the teacher.

The teacher in interactive learning is the organizer of the learning process, a consultant, a facilitator who does not focus the learning process on himself, but provides communication between the students, their interaction and cooperation. Learning outcomes are achieved through the mutual efforts of its participants; students take responsibility for their learning outcomes [2].

## **REFERENCES**

1. Common European Framework of Reference for Languages: Learning, teaching, assessment. Council of Europe. – Cambridge University Press, 2001. – 260 p.
2. Пометун О.І. Енциклопедія інтрактивного навчання/ О.І.Пометун.– К., 2007. –144с.

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## **PRESIDENTIAL ELECTIONS 2019: A STUDY OF YOUNG VOTERS' PREFERENCES**

The study of public opinion around the elections is an important component of the establishment of democratic processes in the country, since the study of voters' preferences helps to make predictions about the voter turnout, prevent data falsification, correct the course of a political campaign and the image of a particular political candidate, etc. These factors determined the relevance of our research.

The purpose of our study was to explore the preferences of young voters regarding the presidential elections that will take place in Ukraine in 2019. To achieve the goal, a questionnaire was designed to collect the maximum amount of information in a short time compared to an interview.

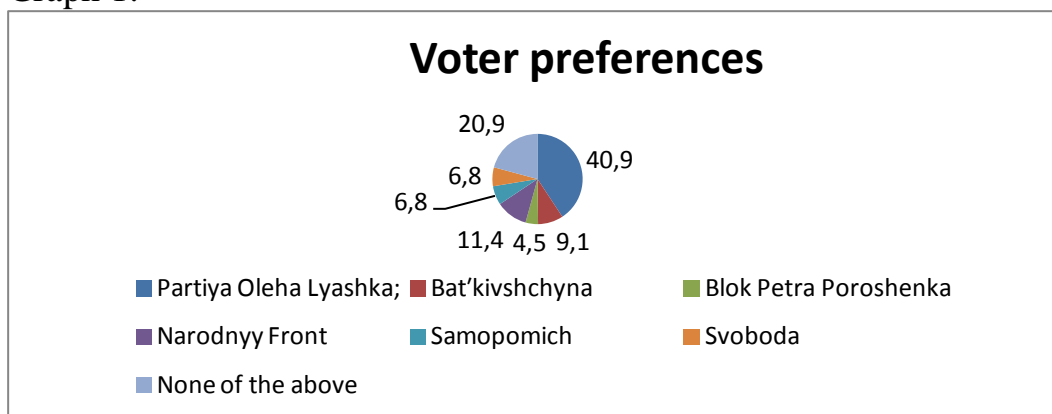
The question "Which representative of a political party will you give preference to in the presidential elections 2019?" is part of the questionnaire concluded by Anastasiya Gladyshchuk. The survey took place on March 23, 2018. The survey was conducted by Galaktionova Margarita and Gladyshchuk Anastasia among the students of Zhytomyr National Agroecological University. Such a sample allowed us to study the preferences of a specific sample of voters: age – up to 20 years old, type of activity – student.

The survey was conducted with 50 people. They had to choose the political party whose representative they would prefer in the 2019 presidential elections in Ukraine from the following options: 1. Radical Party Oleh Lyashko; 2. "Batkivshchyna"; 3. Petro Poroshenko Bloc; 4. People's Front; 5. Union "Self Reliance"; 6. VO "Svoboda"; 7. None of the above. The results of the study were filled in a table followed by the analysis of the responses. The survey results are presented below.

Thus, 44 people elected representatives of the proposed parties, and 14 chose the option "None of the above". The procedure for calculating the results is as follows: first, we calculated the specific weight of the answer of one respondent –  $44: 100 = 0.44$ . This allows us to calculate the percentage of respondents who selected each response, for example, 18 voted for the Party of Oleh Lyashko –  $18: 0.44 = 40.9\%$ .

The results of the study are presented in Graph 1.

Graph 1.



Conclusion: According to the results of the survey, students' votes at the next presidential elections will be distributed as follows: 40.9% of voters will vote for a representative of the Radical Party Oleh Lyashko, 9.1% – for a representative of “Batkivshchyna”, 4.5% for Petro Poroshenko Bloc, 11.4% for the People's Front, and 6.8% for Self RelianceHelp and Freedom. However, in order to achieve optimal results, it would be necessary to add a question to those 20.9% of respondents who chose the option "None of the listed" to clarify whether they have already made their choice, and if so, provide the possibility to include their option.

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## THE IMPACT OF SOCIAL MEDIA ON TEENAGERS

In the last few years, social network media have spread widely all over the world and are used by various users for several purposes. If we have a closer look on the real impact of social media, it is running the career and future of people, especially teenagers. Today billions of people across the world have their profiles in social media networks. The social media websites like linkedine.com, facebook, twitter, orkut, whatsapp are continuously distracting students from their studies. More and more students are shunning newspapers, books and magazines and consider social media as the best platform to find latest happenings, trends and new information, says a survey. According to the survey conducted by Fortis Healthcare, more than 74 per cent of students think that social media is the best platform for information, facts and latest happenings. “Social media has a far-reaching impact on the minds and behaviour of youth today. Their lifestyle



choices, likes and dislikes are being fashioned by what they see on online and electronic media,” said Dr Samir Parikh, head of the department of mental health and behavioral sciences at Fortis Healthcare. “A key concern is also that most students rely on social media for facts, information and knowledge as compared to books and magazines,” Parikh added.

Reading different kinds of materials goes a long way in making students creative and imaginative. However, the survey that involved 1,350 students also revealed that apart from social media, celebrities and their activities also influence youth to a great extent. This survey pointed out that more than half the users get news from social media.

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## **FUNCTIONAL STYLISTIC FEATURES OF COMPARATIVE IDIOMS IN ENGLISH**

The specific character of idioms is characterized due to their stylistic features. Stylistic effect in them is created through the specific properties of expressiveness, imagery, emotion. These properties of phraseological units depend on the components of their elements and from the relations in which they are. Phraseological units inherent rhythmic properties, alliteration, rhyme; they are often used comparisons, repetitions, synonyms, antonyms [1, c.161].

Consider some stylistic functions of comparative phraseological units.

The rhythm of phraseological units is based primary on two-part construction of equal-length elements, often synonymous or antonymous: *now or never, day in and day out*, etc.

Antonymous pairs create contrast or opposition images and concepts *ups and downs, back and forth*, etc.

Alliteration, repeat the same or homogeneous sounds, gives a special sound expression of phraseological units, and contributes to their rhythmicity: *pack and peel, black and blue, this and that*, etc.

Rhythm and alliteration can be combined with shaped comparisons. Variant rhythmical constructions of this type are such that the second significant element longer than the first: *as flat as a pancake, as light as a butterfly, as cold as a cucumber*, but also in the following phraseological units rhythm is saved: *as cold as any stone, as helpless as a baby, as easy as ABC*. This is the so-called comparative or adjective phraseological units [1, p. 162].

Comparative phraseological units have in their part the comparing component *as*. It says that the use of adjective phraseological units helps to compare the

properties of one subject or phenomena with another on the bases of similarities of their characteristics [2, p. 30].

Very often comparative phraseological units are used for characteristics of personages that allows to imagine better the inner word of actors, their external characteristics, their emotional state. Depending on this, phraseological units can be divided into three groups:

1. Idioms, which describe the appearance of human, his physical properties:

*“He was as strong as an ox and if it had ever come to a scrap, knives or no knives, he’d have been a match for half a dozen of them together”* (W.S.Maugham “The Razor's Edge”).

Idiom *as strong as an ox* allows at the same time to present and physical force of a hero, and his body type. Comparing the hero with the bull, we present a stocky tall man having uncommon force.

2. Phraseological units that reveal the character of actors, their personal qualities:

*“Let’s get to this damned shelter. I’m scared stiff.” “I don’t believe a word of it. You’re as brave as a lion”* (W. S. Maugham “The Hour before the Down”).

In the sentence the hero is compared with a lion, we present a man who is very strong and bold.

3. Idioms, which allows to present that emotional state in which the hero dwells:

*“There ain’t much fear of my getting up, doc,” answered the captain. “I feel as weak as a cat”* (W. S. Maugham “Honolulu”).

Idiom *as weak as a cat* the most accurate transmits those emotions that overcome the hero, shows his feeling of freedom, gives more emotional the coloration of the situation.

Thus, the comparison of the images enclosed in phraseological units with stylistic context, the establishment of their connotative values allows to open the context and the most completely determine the emotional state of actors, their external and internal characteristics.

## REFERENCES

1. Арнольд И. В. Стилистика современного английского языка / И. В. Арнольд. – Л., 1973. – 304 с.
2. Арсеньва Е. Ф. Сопоставительный анализ фразеологических единиц / Е.Ф.Арсеньева. – Казань, 1989. – 126 с.

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## **CULTUROLOGICAL ASPECT IN THE STUDY OF LITERARY WORKS**

Cultural aspect of studying literature is considered to be very important and comprehensive phenomenon, since by means of the text students acquire knowledge, learn national treasures and beliefs of different peoples, get acquainted with ethnic characteristics and customs, become fully developed personalities.

Various aspects of culturological approach to the study of literature were widely reflected by many both foreign and domestic scholars such as L.S.Vygotsky, M.M. Bakhtin, V.S.Bibler, I.E. Berland, V.F. Litovsky, who managed to show the importance of the approach in the educational process.

Literature as the art of words is an important component of the spiritual culture of the mankind, so it is entirely appropriate to study literary works in the context of the general cultural movement at a certain stage, in connection with painting, music, cinema and other forms of art. For the formation of the outlook and general culture of students it is important to consider literary works not only as self-valuable texts, but also in the context of domestic and world culture, history, art, philosophical thought, in combination with other texts and artistic phenomena. The cultural principle ensures the broadening of students' outlook [1].

Cultural approach is defined as a scientific methodology of cognition and transformation of pedagogical reality, the basis of which is axiology; the vision of education through the prism of the notion of culture, that is, understanding it as a cultural process, which takes place in appropriate environment, all components of which are filled with human meanings and serve a person who freely manifests his/her personality, ability to cultural self-development and self-determination in the world of cultural values [2].

Some scientists consider the culturological approach to be a direction in pedagogical practice, which is based on the principle of cultural conformity of education, does not contradict the scientific content of education, complements and enriches it [3]. It is indicated that the above mentioned approach provides genuine humanization of education.

A number of researchers study the cultural approach in the context of teaching individual disciplines. Ye. Yu. Fortunatova worked out the main principles in studying culturological approach in literary works. She highlighted the following principles of choosing an artistic text: the principle of saturation of the text cultural information; the principle of communication of artistic text cultural information with the students' real cultural environment; the principle of culturological value of images of literary characters; the principle of taking into account national and cultural peculiarities and others. The above mentioned principles help to concentrate on a single culture, although different cultures exist in interaction. It is

important to refer to the peculiarities of different cultures in the proper way so that there is no intercultural conflict.

Consequently, the cultural approach to the study of literature is extremely essential and urgent scientific issue today, being one of the main features of the Concept of Literary Education. It is dealt with by many scholars who consider the culturological aspect in the study of artistic texts to be expedient. This approach helps to develop the personality, his or her outlook.

## REFERENCES

1. Погодина А.В. Культурологический подход в социально-психологических исследованиях образовательных учреждений / А.В.Погодина // Психологическая наука и образование. – 2010. – №1. – С. 41-47
2. [http://mirslovarei.com/content\\_eco/kulturologicheskij-podxod32415.html](http://mirslovarei.com/content_eco/kulturologicheskij-podxod32415.html)
3. <http://www.psychorelax.ru/forum.php>

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## THE FORMATION OF SOCIAL MOTIVATION OF YOUNG PEOPLE TO SERVE IN THE ARMED FORCES

Armed forces a complex social organism, which is an integral part of modern society. Their development and condition are always conditioned by the tendencies of the development of society itself. Undoubtedly, the formation of a positive attitude towards the army, military service is a task not only of the military, but of the whole society, state and public institutions [1]. An important element in this area is motivation.

Motivation can be defined as that which compels a person to act with determination, or that which gives rise to an inclination that manifests itself through a specific behavior [5].

Individual motivations for service in the armed forces can be diverse and wide-ranging; in fact, they constitute a very blurry universe of ideas [5].

Through study, American educators have identified main factors of motivation for service in the army [2]:

1) Self-improvement. This factor encompasses individuals who identify personal development: responsibility, self-confidence and physical fitness;

2) Benefits. They were all attributed to the benefits received from service in the army, as well as those received after retirement;

3) Military service: the desire to become a soldier, receiving satisfaction from the service. Patriotic obligation, tradition, desire to serve refers to institutional aspects as a set of formal and informal norms and rules;

4) Professional skills: increasing opportunities for future employment;

5) See the world. This factor involves the desire to travel to other countries associated with the military service, in order to see another life and have time to look at themselves, called "time-outs";

6) Money for education (benefits for education, education for the army)[3].

Researchers argue that the significance of these factors may change, but the general tendency of the latter decades are an increase in the relevance of material factors [3].

In various countries, the search for additional ways to solve the problem of motivation of youth to military service in the following areas: increasing the authority of the army, military service; formation of a positive image of a serviceman and army in mass media, advertising products, methodical recommendations, etc.; creation of favorable conditions, privileges, social security, material and career interests; education in pre-synders of a sense of personal social significance, benefit and patriotism; moral, psychological, pedagogical, social and legal influence on conscience consciousness [2].

Military educators have developed ways to improve the activities of motivation to military service [4], among which the main:

- information and advocacy activities to inform the future recruit about training programs for military personnel;
- activation of motivation for service in the army, increasing interest in weapons, military form, patriotism and psychological attractiveness of the intention to "become a man", which is important for a part of youth;
- overcoming negativism in military service, which is being achieved through effective advocacy.

## REFERENCES

1. Закон України «Про військовий обов'язок і військову службу» (№2233-ХІІ від 25.03.1992р.) [Електронний ресурс].
2. Мудрік В. І. , Формування мотивації молоді до військової служби в різних країнах / В. І. Мудрік, УДК 373.5.015.31: 172.15 м. Київ
3. Соотношение денежного довольствия армий мира [Электронный ресурс]. — Режим доступа: [http://www.b-i.viard.ru/ne\\_chleb.htm](http://www.b-i.viard.ru/ne_chleb.htm).
4. Baker A. Scale Development for Enlistment Motivation Measures Todd / A. Baker. — 2009. — July.
5. [http://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview\\_20061231\\_art016.pdf](http://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview_20061231_art016.pdf)

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## **PRAGMATIC FUNCTIONS OF PLEONASMS IN THE NOVELS “TENDER IS THE NIGHT” AND “THE GREAT GATSBY” (F. C. FITZGERALD)**

The topicality of the research is determined by the anthropological approach to the study of linguistic units in the 21<sup>st</sup> century, in particular pleonastic phrases, which fulfill the main aim of an author to manipulate the reader's perception [1:53]. The aim of the research is to analyse pleonasm and actualization of their pragmatic functions in discourse on the basis of the novels “Tender is the Night” and “The Great Gatsby” (F.S. Fitzgerald).

Linguists emphasize the following pragmatic functions of pleonasm in the modern discourse: promissive, menative, vocative, performative, questive [2].

Pleonasm in the menative function are closely associated with emotions and are applied for threatening. The example “*We’ve got to beat them down,” whispered Daisy, winking ferociously toward the fervent sun*” [4:9] is characterized by the manifestation of aggression and determination through the use of lexemes to “*beat them*” and “*fiercely*”.

A characteristic feature of the promissive function is the acceptance by a speaker an obligation to perform or not to perform a certain action: “*He seemed kind and charming - his voice promised that he would take care of her, and that a little later he would open up whole new worlds for her, unroll an endless succession of magnificent possibilities*” [3:175]. This example shows that a man with his behavior promises to open new worlds “*open up whole new worlds*” to a young girl. In the example “*I have a hundred years of Ohio love behind me and I’m going to bomb out this trench*” [3:86] the reader gets an emotional aggressive promise to act.

In the questive function pleonasm is used for finding out information. In the example “*Who was the woman? He inquired*” [4:95] the reader's attention is focused on the person who had an accident, and pleonasm emphasizes the fact that it was the woman.

The vocative function helps to attract attention and establish contact with an interlocutor. In the example “*That’s what I get for marrying a brute of a man, a great, big, hulking physical specimen of a -*” [4: 8], the narrator attracts the attention of the interlocutor by means of pleonasm and, using the synonymic row “*a great, big, hulking physical specimen*” intentionally creates a conflict situation.

After analyzing the novels by F.S. Fitzgerald a conclusion can be made that pleonasm can be used as means of affecting the readers' perception, focusing the

attention on certain facts and details. Pleonasms make the narration more vivid and expressive.

## REFERENCES

1. Азнаурова Э. С. Прагматика художественного слова / Э. С. Азнаурова. – Ташкент: Фан, 1988. – 122 с.
2. Літкович Ю.В. Прагматичні функції плеоназмів у сучасному дискурсі // Academia [сайт] URL: [http://www.academia.edu/22363899/SCIENCE\\_and\\_EDUCATION\\_a\\_NEW\\_DIMENSION\\_PHILOLOGY\\_Issue\\_62](http://www.academia.edu/22363899/SCIENCE_and_EDUCATION_a_NEW_DIMENSION_PHILOLOGY_Issue_62) (дата обращения 02.03)
3. F.S. Fitzgerald Tender is the Night // Planetebook [сайт] URL: <http://www.planetebook.com/ebooks/Tender-is-the-Night.pdf>
4. F.S. Fitzgerald The Great Gatsby // ReadinEnglish [сайт] URL: <http://readinenglish.com/wp-content/uploads/2016/10/The-Great-Gatsby.pdf>

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## CYBERCRIME

Since the use of protective measures or measures to combat any phenomenon is impossible without understanding the essence of this phenomenon, scientists, researchers and legislators all around the world have attempted to define the concept of "cybercrime" and to formulate criteria for its separation from other illegal acts.

Cybercrime is any crime in the electronic sphere committed with the help of a computer system or a network or against it."

Features of this type of crimes:

- extreme secrecy of acts achieved through the use of anonymity and encryption;
- cross-borderness, the criminal and the victim can be separated by thousands of kilometers, borders of several countries;
- non-standard ways of committing;
- automated mode [1].

The Council of Europe Convention organize all the types of cybercrime into five groups.

1) All computer crimes against computer data and systems (e.g. illegal access, interference with data or system in general).

2) Illegal acts related to the use of technologies (forgery, extraction, blocking or modification of data, obtaining economic benefits by other means.

3) Offences relating to the contents if the data or content.

4) Violation of copyright, the allocation of certain types of crimes attributed to the legislation of specific states.

5) Cyberterrorism and the use of virtual space for committing acts of violence, as well as other acts that infringe on public security [2].

The number of cybercrime is steadily increasing, over the past five years, their number ranges from 8 thousand to 17 thousand.

The legislation of most countries of the world assumes criminal liability for the commission of crimes of this type. Effective counteraction is possible only at the level of international cooperation. Carrying out preventive work with the population, representatives of business structures plays an important role in the fight against crime. The security of cyberspace in general and their personal data and funds in particular also depends on citizens in many respects.

Here are some specific recommendations:

- ignore phone calls, text messages, messages on winnings from unfamiliar numbers, never call back to them, don't send any messages;
- don't tell anyone the details of your plastic card; with all the questions you have, contact directly to the Bank branch;
- install a reliable anti-virus on your gadgets and regularly conduct a full system scan. Here you can learn what to do when you were charged with creating a virus;
- buy only licensed software.

## **REFERENCES**

1. Киберпреступления [Electronic resource]. – Режим доступа: <https://urist.one/dolzhnostnye-prestupleniya/kiberprestuplenie.html> – Date of access: 21.03.2018.
2. Cybercrime [Electronic resource]. – Режим доступа: <https://www.interpol.int/Crime-areas/Cybercrime/Cybercrime> – Date of access: 24.03.2018.

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## **ELECTRONIC LAW DICTIONARY AS AN AUXILIARY MEANS OF TRAINING LAWYERS FOR PROFESSIONAL COMMUNICATION**

The language of law implies the specialization of the vocabulary, which covers a wide range of legal sectors and institutions. The lawyer faces the problem of adequate transfer of the content of legal texts (both orally and in writing) when communicating with a representative of a different culture. As a result, there is a need for the formation of professionally oriented lexical competence, since the



originality of the terminological system of the legal language is in its nonequivalence and culturally conditioned content [1].

This is due to the fact that an incorrect interpretation of the legal discourse can lead, for example, to material damage and bringing a lawsuit. Even minor errors and inaccuracies in the text can lead to misinterpretation of its meaning and, as a consequence, to encourage any improper actions.

To train lawyers, there are traditional auxiliary tools, such as dictionaries –both explanatory and bilingual, as well as reference books, which is often insufficient. Therefore, it is necessary to involve electronic means of training.

There is no doubt that electronic dictionaries provide the user with many additional opportunities compared to printed counterparts:

- allow you to store a large amount of information through the use of hyperlinks;
- have an effective search system;
- provide the use of multimedia tools, such as, for example, the inclusion of illustrations with photos, animations, audio and video fragments;
- when creating computer dictionaries, significant savings in time and material resources.

The task of electronic dictionaries is to meet the needs of the widest audience, so their main quality should be usefulness. This is achieved by structuring the dictionary article, which allows you to highlight the main types of information about the word. Each element of information about the word can serve as a hyperlink to another dictionary entry. The system of hyperlinks provides the ability to quickly access the information you need without an exhausting search. It is very important that the structure allows you to form a kind of dictionary entries in accordance with the request. For example, if a user is interested in a vocabulary related to criminal law, they can specify it in the query, and the dictionary will show him only the translation applicable to the subject. If the user is interested in the maximum range of values – the dictionary will show him a variety of values, possible translation options and examples. The new features of an electronic dictionary include a variety of ways to display the content of the dictionary article, including graphical tools that are not used in conventional dictionaries; as well as such linguistic technologies as morphological and syntactic analysis, full-text search, recognition and synthesis of sound, etc. [1]

However, it should be recognized that one of the disadvantages of electronic dictionaries is attachment to a personal computer and therefore limited accessibility. However, this shortcoming is not so significant, especially in comparison with the new opportunities provided by constantly developing information technologies.

## REFERENCES

1. Журавлева Н. Н. Проблема использования словарей и электронного переводческого сервиса при переводе специальной литературы с германских языков [Electronic resource]. – Режим доступа:

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## **THE FORMATION OF NATURAL SCIENCE COMPETENCE WITH THE HELP OF THE STUDENTS' GROUP ACTIVITY ORGANIZATION**

The article examines the problem of training of future primary school teachers in the context of the organization of students' group activities. It examines the conditions of future primary school teachers training and the efficiency of this process.

