

Міністерство освіти і науки України  
Житомирський державний університет імені Івана Франка  
Навчально-науковий інститут іноземної філології  
Кафедра іноземних мов і новітніх технологій навчання  
Науково-дослідна лабораторія  
«Мовна освіта як чинник підготовки сучасних фахівців»  
Уманський державний педагогічний університет імені Павла Тичини  
Львівський інститут економіки і туризму  
Барановичський державний університет (Білорусь)  
Таласький державний університет (Киргизстан)  
Академія імені Яна Длугоша (Польща)  
Grow More College of Education, Himatnagar, Gujarat (Індія)

## **Україна. Європа. Світ: актуальні проблеми та міждисциплінарні досягнення розвитку іншомовної компетентності**

Матеріали V Міжнародної науково-практичної студентської конференції

17 квітня 2019 року

Житомир – 2019

**УДК 811.11.13**

**ББК 81.2**

**T65**

*Друкується*

*згідно рішення Вченої ради*

*Житомирського державного університету імені Івана Франка*

*протокол № 4 від 26 квітня 2019 р.*

**Рецензенти:**

**Жуковська В.В.** – кандидат філологічних наук, доцент, завідувач кафедри міжкультурної комунікації та прикладної лінгвістики Житомирського державного університету імені Івана Франка;

**Могельницька Л.Ф.** – кандидат філологічних наук, доцент, завідувач кафедри теоретичної та прикладної лінгвістики Житомирського державного технологічного університету;

**Самборська Н.М.** – кандидат педагогічних наук, викладач вищої категорії, циклова комісія іноземних мов КВНЗ «Житомирський медичний інститут» Житомирської обласної ради.

**T65            Україна. Європа. Світ: актуальні проблеми та міждисциплінарні досягнення розвитку іншомовної компетентності:**

матеріали V Міжнародної науково-практичної студентської конференції для студентів немовних спеціальностей: Житомир, 17 квітня 2019 р. – Житомир: Видавництво ФО-П Левковець Н.М., 2019. – 220 с.

У збірнику представлені матеріали V Міжнародної науково-практичної студентської конференції для студентів немовних спеціальностей, що висвітлюють питання філології, психології, педагогіки, методики викладання іноземних мов, історії, політології, екології, інформатики, менеджменту та економіки.

Для студентів вищих навчальних закладів, аспірантів, наукових та педагогічних працівників.

**УДК 811.11.13**

**ББК 81.2**

*Матеріали друкуються в авторській редакції. За достовірність фактів, цитат, власних імен, посилань на літературні джерела та інші відомості відповідають автори публікацій. Думка редакції може не збігатися з думкою авторів.*

## ЗМІСТ

<i>A. Ananko</i> . Nickname as a type of modern anthroponyms .....	8
<i>E. Anashkevich</i> . General characteristics of juvenile delinquency.....	9
<i>V. Antonenko</i> . The expediency of using computer programs at school.....	11
<i>E. Antonov</i> . Character creation for modern content .....	12
<i>N. Babushko</i> . Communicative approach to teaching foreign languages .....	14
<i>L. Baraniuk</i> . Familiarizing children of upper preschool age with shapes and geometric figures by means of Cuisenaire rods .....	15
<i>A. Biloshytska</i> . Structure of quasicrystals and liquid crystals .....	17
<i>T. Bilyk</i> . Social education of senior preschool children on the basis of O.V.Sukhomlynsky's fairy-tale .....	18
<i>I. Bondarev</i> . Chinese-Belarusian Industrial Park "Great Stone" .....	19
<i>Y. Chumak</i> . Teaching writing skills to senior school students.....	22
<i>O. Diahil</i> . Concept of political representation in western scholar tradition .....	23
<i>S. Didkivska</i> . Overview of foreign information systems for data management at universities.....	25
<i>L. Dobrianska</i> . Why are games an important language learning tool?.....	26
<i>V. Dolgier</i> . Impossible figures .....	28
<i>D. Domanska</i> . Bisecting triangle and its properties.....	30
<i>O. Dvohopiatyi</i> . The role of the significance test in modern science .....	32
<i>O. Dubenko</i> . Sekundäre Pflanzenstoffe und ihre Wirkung auf die Gesundheit .....	33
<i>K. Dudar</i> . Criteria affecting people's image of a beautiful person.....	34
<i>E. Duko</i> . La pollution numérique .....	35
<i>V. Dulko</i> . Tourism image as one of the key factors to attract tourists .....	37
<i>V. Dvoretzka</i> . The development of coherent speech in preschool children by means of fairy tales.....	38
<i>M. Dykyi</i> . Ptolemy's inequality and its application .....	39
<i>O. Falkovska</i> . English texts of social and cultural character as a resource of critical thinking formation.....	41
<i>K. Gripich</i> . Overtourism as one of the most pressing issues of tourism industry .....	42
<i>E. Gubskaja</i> . Cybercrime and money-laundering .....	44
<i>L. Helevei</i> . The use of the English folk fairytales for formation of analytical skills of basic school pupils.....	46
<i>A. Hladyschuk</i> . Basic approaches to the interpretation of the concept "frame" in the western scientific tradition .....	47
<i>I. Hohola</i> . Using innovative techniques in the process of teaching the algorithm of performing actions in information science lessons in primary school .....	49
<i>I. Holubiev</i> . The latest discoveries and breakthroughs in mathematics.....	50

<i>O. Ignatenko</i> . Evolutionary formulated models of mamals behaviour in stress situation .....	52
<i>O. Ivanitska</i> . Middle lines of trippy .....	53
<i>K. Kalachev</i> . Ecologization of agriculture in the context of the transition of the Republic of Belarus to a "green economy" .....	56
<i>A. Kalutsky, M. Paripa</i> . English internet slang .....	57
<i>O. Karmaniuk</i> . Objectives of application of information technologies in the study of linear algebra .....	60
<i>E. Khomenko</i> . Solving rational inequalities graphically .....	61
<i>I. Kirey</i> . Learning English through watching movies .....	63
<i>M. Loseva, Yu. Kokhovich</i> . Environmental problems of Svetilovsky lake of the city of Baranovichi .....	64
<i>K. Korniietska</i> . The formation of sociocultural competence in primary school English language learners by means of literature .....	65
<i>A. Korshak, T. Gritskevich</i> . Selected issues of limitation of gift and bribe in civil and criminal legislation of the Republic of Belarus .....	67
<i>V. Kortschenjuk</i> . Bodenschätze der Ukraine .....	68
<i>A. Kotvitska</i> . Symmetry as a mathematical law of the beauty of curbs and ornaments .....	69
<i>Y. Kovalchuk</i> . Problems of the translation of Belarusian fairy tales to the English language.....	72
<i>V. Kravets</i> . The formation of entrepreneurial competence in the process of teaching English in primary school.....	73
<i>D. Krot, A. Yurkovets</i> . About commission of small household transactions by juveniles.....	75
<i>L. Krut</i> . The advantages of project method in the educational process .....	76
<i>A. Kukharchuk, O. Omelyanovich</i> . Franchise agreement and its role in consumer rights security .....	78
<i>M. Kurilo</i> . Digitalstrategie Byod für Schulen .....	79
<i>A. Kurova</i> . Development of coherent speech of children of the senior preschool age and its role in formation of speech and communicative creativity.....	81
<i>N. Kuryn</i> . The use of interactive teaching methods at biology lessons .....	82
<i>I. Kuzmich</i> . Charity in Ukraine during the World War I.....	83
<i>Ya. Kuzmuk</i> . Specific and quantitative composition of phytoplankton of Basiv Kut Reservoir.....	84
<i>J. Lapchik</i> . How to help young English language learners love writing .....	86
<i>A. Lazaniuk</i> . Multiple intelligences of students in the process of studying .....	87
<i>I. Lisogurska</i> . The mystery of the Templars .....	89
<i>K. Litvinko</i> . Information portal for selecting applications .....	90