Nowadays to solve the problem of qualitative experts training in modern higher education system is one of the highlighted challenges. The present world has created a situation where education is simply not a solution. For improving modern economical and social relations in general, it is necessary to renew an educational quality, which is the key to the wealth and prosperity of any country. In this regard, there is the problem of providing schools with teachers who have in-depth knowledge, skills and abilities. Teachers need to introduce in educational process new technologies of training.

At the present stage, there is a certain discrepancy between the level of readiness of future specialists for primary school. One more problem is a low priority of higher education institutions in training. We can observe the lack of readiness of the pedagogical theory of active methods and forms of training and insufficient readiness of teachers to use it. Thus, the lack of didactic theoretical aspects of group work organization in primary education and their practical significance for the solution of urgent problems in primary school determine the choice of the theme of the article: "The formation of natural science competence with the help of the of students' group activity organization".

The problem of training future teachers received quite substantial coverage in the scientific literature of the past. Its theoretical and methodological basis is reflected in the works of K. Ushynskoho, M. Drahomanova, O. Dukhnovycha, S. Rusovoi, V. Sukhomlynskoho. Modern aspects reflected in scientific heritage of A. Aleksyuka, N. Honobolina, S. Honcharenka, N. Kuzminoi, A. Savchenko and others.

At the present stage explores find conceptual bases of professional preparation of future teachers in the context of learner-centered education (I. Bekh, A.

Hokhberh, L. Kartashova, V. Lutsenko, S. Sysoieva) and training teachers to implement innovative pedagogical technologies (I. Bohdanova, A. Yevdokimov, A.Kiyashko, I. Rusnak, S. Sysoieva).

A central issue in my article is to explore the pedagogical conditions of preparation of future teachers for group work organization.

Training of future school teachers for the organization of students group activities is part of professional competence of primary school teacher.

Group training activities, in contrast with frontal and individual, are not going to isolate children from each other, and vice versa, they allow to realize the natural desire to communicate, mutual aid and cooperation[1].

R. Astvatsaturov writes: "the training comes in the format of subject – subject interaction. Collective intelligence can solve many problems quickly and efficiently... but it's not just that. Solving the problem, the group maintains cooperation, co-creation. Here everyone works on all... exchange of knowledge, ideas, changing the psychological climate. Even in the group of "weak" pupils also begin to take an active part in discussing and solving problems. During the group discussion, children learn to listen to each other. With each of the training tasks, they improve their tactics in cognitive search. They create a formula for success"[3].

Analyzing psychological and pedagogical literature, we came to the conclusion that it is necessary to enrich the future teachers knowledge about types, features of group work, the features of the lesson, the specifics of the organization of students' activities during these lessons, features of the teacher's activity, creation of comfortable conditions of training and the organization of active interaction in class, organization, reflection, various forms of mutual learning. The process of training future teachers to implement group learning activities implemented during training, which should be organized so that the study of academic subjects and courses occurred with the use of lectures, practical and laboratory classes organized on the basis of group work[2]. The teacher in group learning activities directs the work of each student indirectly through the tasks that he offers the group and regulates the activities of students. The relationship between the teacher and pupils acquire the character of cooperation, because the teacher directly interferes in the work of groups only in that case if students have questions and they seek for the help of the teacher. These are their joint activities.

So, it should be noted that group learning activity improves students' achievement, solves a lot of educational and developmental tasks: accelerates child's learning activities, builds the self-esteem and self-regulation, forms the ability to adapt to the pace of the group work, students' positive attitudes to learning, helps to prepare them for communication. Systematic work on improving methods of preparation of future teachers and the implementation of the presented requirements will strengthen the practical orientation of training and to ensure that this process was of a systemic and holistic in nature.

## REFERENCES

1. Васильєва Н. М. Застосування інтерактивних методів навчання/ Н.М.Васильєва // Управління школою. – 2005. – № 34. – с. 22–24
2. Комар О. А. Інтерактивні технології – технології співпраці / О. А. Комар// Початкова школа. – 2004. – № 9. – с. 5–7
3. Пометун О. І. Активні та інтерактивні методи навчання: до питання про диференціацію понять / О. І. Пометун // Шлях освіти. – 2004. – № 3. – с.1–15.

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## HENRY FORD'S CONTRIBUTION INTO AMERICAN INDUSTRIAL REVOLUTION

Henry Ford was a very famous and significant person in the world's history. He was one of those people who moved technical progress in the early 19<sup>th</sup> century. There were many others who had made their contribution to the industrial revolution, but Henry Ford was an extraordinary person who showed the world new horizons of industrial future.

It is important to mention that Henry Ford was not an inventor, but an innovator. He didn't invent the car, he reinvented it, as many other usual things. By lowering costs as much as he did, he was able to sell it to the common American, his employees first and foremost. At the beginning of the 20<sup>th</sup> century the automobile was a plaything for the rich. Most models were complicated machines that required a chauffeur conversant with its individual mechanical nuances to drive it. Henry Ford was determined to build a simple, reliable and affordable car – a car the average American worker could afford. Consequently, out of this determination came the Model T and the assembly line, two innovations that revolutionized American society and molded the world we live in today.

The Model T made its debut in 1908 with a purchase price of \$825.00. Over ten thousand were sold in its first year, establishing a new record. Four years later the price dropped to \$575.00 and sales soared. By 1914, Ford could claim a 48% share of the automobile market [1]. However, central to Ford's ability to produce an affordable car was the development of the assembly line that increased the efficiency of manufacture and decreased its cost. Ford did not conceive the concept, he perfected it. Prior to the introduction of the assembly line, cars were individually crafted by teams of skilled workers, a slow and expensive procedure. The assembly line reversed the process of automobile manufacture. Instead of workers going to the car, the car came to the worker who performed the same task

of assembly over and over again. With the introduction and perfection of the process, Ford was able to reduce the assembly time of a Model T from twelve and a half hours to less than six hours [2].

As a result, Ford Motors sold more cars and steadily increased its earnings, transforming the automobile from a luxury toy to a mainstay of American society. His introduction of the Model T automobile revolutionized transportation and American industry. As owner of the Ford Motor Company, Henry Ford became one of the richest and well-known people in the world. His intense commitment to systematically lowering costs resulted in many technical and business innovations, including a franchise system that put dealerships throughout most of North America and in major cities on six continents.

## REFERENCES

1. <https://sites.google.com/a/imagineprep.com/theindustrialrevolution/inventors/henry-ford>
2. <https://www.history.com/topics/henry-ford>

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## INTRODUCTION OF CHRISTIANITY IN KYIVAN RUS

Introduction of Christianity by Volodymyr the Great became one of the main events in the history of Kyivan Rus in 988. This religious reform of Prince defined the subsequent vector of the development of the Rus state for future. The principal reasons of introduction of Christianity named by the researchers were that the keeping of paganism would brake the external relationships of Kyivan Rus with the neighbouring states. Only a new monotheistic religion could become a support for the power of Prince.

The intensive searches of new religion began. In “The Tale of Past Years” it was told about representatives of different religions having arrived to Kyiv: Muslims from Bulgaria, Germans from Rome, Greeks and Jews from Khazaria. It was decided to make Christianity the state religion on the Byzantine model. As researchers consider decisive role was a circumstance that in the Barbarian leaders’ minds of those days the Byzantine model of Christianity related to the images of high society. This model corresponded to the system of political order of Kyivan Rus best of all, as in that time it was a young feudal monarchist state. Besides the acceptance of Orthodox Christianity was politically more advantageous for Rus. In fact, in the 10<sup>th</sup> century Byzantine was more developed than the Holy Roman Empire. It was named the Second Rome [1, p. 59-63].

The First Prince in Rus, who adopted Christianity, was Askold. Princess Olga was also a Christian. However, Nestor the Chronicler paid more attention to Volodymyr the Great's actions. He told about an invasion of Korsun by Prince and adopting Christianity by him and his marriage with the Byzantine Princess. The Byzantine sources didn't mention such an event, as baptizing of Rus [2, p. 88-91].

However, large pride for Rus rulers was that Rus as the state wasn't influenced by ideological and economic power of other countries. An Academician Grekov marked that Christianity had been adopted in Rus state not following the Byzantine or Roman model, but Rus model. It is important to mention that from the early beginning the Christianity reminded a combination of Rus and Byzantine faith [2].

Nowadays such Ukrainian researchers as P. Tolochko, A. Kolodniy, O. Rychka, O. Motsya and others continue to study this question. Researches on this subject remains to be essential up to now. To sum up, the introduction of Christianity as state religion, had the greatest value for the subsequent evolution of Kyivan Rus as a state.

## REFERENCES

1. Моця О., Ричка В. Київська Русь: від язичництва до християнства. – К., Глобус, 1996.
2. Колодний А. М. Історія релігії в Україні: Навч. посібник. – К., Знання, 1999.

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## FROM PYTHAGORAS THEOREM TO THE FERMAT THEOREM AND ITS MODIFICATION

In our time, it's hard to find a person who would not have heard of the Pythagorean theorem. It indicates that the sum of the squares of the cathetes is equal to the square of the hypotenuse. For the majority of people it will be a great surprise to learn that there is no evidence of the Pythagoras proof of this theorem. But why then it is called so? Pythagoras spent his young years in Egypt for studying. It was there where he learnt about Egyptian triangles ( $3^2 + 4^2 = 5^2$ ). After returning to Greece, he systematized knowledge on this issue and made it's logical justification. Then appeared the Pythagorean trios – the three numbers that satisfy the equality  $x^2 + y^2 = z^2$ , for example: (3; 4; 5); (5; 12; 13), (9; 40; 41) or in general:

$$(a^2 - b^2)^2 + (2ab)^2 = (a^2 + b^2)^2$$

If substitute any  $a$  and  $b$ , we get an arbitrary Pythagorean trios.

Many years later Pierre Fermat came across this theorem in the second book of "Arithmetic". Being interested in this theorem, he decided to consider other equations of this type:  $x^3+y^3=z^3$ ;  $x^4+y^4=z^4$ ; ...;  $x^n+y^n=z^n$ . Having done this he came to the conclusion, which is now interpreted as the Last Fermat's Theorem [1]:

*"The equation  $x^n+y^n=z^n$  can not be solved in integers (or rational numbers), provided that the natural  $n > 2$  and  $xyz \neq 0$ ".*

Unfortunately, he did not leave proofs of his statements, but only short notes. After Fermat's death due to the efforts of his son, his works were published. Realizing all the genius of Fermat, mathematicians all over the world began to prove his statement. From year to year scientists tried to prove different theorems. As a result there left the Last Fermat's Theorem. Everyone tried to solve it, but no one succeeded. Paul Wolfsquel has commissioned 100,000 marks to the one who will prove this theorem in the next 100 years (from September 13, 1907).

Only 358 years after the theorem was created, it was proved by a British mathematician Andrew Wiles. Today, it is considered one of the most difficult tasks of humanity. Its proof takes 130 pages and can be understood by only 1000 people around the world.

In 358 years, as soon as they tried to prove this theorem, mathematicians suggested various statements referred to it and changed it for the easier proof. One of these tasks is mentioned in the book of Hugo Steinhaus "Hundred Tasks" on page 10 [2]:

$$x^n+y^n=z^n, x, y, z, n \in N, n \geq 2.$$

Let's consider it.

If  $x, y, z, n$  are natural numbers,  $n \geq 2$ , then the equation  $x^n+y^n=z^n$  has no solutions.

Reasoning:

Let's assume that there are natural numbers  $x, y, z, n$  such as  $n \geq 2$  and  $x^n+y^n=z^n$ .

$x \neq y$ , because if  $x = y$  then:

$$x^n+x^n=z^n \rightarrow 2x^n=z^n \rightarrow x^n=\frac{z^n}{2} \rightarrow x=\sqrt[n]{\frac{z^n}{2}}$$

This means that the number  $x$  is irrational, which is contrary to the condition.

It can be seen that  $x < z, y < z$  and  $x < y$  or  $x > y$ .

Let's take  $x < y \rightarrow z < y < x$ . If all numbers  $x, y, z$  are minimal:

$$x_{min} = 1, y_{min} = 2, z_{min} = 3.$$

Then it is clear that  $z - y \geq 1$ .

$$z > x \rightarrow z^{n-1} > x^{n-1}; z^{n-2} > x^{n-2} \dots$$

$$y > x \rightarrow y^{n-1} > x^{n-1}; y^{n-2} > x^{n-2} \dots$$

$$z^n - y^n = (z - y)(z^{n-1} + yz^{n-2} + \dots + y^{n-1}) \geq 1 \times (x^{n-1} + xz^{n-2} + \dots + x^{n-1}) = x^{n-1} + x^{n-1} + \dots + x^{n-1}$$

Since  $x^{n-1}$  in the inequality will be  $n$  items and  $n \geq z > x \rightarrow n > x$ , then:

$$z^n - y^n \geq n x^{n-1} > x x^{n-1} = x^n$$

$$z^n - y^n > x^n$$

And this equation contradicts the assumption that  $x^n+y^n=z^n$ . That is, the statement is true.

## REFERENCES

1. Шмигевський М. В. Велика теорема Ферма. // Математика в школі. – 2006. – №2. – с. 51 – 55.
2. Штейнгауз Г. Сто задач. – М.: Наука, 1951. – 144 с.

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## SYMBOLISCHE BEDEUTUNGEN DER FARBBEZEICHNUNG „ROT“ IN DER DEUTSCHEN PHRASEOLOGIE

Rot ist bestimmt die wirksamste Farbe. Ihre Bedeutungen sind mit verschiedenen Lebensbereichen verbunden. Die rote Farbe galt als die Farbe des Kampfes und der Verteidigung. Sie war auch mit der Zauberei und der kaiserlichen Macht verbunden. Als Farbe des Blutes symbolisiert Rot das Leben, die Mutterschaft, die Aktivität und die Kraft des Menschen. Es steht sowohl für positive, als auch für negative Emotionen. Da Rot die Farbe des Feuers ist, symbolisiert es noch die zerstörerische Kraft, das Schmerz und die Gefahr. Überall verwendet man Rot als die Farbe der Warn- und Verbotsschilder, deshalb hat Rot auch die Bedeutung der Warnung.

In der deutschen Phraseologie ist die Farbe Rot eng mit der Bedeutung „Rechtswesen“ verbunden. Als **Rotes Buch** bezeichnete man die Stadtbücher, die Rechtssammlungen und Verzeichnisse, die Verbrecher auflisteten. [2, S. 57] Die Orte, wo im Mittelalter Gericht gehalten wurde, bezeichnete man als **Roter Graben**. Das war eine vertiefte Stelle, die mit drei roten Kreuzen gekennzeichnet wurde. [1, S. 460] Es gibt auch Phraseologismen, die meist ironisch gemeint wurden, wie z.B. **rote Monarchie** und **rotes Gespenst**. Diese Symbolik der Verehrung der mächtigen Personen findet man auch in der Phraseologie. Wenn man **jmdm. den roten Teppich ausrollt**, heißt es, dass man die Person mit den höchsten Ehren empfängt. Da Rot eine wirklich wirksame Farbe ist und als Symbol einiger starken Emotionen auftritt, gibt es auch in der Phraseologie Wendungen, die Leidenschaft sowie Wut und Zorn ausdrücken. **Den roten Rock tragen** heißt **jmdn. leidenschaftlich lieben**. Man kann auch **den roten Rock verdienen** mit der Bedeutung **sich in Gunst setzen**. Die Redewendungen **auf jmdn. wie ein rotes Tuch wirken**, **ein rotes Tuch für jmdn. sein** drücken solche Emotionen wie Wut und Zorn aus. In der deutschen Sprache verwendet man Rot in den phraseologischen Wendungen oder Vergleichen, die das Äußere des Menschen beschreiben: **rot anlaufen**, sie ist mit den Gefühlen der Verwirrung und Aufregung verbunden.

Rote Farbe assoziiert man auch mit dem Feuer und in dieser Bedeutung funktioniert Rot in der Redensart **jmdm. einen roten Hahn aufs Dach setzen**, d.h. **jmdm. das Haus anzünden**. Die Verzeichnisse der vom Sterben gefährdeten Tier-



und Deutschen genannt. Rote Farbe wurde nicht umsonst gewählt, sie versinnbildlicht in diesen Wendungen das Alarmsignal und die Gefahr. Rote Kupfermünzen bezeichnete man als rote Heller. Sie waren aber von geringem Wert, deshalb entstand der Phraseologismus *etwas ist keinen roten Heller wert* für die Bezeichnung von etwas, was völlig wertlos ist. International dient **das rote Kreuz** als das Symbol der Barmherzigkeit und der medizinischen Hilfeleistung, obwohl Rot oft als die Farbe des Verbotes und der Gefahr vorkommt.

Zusammenfassend lässt sich feststellen, dass die Symbolik der Farbe Rot in den phraseologischen Wendungen der deutschen Sprache widersprechend ist. In der deutschen Sprache wurde es im Rechtswesen verwendet, deshalb steht es für Gesetzlichkeit sowie für Macht. Rot ist auch die Farbe der starken Gefühle. In der deutschen Phraseologie funktioniert sie für die Beschreibung der Leidenschaft und der Gunst. Obwohl rote Farbe in beiden Sprachen für Gefahr und Verbot steht, dient sie auch als die Farbe der medizinischen Hilfeleistung und wird im Namen des Internationalen Komitees vom Roten Kreuz verwendet. Rot wird oft nicht in seiner symbolischen, sondern in der direkten Bedeutung verwendet.

### LITERATUR

1. Suntrup R. Liturgische Farbenbedeutung im Mittelalter und in der frühen Neuzeit. In: Symbole des Alltags – Alltag der Symbole. Hrsg. von Gertrud Blaschitz u.a. – Graz: Akademische Druck- und Verlagsanstalt, 1992. – S. 445-467.
2. Wanzeck C. Zur Etymologie lexikalisierter Farbwortverbindungen. – Amsterdam: Rodopi, 2003. – 428 S.

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### SYSTEM OF MARKETING MANAGEMENT

In a modern market economy, when competition between manufacturers of goods is sharply increasing, and consumers are becoming more demanding, each company is interested in the effective management of its marketing activities. Such activities should be filled not only by various measures but also clearly coordinated and planned in modern conditions. At the same time, enterprises need to find new potential markets, introduce innovative technologies and create relevant products, study the activities of the potential competitors and implement measures to preserve and enhance the competitive position in the relevant market. Application of marketing management is one of the main conditions for enterprise development and formation of market relations [2].

Marketing management is a process of analysis, planning, implementation and control over the implementation of measures aimed at establishing and maintaining mutually beneficial links with the target market for the achievement of certain goals of the organization.

In modern conditions, the marketing management system is the basis for managing the organization's activities. Marketing helps organizations determine their place in a market where there is tough competition. The purpose of marketing managers is to support the volume of sales of products while reducing the cost of advertising and promotion of goods on the market [1].

All marketing management tools should be focused on solving existing or potential problems of potential customers. Marketing management is closely linked with research, analysis, and the ability of the company to respond to changes in its internal and external environment. Formation of marketing management implies knowledge of the basics of market needs, production processes, financial and business operations, social and economic principles of company management, etc. [3].

Its main strategic resource should be the maximum satisfaction of the market needs, that is, the consumers' needs.

Thus, the main functions should be identified in the formation of marketing management, as well as the algorithm should be determined through which marketing activities will be formed. As a result of the research on the sequence of the marketing management process, it should be noted that this process consists of steps aimed at managing the demand of potential customers, satisfying and serving the needs of the market. Taking into account the development of these stages, as well as their further application will ensure the effective functioning of marketing activities of the enterprise and contribute to the achievement of the goals and the successful functioning of the harsh conditions of modern economic relations.

## REFERENCES

1. Белявцев М. І., Воробйов В. Н. Маркетинговий менеджмент: навч. посібник / М. І. Белявцева, В. Н. Воробйова. – К.: Центр навчальної літератури, 2010. – 407 с.
2. Полторак В.А. Маркетингові дослідження: навч. посібник / В.А. Полторак. - Київ: Центр навчальної літератури, 2013. - 387 с.
3. Циганкова Т.М. Сучасні моделі та тенденції розвитку стратегічного маркетингу / Т.М. Циганкова // Маркетинг в Україні. – 2012. – №2. – С. 31 – 36.

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## **FIBONACCI NUMBERS IN DAILY LIFE**

In this article the notion of Fibonacci numbers and their application in various spheres of life is considered.

Fibonacci sequence was firstly introduced by an Italian mathematician Fibonacci in his book *Liber Abaci*. On pages 123-124 of the Fibonacci's manuscript he presents such problem: *"Someone put a pair of rabbits in a certain place, surrounded by a wall, in order to know how many pairs of rabbits will be born during a year. In fact, the nature of rabbits is such that after a month the pair of rabbits gives birth to another pair, and the birth process of rabbits occurs from the second month after their birth"*. This problem has created the most famous numerical sequence in the world. The scientist did not know what role it would play in the history of mankind. The Fibonacci sequence presents a series of numbers where a number is found by adding the two previous numbers. Starting with 0 and 1, the sequence goes 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, and so forth. Written as a rule, the expression is

$$x_n = x_{n-1} + x_{n-2}.$$

The Fibonacci sequence is not just a game with numbers. It is one of the most important mathematical expression of natural phenomena. The examples below present some interesting applications of this mathematical sequence.

This sequence asymptotically tends to a constant value. However, this ratio is irrational. It is impossible to express it exactly. We will bring it in the form of 1.618. When we divide any member of the Fibonacci sequence the result gets back to 1.618 (0.382) value. The Fibonacci series was discovered in the placement of sunflower seeds, pine cones, in the distribution of leaves or pine needles on trees, in the placement of stems. But the most surprising is application of this phenomenon in our life – it divides the human body in the golden section. Many scientists have devoted significant amount of time to guess the secrets of Giza pyramid. It still remains the preeminent numerical puzzle. Edge length is divided by the height, gives the ratio  $F=1,618$ . Height is 484,4 of the foot is 5813 inches (5–8–13) is the number of the Fibonacci sequence.

From the history of astronomy it is known that I. Tus, German astronomer of the XVIII century, using the Fibonacci sequence found a pattern and order in the distances of our solar system. In 1997, several features of the sequence were described by Vladimir Mikhailov. Mikhailov is convinced that Nature is developing according to the laws, which are incorporated in this numerical

sequence. In a pine cone, if you look at it from the side of the handle, you can find two spirals, swirling against one another in a clockwise direction. The number of these spirals, 8 and 13. Sunflower has observed pairs of spirals: 13 and 21, 21 and 34, 34 and 55, 55 and 89. The human set of chromosomes somatic cells (23 pairs), the basis of hereditary diseases are 8, 13 and 21 pairs of chromosomes.

This is not a complete list of the applications of the Fibonacci sequence; however, it plays a huge role in our world.

## REFERENCES

1. Adam J. Mathematics in nature: Modeling patterns in the natural world. Princeton, NJ: 2010.
2. Devlin K. The man of numbers: Fibonacci's arithmetic revolution. New York, NY: 2011.
3. Henderson, H.. Mathematics: Powerful patterns in nature and society. Chelsea House; New York, NY: 2007.