<i>T. Luzhanska.</i> The correlation between content analysis and discourse analysis in the works of foreign scholars .....	92
<i>S. Majster, M. Chylewytsh.</i> Die Gründung der unabhängigen Ukraine .....	94
<i>O. Makarchuk.</i> Developing phonological competence in children of upper preschool age by means of didactic games and exercises .....	95
<i>N. Maksimuk.</i> The most relevant methods of investments for today .....	97
<i>T. Martynenko.</i> The use of authentic materials while teaching English .....	98
<i>K. Marushchak.</i> Preparing educators for shaping nature-friendly behaviour in children of mid-preschool age.....	100
<i>K. Mashevskya.</i> The formation of students' socio-cultural competence through modern information technologies.....	101
<i>O. Melnychenko.</i> Climate as a catalyst for the evolution of the Caucasian race .....	102
<i>E. Meshcherina.</i> Influence of the work of Ch. Aitmatov to the moral education of youth.....	104
<i>T. Mudrak.</i> Multimedia resources in teaching English .....	107
<i>R. Mukutyk.</i> The formation of mathematical competence in senior preschool age children by means of didactic games and exercises.....	108
<i>O. Mykhailiuk.</i> Mytilidae .....	109
<i>V. Mykhailovska.</i> Didactic gaming technologies in the formation of English grammar competence .....	110
<i>A. Mykhaliuk, I. Usyk.</i> The Crusades: causes and consequences.....	111
<i>K. Myronova.</i> Radioactive elements .....	113
<i>A. Nidzelska.</i> The role of national and cultural stereotypes in political discourse ...	114
<i>S. Nykodyuk.</i> Causes and consequences of migration for Ukraine .....	115
<i>M. Ogorodnik.</i> Comparative analysis of the achievement motivation of Orthodox and Protestant confessions .....	117
<i>K. Olekhnovych.</i> The distribution of naked amoebae in the soils of the forest areas of Ukraine.....	118
<i>A. Olijnyk, M. Kolomietz.</i> Die Nuklearkatastrophe von Tschernobyl.....	120
<i>T. Opanasiuk.</i> The generalization of the golden section.....	121
<i>I. Oshurkevich.</i> About the subject of the power supply contract.....	123
<i>T. Osipchuk.</i> The idea of homogeneity in systems of rational equations .....	125
<i>A. Osypchuk.</i> The use of cloud technologies in educational process.....	126
<i>I. Ovdiychuk.</i> Realization of the right to environmental information .....	128
<i>V. Ovsejuk.</i> La criminalité sur le net .....	130
<i>Kh. Padyuka.</i> The role of economic analysis in the system of tourism enterprise management.....	131
<i>L. Panasiuk.</i> Methods of formation of experimental skills by means of solving experimental tasks .....	133

<i>M. Panchuk.</i> The implementation of the idea of Ukraine’s unity in the process of state building .....	134
<i>E. Panteleeva, E. Savchenkova.</i> Legal personality of a physical person (individual) in international aspect.....	135
<i>A. Pavlosyuk.</i> The legal status of civil servants .....	137
<i>K. Pertsova.</i> The formation of students’ foreign language communicative competence through interactive learning technologies .....	138
<i>K. Petruk.</i> Systematics of Annelida .....	140
<i>M. Polishchyk.</i> Application of chain fractions in chronological order .....	141
<i>M. Polishchyk.</i> Approaches to the interpretation of the concept of “political representation” .....	142
<i>T. Polishchuk.</i> Developing spoken production skills in children of upper preschool age by means of plot-based role play .....	144
<i>V. Polkhanova, V. Rusy.</i> Chatbot as means of digital marketing .....	145
<i>A. Prokopchik.</i> Museum explication and its role in creating a multicultural society .....	147
<i>A. Radchuk.</i> Conic section.....	149
<i>D. Regenel.</i> Motivation for creation of social enterprises.....	150
<i>V. Romanchuk.</i> Influence of cellular networks on bee populations .....	152
<i>V. Rusy, V. Polkhanova.</i> Top marketing trends in website design 2019.....	153
<i>D. Rybak.</i> Application of graph theory .....	155
<i>A. Samoliuk.</i> The organization of labour in craft guilds in Medieval Europe .....	157
<i>I. Sapotnitskaya.</i> Nahrungsergänzungsmittel: Einstufung und Einfluss auf den menschlichen Körper.....	158
<i>M. Savchuk.</i> Teaching listening comprehension of foreign texts to junior students of the faculty of natural sciences.....	160
<i>A. Savytska.</i> Using video support in the process of lexical competence formation at the English lessons at primary school .....	161
<i>A. Sazontova.</i> Phylum Mollusca.....	162
<i>S. Shcherba.</i> Triangle inequality in trigonometry .....	163
<i>O. Shevchuk.</i> Indices for conflict level measuring in event analysis .....	164
<i>B. Shevtsov.</i> The First and Second Punic Wars: causes and consequences .....	167
<i>A. Shimanskaya, K. Skidan.</i> Theories of leadership .....	169
<i>I. Shkyliuk.</i> Prospects of application of liquid crystals in medicine.....	171
<i>A. Schumskaja.</i> Cyberkriminalität .....	172
<i>V. Sionchuk.</i> Education in the domestic policy of P. Skoropadsky’s government ...	174
<i>O. Skreminska.</i> Social problems of intergenerational relations .....	175
<i>T. Sotnikova, I. Oshurkevich.</i> Concept, signs and features of the perfection of small household transactions by minor in the Republic of Belarus .....	176