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## PECULIARITIES OF DIRECT AND INDIRECT SPEECH CHARACTERISTICS IN THE NOVEL “REBECCA” (DAPHNE DU MAURIER)

Personages' characteristics are necessary for perceiving and understanding the content of a story. Personage's characteristic is a set of methods and motives used by the author to create or reveal a character in the story. The characteristic can be: 1) direct and 2) indirect. In the narrow sense, personages' characteristics are motives which define the psychology of the personages and their “character” [2].

In the direct characterization the author or the character tells the reader how the other characters look or what kind of people they are. Moreover, in the direct personages' characterization the author or narrator makes direct statements about the features of the character [1; c. 169].

Indirect characteristic is the method used by the author to represent the personality of the personages through their words, actions or how other personages speak about them and treat them. After this readers can make their own conclusions about the characters [2].

In characteristics' creation and linguistic analysis of speech characteristics the important role belongs to stylistic devices and expressive means. Let's study the examples of direct and indirect characteristics of the characters in the novel “Rebecca” (Daphne Du Maurier).

*“This including of me in the conversation found me at my worst, the raw ex-schoolgirl, red-elbowed and lanky-haired...”* [c. 8]. In this case through the epithets ***the raw ex-schoolgirl, red-elbowed and lanky-haired*** a direct characteristic of the future wife of Maxim de Winter during their first meeting is made.

*“My shyness fell away from me, loosening as it did so my reluctant tongue, and out they all came, the little secrets of childhood, the pleasures and the pains”* [c. 8]. This direct characteristic of the main character is realized here through the metaphoric expression.

*“I think he realised my distress, for he leant forward in his chair and spoke to me, his voice gentle, asking if I would have more coffee, and when I refused and shook my head I felt his eyes were still on me, puzzled, reflective...”* [p. 8 – 9]. In this episode we can find the examples of direct and indirect characteristics. *“...his voice gentle...”* – direct characteristic of Max de Winter’s voice denoted by the epithet ***voice gentle***; *“...asking if I would have more coffee...”* – indirect characteristic of Maxim which shows his good manners and upbringing. His interest to the unknown girl (his future wife) is highlighted by epithets ***eyes puzzled, reflective***. *“...when I refused and shook my head...”* – indirect characterization of good up-bringing and modesty. This passage also emphasizes the girl’s lack of life experience.

The study of direct and indirect characteristics peculiarities in the analyzed novel shows that direct characteristics are used in the text less often than indirect characteristics. The most frequently used stylistic devices of the novel are metaphors, epithets and similes. They function in the text of the novel together and amplify the expressiveness of the whole novel.

## REFERENCES

1. Жуковська В.В. Основи теорії та практики стилістики англійської мови: Навчальний посібник. - Житомир: Вид-во ЖДУ ім. І. Франка, 2010. 240 с.
2. Томашевский Б.В. Теория литературы. Поэтика. Тематика. Сюжетное построение // Philologos [сайт] URL: <http://philologos.narod.ru/tomash/tema7.htm> (дата обращения 05.03.2018).
3. du Maurier D. Rebecca // Royallib [сайт] URL: [https://royallib.com/book/du\\_Maurier\\_Daphne/Rebecca.html](https://royallib.com/book/du_Maurier_Daphne/Rebecca.html) (дата обращения 05.03.2018).

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## CULTURAL CODE SWITCHING

My research on cultural adaptation has focused on the challenges and outcomes associated with long-term adaptation to a foreign culture. Little has focused on the

dynamics of cultural adaptation within single interactions, which are the building blocks of these long-term patterns. I fill this gap by introducing the concept of cross-cultural code-switching and providing an account of the psychological challenges people face in successfully adapting their behaviour in foreign cultural interactions. In the last years, the tide of globalization has reached an unprecedented degree as firms increasingly expand beyond their national borders. The success and failure of these companies is dependent on more than just management of economic and legal barriers but also cultural ones. Firms are increasingly aware of the necessity of intercultural communication. Recognition of the importance of developing intercultural skills is closely tied to the need of the corporations to succeed globally and the demand of managers with the capability of interacting with people from countries other than their own. With a globally interdependent economy, differences in cultural traits and backgrounds often cause misunderstandings and unintentional sights. Clearly, the diversity and dynamism of today's market place calls for managers with diverse skills to lead teams beyond national boundaries (Gudykunst, 2005; Hampden-Turner & Trompenaars, 2000; Landis, Benett & Benett, 2005).

According to Jandt, characteristics of an effective communicator are: "Self awareness (using knowledge about yourself to deal with difficult situations), self-respect (confidence in what you think, feel and do), interaction (how effectively you communicate with people), empathy (being able to see things from different points of view), adaptability (how fast you can adjust to new situations and norms), certainty (the ability to do things opposite to what you feel), initiative (being open to new situations), and acceptance (being tolerant or accepting unfamiliar things)". Cross-cultural code switching competency is an indicator of an effective communicator. Specifically, encompasses more or less the above named characteristics and expands on the role of emotions when switching. Molinsky's model of psychological toll illustrates the determinants of cross-cultural code-switching and the psychological challenges faced by an individual during performance. The model provides an excellent foundation for investigating how international organizations can tailor trainings for global leaders.

In this paper, I refer to global leaders as expatriates in management positions. A case study on the movie outsourced exemplifies how organizations can foster and create leaders who can cope with the complexities of cross-border relations.

Cultural knowledge is gained from cross-cultural training or experiences in living in a foreign culture. For individuals to be successful in code switching, they must have knowledge and understanding of the foreign culture's norms and values. There are varieties but related types of knowledge. Namely: linguistic competency – 1) how cultures compose their messages (Chen & Starosta, 1996); 2) reading, speaking and interpretation of the foreign culture (Redmond, 2000); 3) ability to interpret and predict behaviour of foreign culture; and, 4) knowledge of effective communication in the business context. The higher the level of one's cultural knowledge, the easier it is to perform an effective switch.

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## **THEORETICAL AND METHODOLOGICAL PRINCIPLES OF STUDYING THE RELATIONSHIP BETWEEN EMOTIONAL BURNOUT AND ANXIETY SELF-APPRAISAL OF FAST FOOD SERVICE EMPLOYEES**

Theoretical analysis of psychological literature presents emotional burnout as a complex of special psychological problems faced by a person in connection with his/her professional activities. Emotional burnout turns to be a specific health threat which increases the reliability of a suicide.

The person's state of emotional burnout affects his/her own activities, one's relations with partners, clients and dear people. Thus emotional burnout may really threaten one's health.

Despite its practical and theoretical importance, the problem of studying the psychological comfort of fast food service employees is not sufficiently considered in science. At the same time some observation shows that fast food shops employees are characterized by an extremely low rate of physical and psychological health as well as by their emotional exhaustion, depersonalization and reduction of their personal achievements.

The theoretical and methodological basis of the research is formed by the reasons for the appearance of one's emotional burnout (E. Aronson, K. Maslach, A. Pines, H. Freidenberg, A. Chyrom); the main theoretical and methodological approaches to studying the problem of emotional burnout (V. Boiko, V. Kovalchuk) and the basic theoretical statements on the reasons of one's anxiety onset (A. Adler, B. Ananyev, K. Izard, E. Ilyin, Ch. Spilberger, Z. Freud, Yu. Khanin, K. Horney).

In particular, V. Boiko emphasizes on the emotional burnout as a form of psychological defence mechanism developed by the individual. This mechanism allows either complete or partial elimination of emotions in response to some particular affects that may injure one's psyche. Thus emotional burnout causes some problems in one's physical and mental health. It is also tightly connected with anxiety [1].

In Z. Freud's and K. Horney's unanimous opinion anxiety is some vague fear. The main difference between fear and anxiety consists in the fact that fear is the response to particular danger, while unspecific ("uncertain") danger is the object of anxiety [1; 2].

The term "anxiety" is rather polysemantic in psychological literature. It may be defined both as the state of a person at a certain moment and as one's constant state. So it's necessary to distinguish between situational and personal anxiety. Personal anxiety is associated with genetically determined human properties which cause a constantly increased level of emotional agitation, anxiety [3].

To investigate the phenomenon of the emotional burnout some diagnostic methods have been developed on the basis of studying this problem. In our opinion the most appropriate method for studying the level of emotional burnout is that proposed by V. Boiko ("Diagnostics of Emotional Burnout"). This method allows to identify the emotional burnout at the stage of formation as well as to define its level.

The theoretical analysis of the problem of anxiety made it possible to identify the technique of Ch. Spilberger, Yu. Khanin as the most significant one for studying the self-appraisal of anxiety. This diagnostic instrument is a reliable and informative way to analyze the self-appraisal of the level of anxiety at a particular moment (situational anxiety as a certain state and personal anxiety as a constant feature of a person) [3].

Studying the relationship between the emotional burnout and self-appraisal of anxiety among fast food service employees will allow to develop a programme of preventive and educational measures the purpose of which is to prevent the appearance of some destructive state.

## REFERENCES

1. Бойко В.В. Синдром "эмоционального выгорания" в профессиональном общении / В.В. Бойко. – СПб. : Питер, 1999. – 105 с.
2. Прихожан А.М. Причины, профилактика и преодоление тревожности // Психологическая наука и образование. – 1998. – № 2. – С. 11-17.
3. Ханин Ю.Л. Краткое руководство к применению шкалы реактивной и личностной тревожности Ч.Д.Спилбергера. – Л., 1976.
4. Freudenberger H.J. Staff Burnout / J. Freudenberger // Journal of Social Issues. – 1974. – Vol. 30. – P.159-165.



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## **THEORETICAL AND METHODOLOGICAL BASES OF THE STUDY OF PSYCHOLOGICAL FACTORS ON MARITAL SATISFACTION**

Family is the most important social environment for each person. One of the main factors determining the direction of family development is marital satisfaction. Today, the problem of building a happy, harmonious and effective marital relationship is one of the common scientific problems. It is very important to know all the main factors that affect family relationships satisfaction. In fact, it can be observed that the features of the prevailing factors at different stages of married life aren't clearly marked.

The study of marital satisfaction was carried out by such scholars as Yu. E. Alyoshina, M. M. Obozov, N. N. Obozov and others. In particular, Yu.E. Alyoshina established a parabolic dependence of marital satisfaction on family experience. After 12-18 years of married life, the level of marital satisfaction is the lowest as spouses need autonomy and changes in basic needs for adaptation and spiritual relationships. After 18 years of married life, satisfaction is rising again [1].

According to literature data analysis, we can specify two groups of factors which influence marital satisfaction at different stages of married life – internal and external. The first group includes satisfaction with a sexual partner, reaction to conflict situations, psychological compatibility and partners' values. In the case of the second group, the following factors can be mentioned: family communication, the birth of the first child, the division of household chores and psychological support.

These factors determine the early stages of married life:

1. Sexual satisfaction. S.I. Golod and O.A. Dobrynina distinguished the factors of marital satisfaction specific to each gender within the first decade of married life. Thus, for women, it is domestic and spiritual adaptation, her husband and relatives compatibility and sexual relations, for men – the sexual expression of his wife [2].

2. Reactions to conflict situations. According to V.A. Sysenko, the level of marital satisfaction is determined by the coherence of family responsibilities. Conflicts often arise on the basis of unfair labor division, dissatisfaction with their own needs. There are many conflicts in young families which arise as a result of disagreements in the rules of family behavior that partners have inherited from their parents [1].

3. Psychological compatibility. B.G. Ananiev found a connection between psychological compatibility and marital satisfaction among married couples. This connection wasn't found among those who were married, therefore, it can be assumed that the partners are more satisfied with the process of starting a family if they have similar characters, but later it loses its significance [2].

4. Family communication, namely the social behaviour experience and setting formed in the parent's family. It is expected from a partner that he will follow the same behaviour that is observed in his/her family (in particular, positive moments) [1].

5. Birth of the first child. I.V. Grebinnikov drew attention to the fact that the maximum level of marital satisfaction is observed before the birth of children, and the minimum – in families with children of infant age [2].

6. Distribution of household chores. If one of the partners does more housework, he/she can rapidly become emotionally and physically exhausted, and this has a great influence on marital satisfaction.

At the later stages of married life (in particular, the stage of the 'empty nest'), there are quite different factors that are dominant:

1. Values. These are internal desires, attitudes to life, sense of respect, loyalty to a partner. According to studies conducted by J. Medling and M. McKerry, it was discovered that the similarity of values is positively related to the marital satisfaction with the experience of married life during 26-50 years [2].

2. Psychological support. This factor is important at all stages of the family, in fact, it is one of the main functions. The greatest psychological support of each other will affect the marital satisfaction in families with married life duration of more than 25 years. This is primarily due to the fact that at this time, children leave their parents, start their own families, and therefore, mutual support and understanding are very important for happy relationships [1].

So, we can state that all of analysed factors impact each family and can determine a certain level of marital satisfaction at different stages of married life. The greatest variety of married satisfaction factors is observed in the early stages of married life. This is primarily due to the fact that the couple starts to adapt to new social roles, responsibilities and begins to form their own style of interaction and behaviour in different life situations.

## REFERENCES

1. Алешина Ю.Е. Индивидуальное и семейное психологическое консультирование. – Изд. 2-е. / Ю. Е. Алешина. – М.: Независимая фирма "Класс", 1999. – 208 с.
2. Андреева Т.В. Психология современной семьи / Т. В. Андреева. – СПб. : Питер, 2005. – 436 с.

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## CORRECT POLYGONS

Construction of the correct polygon (n-sides polygon) remained a problem for mathematicians until the 19th century. Most famous mathematicians such as Karl Friedrich Gauss, Euclid, Per Laurent Vanzel, Johannes Erchinger, Friedrich Julius Richelio, Johann Gustav Hermes and others paid much attention to this problem.

A polygon is called correct if all its sides and corners are equal, for example, an equilateral triangle is a correct triangle, a square is a correct quadrilateral. The correct polygon is a convex polygon.

Every corner of the correct n-sides polygon is equal  $\frac{180^\circ(n-2)}{n}$ .

Indeed, since the sum of the angles of a convex n- sides polygon is  $180^\circ(n-2)$  and they are all equal, each of them is equal  $\frac{180^\circ(n-2)}{n}$ .

Any correct polygon is simultaneously inscribed and described, and the centers of the described and inscribed circles coincide.

The point, which is the center of the described and inscribed circle of the correct polygon, is called the center of the correct polygon.

Formulas for finding the radii of the described and inscribed circles for the correct triangle, quadrilateral, and hexagon are the following:

The number of sides of the correct n- sides polygon	n = 3	n = 4	n = 6
The radius of the circle is described	$R_3 = \frac{a\sqrt{3}}{3}$	$R_4 = \frac{a\sqrt{2}}{2}$	$R_6 = a$
The radius of the circle is inscribed	$r_3 = \frac{a\sqrt{3}}{6}$	$r_4 = \frac{a}{2}$	$R_6 = \frac{a\sqrt{3}}{2}$

The ancient Greek mathematicians (Antiphon, Brison, Archimedes, etc.) used correct polygons to calculate the number  $\pi$ . They calculated the area of the polygons inscribed in the circle and the polygons around it, gradually increasing the number of their sides and thus obtaining the correct square of the circle.

In computer graphics, a polygon is a primitive used in modeling and rendering. They are defined in a database, containing arrays of vertices (the coordinates of the geometrical vertices, as well as other attributes of the polygon, such as color, shading and texture).

So, this topic is very important in the study of mathematics and computer graphics.

## REFERENCES

1. [http://ua.onlinemschool.com/math/formula/regular\\_polygon/](http://ua.onlinemschool.com/math/formula/regular_polygon/)
2. Zhukov A.V. About the number  $\pi$ . - Moscow: ICESM, 2002. ISBN 5-94057-030-5.

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## ELEKTRONISCHE WÖRTERBÜCHERBENUTZUNG

Zum Erlernen einer Fremdsprache ist die Verwendung eines Wörterbuches eben nahezu unerlässlich.

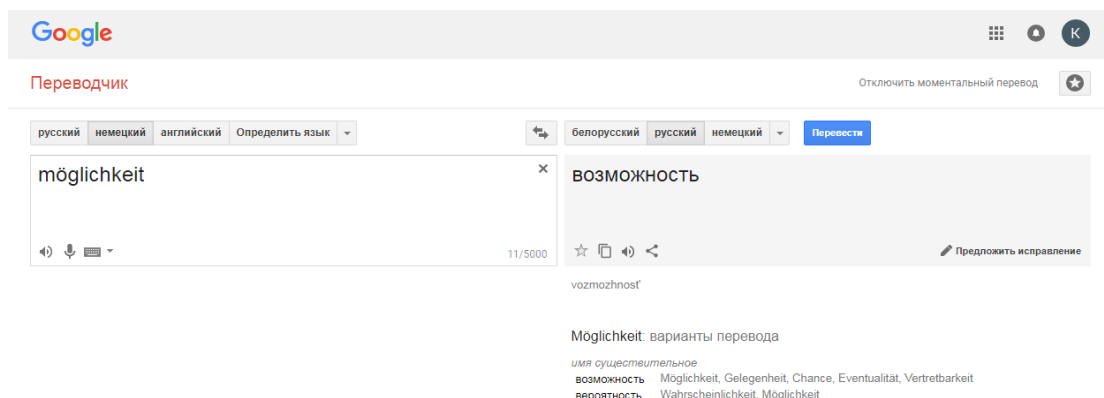
Man schlägt neue Vokabeln nach oder informiert sich über die Bedeutung einzelner Wörter. Ohne ein Wörterbuch wäre es schlichtweg unmöglich sich einen umfassenden Wortschatz in einer Fremdsprache aufzubauen.

Früher waren Wörterbücher jedoch sehr umfangreiche Werke. Das Nachschlagen in einem Wörterbuch benötigte seine Zeit. Mit dem Internet und dem Beginn der Digitalisierung tauchten recht schnell auch die ersten Online-Wörterbücher auf. So ein Online-Übersetzer erleichtert Dir die Arbeit nicht unerheblich. Statt zwischen hunderten Seiten zu suchen und Dich darin zu verlieren, kannst Du in wenigen Sekunden das gesuchte Wort in das Übersetzungsprogramm eintippen. Meistens schlägt Dir solch ein Online-Wörterbuch nicht nur eine sondern mehrere bis viele mögliche Übersetzungen vor. Oft sind inklusive Kontextbeispielen und Bedeutung [1, s.74].

Durch die große Nachfrage und der Popularität der Angebote gibt es im Internet inzwischen eine sehr unendliche Vielzahl von Online-Wörterbüchern, Übersetzer-Apps und Online-Übersetzungsprogrammen.

Google Translate ist eines der umfangreichsten Online-Wörterbücher, die es gibt. Wegen der Masse an Daten kann die Google schon mehr als 100 Sprachen in seinem Angebot vorweisen. Und das sogar inklusive Spracherkennung [2].

Google Translate übersetzt nicht nur einzelne Wörter, sondern auch ganze Sätze oder sogar Texte. Diese sind natürlich nicht immer optimal übersetzt, aber den Sinn kann man in den meisten Fällen herauslesen. Es ist ebenfalls möglich ganze Dokumente hochzuladen und übersetzen zu lassen.



Es wird jeweils nur eine Übersetzung angezeigt. Dadurch ist es nicht notwendig lange in Ergebnislisten suchen. Darunter werden weitere Übersetzungen angezeigt.

Die Google Translate App ist ein absolut ausgezeichnetes Tool. Man kann Wörter und Texte aufsprechen und Google erkennt und übersetzt sie. Auch ist es möglich Schilder oder Dokumente zu fotografieren und sofort eine Übersetzung dazu zu erhalten. Jedoch, zum Teil kommen unpassende Übersetzungen raus. Deshalb muss in vielen Fällen überprüft werden, ob eine Übersetzung überhaupt die Richtige ist [2].

Google Translate eignet sich ausgezeichnet als erste Anlaufstelle, um eine Übersetzung zu erhalten. Vielen nutzen es auch, um sich mit jemanden zu unterhalten, mit dem man keine Sprache gemeinsam hat (einfach das was man sagen will ins Suchfeld eingeben). Vor allem für die populären Sprachen leistet Google Translate einen ausgezeichneten Job.

## LITERATUR

1. Кузин, А. В. Разработка и создание многоязычного мультимедийного компьютерного словаря для системы автоматизированного перевода / А. В. Кузин, С. В. Левонисова // Проектирование и технология электронных средств. – 2003. – № 4. – С. 73-77.
2. Google Translate [Electronic resource]. – Режим доступа: <https://translate.google.com/> – Date of access: 21.02.2018.

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## INTERACTIVE WHITEBOARDS: NEUE MÖGLICHKEITEN IM UNTERRICHT

Das Thema interaktive Whiteboards wird immer wichtiger in Belarus. Dabei bietet der Einsatz interaktiver Tafeln etliche Vorteile wie die zeitsparende

Vorbereitung, eine sinnvolle Dokumentation und unterrichtliche Transparenz. Die Studenten zeigen sich motivierter und beteiligen sich plötzlich aktiver am Unterricht. Das Schreiben oder verschieben bestimmter Text- und Bildelemente an der Tafel macht auf einmal Spaß, und alle wollen gerne mal an die Tafel und darauf arbeiten. Auch das Abschreiben von der Tafel fällt plötzlich leichter im Vergleich zu den vergilbten und unleserlichen Projektorfolien, und sogar die Anzahl der Abschreibfehler geht zurück. Unterrichtsinhalte können auf einmal viel besser mit aktuellen Bildern und Karten veranschaulicht werden, und auch die bereits erstellten Arbeitsblätter und Folien lassen sich nach dem Scannen an der digitalen Tafel weiter verwenden [1].

Der handschriftliche Aufschrieb kann unkompliziert in einen digitalen Text umgewandelt werden.

Die Schrifterkennung schließt auch Zahlen und Formeln ein. Alternativ ist auch der Einsatz einer (angeschlossenen oder eingeblendeten) Tastatur möglich. Bilder, Fotos, Videos, anklickbare Links und Audio-Dateien können integriert werden, ohne einen Bruch in der Unterrichtsstunde zu verursachen. Notizen können nachträglich geordnet, kopiert oder verschoben werden. Der Unterricht kann so dynamischer gestaltet werden.

Viel zu offen, als dass man sie ignorieren könnte, liegen die Vorteile dieses Mediums auf der Hand: Sie bieten Arbeitserleichterung für Pädagogen und einen gewaltigen Motivationsschub für die Studenten. Die Integration aller bisher separat genutzten Medien und die Speicherung von Lerninhalten sind möglich [1].

Die Kreidetafel soll schrittweise durch elektronische interaktive Tafeln ergänzt, teils aber auch ersetzt werden. Der Prozess der Einführung von interaktiven Tafeln ist, wie schon die Einführung von Computern in anderen Formen, seit Jahren von großer Unsicherheit gekennzeichnet. Die Besonderheit einer interaktiven Tafel ist, wie schon der Name sagt, ihre Interaktivität. Das Potential interaktiver Tafeln für den Unterricht und ihre vielfältigen Einsatzmöglichkeiten werden von geübten Anwendern. Die elektronische Tafel vereint Funktionen, die bisher von mehreren Geräten erfüllt werden mussten.

Interaktive Whiteboards sind die Medien der Zukunft, doch zu wenig interaktives Material, geschweige interaktive Übungen für den alltäglichen Unterricht, sind vorhanden.

## **LITERATUR**

1. Использование интерактивных досок на уроках [Electronic resource]. – Режим доступа: <http://www.aura.kz/helpinfo/index.php?id=55316> – Date of access: 19.03.2018.

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## **ROLE OF EDUCATIONAL INSTITUTES FOR STRENGTHENING DIGITALIZATION**

The proliferation of Smartphone's and PCs has made the world digital like never before. And India is not an exception. Today's generation is tech savvy and is well versed with the use of internet. The idea of implementing technology in education, in India was limited to alcove segment that comprised of prestigious educational institutes and private colleges. There was the time when digitization or introduction of technology in the Indian education system seemed a long distant dream. Investors and education technology providers were reluctant to invest in India for a long time.

In the present times the scenario has finally changed due to the introduction of various digital educational tools and their awareness and the rise in the number of neo middle class that is ready to spend for better quality of education. A typical Indian classroom was once portrayed by long hours of lectures given by the teacher. The introduction of educational technology has created drastic changes in the quality of education in India. Schools and colleges in India are adopting digital solutions to enhance learning experience of new generation students. Digitization has made the environment of the class more interactive and participative. With the help of digitization, teachers are able to teach students by showing 3D model and it's functioning in an effective manner rather than drawing a complicated diagram on blackboard. Introduction of digitization has definitely made process of education more simplified and attention-grabbing. Furthermore, it has helped in the promotion of higher education like never before. Digitization has lessened the distance between students and their educational needs. More than 100,000 schools and colleges in India have adopted varied educational software. Private schools in India have been adopting technology in education at a fast rate. Educational ERP's will benefit schools and other educational institutes for better management of activities. The adoption of digital education in schools across India has benefited in bringing changes in age old education system. Earlier, high cost of technology installation prevented schools from buying educational software. Innovative solutions have helped in modifying educational scenario and management of schools. Digitization has helped in faster transmission of education at a minimal price. Firms that provide innovative technologies in the field of education are

looking forward for tapping opportunities in rural sector with the help of state government.

Digitization of education in India is in emerging state. Private schools in India are adopting technology swiftly to meet the educational needs of next generation students. The government is also working towards enhancing education system in rural India with the help of digital tools. Printing press changed the world of education forever. Six centuries later we are undergoing another transformation and this time everything is going digital. Leading this second wave of technology backed empowerment. Educomp has taken education from the paper to the pixel.

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## **LA CYBERDÉPENDANCE DE JEUX VIDÉO**

On compare la cyberdépendance à l'alcoolisme, à la toxicomanie et au "gambling" compulsif. La cyberdépendance est un phénomène relativement nouveau. Les jeunes passent beaucoup de temps sur la Toile: deux heures en moyenne par jour. Les jeux vidéo en particulier ont un grand pouvoir d'attraction sur les enfants et les adolescents. Ils aussi fascinent et sont, du coup, fréquemment pratiqués, car ils permettent de satisfaire leur goût de l'aventure et leur besoin de reconnaissance et de succès. Les problèmes émotionnels semblent plus faciles à surmonter en jouant, en surfant et en tchattant [1].

Les jeux de rôle en ligne et les plateformes de communication comme les réseaux sociaux et les tchats recèlent un fort potentiel addictif. Leur particularité est de permettre de créer des communautés, de se faire des amis et d'éprouver de la confiance en soi, ce qui n'est pas toujours si facile dans la «vie réelle».

Il faut noter qu'aujourd'hui il existe le phénomène de la dépendance aux jeux vidéo. Chez les jeunes enfants, les jeux en 3D peuvent avoir des conséquences négatives sur la perception de l'espace. Deux tiers des jeunes adeptes de jeux vidéo ont déjà joué à des jeux non adaptés à leur âge d'après les recommandations d'âge figurant sur l'emballage. Or jouer à des jeux vidéo violents peut avoir des conséquences néfastes [2].

La plupart des jeux peuvent aussi être joués en ligne, c'est-à-dire sur Internet. Cela implique des risques supplémentaires par rapport aux jeux hors ligne:

Il est beaucoup plus facile de contourner les limites d'âge sur Internet que pour les jeux achetés en magasin. Les jeunes ont ainsi accès facilement à des jeux inadaptés, comme des jeux violents.



Les autres internautes peuvent avoir un comportement inadéquat, par ex. insulter, tyranniser, manipuler ou tromper les autres joueurs, ou encore faire preuve d'agressivité [1].

En raison des relations qu'il établit au fil du jeu avec les autres joueurs, l'enfant risque de dévoiler des informations personnelles ou de rencontrer ces personnes dans la vie réelle.

Quand on parle de dépendance aux jeux vidéo, on pense généralement aux jeux en ligne: dans les jeux de rôle en ligne massivement multijoueurs comme World of Warcraft ou Lord of the Rings, les joueurs s'identifient rapidement et fortement à leur avatar (personnage dans le jeu), qu'ils peuvent développer et améliorer en permanence. Cela peut créer une dépendance aux jeux vidéo chez les adolescents, mais aussi chez les adultes qui ont déjà d'autres problèmes [2].

La protection des enfants et des jeunes face aux médias numériques a pour but de promouvoir un usage des médias sûr, responsable et adapté à leur âge. Cela passé par la promotion des compétences médiatiques, mais aussi par des mesures de régulation visant à restreindre la diffusion et l'utilisation de certains contenus médiatiques.

## LITTÉRATURE

1. Киберзависимость, или жизнь в виртуальном зазеркалье [Electronic resource]. – Режим доступа: [http:// medportal.md/ detail\\_news.php?detail\\_news=1298&id=298](http://medportal.md/detail_news.php?detail_news=1298&id=298) – Date of access: 11.01.2018.
2. Зависимость от компьютерных игр [Electronic resource]. – Режим доступа: <http://kak-bog.ru/zavisimost-ot-kompyuternyh-igr> – Date of access: 11.02.2018.

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## THE UKRAINIAN ISSUE IN THE CONTEXT OF THE UNION OF LUBLIN

The Lublin Union was signed on 1 July 1569 at the Seim of Lublin creating the single state of the Polish-Lithuanian Commonwealth. The provisions concerning the Ukrainian territory constituted an important part of the document, since most of the territories of modern-day Ukraine belonged to the Grand Duchy of Lithuania and, accordingly, were to be included into the newly formed state.

The processes around the Union have not been studied exhaustively in the national historiography. M. Hrushevsky was one of the first to cover the topic of

the Lublin Seim and the Union. In his work "History of Ukraine-Rus" the historian provided a detailed description of these events and presented them as bearing negative consequences for further life and development of the Ukrainian people. Soviet historians saw the Union as an armed occupation of Ukraine by the Poles. Modern researchers of this problem include N. Yakovenko who published the article "The Gains and Losses of the Union of Lublin", V. Vasilenko, and N. Belous.

The purpose of this article is a brief study of the process of entering the Ukrainian lands into the Polish-Lithuanian Commonwealth, and their position pursuant to the conditions of the Lublin Union of 1569.

The Lublin Seim was convened by the Polish king Sigmund II August and began on January 20 in the city of Lublin. The interests of the Ukrainian territories at the Congress were advocated by senior officials, including starosts, vaivodes, cornets, provincial ambassadors and the nobility. The most influential delegates from Ukraine were representatives of princely families, among them Konstantin Ostrozhsy, Alexander Czartoryski, Andrew Vishnevetsky, Bogush Koretsky and others. However, despite this wide range of representatives of the Ukrainian lands, they did not play a crucial role in the Seim debates. The probable reason for this was understanding the weaknesses of Lithuania, both in economics and politics, and the desire to strengthen Ukraine's defense capacity on account of a more powerful state – the Crown of Poland.

On March 5, 1569, the Seim adopted the Act of Accession of Podlasie, on May 27 the same resolution was approved in respect of Volyn province. The issue of the remaining territory of Ukraine-Rus remained unsolved. Kyiv region was included into the previously annexed lands, and after June 6, when Prince of Ostroh swore allegiance to the king and the Crown, Bratslav Voivodeship joined Poland. Thus almost the entire territory of Ukraine was under the rule of the Polish Crown.

The king provided guarantees of the entirety and integrity of the annexed lands, as well as the stability of their administrative and judicial structure. The Union also took into consideration national, cultural and religious needs of the Ukrainian people. The rights of Catholics extended to the Orthodox population. The resolution of the Seim stipulated the preservation of the Ukrainian language in all spheres of life, including the judicial proceedings, administrative authorities or local regional councils. However, the Polish was set forth as the language of the Seim. According to the main documents of the Seim, the Ukrainian lands were attached to Poland as equal and free territories.

Thus, the question of the impact and consequences of the Lublin Seim remains quite controversial. Although the king left all spheres of life almost unchanged within the Ukrainian lands, we cannot view further Polish domination in Ukraine as having beneficial effects on the history of the Ukrainian people.

## REFERENCES

1. Horobets V.M. Rus "after Rus" / V.M. Horobets, M.M. Voloshchuk, A.G. Plakhonin and others. – Kharkiv: printing house of T. Shevchenko KNU, 2016. – 352 p.

2. Yakovenko N. Gains and Losses of the Lublin Union / N. Yakovenko // Kyivska starovyna. – 1993. – # 3. – pp. 77 – 85.
3. Kaminski A. S. Historia Rzeczypospolite wielu narodow 1505 – 1795/ A. S. Kaminski. – Lublin: Instytut Srodkowo-Wschodniej, 2000. – 262 s.

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## **PROBLEMS OF SOCIAL ADAPTATION OF PENSIONERS IN UKRAINE**

The problems of the elderly until recently have been poorly understood in our country, and especially the problems of adaptation. Social adaptation is an important indicator of the success of the interaction of man, a social group with a radically changing social environment and the main condition for the completion of transformation. From the point of view of scientists, adaptation is a continuous process of active adaptation of a person to changing conditions of a social environment. The effectiveness of adaptation largely depends on how much the person perceives himself and his social connections [1, c. 120].

The peculiarities of social adaptation of pensioners are due to the fact that they are forced to simultaneously adapt to age changes at the micro level, to social changes at the level of a small group and to changes in the level of society as a whole [2, p. 57]. People who retire mostly face such problems as loneliness, isolation from all relatives, friends and acquaintances, deterioration of health, low material provision. All this gives rise to a number of consequences that affect the process of social adaptation. People have a low level of social mobility, retirees sit at home and do not integrate into society, communicate less with their relatives, over time, the circle of communication is very narrowing. When a person retires, she has a lot of free time, and as a rule, this time spent on watching television, listening to radio, reading books, this implies the impossibility of self-development. All these components eventually lead to disadaptation.

In Ukraine, the elderly have a low standard of living, their basic needs are not satisfactorily fulfilled, which is why they are not able to fully function in society. Such a process as reducing the level of communication with other people generates the loss of family ties, loneliness, alienation from society, isolation in oneself etc.

Pensioners who have problems with social adaptation often plunge into themselves and their problems and reject any opportunities for improving social adaptation. Usually, this leads to depression, there is a loss of interest in life, a person does not want to think about the future, it simply "floats by the flow" [4]. Persons who are retired consider themselves unnecessary to others, they feel

ambivalent about their status. "It does not matter what I do" may be joyful or cruel expression [3].

Another important problem can be singled out, namely that people in this age face a large number of deaths, they lose their relatives, friends, acquaintances, etc. This greatly affects their physical and mental state. They can become ill severely after leaving a close relative or friend.

Retirement is often the first major change faced by elderly people. This change affects each person in different ways and leads to various consequences, the main of which are the problems of social adaptation.

## REFERENCES

1. Сокорева И. Е. Проблемы пожилого пациента: взгляд менеджера сестринского дела // Клиническая геронтология. – 2005. - №9. – С.120 – 121.
2. Щанина Е. В. Факторы социальной активности старшего поколения / Е. В. Щанина // Известия высших учебных заведений. Поволжский регион. Общественные науки. – 2009. – № 2 (10). – С. 57–61.
3. Kaplan Daniel B. Effects of Life Transitions on the Elderly [Электронный ресурс] / Daniel B. Kaplan. – Adelph: Network working paper. – Режим доступа : <https://www.msmanuals.com/home/older-people's-health-issues/social-issues-affecting-older-people/effects-of-life-transitions-on-older-people> . – Назва з екрану.
4. <http://medicine.jrank.org/pages/1513/Retirement-Transition-Adaptation.html>

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## THE UNEXPECTED MATHS BEHIND VAN GOGH'S "STARRY NIGHT"

One of the most remarkable aspects of the human brain is its ability to recognize patterns and describe them. Among the hardest patterns we have tried to understand is the concept of turbulent flow in fluid dynamics. As difficult as turbulence is to understand mathematically, we can use art to depict the way it looks.

In June 1889, Vincent van Gogh painted the view just before sunrise from the window of his room at the Saint-Paul-de-Mausole asylum in Saint-Rémy-de-Provence, where he had admitted himself after mutilating his own ear in a

psychotic episode. In "The Starry Night," his circular brushstrokes create a night sky filled with swirling clouds and eddies of stars.

Van Gogh and other Impressionists represented light in a different way than their predecessors, seeming to capture its motion, for instance, across sun-dappled waters, or here in star light that twinkles and melts through milky waves of blue night sky. The effect is caused by luminance, the intensity of the light in the colors on the canvas.

The more primitive part of our visual cortex, which sees light contrast and motion, but not color, will blend two differently colored areas together if they have the same luminance. But our brains' primate subdivision will see the contrasting colors without blending. With these two interpretations happening at once, the light in many Impressionist works seems to pulse, flicker and radiate oddly.

Sixty years later, Russian mathematician Andrey Kolmogorov furthered our mathematical understanding of turbulence.

Experimental measurements show Kolmogorov was remarkably close to the way turbulent flow works, although a complete description of turbulence remains one of the unsolved problems in physics.

A turbulent flow is self-similar if there is an energy cascade. In other words, big eddies transfer their energy to smaller eddies, which do likewise at other scales. Examples of this include Jupiter's Great Red Spot, cloud formations and interstellar dust particles.

In 2004, using the Hubble Space Telescope, scientists saw the eddies of a distant cloud of dust and gas around a star, and it reminded them of Van Gogh's "Starry Night."

This motivated scientists from Mexico, Spain and England to study the luminance in Van Gogh's paintings in detail. They discovered that there is a distinct pattern of turbulent fluid structures close to Kolmogorov's equation hidden in many of Van Gogh's paintings. The researchers digitized the paintings, and measured how brightness varies between any two pixels. From the curves measured for pixel separations, they concluded that paintings from Van Gogh's period of psychotic agitation behave remarkably similar to fluid turbulence.

While it is too easy to say, Van Gogh's turbulent genius enabled him to depict turbulence. It is also far too difficult to accurately express the rousing beauty of the fact that in a period of intense suffering, Van Gogh was somehow able to perceive and represent one of the most supremely difficult concepts nature has ever brought before humankind and to unite his unique mind's eye with the deepest mysteries of movement, fluid and light.

## REFERENCES

1. Ball, Philip. *Flow: Nature's Patterns: A Tapestry in Three Parts*, 1<sup>st</sup> ed, pp. 164-178. New York: Oxford university press, 2009.
2. Garfield, Kathryn. A Turbulent Mind: The Physics of Van Gogh's Starry Night. *Discover Magazine: The magazine of science, technology, and the future*. 06-10-09 <http://discovermagazine.com/2006/oct/van-gogh-turbulence-painting>

3. Freiburger , Marianne. Troubled minds and perfect turbulence. *Plus magazine*. 06-07-21 <https://plus.maths.org/content/troubled-minds-and-perfect-turbulence>

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### **FBI AGENTS VS LIE**

*“No mortal can keep a secret. If his lips are silent, he chatters with his fingertips.”*

*S. Freud*

Lie is our daily life. We lie to strangers and coworkers. Introverts and extroverts, we lie. Men lie more about themselves. And women lie to protect other people. Even babies fake a cry what also means cheating. Lie is normal. But it is necessary to recognize lie like the real FBI agents. So, we can learn some tricks from professionals, Joe Navarro & LaRae Quay, and easily define the deception. Here are the indicators or “red flags” of lie.

*Speech.* People who are overdetermined in their denial will resort to formal rather than informal language. It means to use “do not” instead of “don’t” etc. In addition we heard distancing language: “that man/woman”. Liars will unconsciously distance themselves from their subject, using language as their tool. They will try to “look good”. We should also point out the fact that liars are talking down to the asking; giving short answers; becoming resistant, hostile, or sarcastic; displaying “micro gestures” with indecent connotations [1].

*Eye contact.* Little or no eye contact is perceived erroneously by some as a classic sign of deception, especially during questioning, while the truthful should “lock eyes”. This may be accurate for some but not for all. For instance, research shows that people actually will increase eye contact during deception. This may occur because they know that we look for this feature. Also, some people look down or away (from parental authority as a form of respect) [1]. What’s more, trained lie spotter can spot a fake smile. Everyone can consciously contract the muscles in cheeks. But the real smile which is in the eyes can’t be faked [2].

*Body language.* When people speak, they naturally incorporate various parts of their body, such as the eyebrows, head, hands, arms, torso, legs, and feet, to emphasize a point for which they feel deeply or emotionally. For the most part, people create artificial barriers with both their shoulders and arms or with inanimate objects in front of them. Other clear signs of discomfort include rubbing the forehead near the temple region, squeezing the face, rubbing the neck, or stroking the back of the head with the hand [1].

Summing up, we can highlight the main aspects of human existence of lies. Their verification and confirmation is possible with a simple test. Any of “no responses” suggest they’re demonstrating deceptive behavior or trying to mislead you:

Saying “no” with	Reading like
looking in a different direction	desire to escape
close their eyes	sign of deception
hesitating and stretching out	pondering the lie
singsong manner	hiding uncertainty

Interesting that when anybody tells “yes” while shaking his head “no”, slightly shrugging his shoulders it must be a lie [3].

The detection of deception remains a difficult task in which many errors are allowed. Described above is applicable to general cases, and can be used only in conjunction with individual approach.

## REFERENCES

1. Joe Navarro, A Four-Domain Model for detecting deception an alternative paradigm for interviewing/ Joe Navarro [Electronic resource] – Access mode: [http://www.au.af.mil/au/awc/awcgate/fbi/decep\\_detect\\_4d.pdf](http://www.au.af.mil/au/awc/awcgate/fbi/decep_detect_4d.pdf)
2. Pamela Meyer, How to spot a liar / Pamela Meyer [Electronic resource] – Access mode: [https://www.ted.com/talks/pamela\\_meyer\\_how\\_to\\_spot\\_a\\_liar](https://www.ted.com/talks/pamela_meyer_how_to_spot_a_liar)
3. Former FBI agent explains How to spot a liar [Electronic resource] – Access mode: <http://brobible.com/life/article/how-to-spot-liar/>

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## PROBLEMS WITH PARAMETERS

Problems with parameters are one of the most difficult tasks of the elementary mathematics course. Their aim is to study the functions included in the problem and to solve the equations or inequalities with the further numerical coefficients. In mathematics, a **parametric equation** defines a group of quantities as functions of one or more independent variables called parameters. Parametric equations are commonly used to express the coordinates of the points that make up a geometric object such as a curve or surface, in which case the equations are collectively

called a **parametric representation** or **parameterization** (alternatively spelled as **parametrization**) of the object.

For example, the equations form a parametric representation of the unit circle, where  $t$  is the parameter: A point  $(x, y)$  is on the unit circle if and only if there is a value of  $t$  such that these two equations generate that point.

While solving equations (inequalities) with parameters it is necessary to find out at which values of the parameter the given equation (inequality) has a solution, and to find all these solutions. In the case there is at least one of the permissible parameter value which is not investigated. Thuse the problem is not considered to be completely solved. For a long time, tasks with parameters were included in entrance exam papers on mathematics to higher education institutions, and in recent years such tasks have been also offered during the preparation to the external testing. Typically, not all applicants can solve such tasks, which lead to a reduction of the score for written test.

A secondary school can not teach to solve problems with parameters. This is a very difficult material that requires a lot of time; in addition, before starting to solve such problems a pupil must perfectly master the general course of mathematics.

Tasks with parameters is a test to check the level of mathematical culture, its presence or absence. One can find them not only in Algebra or Geometry. The study of Physics, Chemistry, Economy, and many other subjects often lead to the solution of problems with parameters or to the study of processes depending on the parameter. Almost every problem in the textbook of Physics or Economics is a text with algebraic parameters problem. The solution of such problems with the parameters requires:

- a special rule for writing answers to the tasks with parameters;
- the values;
- the field where formulas can be applied.

A special rule for writing the answer follows from the statement of the task with the parameters. To solve equations with parameter means finding if each parameter has a root. It is necessary to formulate conditions in solving the problem with parameters which indicate the area of admissible values of the equation or inequality, the domain of admissible parameters values [2].

The general method of solving tasks includes: knowledge of the stages of the solution, the methods of execution, the types of tasks, the justification of the choice of the method of execution on the basis of the analysis of the text of the problem, as well as the possession of the subject knowledge: concepts, definitions of terms, rules, formulas, logical methods and operations.

## REFERENCES

1. Амелькин В. В., Рабцевич В. Л. Задачи с параметрами: Справ. Пособие по математике. Минск: Асар, 1996. - 464 с.
2. Бернштейн Е. А., Попов Н. В. Задачи с параметрами. Учебное пособие для учащихся ОЛ ВЗМШ. - М. - 2003. - 75 с.



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## **IMPROVEMENT OF THE MARKETING COMMUNICATION POLICY OF THE ENTERPRISE**

Modern marketing demands not only the production of quality goods and the establishment of affordable prices for consumers but also marketing communications today occupy a principal place among the means of competition. Marketing communication policy is a set of measures used by an enterprise to inform, persuade or remind consumers of their products or services [2].

Effective marketing communication policy should not only provide the consumer with the necessary knowledge about the characteristics of the product or services, the features of the competitive offer, but also encourage the customers, create an atmosphere of emotional understanding and trust between the manufacturer and consumers.

The complex of marketing communications consists of four main means of influence: *advertising*, *sales promotion*, *propaganda* and *personal sales*.

*Advertising* - any paid form of non-personal presentation and promotion of ideas, goods or services from a well-known person.

*Promotion of sales* - short-term incentive measures to encourage the purchase or sale of goods or services.

*Propaganda* - non-personal and unpaid stimulation of demand for goods, services or organization through the dissemination of commercially valuable information or benevolent presentation in the media.

*Personal sales* - an oral presentation of a product during the conversation with one or more potential buyers for the purpose of selling [3].