<i>A. Stasevich.</i> Application of the Menelaus's theorem .....	178
<i>I. Stepanchuk.</i> The use of visual methods in the development of fluent speech in junior preschool age children .....	179
<i>I. Storchak.</i> Falsification of caviar .....	181
<i>A. Sych.</i> The formation of grammar competence in primary school pupils by means of games .....	182
<i>V. Tatarinovich.</i> Human resources management as primary means of personnel policies.....	183
<i>I. Teteruk.</i> The triple system of anthropogenesis .....	185
<i>A. Tolkach.</i> Manipulative technologies in mass media.....	187
<i>D. Tolpichina.</i> Using software to teach geometry .....	188
<i>N. Trochsuk.</i> Orthodoxer Kirchenkonflikt in der Ukraine .....	190
<i>T. Troianchuk.</i> Multimedia technologies at math lessons.....	191
<i>E. Tsvirko.</i> Features of the development of the market of organic products in the Republic of Belarus .....	192
<i>A. Tuchapets.</i> The influence of physical recreation on environmental improvement.....	194
<i>S. Vashchuk.</i> Developing active vocabulary in children of mid-preschool age by means of plot-based role play.....	195
<i>Y. Venzhega.</i> Political regimes .....	197
<i>A. Vikarchuk.</i> Use of didactic material in the process of teaching zoology at school.....	199
<i>A. Voloshchuk.</i> Marketing communications in the banking management system...	200
<i>S. Voroshkevich.</i> Thailing by abuse of service powers as a corruption crime .....	201
<i>B. Vyshnivska.</i> The Red Book of Ukraine .....	203
<i>S. Wenchak.</i> Promotion des grünen Tourismus im Karpatenregion .....	204
<i>Y. Yakimchuk.</i> Contracting agreement: specific features of certain limitations issues.....	205
<i>A. Yukhymchuk.</i> Pedagogical prerequisites for integrating different forms of art in literary lessons in primary school .....	207
<i>O. Zagryva.</i> The use of information and communication technologies in studies ...	208
<i>K. Zakharchenko.</i> The formation of the bases of linguistic and sociocultural competence in preschool children with the use of authentic materials.....	210
<i>A. Zaruba.</i> Miejsce nowych technologii w usługach hotelarskich .....	211
<i>M. Zarukina.</i> Arten und Sortiment des Fischkaviars .....	213
<i>E. Zhuravlyova, C. Gubko.</i> «Small Motherland» in the text of literature and culture .....	214
<i>A. Zinchuk.</i> The most common helminthiasis of Ukraine .....	216

**A. Ananko**

*Research supervisor: L.S. Zubritskaya,*

*Senior teacher,*

*Baranovichi State University*

*Language tutor: L.S. Zubritskaya*

## **NICKNAME AS A TYPE OF MODERN ANTHROPNYMS**

The rapid development of new technologies has given impetus for the communication of people in Internet communications. Today, not many people can imagine their daily lives without e-mail, social networks, Internet forums, chat rooms, instant messengers used for communication, entertainment, information sharing, training and other things. Here the use of pseudonyms, or nicknames, is most prevalent, including for reasons of anonymity and security, the safety of personal and confidential data.

Replacing a real name with a set of characters or words known only to the author himself or to a certain group of people has been known to man for a long time. Such a replacement may be due to both desire and necessity. For example: many entertainers change their name to emphasize their image; many writers and poets concealed their name or surname in order to avoid persecution.

A nickname is a pseudonym used by the author in a blog, his e-mail address or for communication in forums or in chat rooms and social networks as a personal network name, which means that the nickname is a formed type of anthroponym. The nickname acts as an additional identifier of the person in the informal sphere of communication and is a way of self-presentation of the person in the network. In other words, a nickname is an artistic fictional image [1, p. 10], which is the face of a person on the Internet, which, if desired, may reflect its essence, aspirations, character or interests.

Types of nicknames can be divided into the following groups:

1) formed from proper names (personal name and its abbreviated form, the names of literary heroes, celebrities): *BonJovi, emel\_ya, AndrewP\_1*;

2) derived from the names of animals and plants: *puma, кот\_вездеход, kaktus*;

3) containing the characteristics of the qualities, states and moods of the person: *весельчак, Ничего\_Личного, balabol*;

4) containing an indication of age: *Dutch76, Aleksei2000, Boy14*;

5) containing a characteristic of social status or purpose of being on the site *bedn'ak, Bachelor2.0, Student* [2, p. 331 – 332].

A nickname may consist of letters and words of one or several languages, for example, the native language of the given nickname and English. Special characters (ampersand, dollar sign, commercial at, brackets, exclamation mark, underscore, etc.) and numbers can serve as a supplement to a word, phrase, or replace some letters and letter combinations.

A computer name replaces the official name, and the situation of concealment, the inability to identify the carrier differently than through a symbol, allows you to switch to a more simplified type of speech interaction [1, p. 9]. This gives a certain

freedom to thoughts and words, to some extent eliminates the inferiority complex, makes the speech of the nickname's owner livelier.

Thus, a nickname is an integral part of the life of a modern person on the Internet. This is a kind of self-presentation to the Internet community, used mainly to set itself apart from the crowd and draw attention to your personality, your interests and attitudes.

#### REFERENCES

1. Аникина, Т. В. Сопоставительное исследование виртуального антропонимикона англоязычных, русскоязычных и франкоязычных чатов : автореф. дис. ... канд. фил. наук : 10.02.20 / Т. В. Аникина ; Уральский государственный педагогический университет. – Екатеринбург, 2001. – 24 с.
2. Лунгуль, А. А. Лексико-грамматические особенности никнеймов / А. А. Лунгуль, И. А. Славкина // Научный альманах. – 2016. – № 4-4 (18). – С. 330-332.

*E. Anashkevich*

*Research supervisor: I.V. Trafimchik*

*Senior Lecturer, Master of Laws*

*Baranovich State University*

*Language tutor: M.D. Lavrenkova,*

*Senior Lecturer*

*Baranovich State University*

#### GENERAL CHARACTERISTICS OF JUVENILE DELINQUENCY

One of the urgent problems facing society is to find ways to reduce the growth of crime committed by people who have not reached the age of eighteen. In this regard, the formation of juvenile legal awareness, based on knowledge of the requirements of the legislation, first of all - criminal law, is of great importance. Also important is the work of teachers to raise the level of legal awareness of the younger generation. All educational work in this direction should focus on measures to prevent possible crimes and educate law-abiding citizens. The Criminal Code of the Republic of Belarus defines a minor as a person who has not reached the age of 18 on the day of the crime. Such a definition corresponds to the interpretation both in international law and in national legislation.

Crimes committed by minors and with their participation may relate to the most different types of criminal offenses stipulated by the Criminal Code of the Republic of Belarus and differ not only in the object of criminal encroachment, but also in methods, motives and other grounds [1, p. 175]. Penalties that are imposed on persons who have reached the age of 18 differ from punishments for minors in terms of time, size, order of appointment. Most juvenile crimes occur with violence and extreme cruelty. Adolescents, as a rule, overstep the limit of violence and cruelty, which in a given situation would be quite sufficient to achieve the

goal. In the course of a crime, minors, in an unsuccessful set of circumstances, commit crimes such as murder, serious bodily injuries, robbery, theft, and hacking [1, p. 125].