The choice of means, forms and methods of communicative influence is determined by factors that characterize the needs, preferences and interests of the audience. It is important to note that the audience of communicative influence is not only consumers. The given action is also carried out in relation to the employees of the firm, investors, suppliers, distributors and other partners of the company, who interact daily during the realization of current and operational tasks. Market participants, with whom the firm supports irregular communications, such as the media, state and public institutions, and financial institutions, can serve as contact audiences [1].

Ways of improvement of the marketing communication policy of the enterprise:

- better regulation of information flows;
- improvement of administrative actions;
- improvement of the feedback system;

- improvement of the system of proposals;
- introduction of newsletters, publications;
- modern information technology.

It should be noted that the management of communication policy in modern conditions has come to a new level. The continuous increase of the role of information in the activities of enterprises makes them revise their marketing positions, particularly in the field of communications. The emergence of entirely new problems associated with changes in consumer behaviour, the expansion of communication opportunities promotes new approaches in marketing communication policy management.

## REFERENCES

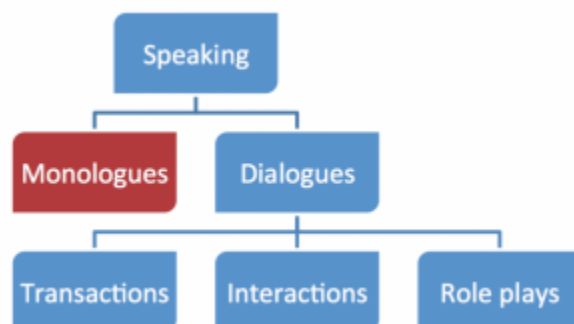
1. Апчел Ю.С. Сучасні моделі маркетингових комунікацій / Ю.С. Апчел // Ефективна економіка, 2010. – 690 с.
2. Балабанова Л.В. Маркетинг : підруч. / Л.В. Балабанова. – [2-ге вид., перероб. і допов.]. -К.: Знання-Прес, 2004. - 645 с.
3. Зуляр Ю.А. Массовые коммуникации в рекламе: учебник [для вузов] / Ю.А. Зуляр. - Иркутск: Оттиск, 2006. - 405 с.

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## VIDEO CONTENT FOR DEVELOPING SKILLS OF PROFESSIONAL MONOLOGUE OF FUTURE COACHES

*Developing speaking skills is a matter of top priority of most language courses, but the issue remains to be explored: **how** do you get your learners talking? To answer this question, Urs Kalberer starts by looking at different types of speaking, as seen in the diagram below.*



Monologue is a long utterance of a person directed at themselves, an imagined other character, or an audience that:

- reveals (through voice) the speaker's personality, thoughts, emotions and some aspects of his/her perception of life;
- might resolve a conflict, solve a problem, entertain or persuade;
- might require some stage directions and setting.

Monologues are extended utterances implying no interruptions, and used in storytelling, descriptions or presentations. But unlike dialogues, they do not presuppose an interaction partner – you are all by yourself.

Teaching monologue should start with drills and reading out loud, i.e. let your students echo what they hear or use a recording from your materials. Add more sentences and let the learners repeat longer passages. When you use recordings from your course book, students can read along in their books. This way they can focus on the rhythm and pronunciation. After several turns, they can try to speak at the same time and speed as in the recording. In the end, they will be able to recite a passage even without the text or the soundtrack.

We analyzed a set of videos suggested in a popular workout software “5 Minute Workout” in order to study the peculiarities of professionally oriented speech of coaches. In the videos, for instance, coach Katie Dunlop uses monologues rich in imperative mood. Having analyzed available monologues, we established that the imperative mood of verbs is the main peculiarity a coach's speech pursuant to the circumstances characterizing the situation of communication, and the necessity to give orders, provide warnings, correct movements and give general advice on body movements during a workout.

Also to sound less categorical she includes herself in the imperative by adding "Let's," as in, "Let's do like this", "Let's try to do", "Let's begin", "Let's start." To sound more polite, Katie Dunlop uses the word “please when she say advise how to do or not to do anything. For example, "Please, look at me and do this exercise 5 times!

Thus, the skills of using the imperative mood in the professional monologue and various ways of making a request or an order sound less categorical and more polite is one of the tasks to be accomplished during an ESP course for future coaches.

## REFERENCES

1. Скляренко Н.К. Сучасні вимоги до вправ для формування навичок і вмінь // Іноземні мови. — 199. — № 3 — с. 3 — 8
2. <http://www.cambridge.org/elt/blog/2015/08/24/monologues-elementary-speaking/>
3. [http://www.englishbaby.com/lessons/grammar/imperative\\_form](http://www.englishbaby.com/lessons/grammar/imperative_form)
4. <https://www.youtube.com/watch?v=SRq7XtDW0wg&t=93s>

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## **NATIONAL AND CULTURAL ACHIEVEMENTS OF CANADIAN UKRAINIANS**

In 2018, the Ukrainian Diaspora of Canada celebrates its 127th anniversary of the settlement in this country. During more than a hundred years of residence in Canada, Ukrainians have proven themselves as worthy citizens of that country. Having created a significant network of non-governmental and political organizations, they did not easily experience significant success in all spheres of public life.

The aim of our article is to analyze the outstanding national and cultural achievements of the Ukrainian diaspora in Canada.

The Canadian diaspora was formed by four waves, which largely coincide with the waves of emigrants to the United States (before the First World War, in the interwar period, after the Second World War, at present). As in the United States, Canadian Ukrainians live a full-fledged sociocultural, religious, economic and political life. They are deeply integrated into civil society. The social and political life of the Ukrainian diaspora in Canada is well organized. There is the center of the World Congress of Ukrainians (UWC), the Ukrainian National Association, the League of Liberation of Ukraine and the Association of Ukrainians of Canada. There are many professional associations of doctors, lawyers, businessmen, etc [1].

Ukrainians get primary education in private elementary schools, in special Ukrainian courses, and as for higher education there are universities and colleges in the country. Ukrainian Studies Department was opened at Toronto University and the Canadian Institute of Ukrainian Studies in Edmonton. The UGCC has the Ukrainian Catholic Seminary of the Holy Spirit. The Canadian Institute of Ukrainian Studies (CIUS), which conducts research and publishing activities, also plays a significant role. The institute was founded at the University of Alberta in 1976 at the initiative of the prominent Ukrainian scholars in Canada. There is also the Center of the Study of the Ukrainian History named after Petro Jacyk, that published Mykhailo Hrushevsky's "History of Ukraine-Rus" in English.

The Scientific Society named after Taras Shevchenko, which brings together leading scientists of various branches of science, functions in Canada. Also, it's worth mentioning the well-known people in Canada who work there: Bogdan Havrylyshyn (an economist, member of the Club of Rome and International Academy of Management), Petro Savarin (a public and political activist, a well-known lawyer, one of the famous developers of the concept of multiculturalism, a founder of the Canadian Institute of Ukrainian Studies), Orest Subtelny (Doctor of

Philosophy and History, the author of the textbook "History of Ukraine", popular in Ukraine in the early 1990s), Leonid Molodozhanin (a sculptor and an artist, the author of the monuments to Taras Shevchenko in Washington D.C. and Buenos Aires, who was awarded the Order of Canada), Ivan Ohienko (a prominent scientist and scholar, historian, educator, political, civic and church leader, who translated Scripture into Ukrainian) and others.

Thus, Ukrainians successfully integrated into the Canadian multi-ethnic environment, became full-fledged citizens of the new country and a part of the Canadian society, but at the same time they managed to preserve their national identity, culture and traditions.

## REFERENCES

1. Ключковська І. Українська діаспора в об'єктиві сучасності – національно-політичний та духовно-культурний феномен (перша – четверта хвилі еміграції) // МІОК [Електронний ресурс]. Режим доступу: <http://miok.lviv.ua/?p=379>
2. Кондрашевська Ю. Національно-культурні здобутки українців Канади // Наукові записки Національного університету «Острозька академія». Серія: Історичні науки. – 2015. – Вип. 23. – С. 204-208.

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## DIE KATASTROPHE VON TSCHERNOBYL

Am 26. April 1986 kam es im Atomkraftwerk von Tschernobyl zum bisher schwersten Unfall in der Geschichte der Kernenergie. Zwei Explosionen zerstörten einen der vier Reaktorblöcke und schleuderten radioaktives Material in die Atmosphäre, das weite Teile Russlands, Weißrusslands und der Ukraine verseucht. Die radioaktive Wolke zieht bis nach Mitteleuropa und zum Nordkap.

Der Unfall im Block IV des Kernkraftwerks Tschernobyl ereignete sich in der Nacht vom 25. auf den 26. April 1986 während eines Tests. Die Betriebsmannschaft sollte prüfen, ob die Turbine bei einem Stromausfall - ehe die Notstromaggregate anspringen - noch genügend Restenergie für die Kühlwasserpumpen erzeugen würden. Um den Probelauf des Reaktors nicht zu unterbrechen, wurden die Sicherheitssysteme mit Absicht außer Funktion gesetzt. Für den Test musste der Reaktor auf 25 Prozent seiner Leistung heruntergefahren werden. Dieser Vorgang verlief nicht nach Plan: Die Leistung des Reaktors sank aus bisher ungeklärten Gründen auf unter 1 Prozent. Der Reaktor musste wieder langsam hochgefahren werden. Doch 30 Sekunden nach Testbeginn wuchs die Leistung plötzlich schlagartig an. Die Notabschaltung (Abbruch der

Kettenreaktion) des Reaktors misslang. In Sekundenbruchteilen stiegen Leistung und Temperatur um ein Vielfaches. Der Reaktor geriet außer Kontrolle. Es kam zu einer gewaltigen Explosion. Die 1000 Tonnen schwere Abdeckplatte des Reaktorgebäudes wurde weggesprengt. Bei Temperaturen über 2000 Grad Celsius schmolzen die Brennelemente. Dann fing der Grafitmantel des Reaktors Feuer.

Um die Folgen der Katastrophe einzudämmen, schickte die sowjetische Führung Tausende Helfer nach Tschernobyl. Sie wurden „Liquidatoren“ genannt, da sie die radioaktive Strahlung „liquidieren“ sollten. Direkt nach dem Unfall mussten die Liquidatoren auf die Dächer neben dem offen liegenden Reaktor klettern, um diesen mit Schutt zu bedecken oder verstrahlte Grafitblöcke, die durch die Explosion in die Umgebung geschleudert worden waren, in den Schlund des Reaktors zu werfen. Sie durften nur für 40 Sekunden auf dem Dach bleiben, da sonst die Strahlenbelastung zu groß geworden wäre. Damit der Reaktor keine Radioaktivität mehr an die Umwelt abgeben konnte, beschloss man, ihn komplett zu ummanteln und abzudecken.

Bis zum Herbst 1986 wurde daher ein sogenannter Sarkophag aus Beton um den Reaktor gebaut. Er war für eine Dauer von 20 bis 30 Jahren ausgelegt, doch bereits nach einigen Jahren zeigten sich schwerwiegende Schäden.

Obwohl den Verantwortlichen die Gefahr bewusst war, kümmerten sie sich vor allem um die Eindämmung der Katastrophe, nicht aber darum, die Bevölkerung zu informieren und über die Gefahren aufzuklären. Erst am 27. April, 36 Stunden nach dem GAU, begann man die 49.000 Einwohner, die nur vier Kilometer vom Kernkraftwerk entfernt liegenden Stadt Pripjat, zu evakuieren. Ab dem 2. Mai wurden die Einwohner der Stadt Tschernobyl (18 Kilometer entfernt) evakuiert. Und erst ab dem 4. Mai wurden Menschen aus dem Umkreis von 30 Kilometern umgesiedelt.

Die atomare Katastrophe von Tschernobyl wurde nicht nur dem eigenen Volk, sondern auch dem Ausland so lange wie möglich verschwiegen. Dabei betrafen die Folgen des Unfalls weite Teile Europas. Eine erste Wolke zog über Polen nach Skandinavien, eine zweite über Tschechien nach Deutschland und weiter westwärts, eine dritte verteilte den Fallout über Rumänien, Bulgarien, Griechenland und die Türkei. Aus der regionalen Katastrophe wurde ein globales Problem, das mächtig am Image der Kernkraft kratzte. Noch heute leiden die Menschen in den betroffenen Regionen in der Ukraine und in Weißrussland an den Folgen der radioaktiven Verseuchung.

Insgesamt wurden 150.000 km<sup>2</sup> in Weißrussland, der Ukraine und Russland durch den Reaktorunfall in Tschernobyl radioaktiv verseucht. Ein Gebiet, in dem damals fünf Millionen Menschen lebten. Mehr als 330.000 Menschen, die in unmittelbarer Nähe des Reaktors gelebt hatten, mussten evakuiert werden. Wegen der Wetterbedingungen wurden weitere 45.000 km<sup>2</sup> in ganz Europa durch Radioaktivität belastet.

## **LITERATUR**

1. Der Unfall und die Sicherheit der RBMK-Anlagen, GRS (Gesellschaft für Reaktorsicherheit mbH), 1996, GRS-121

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## **THE INVESTIGATION OF ENGLISH INTERNET DISCOURSE: TERMINOLOGICAL SATURATION**

The topicality of the research is determined by the growing interest to the linguistic communication in the Internet as the important component of human activity in the XXI century.

E.V. Horina defines the Internet discourse as a set of network products, that were created and exist in virtually real conditions, in the linguistic and paralinguistic context, which are perceived by the addressee taking into account communicative and cognitive activity [1: 13].

According to O.M. Halichkina the constitutive features of the Internet discourse are: electronic signal of communication, virtuality, spatial and temporal distance, mediation, high degree of permeability, hypertext, transmission of emotions, status equality of the participants, different types of discourse combination and observance of the netiquette [3: 78].

Without any doubts the Internet discourse is a complicated phenomenon with a variety of classifications and genres. M.M. Bakhtina underlines that the notion of the Internet genres is the important component of one's linguistic competence [5: 104].

F.O. Smirnov distinguishes such genres of the Internet discourse according to the level of the interactivity:

- 1) high level of the interactivity (chats, social networks, Skype/Viber);
- 2) medium level of the interactivity (blogs, micro blogs);
- 3) low level of the interactivity (e-mail) [4: 11].

To investigate the terminological saturation of English Internet discourse in our research we work with genres of high and medium levels of interactivity. The analysis was carried out on the basis of the contemporary English blogs, micro blogs, social networks and chats.

After the thorough analysis we found out that in blogs and microblogs the most popular spheres of terms usage are: nature (14%), music (18%), finances (22%), computers (27%), medicine (19%). In chats and social networks, the greater part of terms is used talking about computers (31%), politics (20%), professions (15%), sport (17%), culture (10%), army (7%).

Mathematical calculation according to formula proposed by S. Vovchanska [2: 177] allows us to define the terminological saturation of English Internet

discourse:  $\rho = \Sigma_t : \Sigma_w * 100\%$ ,  $\rho$  – terminological saturation of the text,  $\Sigma_t$  – quantity of terms in the text,  $\Sigma_w$  – quantity of all words. The terminological saturation in social networks and chats is 17%, and in blogs and micro blogs – 21%.

Also, the findings of the investigation provide that the terminological saturation of the Internet discourse depends on such pragmatic parameters as: age, sex, time and place of communication, number of speakers, their social position and outlook.

The conducted research is not exhaustive. The prospect of further research can be focused on the detailed investigation of the terminological saturation of English Internet discourse with the usage of speech strategies and tactics.

## REFERENCES

1. Байчибаев А.Ф. Интернет-дискурс как особая разновидность дискурса / А.Ф. Байчибаев // НаучФорум. – М.: МЦНО, 2015. – №6. – С. 11-14.
2. Вовчанська С.І. Німецька фахова мова маркетингу: структурно-семантичний, лінгвопрагматичний та функціональний аспекти: дис. ... канд. філол. наук / С.І. Вовчанська. – Івано-Франківськ, 2014. – 395 с.
3. Галичкина Е.Н. Специфика компьютерного дискурса на английском и русских языках (на материале жанра компьютерных конференций): дис. ... канд. филол. наук / Е.Н. Галичкина. – Астрахань, 2001. – 212 с.
4. Макаров М.Л. Основы теории дискурса / М.Л. Макаров. – М.: ИТДК «Гнозис», 2003. – 280 с.
5. Ульянова М.А. Классификация жанров Интернет-дискурса / М.А. Ульянова // *Lingua mobilis*. – Челябинск: ЧГУ, 2014. – №3. – С. 102-110.

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## EUROPEAN REGULATIONS OF ORGANIC PRODUCTION

Organic agriculture is a priority for the development of the agrarian sector in Europe. The products of other countries that are exported to the European Union must be certified in accordance with its requirements.

The EU Regulations contain general regulations on the production, labeling and control of ecological products of plant and animal origin. They cover the areas of general organic management, crop production (including plant breeding), livestock (including beekeeping), aquaculture, processing and processing of food and feed, as well as packaging, storage, transportation and labeling of organic products. The practice of European countries shows that the adoption of such legislation stimulates the development of organic agriculture, improves the state of the environment, human health and promotes the development of rural areas [2].



The modern system of organic farming and animal husbandry includes not only the process of cultivation itself, but also the process of processing and labeling of manufactured products using such names as bio, eco, organic. All these words are synonymous and applicable to ecological farming [1].

According to the EU standard, the terms "ecological", "biological" and "organic" agriculture are virtually synonymous. In different countries, different variants are used to designate agricultural practices that conform to the principles of organic agriculture: "organic" – English-speaking countries, Ukraine; "Ecological" – Hungary, Denmark, Spain, Lithuania, Poland, Slovakia, Ukraine, Czech Republic, Sweden; "Biological" – Germany, Greece, Georgia, Italy, Latvia, Netherlands, Portugal, France; "Natural" – Finland.

The presence of a sign of organic products on the product label gives the consumer the opportunity to distinguish organic products from others. Organic certification differs from compulsory certification primarily in that it is not limited to the control of the final product – it includes monitoring of land and the entire production and processing process.

In the European Union, organic certification provides for continuous monitoring of the conformity of the production process and finished products with the rules of organic production. To this end, annual audits of documentation, audit of production and analysis of final products are carried out. Entrepreneurs who produce, process, pack, store or sell crop and livestock products grown in accordance with organic principles can pass certification. The certificate of conformity, and with it the possibility to use the label "organic" on the label, is issued for 18 months and is prolonged if the operator passes the annual inspection safely [2].

With the help of certification and organic marking, manufacturers provide convincing evidence that their farm and products meet all the requirements of organic farming. It is forbidden to specify, for example, "organic milk" on a product that has not been certified. Otherwise, certain sanctions will be applied and the product may be withdrawn from the market. Such strict rules allow the market to prevent and control unscrupulous self-declarations of producers, and the buyer - to be sure of the reliability of the marking and the quality of the products.

## REFERENCES

1. Что такое органическое сельское хозяйство? farming [Electronic resource]. – Режим доступа: <http://www.fao.org/organicag/oa-faq/oa-faq1/ru/> – Date of access: 03.03.2018.
2. European Council endorses new regulations for organic farming [Electronic resource]. – Режим доступа: <https://www.foodbev.com/news/european-council-endorses-new-regulations-organic-farming/> – Date of access: 10.03.2018.

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## **GREEN OFFICE**

"Green initiatives" are gaining popularity among Ukrainian companies. The introduction of Green office makes a business not only environmentally friendly but also opens new opportunities for companies.

Green office is a concept of organization management, which can reduce its negative impact on the environment by maximizing the conservation of resources and energy and reducing waste.

Today every company uses water, heat, paper and electricity to provide comfortable and efficient operation. Green office enables more efficient use of resources and helps to save money. So when the office is green it should minimize the cost of equipment and use resources efficiently.

1. Electricity: to turn off equipment that is not working; to use the standby mode for office equipment; to unplug the charger from the mains after use.

2. Paper: to buy paper made from re-processed material; not to buy paper with sodium chloride bleaching; to buy from a local paper manufacturer; to pay attention to ecological labelling; to use reasonable paper (in cases when you need it); to print or copy documents from both sides of the sheet; to encourage sparing in the use of drafts.

3. Water: to buy with modern fixtures and equipment, economize on water; not to buy bottled water, it is better to install a good quality filter and the supply system of drinking water; to pour to the kettle as much water as is needed for consumption; to inform the Manager about the damage to sanitary ware - taps or cisterns immediately.

4. Waste disposal. In waste management it is necessary to observe the rules of the "3-R" (Reduce, Reuse, Recycle).

Business environment gradually becomes aware of its leading role in caring for the environment. The introduction of a green office can reduce the harmful effects on the environment and provide the efficient use of resources. This attitude to nature is not only environmentally friendly, but allows the business to save finances, to enhance the reputation of the company and thus to obtain competitive advantage in the market.

## **REFERENCES**

1. Концепція зеленого офісу: рекомендації для організацій щодо екологічно дружнього ставлення до навколишнього середовища / робоча гр.: Маслюківська О. П. – К. : Пульсари, 2007. – 64 с.
2. <http://enefcities.org.ua/biblioteka/prezentatsi/>

3. <http://open.kmbs.ua/ua/articles/finance/13824/koncepciya-zelenogo-ofisu>

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## **APPLICATION OF CHAOS THEORY TO MARKETS**

The theory of Chaos found its application back in the 19th century, but these were only the first steps. Edward Lawrence and Benoit Mandelbrot tackled this theory in the second half of the 20th century. However, Lawrence in his theory tried to predict and managed to derive the main reason for the chaotic behavior - different initial conditions.

Capital markets go through alternating periods of calm and storminess. However, they are not always chaotic, and the shift between calm and chaos is often sudden and unpredictable. Some believe that these concepts of chaos theory can be used to understand how financial markets operate.

Markets tend to grow in bubbles that eventually pop with drastic consequences. Financial bubbles often grow because of positive feedback. When investors make money during a rise in the financial markets, other observers think the investors must have made a smart decision, which leads the observers to invest their own money in the markets. The result is more buying and stock prices going higher. The positive feedback loop leads to prices beyond any logical or justifiable level. The loop eventually ends, and the last investors are left hanging with the worst positions.

The same concept can explain volatile bear markets. The markets can suddenly shift due to outside factors, which cause investors to pay attention only to negative news. Initial selling leads to more selling as market participants liquidate their positions. The negative feedback loop tends to accelerate quickly, often resulting in a market full of undervalued stocks.

Bill Villas the author of "Trading Chaos" is sure that the characteristic links of chaos are systemic and random. In his opinion, chaos is permanent, in comparison with the same stability, which is temporary. In turn, financial markets are a product of chaos. In fact, the theory of Chaos casts doubt on the very basis of technical analysis.

## **REFERENCES**

1. <http://www.delo-angl.ru/ekonomicheskij-anglijskij/ekonomicheskaya-statya-na-anglijskom-s-perevodom-5/>
2. <https://utmagazine.ru/posts/5608-teoriya-haosa>

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## SURFACES OF THE SECOND ORDER AND THEIR APPLICATION IN ARCHITECTURE

Analytic geometry, also called coordinate geometry, is a mathematical subject in which algebraic symbolism and methods are used to represent and solve problems in geometry. The importance of analytic geometry is that it establishes a correspondence between geometric curves and algebraic equations.

The surfaces are part of the analytical geometry section. The basic concepts of analytic geometry were first formulated by the philosopher and mathematician Rene Descartes in 1637. Gottfried Wilhelm Leibniz, Isaac Newton and Leonard Euler developed his ideas and raised analytic geometry to the modern structure.

Geometry can also be seen as a structural science. The architectural design is based on geometric structures developed out of the idea of transformations. The symmetry transformations are visible as design concepts through history of architecture. In contemporary architecture, there are no fixed rules about design concepts. But there are still relations to geometric space concepts.

Surfaces of the second order have had wide practical application in science and industry. First of all, they can be used in different constructions creating buildings of unusual, extraordinary and fascinating shapes and sizes.

For example, the *Canton Tower* or *Guangzhou Tower* is now the second tallest tower and the fourth tallest freestanding structure in the world. The tower is world famous for its twisted shape and hyperboloid structure.



The form, volume and structure of the tower is generated by two ellipses, one at foundation level and the other at a horizontal plane at 450 m. These two ellipses are rotated relative to another. The tightening caused by the rotation between the two ellipses forms a "waist" and a densification of material halfway up the tower. This means that the lattice structure, which at the bottom of the tower is porous and spacious, becomes denser at waist level. The waist itself becomes tight, like a twisted rope; transparency is reduced and views to the outside are limited. Further up the tower the lattice opens again, accentuated here by the tapering of the structural column-tubes.

*The Round House*. This architectural monument was created at the beginning of XIX th century. It is located in the village of Golovchino, Belgorod region

(Russia). The brick building consists of two cylinders – the large (diameter 26 m) and the small (diameter about 10 m) ones. The smaller one is build inside the larger one, rises above it and ends with a dome. Inside the small cylinder all the floors are combined with stairs. There is a museum in this building now.

So, analytic geometry has found important applications in science and industry.

### REFERENCES

1. Аналітична геометрія / За заг.ред. В. П. Белоусової. – К.: Вища школа, 1973. — 328 с.
2. Погорелов, А. В. Аналитическая геометрия / А. В. Погорелов. –М.: Наука, 1978.—208 с.

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### THE FRAMEWORK OF TEACHING LISTENING TO STUDENTS OF NON-LINGUISTIC SPECIALITIES

Pursuant to the existing challenge of improving the competitiveness of a graduate student, the ESP course should be in line with the professionally oriented subjects. In contemporary life a student who wants to be academically successful and apply English in further professional activity has to master all aspects of the discourse competence (listening, speaking, reading and writing) to rely on in his or her professional activity, public and social life.

**The aim** of the article is to explore the theoretical background of the methods of teaching professionally oriented listening and the strategies of developing listening competence of students of non-linguistic faculties.

**The object** of the researching is the process of developing professionally oriented listening skills. **The subject** of the study is the methodology of teaching professionally oriented listening to students majoring in political sciences, based on the correction, development and improvement of psychological mechanisms with the help of purposeful strategies, the system of special exercises that account for the peculiarities of future professional activity.

Teaching listening is a fundamental aspect of the ELT methodology, because the perception of foreign language is a difficult process that demands the student`s full concentration and the teacher`s phased preparation, which calls for thorough methodological organization of teaching listening and correct planning of the process, so that the level of listening skills corresponds to the demands of the modern information society.

It is worth reminding, that listening is a receptive kind of speech activity which includes simultaneous perception and understanding of language. Listening occupies 60 percent of the teaching process, so the need in special and purposeful learning of listening as the independent kind of speech activity is obvious.

Let us consider the psychological mechanism of listening and difficulties of students of non-linguistic faculties. The main challenges are the inability to quickly and adequately analyze the information which the student has heard, insufficient development of phonemic hearing and main semantic perception of the English language, the inability to overcome obstacles during listening. Thus, the ESP course tutor of the non-linguistic faculty should develop student-specific tasks for the teaching listening. Further we are going to study the ways of adjusting the teaching techniques of listening to the needs of students of political science.

The listening competence includes the skills of independent planning of the process and choosing strategies of listening to the text, monitoring the perception of the information, evaluating the effectiveness of the strategies which can help to achieve the goal of listening. The effectiveness of developing listening competence is influenced by such factors as motivation, attitude to education, intellectual level, skills, personal characteristics, age, and linguistic peculiarities of the native language of the students.

To activate the formation of student's foreign language listening competence, the primary task of the teacher is to organize the listening process as a conscious process. Students should aim at creating their own metacognitive, cognitive, social and emotional strategies for listening material.

Teaching professionally oriented listening to students of non-linguistic faculties is held with due consideration of the specific inner structure of this kind of speech activity, and future professional activity, in our case in the sphere of political science.

The strategy of developing listening competence is determined as a logical sequence of teacher's and students' actions aimed at forming their listening competence. Such strategies are classified by American teachers as a way of perceiving and processing information, distinguishing the top-down and the bottom-up strategies.

The top-down strategies are listener-focused. The listener receives background knowledge on the relevant topic, situation or context, finds out the type and peculiarities of the text for listening. The top-down strategies are aimed at developing abilities to define the main idea of the message, to predict a possible variant of the actions, make a conclusion, summarize the material that student has heard.

The bottom-up strategies are text-centered. The listener pays attention to the context of the message. It means that they try to interpret the meaning of sounds combination, words and grammatical structures. The bottom-up strategies are aimed at developing abilities of detail perception and recognizing cognitive elements.

For proper teaching of professionally oriented listening the teacher should know the peculiarities of professional texts, the inner textual connections,

completeness, explicitness and logical order; the presence of logical connections between elements in the text (adjectives, modal verbs, clichés, introductory turns); the presence of passive speech constructions; predominance of two-component sentences etc.).

The right strategy of teaching listening should be based on actual spheres of speaking and typical situations of the future professional communication. According to the chosen strategy of teaching listening there is a certain set of listening exercises, such as introductory, while-listening and controlling. In conclusion, developing listening competence is a conscious entertaining process for every participant. The aim of the listening is mastering the effective strategies of listening to information. The perspectives of further scientific researches depict the most effective ways for students to cope with obstacles during listening audio- and video materials.

### REFERENCES

1. Міхіна А.Е. Теорія і методика навчання аудіювання : автореф. / А. Е. Міхіна. – К., 2009.
2. Пруссаков М.М. Складності при навчанні аудіювання іноземного тексту / М. М. Пруссаков // Іноземні мови в школі. – 1981. – № 5. – С. 57-62.
3. Соловова Е.Н. Практикум к базовому курсу методики обучения иностранным языкам : учеб. пособие для вузов / Е. Н. Соловова. – М. : Просвещение, 2004. – С. 98-112.
4. Rogers A. Procedures for Teaching Listening skills [Електронний ресурс] / А. Rogers. – Режим доступу : [http://www.ehow.com/info\\_8738824\\_procedures-teaching-listening-skills.html](http://www.ehow.com/info_8738824_procedures-teaching-listening-skills.html). – Загол. з екрану. – Мова англ.
5. Lynch T. Listening – A Course in Listening to Lectures and Note-taking / T. Lynch. – Cambridge : Cambridge University Press, 2004. – 214 p.
6. Wang H. An Exploration on Designing College English Listening Class / H. Wang // Journal of Language Teaching and Research. – Finland : Academy Publisher, 2011. – Vol. 2. – No. 2. – P. 359-363.

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### PROMISE AS THE KEY TACTICS IN THE PRE-ELECTION CAMPAIGN SPEECH OF DONALD TRUMP

In modern political linguistics research conducted upon the study of strategies and tactics of political communication occupies an important place. At the same time, a large number of works on this subject indicate that at the moment there are no single criteria for systematizing strategies and tactics in the political discourse.

As is known, political discourse is a kind of persuasive discourse which makes it manipulative. In this discourse, the political leader tries to exert a verbal influence on the addressee in order to introduce certain cognitive changes into their worldview which will entail the regulation of the dispositions and activities of the addressee in favour of the addresser. V. E. Chernyavskaya defines persistence as “the effect of the author of oral or written communication on their addressee in order to convince them of something, to appeal to perform or not to perform certain actions. In case of persuasive communication, a person consciously produces statements that are aimed at causing a certain reaction in the recipient” [1, p. 15].

O. N. Parshina divides the strategy of persuasion in the political discourse into argumentative and agitational. In order to implement an argumentative strategy, a political leader uses such tactics as reasonable evaluation, contrast analysis, illustration and promise.

Promise is a "statement in which the speaker reports that he undertakes to do something or not to do something, and itself looks like a commitment" [2, p. 21]. Promise is realized in four subtypes of intentional values: promise-intention, promise-desire, promise-commitment and promise-oath. Promises that contribute to a person's current needs or expectations are most effective. All this leads us to the conclusion that the speech tactics of promise is a technique for achieving the strategic goals of the speaker [3, p. 25].

In the present article we analyze the pre-election campaign speech of the US President in Gettysburg, Pennsylvania, which he delivered on 22 October 2016, being a candidate for the post [4]. This speech is of special interest to us as it is some kind of program of the first hundred days of the presidency of D. Trump, in which the future president tries to present himself from the best possible side, using the strategy of self-presentation, which is realized most often with the help of the tactics of promise. The US President himself defined this speech as the final word before the voters in which he made an attempt to focus their attention on the priorities of his program and to distract voters from the contradictions that pursued him recently.

In his speech, D. Trump not only leads the audience by activating the power of political discourse but also involves listeners in the construction of the future of the country, which is achieved with the help of actualization of the strategy for modeling the alternative future:

*One thing we all know is that we will never solve our problems by relying on the same politicians who created these problems in the first place. We now find ourselves at that very special fork in the road. Do we repeat the mistakes of the past or do we choose to believe that a great future, yet unwritten lies ahead for us and for our wonderful, beloved country? I think it does. I know it does. My economic plan will deliver at least 25 million jobs in one decade. Now, our jobs have been taken.*

In this example we can see how Trump first talks about bad present days, then visualizes the desired future suggesting that the audience decide to change, then he



talks about how he personally intends to help the American people solve the problems while promising a better life.

D. Trump appears before the electorate as a politician well aware of the needs of Americans which he promises to satisfy. You can also notice that he often resorts to the use of lexemes *American people*, *American character*, *American voter*, *America*:

*I'm asking the **American people** to rise above the noise and the clutter of our broken politics and to embrace that great faith and optimism that has always been the central ingredient in the **American character**. There is nothing better or stronger than the **American character**. I am asking the **American people** to dream big, once again. What follows is my 100-day action plan to make **America** great again. It's a contract between Donald J. Trump and the **American voter** and it begins with bringing honesty, accountability and change to Washington, D.C.*

The concept *people* is one of the basic concepts of political discourse and is used by politicians as an instrument of political manipulation. Frequent repetition of word combinations the meaning of which is reduced to *American people* in the speeches of D. Trump inspires Americans with a sense of unity. The emphasis on the importance of the concept *people* for the political leader shows that he is concerned about the fate of his citizens and is patriotically minded.

We would also like to note that D. Trump often mentions in his speech his opponent Hillary Clinton, which allows us to talk about manifestation of a characteristic feature of the American mentality – the desire for competition. In this case, D. Trump in a quite calm and open way says that he is good, and H. Clinton is not:

*These are our drug dealers, gang heads, gang members, killers and cancel visas to foreign country them back. And when **Hillary Clinton** was secretary of state, and they had someone who was bad, really bad. And they brought them back to the country and the country wouldn't take them, she said bring them back. **Hillary Clinton** is not running against me, she's running against change and she's running against all of the American people and all of the American voters.*

By demonizing the opponent D. Trump opposes the negative nature of the actions of H. Clinton against the positive nature of his actions. In this case, the American politician uses the strategy of discrediting the opponent which is realized most often with the help of the tactics of promise. At the same time, the promise comes down to the fact that D. Trump will change everything if he is elected president.

Thus, D. Trump is a good speaker able to keep the attention of the audience. In his speeches, the American political leader uses various strategies most of which are implemented with the help of the tactics of promise.

## REFERENCES

1. Чернявская, В.Е. Лингвистика текста: Поликодовость, интертекстуальность, интердискурсивность / Учебное пособие. – М.: Либроком, 2009. – 248 с.

2. Лухина, Е.В. Социально-ориентированный дискурс в лингво-прагматическом освещении (на материале современного английского языка): автореф. дис... канд. филол. наук: 10.02.04 / Е.В. Лухина. – М., 2011. – 26 с.
3. Труфанова, И.В. О разграничении понятий: речевой акт, речевой жанр, речевая стратегия, речевая тактика // Филологические науки. – М., 2011. – № 3. – С. 56 – 65.
4. Trump Speech in Gettysburg, Pennsylvania, October 22, 2016 [Electronic resource]. – 2016. – Mode of access: <http://transcripts.cnn.com/TRANSCRIPTS/1610/22/cnr.03.html>. – Date of access: 01.11.2017.

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## **COSSACK MYTH IN THE SOVIET UNION**

One of the central images in the history of Ukraine was and remains the legendary, heroic and mythologized image of the Cossack, which was captured in our consciousness above all as an indestructible defender of our native land, an Orthodox faith and a rebel against social and national oppression. Such a stereotype has been formed for many centuries in the process of formation and development of the Ukrainian nation since the time when the Cossacks began their way of becoming as a social phenomenon at the turn of the 15<sup>th</sup> and 16<sup>th</sup> centuries.

The Cossack myth is not something steady. Having formed at the beginning of the 17<sup>th</sup> century, it faced significant changes according to the changes in the Ukrainian society. Many efforts to form such a myth were made by Soviet ideologists. They interpreted it as the struggle of the masses (the Cossacks together with the peasants) against the landlords because the ideology of the USSR was based on the well-known theory of Marxism about the class struggle.

The largest falsification and distortion of the Soviet era was the Ukrainian-Russian agreement of 1654 – the Pereyaslav Council [1]. As a Ukrainian historian and philosopher Viacheslav Lipinsky confirmed, there were two facts in history: the Pereyaslav Treaty, known as the March Articles, and the Pereyaslav myth, which had nothing to do with the reality of the middle of the 17<sup>th</sup> century. This legend created a distorted idea of the real events in the minds of many generations in Ukraine and Russia that led to its complication after the death of Bohdan Khmelnytsky. The crown of conscious falsification and transformation of history, the silencing of one and the protrusion of other facts became “Theses of the Central Committee of the CPSU to the 300th anniversary of the reunion of Ukraine with Russia”, and articles written on their basis in the newspaper “Pravda”,

designed to serve the only correct explanation of history from the point of view of their authors. At that time the Moscow propagandists invented the term "reunion" in relation to the events in Pereyaslav. Its use was to stifle the aspiration of the Ukrainian people to independence.

The myth of the Pereyaslav Council contains a number of ideologies, each of which has been widely promoted both in the Soviet historical works and in the literature of the period of the USSR. Ukrainian historian Mykhailo Braichevsky wrote that even some works by T. Shevchenko, which criticized the "reunion", were banned in order to protect "the original friendship of the Ukrainian and Russian people." So, for example, in 1954 "Kobzar" was published without such works as "Great Cellar", "Standing in the village of Subotiv ...", "Chigirin, Chigirin ..." and others. The liberation from the myth was difficult and complex, and the myth still exists in the minds of several generations [3, p. 988-989].

The anti-Polish aspects of Cossack mythology were also not rejected. They were used particularly active on the eve and during the Second World War [2].

Thus, the Soviet ideology tried to mythologize the image of the Ukrainian Cossacks and the whole Cossack era in our history in order to prove that Ukraine was an integral part of the empire under the name of the USSR, whose key role was played by the "fraternal Russian people". Analysis of the events of that time allows us not to repeat the mistakes of the past, to free our consciousness from historical myths and legends, because those who forget the past are doomed to its repetition.

## REFERENCES

1. Король В. Переяславська угода без політичних та історичних міфів / Віктор Король // Історія в школі. – 2004. - № 1. – С. 11-17.
2. Плохій С. Козацький міф. Історія та націєтворення в епоху імперії / Сергій Плохій. – К.: Золоті ворота, 2012. – 457 с.
3. Райхель Ю. «Робили те, чого не бажали». Реальність і міфи Переяславської ради / Юрій Райхель // Екстракт 150 / За заг. ред. Л. Івшиної. У 2 ч. – Ч. 1. – К.: ЗАТ «Українська прес-група», 2009. – С. 988-998.

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## **THE ISLAMIC STATE AS A POLITICAL AND SOCIAL PROBLEM OF A GLOBAL NATURE**

The armed formations of the Islamic State began fighting on the territory of the Syrian Arab Republic and in Iraq, relying on the spread of their ideas in the Islamic world as a whole. Researchers from the outset of the conflict define it as a brutal, encompassing enormous power for the region, both human and financial, as a conflict that has an unacceptable frivolity. At the same time, it must not be forgotten that military conflicts for Syria and Iraq have been a terrible reality for many years, and that the development and initial success of the Islamic State are a direct consequence of past military conflicts.

A striking example is Iraq, which is in a state of constant armed conflicts with short interruptions from 1980 till today. Their causes serve as a political struggle, as well as centuries-old clashes between supporters of two major trends in Islam - Shiism and Sunni. First of all, we must mention the brutal war with Iran (and Kurds), which is statistically based on the number of victims (85,000) [4, c. 13], belongs to one of the bloodiest in the twentieth century. Among other things we should mention the use of chemical weapons against both armed formations and civilians, ending in 1988. The next was the attack on Kuwait (1990), the war with Arab coalition, the United States, Kurds and Shiites (1991); blockade along with coalition attacks in the coming years, finally the invasion of Iraq by the US armed forces and coalition (2003) and years of conflict with the character of the civil war with the involvement of post-Saddam armed groups, Sunni, Shiite and armed forces, and the coalition. Only since 2003 135-155 thousand people were killed in Iraq [4, c. 27]. In 2007, according to statistics, about 2 million people became refugees.

A similar situation is observed in Syria. Staying in a state of frozen conflict with Israel, and from time to time being the main actor of the Lebanese conflict, Syria itself was in a state of civil war in the spring of 2011. During the bloody civil war there was ethnic and religious cleansing, massive human rights were violated, and the use of chemical weapons took place. By March 2015, 215,000 people had become the victims of the conflict half of which were peaceful residents. The number of refugee reaches 4 million people [3, c.140]. The Middle East is unchanged in the main ideological, social and financial center of terrorism, and the military conflicts in Iraq and Syria simply drowned the status of Afghanistan as the main front and platform for the exchange of jihadist experiences and permanent opportunity to take part in the "sacred" war against the infidels [2, c. 46]. This

position has been maintained by Afghanistan since the late 1970s, where the struggle against the Soviet troops attracted many adventurers and extremists from the entire Islamic world in seeking fame and securing their own religious aspirations. Taking into account the million Arab diaspora in Europe, some researchers believe it is possible to transfer the critical situation from the Middle East to a new region that has already become an arena of terrorist acts. It should be noted that the already long-lasting struggle of the coalition of many countries with the Islamic State did not lead to its complete collapse and destruction. Moreover, this conflict did not quickly give the expected effect of defeat. Therefore, the question arises - is the Islamic State in general able to radically weaken the terrorist threat? Finally, we can conclude that the Islamic State is a very unique terrorist organization in our time. Its ideology and the methodological approach of the leaders promote the spread of radical Islam ideas among many followers around the world. In total, reaching more than 250,000 active members, Islamic State has become a unifying factor for Salafist jihadism at the global level. Applying the accumulated experiences of various terrorist organizations over decades, it has succeeded in the Middle East and has been appalled by terrible terrorist acts in some European countries, posing a threat to the collective security of formerly peaceful regions of the world.

#### **REFERENCES**

1. Porhelm A. War and sexual adventurer of ISIS [Электронный ресурс] / Ammirosey Porhelm. – 2015. – Режим доступа до ресурсу: <http://www.irna.ir/ru/NewsPrint.aspx?ID=2849361>.
2. Бузев Е. Ю. ИГИЛ. Зловещая тень Халифата / Е. Ю. Бузев. – Москва: Алгоритм, 2015. – 224 с.
3. Вайс М. Исламское государство: Армия террора / М. Вайс, Х. Хасан. – Москва: Альпина нон-фикшн, 2016. – 346 с.
4. Добаева И. П. Геополитика и терроризм эпохи постмодерна / И. П. Добаева, А. И. Добаева, В. И. Немчинова. – Ростов-на-Дону: ЮФУ, 2015. – 370 с.

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## **STRATEGIC TRENDS OF CREATIVE WORK OF TEENAGERS WITH VISION DISORDERS UNDER THE CONDITION OF DIFFERENT STYLES OF FAMILY UPBRINGING**

The problem of upbringing and developing a creative person remains rather urgent nowadays as modern society needs more creative work under the condition of social progress. On the other hand the development of creative skills and creative work is largely determined by the peculiarities of family relations, by the way of a child and parents interaction as well as by parents' attitude towards their children creative work.

L. Bozhovych, G. Tsukerman, D. Feldshtein consider the regularities of teenagers mental development.

Creative work as well as talents is considered to be one of the mechanisms of human adaptation to changeable environmental conditions (N. Rogers, R. Sternberg, D. Bogoyavlenska, V. Druzhynin, A. Romenets). The factors of development of creative work may be divided into external such as creatively enriched environment as well as following the patterns of creative behaviour (V. Druzhynin, N. Khazratova, N. Portnytska) and internal such as imagination, fantasy (L. Vygotsky, V. Davydov). V. Molyako considered the strategies of creative work to be its main mechanism. The author also considers these strategies as the general programme of activity aimed at searching new ideas and their development [1]. Creative activity is regulated by separate strategic tendencies based on the interventions in childhood and adolescence (N. Portnytska) [2].

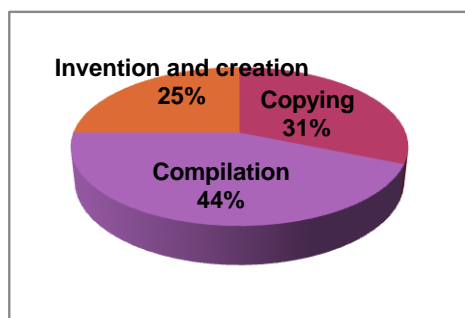
The tendency of person development is determined by the style of parents upbringing (A. Elizarov). The style of education may have both conservative and destructive influence on the child development, especially in adolescence (E. Eidmiller) [3].

The problems of creative work development of teenagers with vision disorders under the condition of different parents upbringing styles are not sufficiently investigated.

We assume that the style of family upbringing determines the peculiarities of strategic organization of creative activities of teenagers with vision disorders. Inventive and creative strategic tendency dominates at teenagers who are brought up in conditions of harmonious education style and minimal sanctions. Strategic tendencies of copying and compiling prevail at teenagers who are educated in disharmonious style of upbringing.