Juvenile delinquency has always attracted the attention of society. This is quite natural, since the younger generation is the future of our country, and violations of criminal law by young people indicate that there are shortcomings in education, the lack of conditions for including young people in the life of society. A rather large increase in crime among young people can be considered as a prognosis in the future for all crime. Teenagers are considered one of the most vulnerable categories of our society. They are more difficult to tolerate stress and irritation. The behavior of a minor can be influenced by various kinds of psychosomatic deviations, which do not deprive him of the possibility of being aware of his actions and directing them. When the court decides on criminal penalties as a measure of punishment, the presence of mental retardation or mental abnormalities is taken into account as a mitigating circumstance if the appearance of these deficiencies did not depend on the will of the perpetrator, for example, when it was the result of injury or illness. In a situation where deviations in mental development are the result of a minor's addiction to drugs, substance abuse or other antisocial habits, punishment should be imposed taking into account the need to eradicate the adolescent's addictions.

School education takes a significant place in shaping the personality of a teenager. The work activity of a minor has a significant impact on the development of his abilities and needs, creates a sense of responsibility, respect for public interests. Group rules of behavior also have a decisive influence on the actions of a minor: suggestibility and imitation, the commission of illegal actions under the influence of the group. Also a big role for a teenager is played by his family, Criminals who are under the age of eighteen are often children and teenagers from dysfunctional families, in such families, for example, the father drinks and beats his wife and children every day, the child who is in such an atmosphere is under constant stress, which affects their further actions.

Taking into account all the material presented, it seems necessary to form the following conclusion: juvenile delinquency with its large volumes of distribution requires targeted and decisive measures to prevent it. For this, the methods and forms of work of the law enforcement bodies, work in educational institutions must be constantly improved. Purposeful improvement of the quality of training of staff responsible for the prevention of juvenile delinquency is required. Also an important role belongs to the measures of general and individual prevention, which are used by the law enforcement bodies in order to eliminate the causes and conditions that cause crimes committed by minors. As mentioned earlier, a great responsibility is placed on parents in order to reduce the increase in crime, in which persons under the age of eighteen participate. Parents of children and adolescents need to pay attention to them, namely, to be interested in their life, hobbies, to follow with whom and where the child spends his time besides studying, whether he has not begun to abuse alcohol and smoking, etc. And the

guardianship and trusteeship bodies should pay special attention to those children and adolescents who are in families considered disadvantaged.

## REFERENCES

1. Саркисова, Э.А. Уголовное право. Общая часть : учебник / Э.А. Саркисова. - Минск : Акад. МВД, 2014. – 559 с.
2. Уголовный Кодекс Республики Беларусь [Электронный ресурс] : 9 июля 1999 г. № 275-З: принят Палатой представителей 2 июня 1999 г.: одобр. Советом Респ. 24 июня 1999 г. : в ред. Закона Респ. Беларусь от 17.07.2018 г. // ЭТАЛОН. Законодательство Республики Беларусь / Нац. центр правовой информ. Респ. Беларусь. – Минск, 2018.

***V. Antonenko***

*Research supervisor: T.A. Vakalyuk*

*Candidate of pedagogical sciences,*

*Associate professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O. I. Dienichieva*

## THE EXPEDIENCY OF USING COMPUTER PROGRAMS AT SCHOOL

The expediency of using computer programs in the education process is determined by the fact that due to different computing programs most of didactic principles can be effectively implemented in practice.

The main educational value of information technology is that they allow the creation of an immeasurably more vibrant multisensory interactive learning environment with almost unlimited potential opportunities available to both teachers and students. The following types of computer tools used in the training are allocated:

1. Presentations are electronic diafilms which can include animation, audio and video fragments, interactivity elements (PowerPoint or Open Impress).

2. Electronic encyclopedias are analogues of the usual reference and information publications: encyclopedias, dictionaries, reference books, etc. To create such encyclopedias, hypertext systems and hypertext markup languages, for example, HTML is used.

3. Didactic materials are the collections of tasks, dictations, exercises, as well as examples of abstracts and articles presented in electronic form (usually in the form of a simple set of text files in doc, txt and combined in hypertext logical structure).

4. Programs are simulators that function as teaching materials and can track the progress of the decision and report errors.

5. Electronic textbooks and training courses combine all or several of the mentioned above types into a single complex. For example, learners are initially

invited to review the training course (presentation), then put a virtual experiment based on the knowledge gained during the review of the training course (virtual experiment system).

Each type has its advantages and disadvantages. At the present time there are many computer programs that could neutralize certain disadvantages. For example, in the school program there is a theme "Visual programming". It is studied in 10-11 classes. This theme is connected with the program Delphi. It is not complicated and has a simple functional. Though, now it is not entirely appropriated and is considered to be outdated. An alternative to Delphi is Visual Studio. Visual Studio includes the Delphi functionality but this is just ¼ of what you can do in Visual Studio. Students could develop more abilities as well as the interest in computer technology if appropriate software was used.

### REFERENCES

1. Гершунский, Б.С. Компьютеризация в сфере образования: Проблемы и перспективы / Б.С. Гершунский. – М.: Педагогика, 1987 – 264с.
2. Дворецкая А.В. Основные типы компьютерных средств обучения. // Школьные технологии. – 2004. – №3. - С.187-188.
3. Упровадження інформаційно-комп'ютерних технологій у навчально-виховний процесу [Електронний ресурс]. – Режим доступу: [http://osvita.ua/school/lessons\\_summary/edu\\_technology/33682/](http://osvita.ua/school/lessons_summary/edu_technology/33682/)

*E. Antonov*

*Research supervisor: T. A. Vakaluk,  
Candidate of Pedagogical Sciences,  
Associate Professor*

*Zhytomyr Ivan Franko State University  
Language tutor: O. I. Dienichieva*

### CHARACTER CREATION FOR MODERN CONTENT

Informatization of modern society requires the fulfillment of certain requirements that are directly related to the development of information and communication technologies (ICTs) and their application in any field of activity. With the active development of IT technologies completely new means of art utilizing such as computer games, digital cartoons and 3D-art creation and conversion tools have been introduced. Constant competition between the leading hard- and software producing companies has resulted in inevitable price reduction of the most advanced means of digital art creation and its further manipulation.

The key-feature of the most digital content pieces is the character. The character is considered to be the image of the personage (main or secondary), his/her appearance that also includes his/her character traits and is created by the author for different purposes (commercials, cartoons, computer games, etc). In the process of characters creation as an integral part of any artistic work, the author

carefully polishes his/her creations depicting their appearance, inner world, motivation and possible role in the game and/or literary setting. In some cases, the character can be created with the help of real life patterns in order to be easily implemented in any kind of close-to-reality novel, game, cartoon or piece of ads.

One of the most important features of the character is his/her motivation. According to this parameter, we can distinguish such characters as:

- Positive (the most vivid cliché of a stereotypical “hero”);
- Negative (also called the “antagonist(s)” - stereotypical “bad guys”, enemies of the “hero(s)”);
- Neutral (usually called NPCs (neutral person characters), these personages don’t play important roles in the events and can be easily killed/removed from the story) [1];
- Ambiguous (so-called black ships, unpredictable, but yet highly motivated. Due to their specific nature, they can’t be clearly classified as “good” or “bad”);

Each author should adhere to the particular stages of plot, character and lore creation in order to ensure success. These stages usually include the following steps:

- Stage I – the idea (the author internalizes the concept of his work, as well as creates a moral image of his/her character)
- Stage II – the graphics (this stage begins immediately after completing the work on the concept of the character and is focused on the visualization of the character with the help of analog or digital means) [1]. Before starting to work on the concept of a character, the author should pay attention to the following factors:
  - Utilization of the character and his/her motivation;
  - Character traits of the future character including his/her moral code, way of thinking, feelings and sphere of interests;
  - Place and role of the character in the project [2].

Thus, by carrying out a detailed analysis of the process of character creation, we can assert that personage creation is a complex process which undergoes particular stages. High-quality content requires particular effort and deep knowledge of theoretical basis of a certain field of digital art production. Violation of any stage of character formation may result in the future post-production content rejection by the target audience.