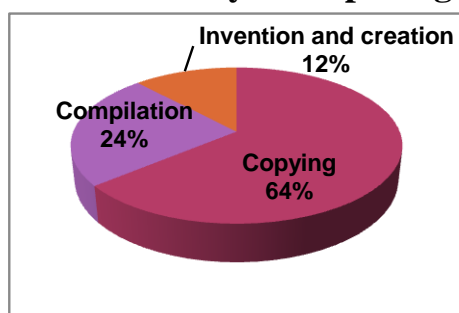
Such methods as experimental research and analysis of the results of one's activities for studying strategic tendencies of creative work as well as the questionnaire "Analysis of Family Relationship" (E. Eidemiller, V. Yustytskis) have been used for diagnosing the style of parents upbringing.

The total sample consists of 66 persons including 33 teenagers with vision disorders (5<sup>th</sup>-7<sup>th</sup> year pupils) and 33 guardian parents (5 men and 28 women). The research was conducted on the basis of the KNZ "Zhytomyr Special Secondary Boarding School of the 1<sup>st</sup>-3<sup>rd</sup> level № 1".



The results of the research prove that the compiling strategic tendency prevails in creative work of teenagers under the conditions of the harmonious style of their upbringing. Both the tendency of copying and the one of invention and creation are used less by teenagers with vision disorders.

**Fig. 1. Frequency analysis of using the strategic tendencies of creative work of teenagers with vision disorders, in the harmonious style of upbringing.**

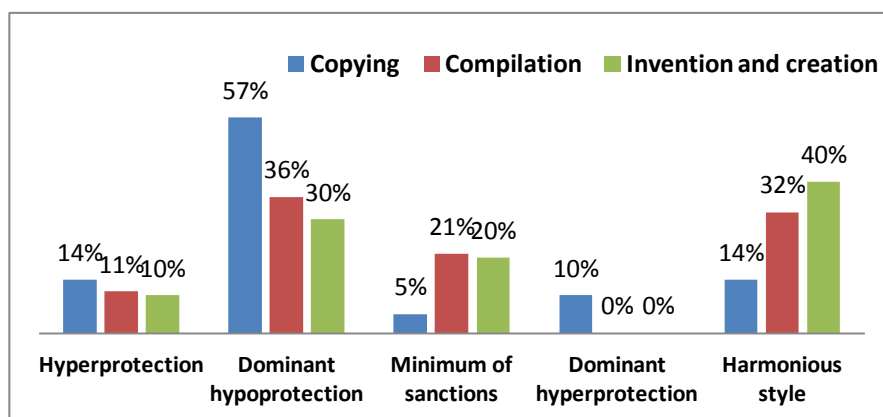


The strategic tendency of copying predominates in the creative work of adolescents with vision disorders under the condition of disharmonious education style (Fig. 2).

**Fig. 2. Frequency analysis of using the strategic tendencies of creative activities of adolescents with vision disorders under the conditions of disharmonious style of upbringing.**

These results prove that harmonious style of parents upbringing positively effects the level of the creative work of a child, especially his/her readiness to use complex mechanisms of creative activities.

To clarify the results obtained we conducted the comparative analysis of the frequency of using some individual strategic tendencies under the conditions of different styles of children and parents interaction (Fig. 3).



The highest rates of using the strategic tendency of copying are observed under hyperprotection and hypoprotection.

**Fig. 3 Frequency distribution of the strategic tendencies of creative activities of teenagers with**

**vision disorders under the conditions of different styles of parents upbringing.**

At the same time the lowest rates of copying are observed while using harmonious style of education and minimum sanctions.

A compilative strategic trend is observed in all the styles of education except hypoprotection. The highest rates of its use were found in a harmonious style and with dominant hyperprotection. The highest indicators of using the inventive and creative strategic tendencies are observed in case of harmonious style of education, dominant hyperprotection and minimum sanctions.

Thus, the style of family upbringing is one of the factors for choosing the strategic trends in creative work of teenagers with vision disorders. Harmonious style of education and dominant hyperprotection stimulate the use of inventions as an instrument for getting creative results. In disharmonious style adolescents follow simple strategic copying and compilation tendencies.

## REFERENCES

1. Моляко В.О. Здібності, творчість, обдарованість: теорія, методика, результати досліджень / В.О. Моляко, О.Л. Музика. – Житомир : Видавництво ПП "Рута", 2007. – 319 с.
2. Портницька Н.Ф. Інвенційні дії як основа розвитку творчості у дошкільному віці. Актуальні проблеми психології: Проблеми психології творчості: Збірник наукових праць / За ред. В.О. Моляко, 12. – С. 256-261.
3. Эйдемиллер Э.Г. Методы семейной диагностики и психотерапии. – М.-СПб., 1996. – 365 с.

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## DIGITAL MARKETING TRENDS FOR 2018

In a modern globalized world marketing plays crucial role that can hardly be overestimated, that's why we state that marketing is varying with the world. After all, every year there are new trends and tendencies. One of these trends is digital marketing. Digital marketing is an umbrella term for all of your online marketing efforts. Different businesses use digital channels such as Google search, a great variety of social media, email and their websites to connect with their current and prospective customers. Thus, marketing has always been about connecting with your audience in the right place and at the right time.

In simplistic terms, digital marketing is the promotion of products or brands via one or more forms of electronic media. Digital marketing differs from traditional marketing as it involves the use of channels and methods that enable an organization to analyze marketing campaigns and understand what is working and what isn't – typically in real time [2].



The digital-marketing trends in 2018 are:

- Big Data (including market and customer insight and predictive analytics);
- Content marketing Communities (Branded niche or vertical communities);
- Conversion rate optimisation (CRO) / improving website experience;
- Display (Banners on publishers, ad networks, social media including retargeting and programmatic advertising);
- Internet of Things (IoT) marketing applications;
- Marketing Automation which incorporates CRM, Email marketing and web personalisation;
- Mobile marketing (Mobile advertising, site development and apps);
- Paid search marketing, e.g. Google AdWords Pay Per Click;
- Online PR (including influencer outreach);
- Partnerships including affiliate programs and co-marketing;
- Search Engine Optimisation (SEO or organic search);
- Social media marketing including Social CRM and Social Customer Care;
- Wearables (e.g. Apple Watch, activity trackers, augmented reality) [1].

Also noteworthy is that digital media is so pervasive that consumers have access to information at any time and in any place they want it. Gone are the days when the messages people got about your products or services came from you and consisted of only what you wanted them to know. Nowadays digital media is an ever-growing source of entertainment, news, shopping and social interaction and consumers are now exposed not just to what your company says about the brand, but what the media, friends, relatives, peers, etc., are saying as well, due to the fact, they are more likely to believe them than you. To some extent, it can be viewed as free advertising. People want brands they can trust, companies that know them, communications that are personalized and relevant, and offers tailored to their needs and preferences.

Thus, enterprises should use digital-marketing trends, because they will help them increase the target audience, increase sales, work with customers both online and offline.

## **REFERENCES**

1. Dave Chaffey. Digital Marketing Trends [Электронный ресурс] – Режим доступа: <https://www.smartinsights.com/managing-digital-marketing/marketing-innovation/digital-marketing>
2. Digital Marketing [Электронный ресурс] – Режим доступа: [https://www.sas.com/en\\_th/insights/marketing/digital-marketing.html](https://www.sas.com/en_th/insights/marketing/digital-marketing.html)

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## **SOZIALBETREUUNG DER VERLETZTBAREN KATEGORIEN DER JUGEND**

In der letzten Zeit treten in der Ukraine in verschiedenen Bereichen des Lebens und im Bildungsprozess Kardinaländerungen ein. Die erwecken das Interesse der Sozialarbeiter für das Problem der Sozialbetreuung der verletzten Kategorien. Die Sozialbetreuung ist eine wichtige Richtung der Sozialpolitik in vielen Ländern der Welt, darunter auch in der Ukraine. Gerade darum ist heutzutage die Frage der wirksamen Strategiebildung der Sozialbedienungs der verwundbaren Kategorien der Jugend, die an den Hochschulen unseres Landes studiert, so aktuell.

Dieses Problem lenkt Aufmerksamkeit vieler vaterländischer Forscher. Die Organisationsstruktur des Systems der Sozialbedienungs wird in den Werken von I. Yevdokymova, L. Yegorova, Y. Tkachenko analysiert. Die Übereinstimmung mit den Theorien und Modellen der Sozialbetreuungspraxis wird in den Werken von S. Hryhorieva, L. Husliakova, B. Lunitsyna, P. Pavlenok, A. Panov, L. Topchii, M. Firsov behandelt. L. Topchii, M. Firsov zeigen reges Interesse für Forschung und Ausarbeitung der Verfahren der Sozialbedienungs.

L. Tiuptia und I. Ivanova vertreten die Meinung, dass die Sozialbetreuung eine der Richtungen der Sozialarbeit und der Organisationsformen der Sozialtätigkeit ist. Die wird als System der bestimmten Verfahren der sozialen humanistischen Tätigkeit betrachtet, das auf die Adaptierung und soziale Rehabilitation der Jugendlichen orientiert ist [6, c.150].

Im «Wörterbuch der Bildungsmanager, der Sozialpädagogen und der Angestellten der sozialpädagogischen Dienst» wird die Sozialbedienungs als Programm und Art der Tätigkeit interpretiert, die nach Verbesserung, der Entwicklung des Wohlstandes der Menschen gezielt ist. M. Prykhodko betont, dass solche Programme soziale und ekonomische Hilfe einschließen sollen, für diejenigen, die nicht fähig sind, ihre Bedürfnisse zu befriedigen [3, c. 98].

B. Stashkov definiert die Sozialbetreuung als Tätigkeit der Sozialdienst. Die gibt gratis Dienstleistungen Personen, die in schwierigen Lebensumständen sind und Hilfe brauchen. Das Ziel dieser Hilfe ist die Bewältigung oder Milderung der Umstände, die Lebenstätigkeit der Person stören [5, c. 77].

Auch N. Zhygailo unterscheidet solche Grundprinzipien der Organisierung der Sozialbetreuung. Das sind:

- das Prinzip der Komplexität;
- das Prinzip der frühen Anwendung;
- das Prinzip der Gemeinsamkeit;
- das Prinzip der Kontinuität [1, c. 119].

Eine außerordentlich große Rolle spielt der Dienst der Familienplanung der Jugend, Rentenversorgung, Arbeitslosenversicherung.

Zvereva ist der Ansicht, die Jugend ist eine differenzierte Sozialgruppe, die spezifische sozialpsychologische, soziale, kulturelle und andere Besonderheiten hat. Die hat ihr soziales Alter und muss der Zeit entsprechend, Schöpfer der neuen sozialen und kulturellen Realität sein [4, c. 130].

In den Hochschulen der Ukraine sind solche gefährdeten Gruppen der Jugend vertreten, wie z. B.: Inlandsumsiedler, Waisen, Jugendliche aus den minderbemittelten Familien, Körperbehinderte, junge alleinstehende Mütter, junge Eheleute, junge Rauschgiftsüchtige und Alkoholiker. Hauptarten und Formen der Sozialbetreuung der besonderen Kategorien der Jugend sind:

- sozialpsychologische Expertise. Sie ist auf Feststellung der Probleme und Krisenzustände verschiedener Kategorien der Jugend gerichtet;
- beratende medizinische Arbeit (die zählt komplexe Maßnahmen zur Informations - und Medizinbedienung der Jugend);
- soziale Aufklärung (sieht die Erhöhung des allgemeinen Kulturniveaus der Entwicklung verschiedener Gruppen der Jugend, Voraussetzungen der Aufnahme ins Sozialleben ein);
- psychologisch-pädagogische Korrektur [6, c. 319].

Es sei darauf hingewiesen, dass Sozialbetreuung der Jugend der empfindlichen Kategorien auf solche Weise durchgeführt wird: Lebensmittelversorgung, Transportdienst, psychologische Bedienung, medizinische Ratschläge, sozialpädagogischer Dienst (Organisierung eines individuellen Lern- und Erziehungsprozesses, der Erholung, Sporttätigkeit), sozialmedizinischer Dienst, Erhaltung und Unterstützung der Gesundheit, Durchführung der therapeutisch-prophylaktischen Maßnahmen, juristische Beratungsstellen, Arbeitsvermittlung.

## LITERATURVERZEICHNIS

1. Жигайло Н. І. Соціальна педагогіка: навчальний посібник / Наталія Ігорівна Жигайло. — Львів: Новий світ-2000, 2007. — 256 с.
2. Закон України «Про соціальні послуги»: за станом на 19.06.2003 р. № 966-IV / Верховна Рада України. — Офіц. вид. — К.: Парлам. Вид-во, 2003. [Електронний ресурс]. — Режим доступу: <http://zakon3.rada.gov.ua/laws/show/966-15>
3. Словник-довідник менеджерів освіти, соціальних педагогів та працівників соціально-педагогічних служб, консультацій / [Приходько М. І., Приходько О. М., Селіверстова Н. І., Турська О. В.]. — Запоріжжя: «Поліграф», 1999. — 132 с.
4. Соціальна педагогіка: мала енциклопедія / За заг. ред. проф. І. Д. Зверєвої. — К.: Центр учбової літератури, 2008. — 336 с.
5. Сташків Б.І. Соціальне обслуговування у системі соціального забезпечення: правові питання / Б.І. Сташків // Право України. — 2005. — № 1. — С. 76-79.

6. Тюття Л. Т., Іванова І. Б. Соціальна робота (теорія і практика): навч. посібник для студ. вищ. навч. закл. / Л.Т. Тюття, І. Б. Іванова. — К.: ВМУРОЛ «Україна», 2004. — 408 с.

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## **TO THE QUESTION OF THE ORDER OF APPEAL TO THE COMMISSION ON LABOR DISPUTES ON THE LEGISLATION OF THE REPUBLIC OF BELARUS**

In accordance with Part 1 of Art. 236 of the Labor Code of the Republic of Belarus, the Labor Disputes Commission (hereinafter - the LC and the LDC, respectively) is the mandatory primary body for the review of labor disputes, except in cases when the LC and other legislative acts establish a different procedure for their consideration [3].

On the basis of Part 4 of the Regulation on the procedure for the consideration of individual labor disputes by the Labor Disputes Commission, the right to apply to the Commission is provided to employees who are in employment relations with the employer. The dismissed workers have the right to apply to the commission only if their claim arises from the employment relationship with the employer (clause 4.1) (hereinafter referred to as the Regulation) [2].

It should also be noted that according to clause 4.2 of the Regulations, the employee has the right to apply to the LDC in both written and oral form. The written application of the employee must contain: the name of the commission with the indication of the employer; the surname, the name, the patronymic, the indication of the address of the applicant; the name of the work or position held by the employee; the essence of the labor dispute. In the case of the application in an oral form the registration log details the information that the employee must indicate in the written application [2].

The LDC does not have the right to refuse to accept the application for the employee because of the non-jurisdiction of the dispute. The application must be considered by the LDC, and if the dispute is not subject to consideration in the LDC, a decision is made to refuse to resolve the dispute. The LDC has the right to refuse to accept the application if the dispute has already been the subject of the LDC's examination and the decision was taken on it or if the LDC members could not come to an agreement.

One of the frequently admitted violations in the practice of the LDC, which has been repeatedly pointed out in the legal literature, is the failure to comply with the requirements of the law regarding an equal number of representatives of the trade

union and the employer participating in the consideration of the labor dispute [1, p. 17].

We believe that a significant gap is the lack of consolidation at the legislative level of the quantitative composition of the LDC. The parties may, by mutual agreement, independently determine the number of their permanent representatives in the LDC, depending on the number of employees, the number of labor disputes that arise and other relevant circumstances. The employer appoints his representatives to the LDC with the appropriate order of the head, and the trade union - by the relevant decision of the trade union committee. A trade union representative can be any employee - a member of this union. Representatives of the employer in the LDC are, as a rule, employees of the personnel service, legal advisers, and economists.

In our opinion, when determining the personal composition of the representatives of the parties, it is necessary to take into account the availability of specific knowledge of legislation in the field of labor and wages, as well as personal qualities allowing to resolve the labor dispute objectively, comprehensively and correctly.

Thus, despite fairly complete legislative regulation of the LDC, there are unresolved issues that are subject to review and subsequent settlement. In particular, it is advisable to consolidate the equal quantitative composition of the LDC in the LC. This provision will allow more rapid agreement between the members of the LDC and settle the dispute.

## REFERENCES

1. Кеник, К. И. Судебная практика по трудовым делам / К. И. Кеник. – Минск : Амалфея, 2000. – 192 с.
2. Положение о порядке рассмотрения индивидуальных трудовых споров комиссией по трудовым спорам : постановление Пленума Верховного Суда Респ. Беларусь, 29.03.2001 г., № 2 : в ред. постановления Пленума Верховного Суда Респ. Беларусь от 28 июня 2012 г. № 5 // ЭТАЛОН. Законодательство Республики Беларусь / Национальный центр правовой информ. Респ. Беларусь. – Минск, 2018.
3. Трудовой кодекс Республики Беларусь [Электронный ресурс] : 26 июля 1999 г., № 296-З : принят Палатой представителей 8 июня 1999 г. : одобр. Советом Респ. 30 июня 1999 г. : в ред. Закона Респ. Беларусь от 13 ноября 2017 г. № 68-З // ЭТАЛОН. Законодательство Республики Беларусь / Национальный центр правовой информ. Респ. Беларусь. – Минск, 2018.

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## **LE COMMERCE VIRTUEL**

Le V-Commerce, ou commerce virtuel, désigne le commerce en réalité virtuelle ou réalité augmentée. Ces deux technologies sont en passe de révolutionner totalement le shopping en point de vente physique et le e-commerce [1]. Avec la démocratisation d'internet, le e-commerce a littéralement révolutionné la vente au détail et le shopping. De plus en plus de personnes préfèrent effectuer leurs emplettes sur le web plutôt qu'en magasin.

Les commerçants et les plateformes comme Amazon peuvent faire des recommandations aux clients en se basant sur leurs historiques d'achats, et les consommateurs peuvent économiser du temps et de l'énergie en effectuant leurs achats depuis leurs ordinateurs ou même leurs smartphones [2]. De plus, tout le monde peut désormais accéder à tous les produits du monde entier. Le e-commerce a indéniablement révolutionné le shopping.

Le géant suédois du mobilier d'intérieur Ikea utilise déjà la réalité augmentée. Grâce à l'application mobile Ikea Place, les utilisateurs peuvent visualiser à l'avance la manière dont un meuble s'intégrera à leur logis. Concrètement, l'application permet de superposer une modélisation 3D d'un meuble à l'environnement réel filmé par l'utilisateur avec son smartphone [3].

Dans un avenir proche, il sera réellement possible d'explorer un magasin dans la réalité virtuelle (VR) de manière aussi réaliste que dans le monde réel. En ajoutant à cette marmite technologique l'intelligence artificielle, on pourra profiter de recommandations sur mesure basées sur nos goûts personnels ou sur les meilleures ventes d'une enseigne. Une façon simple et efficace de rester à la mode.

Ce n'est un secret pour personne: le e-commerce nuit fortement aux commerçants traditionnels et aux boutiques physiques. Le V-commerce pourrait représenter une nouvelle menace potentielle [1]. Pour éviter ce cas de figure, il est important que les commerçants anticipent cette révolution en s'adaptant tout simplement à cette nouvelle manière de faire du shopping. Concrètement, la seule solution pour éviter de disparaître face à l'essor du V-commerce est de proposer de la réalité augmentée dans sa boutique ou de lancer une boutique en réalité virtuelle. Les commerçants qui attendront trop longtemps ou qui se montreront réfractaires à cette technologie risquent fort de se condamner eux-mêmes [1].

En conclusion, il semble clair que le v-commerce révolutionnera totalement le shopping en boutique physique retail et le e-commerce au cours de la décennie à venir. En permettant d'améliorer l'expérience de shopping en magasin ou tout simplement de faire ses achats depuis chez soi à l'aide d'un casque de réalité virtuelle, la réalité virtuelle et augmentée permettra de gagner du temps et de

l'énergie tout en accédant à un choix plus vaste de produits. Le v-commerce va évoluer en même temps que les technologies de réalité virtuelle et augmentée, et ses limites seront progressivement surmontées.

### **LITTÉRATURE**

1. Le commerce électronique [Electronic resource]. – Режим доступа: <http://dictionnaire.sensagent.leparisien.fr/COMMERCE%20ELECTRONIQUE/fr-fr/> – Date of access: 09.01.2018.
2. Amazon [Electronic resource]. Режим доступа: [https://ru.wikipedia.org/wiki/Amazon\\_\(компания\)](https://ru.wikipedia.org/wiki/Amazon_(компания)) – Date of access: 20.01.2018.
3. Компания ИКЕА запускает Интернет-магазин [Electronic resource]. – Режим доступа: [https://www.ikea.com/ms/ru\\_RU/about\\_ikea/press/press\\_releases/national/nat\\_159.html](https://www.ikea.com/ms/ru_RU/about_ikea/press/press_releases/national/nat_159.html) – Date of access: 10.02.2018.

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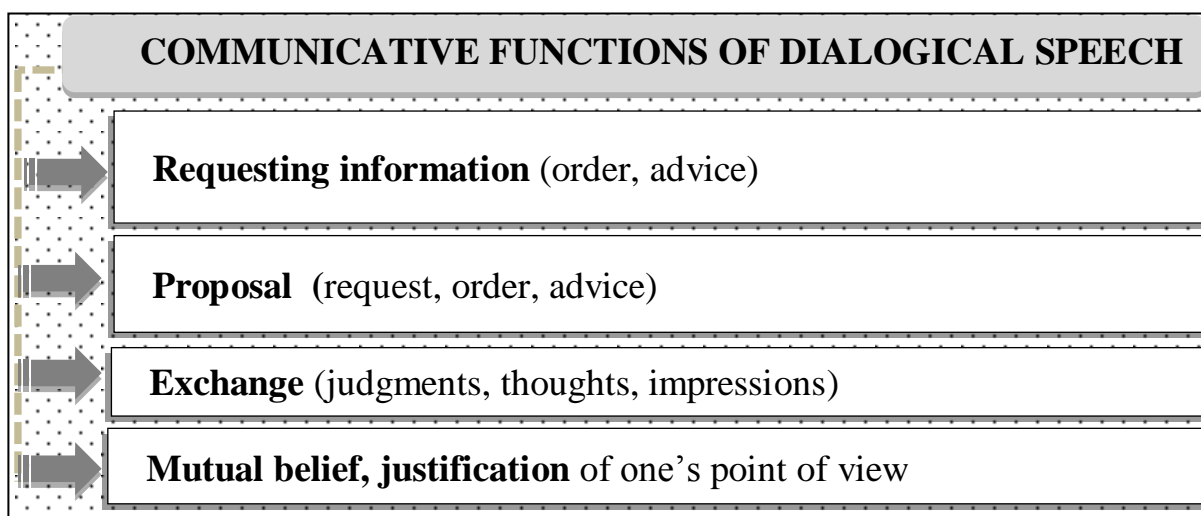
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### **DIALOGICAL SPEECH AS A CRUCIAL ASPECT OF TEACHING ENGLISH TO FUTURE POLITICAL SCIENTISTS**

The professional activity of a political scientist is known to involve intellectually demanding and complicated communication in the field of social and political relations. Political scientists are engaged in theoretical and applied political science, contributing to the political education of society. Representatives of this profession along with lawyers and economists form not only the management building, but also the country's political elite.

One of the important components of the professional preparation of political scientist is the knowledge of a foreign language, since knowledge of a foreign language and the ability to communicate create the conditions for the professional development of a future specialist and personal accomplishments. The issue of preparing political scientists to professional communication in English is not sufficiently investigated due to the fact that this profession does not have a long history in Ukraine. Therefore, the aim of this article is to take a deeper look at teaching dialogical speech as an important aspect of ESP course for future political scientists [2].

The problem of preparing future specialists to professional communication in a foreign language has been studied by O.V. Tarnopolsky and S.P. Kozhushko [4]. The main task of a foreign language instructor at the Faculty of Political Sciences is to develop the students' speaking skills, with special attention paid to the following: acquiring professional vocabulary, and developing the skills of producing a correct, consistent and convincing utterance in any communicative situation [1]. According to N.A. Sura, dialogical speech is the process of speech interaction of two or more participants in communication. In addition, the author determines the communicative functions of dialogical speech (Picture 1). Each of these functions has its own specific language tools and is dominant in the appropriate type of dialogue [3; pp. 77–78].



Picture 1.

Thus, in the course of the research it was established that the achievement of a high communicative level by students of political science is possible through the phased training of dialogical speech by way of the implementing problem-based and creative tasks. Such an organization of training forms the language skills, the ability to defend and faithfully build arguments to prove their own point of view, which is the key to preparing future political scientists for professional foreign language communication [1].

## REFERENCES

1. Ніколаєва С.Ю. Основи сучасної методики викладання іноземних мов. – К.: Ленвіт, 2008. – 285 с.
2. Проблеми викладання іноземних мов у немовному вищому навчальному закладі: матер. Всеукр. наук.- практ. конф., 18 березня 2011 р. – К.: Вид-во Нац. авіац. ун-ту “НАУ-друк”, 2011. – С. 188.
3. Сура Н.А. Навчання студентів університету професійно орієнтованому на спілкування іноземною мовою. – Луганськ: Вид-во Східноукраїнського НУ ім. В. Даля, 2008. – 126 с.
4. Тарнопольський О.Б. Business Projects. – В.: Нова книга, 2007. - 328 с.



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## **TRADE ACTIVITY OF CITIZENS OF THE SOVIET UNION AS A FORM OF INFORMAL ENTREPRENEURSHIP IN THE 1950s AND 1960s**

While the economists and politicians of modern-day Ukraine are striving to establish and update the approaches to improving the currently low level of the democratic and economic processes in the country, the historical roots of the issue seem to be obvious, both for general public and the scientists. People's insufficient involvement in the state economy is closely related to the remnants of the Soviet way of thinking adopted by the Ukrainians who tend to underestimate their strengths and opportunities and attribute financial success to making money in a dishonest way (speculation, bribery, fraud), concealment of income. Few people demonstrating proficient entrepreneurial skills and savvy have learned to think and act in accordance with democratic values. Our hypothesis is that the reasons for such attitudes lie in the former political system of the Soviet Union that incubated the conditions calling for the unofficial entrepreneurship.

Entrepreneurial people had to work actively and creatively, to take risks other than financial to obtain additional income and unleash their natural potential. Therefore, informal (illegal) entrepreneurs relied on imperfect legislation, faulty systems and the natural temptation for private property characteristic of the general population, to develop a series of individual-labor activities in various spheres of life. Due to the specific nature of the activity and the distortion of official information, the statistics describing the scale of informal entrepreneurship cannot be obtained through the usual sources available to historians, namely the official documents, mass media etc. Informal entrepreneurship manifested itself in three main spheres of life: trade, manufacture and services.

Trade activity is understood as the activity of citizens involving purchase and resale of goods or other items in order to obtain additional income, qualified as speculation in the Soviet period and punished depending of the scale of activity, from administrative to criminal liability (up to seven years of deprivation of freedom) [1, p. 9]. Speculators were citizens who, due to their natural skills, active attitudes, determination, ability to take risks and entrepreneurship tried to gain additional material benefits. Like the rest of the citizens, they worked at state institutions and enterprises, but used their free time to improve their financial situation. For example, the driver of the Pereshchepka motor depot of the Dnepropetrovsk oblast Teslenko was engaged in buying up potato from the population of the region and reselling it in Kharkov at speculative prices. Being

aware of the villagers' need for furniture, he brought chairs to be exchanged for potatoes. In 1961, Teslenko was sentenced to two years in prison [1, p. 10].

These economically apt citizens engaged in trade activities more efficiently than government agencies, without having any theoretical background knowledge, they studied and identified the demand of citizens for certain groups of goods. Therefore, the range of goods supplied through illegal trade was wider than the assortment of goods provided by the state and cooperative system. Illegal manufacturers provided people with goods the supply for which was scarce, closing the "economic holes" in the work of state enterprises, and thus indirectly contributing to the development of the state economy. The scientific research demonstrates that the population of the country acquired scarce goods from private traders in the following proportions: 48.8% of trade workers; 36.4% of private persons who traded in crowded places "from hand to hand"; 16.4% of people who had been abroad; 4.8% turned to employees of the service sector for the necessary goods; and, finally, 12.8% were supplied with goods purchased directly from illegal producers [2, c. 22].

To summarize all of the above, the inflexibility of the legislation and the official ideology in conditions of planned economy and shortage of everyday goods caused the emergence of a wide range of factors that stimulated the development of entrepreneurial activity and unofficial entrepreneurship as a way of providing the population with goods and services that were in low supply. In general, it is important to note that entrepreneurship in the USSR in the '50s-'60s of the twentieth century developed under conditions of ideological dictatorship; the regulatory and legal framework that prohibited market relations evolved gradually, shaping modern view of business and entrepreneurship. The change in the model of social development, the official course on advancing the market economy allowed many shadow workers to become post-Soviet entrepreneurs.

## REFERENCES

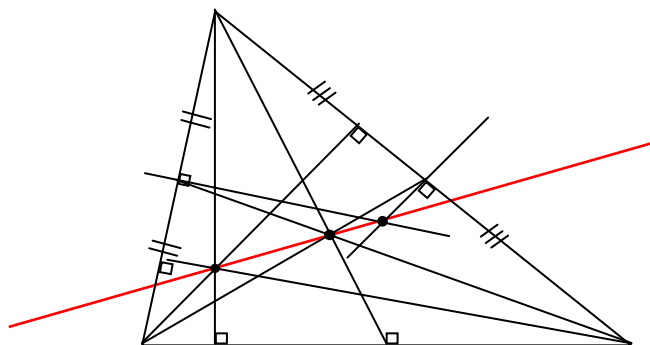
1. Andriukhin Ye.A. Informal Entrepreneurship in the USSR in the '50s through the '60s of the Twentieth Century. // Digest of the Altay State University. – 2010. – # 4/2. – pp. 9–12.
2. Andriukhin Ye.A. Entrepreneurial Activity of the USSR Population in the '50s through the '60s of the Twentieth Century : author's abstract of the thesis for a candidate degree in history : 07.00.02 "National History" / Andriukhin Yevgeniy Aleksandrovich. – Kursk, 2011. – 26 p.

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## EULER'S LINE AND EULER'S CIRCLE

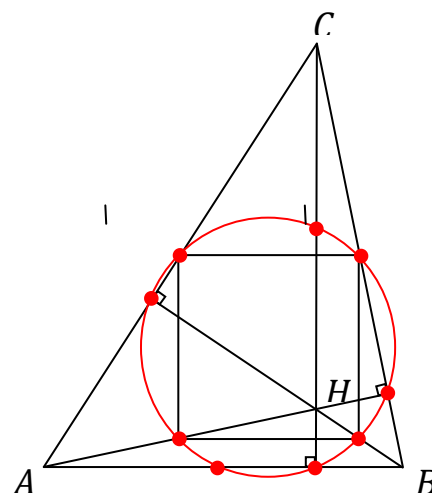
Mathematics is an inexhaustible source of interesting tasks and paradoxes. We all know that in ancient Greece were made almost all major geometric discoveries, but today you can find such topics that require research. For example, such a figure as a triangle was the subject of the research of the famous mathematician Euclid, who found all the main properties of this figure. But in the 18<sup>th</sup> century the well-known mathematician Leonard Euler formulated important theorems connected with two new elements in a triangle – the Euler's line and the Euler's circle (or a circle of nine points). Let's discover these two theorems.

Before the formulating theorems, we give the definition of some points in a triangle. In fact, triangles have over 1602 different triangle centers. But the most important ones are centroid, incenter, circumcenter and orthocenter. Centroid can be found as the intersection of the three medians of the triangle. The centroid is also known as a center of mass. The incenter is the point where the internal angle bisectors of the triangle cross. The circumcenter is the center of a triangle's circumcircle and it can be found as the intersection of the perpendicular bisectors. The orthocenter is the point of intersection of three altitudes in triangle.



Euler showed in 1765 that in any triangle, the orthocenter, circumcenter and centroid are collinear or belongs to line which is called the Euler line. The fact that such a line exists for all triangles is quite unexpected, made more impressive by the fact that the relative distances between the triangle centers remain constant. The interesting fact is that these nine points are also known as remarkable points of triangle.

The next theorem is the theorem about Euler's circle or as it is also called the nine-point circle. This circle of a triangle is a circle going through 9 key points: the three midpoints of the sides of the triangle, the three feet of the altitudes of the triangle and the three midpoints from the vertices to the orthocenter of the triangle.



Sometimes the nine-point circle is referred to as the Feuerbach circle. The fact that the nine-point circle is tangent to the inscribed circle and the three escribed circles is Feuerbach's theorem.

One of the most important property of a nine-point circle is that the radius of the nine-point circle is exactly half the circumradius of the triangle. Furthermore, due to symmetry, we have the following: the nine-point circles of triangles  $ABC$ ,  $HAB$ ,  $BHC$  and  $CAH$  are all the same; points  $A_2, B_2, C_2$  are circumcenters of triangles  $AB_1C_1$ ,  $BA_1C_1$ ,  $CB_1A_1$  ( $AH, BH, CH$  are diameters of these circumscribed circles); the triangles  $AB_1C_1$ ,  $BA_1C_1$ ,  $CB_1A_1$  are similar with each other and similar to triangle  $ABC$ ; the points which are symmetric to orthocenter comparatively to the sides of triangle belong to circumscribed circle of this triangle; the center of a nine-point circle belongs to the Euler's line.

In conclusion, these theorems proved that despite the huge number of discoveries which were made and well-known theorems which were proved, there will always be something that can be interesting for each of us and really amazing as for mathematicians.

## REFERENCES

1. Шаригін І.Ф. Коло дев'яти точок і пряма Ейлера / І. Шаригін / Квант. - 1981. - № 8. - С.34-37.
2. Кушнір І.А. Це відкриття – золотий ключ Леонарда Ейлера / І. Кушнір / У світі геометрії. - 2012. - № 13-15. - С.33-36.
3. Заславський А.А. Ейлер і геометрія / А. Заславський / Математичний кружок. - 207. - № 3. - С.37-40.

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## WORLD'S FIRST HUMAN HEAD TRANSPLANT IS A SUCCESS

The world's first human head transplant has allegedly been performed on a corpse in an 18 hour operation which successfully connected the spine, nerves and blood vessels of two people.

The operation was carried out by a team led by Dr Xiaoping Ren of Harbin Medical University, China, who last year successfully grafted a head onto the body of a monkey.

Italian Professor Sergio Canavero, Director of the Turin Advanced Neuromodulation Group, told that electrical stimulation of the nerves proved the operation on the corpse had been successful, and that the two people had been completely attached.

Describing the surgery, Prof Canavero said the operation was split into two parts. In the first procedure, the blood supply of the donor body was attached to the brain of the recipient. Then the head was severed and the nerves and blood vessels attached to the new body using a biological glue known as PEG.

Although Russian computer scientist Valery Spiridonov had volunteered to become the first head transplant patient, the team have since said the first trial is likely to be carried out on someone who is Chinese, because the chance of a Chinese donor body will be higher.

However Prof Canavero said his ultimate goal was to transplant a human brain.

## REFERENCES

1. Canavero: World's 1st human head transplant carried out [Electronic Resource]. – Mode of access: <http://www.dailymail.co.uk/sciencetech/article-5092769/World-s-human-head-transplant-carried-out.html>.

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## INVARIANTS OF GEOMETRIC FIGURES

The concept of invariant is one of the most important in mathematics, since the study of the invariant is directly related to the tasks of object classifications of any type. In fact, the purpose of mathematical classification is to build a complete system of invariants (up to the simplest).

The invariant is a term which has several meanings. The invariant is a subspace of the vector space.

Any function of the points coordinates in space in which the team operates. It does not change in spite of all group transformations. Our task is to explain what the analytic invariant of the group is. These points can be the arbitrary points in space or belong to a certain geometric image. Any set of geometrical images, which penetrate into each other under arbitrary transformations of the group we will call the geometric invariant of the group, or the absolute of the space in which the team operates [1].

The projective geometry invariants are of particular interest of the projective group, which are geometric quantities. The aim of this work is the classification of projective geometry triangles, with the help a certain projective invariant introduction; the consideration of other invariants geometric shapes. After all, there are some significant differences in the relationship of congruence of segments and

angles (which are not available in proactive geometry). For example, Euclid plane triangles with corresponding sides are equal congruently, and triangles with appropriate congruently angles, in general are not equal.

The topic chosen is relevant because the concept of invariant is quite common in mathematics, it is also a concept used in other fields of science. In particular:

- The cardinality of the set is an invariant for the set of bisectors.
- In the theory of differential equations invariant is a function that depends on the unknown function, the value of which is constant (first integral).
- Invariant theory deals with the search of invariant polynomials (or simply "invariants") and the study of their algebra for the case of linear representations of algebraic groups, action of algebraic groups on algebraic varieties.
- A topological invariant [3].

The problem of projective triangle was the version studied by Felix Klein. He considered projective geometrical treatment of the triangle as follows: three given points on the plane, are joined by two imaginary circular points  $(1, i, 0)$ ;  $(1, -i, 0)$ . Then the whole geometry of the triangle is the projective theory of invariants of these five points. Thanks to this observation, the geometry of the triangle acquires the character of a transparent, systematic discipline [1].

Consequently, invariants of geometric figures, in particular, projective invariants of the triangle are important in the classification of objects of any type.

## REFERENCES

1. Селезньова Н. П. Проективний інваріант трикутника / Н. П. Селезньова, С. В. Селезньов // Математика в сучасному технічному університеті: Збірник науково-методичних праць. – 2015. – №1. – С. 157 – 163.
2. Попов В. Л. Інваріант / В. Л. Попов /Математична енциклопедія. – М.: Радянська енциклопедія, 1979. – Т. 2. – 526 с.

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## FUNCTIONAL ASPECT OF TEACHING PROFESSIONAL MONOLOGUE TO FUTURE POLITICAL SCIENTISTS AS AN ESP ISSUE

Prepared monological utterance is a transition between oral and written information transfer. Professional monologue is a complex speaking activity. It is not intended for verbal reaction as opposed to the dialogue which presupposes interaction.

Monological utterance involves a peculiar contact with the addressee, so both the content and the procedure are important. Even the best message cannot reach its communicative pragmatic goal, if it is not listener-focused [2].

Consequently, a coherent speech reflects all the essential links of their subject content in the linguistic aspect. Monolingual speech is a fairly detailed statement of one person consisting of phrases connected logically and communicatively, reflecting psycho- and lingo-cognitive traits of a speaker.

Along with the term "professional monological utterance" the following are used: the notion of "specialized language" or "specialized speech". English-speaking linguistic research notes the emergence of a similar concept – "Language for special purposes" (LSP) [3]. The origin of the term "language for special purpose (LSP), which was later replaced by the term "language for specific purpose" (LSP), is associated with the development of the communicative approach to learning foreign languages and teaching functional language styles [1].

Teaching professional monologue is generally considered in two aspects. First, professional development involves knowledge of the so-called special language, which includes terminology of the profession. It is believed that possession of professional terminology greatly facilitates the work of a specialist, raising the productivity of his work and developing the ability to navigate complex professional situations.

Second, the high level of professional fluency involves the availability of special knowledge and abilities. They provide the ability of the speaker to establish contacts with representatives of both, their own and related specialties [2].

Regarding public speech of future specialists in the political sphere, we note that, according to current qualification requirements, the professional activity of political scientists is closely related to such kinds of speech activities as: political reviews and comments, reports on scientific conferences, participating in political disputes, discussions, debates, etc.

Taking into consideration all of the above, we can conclude that the functions of the monological speech of future political scientists involves informing and convincing the listeners.

## REFERENCES

1. Скалкин В. Л. Обучение монологическому высказыванию (на материале английского языка) / В. Л. Скалкин. – К. : Рад. школа, 1983. – 118 с.
2. Рубинштейн С. Л. Основы общей психологии / С. Л. Рубинштейн. – СПб. : Питер, 2001. – 720 с.
3. Bostock L. Speaking in Public / L. Bostock. – L., 1994

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## **MARKETING ASPECTS OF PROFITABILITY MANAGEMENT OF THE BANKING BUSINESS**

Functioning of the banking business is very important, comprehensive and systematic financial and economic phenomenon, since almost any financial transactions of entities, businesses, institutions, organizations, people in most countries of the world are somehow mediated by the activity of financial and credit intermediaries, among which banks take special place. From this perspective, financial sustainability, stability, reliability and security are the foundation of maintaining proper financial and economic climate in the country and in the world space. This means that any aspects of the commercial banks activity are extremely important issues both of theoretical scientific research and practical aspects of their work.

Various aspects of the profitability of the banking business are widely reflected in both the foreign and the domestic scientific literature. Among foreign studies the works of such scholars as A. Berger, A. Rappaport, J. Sinckie, D. Hempfree and others deserve special attention. As part of national publications the works of such economists as Azarenkov G.M., Leonov S.V., Salo I.V., Shulga N.P. and others are worth mentioning.

Modern conditions of tough competition require from commercial banks systematic market research to identify those areas of banking business, strengthening of which can provide additional benefits and increase the profitability of their business.

This market research today covers a range of economic, financial and psychological aspects with the help of which it is possible to convince customers in existence of certain advantages to using a specific type of bank services in a separate bank. As a result, banks sponsor various sports events, large and small businesses, products or services of which are popular among people or entities, invite to cooperate popular personalities etc.

Another example of marketing activities practice of Ukrainian banks is a continuous advertising their services in different types of media. And in some cases advertising posters, slogans, commercials, messages are created quite efficiently.

We believe that in conducting market research, banks need not only to analyze the practices of competitors, but also clearly establish the following: ensure the profitability of the banking business; have real conditions for implementation and use; do not have extreme financial losses.

This means that the use of certain instruments should be appropriate and consistent with the main objectives of the bank, rather than conflict with them [2].



An effective management of profitability of the banking business will be carried out in the same way.

Thus, the marketing aspects of the commercial banks activity within the control problem of profitability of the banking business and its ensuring are extremely essential and urgent scientific issues of today, and the formation of an effective and appropriate marketing policy is the basis for maintaining financial stability of commercial banks, even in times of financial and economic downturns.

## REFERENCES

1. Banking transactions: Textbook. - 2nd ed., cor. and add. / A.M. Moroz, M.I. Savluk, M.F. Puhovkina et al., Ed. Dr. Sc. Science professor. A.M. Moroz. - K.: KNEU, 2002. - 476 p.
2. Shevchenko R.I. Loans and control: Teaching guide for self-study courses. - K.: KNEU, 2002. - 183 p.

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## THE GALILEAN AND LORENTZ TRANSFORMATIONS

My article deals with time-space paradoxes which are the consequences of the special relativity and Lorentz transformations. However in order to understand this phenomenon one must firstly understand the Galileo transformations.

The Galilean transformations are so called transformations of coordinates and time, which are used in Newtonian mechanics. It is used in the transition from one reference system to another relatively moving system which has a constant velocity ( $V$ ). Galilean transformations are based on the axioms of absoluteness of the time and lengths periods. The first axiom proves that the passing of the time (respectively periods of time between any two events) is the same for all inertial reference systems. According to the second axiom, the body size is not dependent on the speed of reference system.

With the help of mathematical transformations on the basis of the Galilean transformations we can deduce the law of velocity transformation of a point  $M$ . In turn, on the basis of this law we can conclude that the acceleration of the point  $M$  does not depend on the choice of the reference system. This means that all mechanical phenomena in inertial reference system are the same.

The Lorentz Transformation.

There is a little difference between the Lorentz transformation and the Galilean transformation. Firstly, the speed of one inertial reference system approaches the speed of light. Secondly, Lorenz uses a four-dimensional Minkowski space (three spatial coordinates and the fourth is time). On the basis of the same considerations which were conducted with the help of Galilean transformations, the formulas are derived:

The Lorentz transformation has some interesting insights:

1. Relativity of simultaneity

Simultaneous events in one reference system are not necessarily simultaneous in other systems, moving relative to the first system. Events are simultaneous if and only if they are simultaneous and not separated by space in a different reference system. Once the events are separated in space they will cease to be simultaneous in the moving reference system.

2. Relativity of time intervals (time duration).

The duration of an event occurring at a certain point, is minimum in the inertial reference system and relative to this fixed point. The obtained result can be formulated differently: a moving clock's relative to the inertial reference system, is slower than it is at rest. Therefore, the fluidity of time in a moving system is slower than in a stationary.

3. Relativity of length (the reduction of the Lorentz).

Rod length will be maximum relative to the reference system which is at rest.

4. The law of addition of velocities.

$$u = \frac{u' + v}{1 + \frac{vu'}{c^2}}$$

Consider an imaginary experiment. Let the rocket moves at the speed of light ( $u' = C$ ) relative to the system  $K'$ , and the system  $K'$  moves relative to the system  $K$  with velocity  $v = C$ . What speed of the rocket will be if it is relative to the stationary system  $K$ ? Answer is  $c$ .

## REFERENCES

1. Александров А. Д. Теорія відносності як теорія абсолютного простору-часу // Філософські питання сучасної фізики. М.: Наука, 1959. С. 273-274.
2. *Hencschel K.* Interpretationen und Fehlinterpretationen der speziellen und der allgemeinen Relativitätstheorie durch Zeitgenossen Albert Einsteins. Basel, Boston, Bonn: Birkhauser, 1990.

**ДЛЯ НОТАТОК**

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XXI столітті**

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