## REFERENCES

1. Дизайн персонажей: [Электронный ресурс]. – Режим доступа: [http://artlab.club/diary/character\\_design/](http://artlab.club/diary/character_design/)
2. Принципы дизайна анимационного персонажа: [Электронный ресурс]. – Режим доступа: <http://www.dejurka.ru/articless/character-design-tips/#.WeHo7fc3zNU.facebook>

***N. Babushko***

*Research supervisor: T.V. Lytnyova,  
Candidate of Pedagogical Sciences, Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.V. Lytnyova*

## **COMMUNICATIVE APPROACH TO TEACHING FOREIGN LANGUAGES**

It is well-known that learning foreign languages is more than just necessary in the modern world. There are many opportunities to learn English as one of the most widely spoken languages in the world. A variety of books, media, travelling, the Internet resources widen the opportunities to learn English. Many people need and want to acquire a high level of fluency and accuracy of English. That's why it is very important to master appropriate teaching methods and approaches. Communicative language teaching is the core trend in foreign language teaching.

The paper has proposed a brief analysis of major ideas and basic concepts as to the communicative approach of teaching foreign languages.

Communicative approach of teaching foreign languages is activity-oriented, since speech communication is carried out through "speech activity", which, in its turn, serves to solve the tasks of productive human activity in the conditions of "social interaction" of communicating people. Participants of communication try to solve real and imaginary problems of joint activity with the help of a foreign language.

The communicative approach is based on the idea that one can be a success in learning foreign language if having the communicative real meaning. When learners are involved in real communication, their natural strategies will be used for mastering languages, and this will allow them to learn using the language.

I.A. Winter emphasizes on the following: "Speech activity is a process of active, purposeful interaction of people mediated by the language and conditioned by the situation of communication" [1, p. 355]. Consequently, the author defines that learning of foreign language speech activity should be carried out from the standpoint of formation and independent, determined by the fullness of its characteristics of activity.

The modern communicative method represents a harmonious combination of many ways of teaching foreign languages. The goal is to teach a student to speak a foreign language not only freely, but also correctly. Using the communicative method of instruction removes the language barrier. The communicative approach develops all the language skills – from oral and written speech to reading and listening.

Communicative competence includes the following aspects: knowing how to use the language for different purposes, ability to use the language according to some place and participants (formal and informal speech, written or spoken communication), knowing how to use and understand different types of texts

(narratives, reports, conversations, interviews), ability to communicate having limited knowledge of language (different communication strategies) [2, p. 14].

Interaction among users of the language, creation and negotiation of some meaning are considered to be necessary for language learning. Group work provides learners with such benefits: they can hear the language used by other learners, they can produce a greater amount of language than they would use in teacher-fronted activities. If so the level of motivation is likely to increase, learners will have a chance to develop fluency.

All basic principles of communicative approach to teaching foreign languages are implemented through the use of the inductive approach to teaching English that is aimed at providing some examples for the use of a certain rule and then the rule itself is derived. Many aspects of language teaching are to be studied deeper, namely methodological and psychological constituents and interconnection between them.

### REFERENCES

1. Ибрагимова З.Н. Communicative method in teaching a foreign language // Молодой ученый. – 2017. – № 24. – С. 355-356.
2. Richards J.C. Communicative Language Teaching Today / J.C. Richards. – New York : Cambridge University Press, 2006. – 52 p.

***L. Baraniuk***

*Research supervisor: T.I.Shanskova*

*Candidate of Physical and Pedagogical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: I.V.Samoylyukevich*

*Candidate of Science,*

*Professor*

*Zhytomyr Ivan Franko State University*

### FAMILIARIZING CHILDREN OF UPPER PRESCHOOL AGE WITH SHAPES AND GEOMETRIC FIGURES BY MEANS OF CUISENAIRE RODS

In the context of modern preschool education, it is important to find new ways of developing **the** basis of children`s mathematical competence. The problem of forming a system of knowledge **for** children of preschool age **concerning** shapes and geometric figures was considered in **the** writings **of** such scholars as P.P. Blonsky, L.S. Vygotsky, A.M. Leontiev, D. B.Elkonin and others [27, 2]. In order to solve the problem of **the** formation of mathematical knowledge about the shapes and geometric figures in children of upper preschool age, we use Cuisenaire rods.

Cuisenaire rods are a set of sticks used for arithmetic, which are also called "numbers in color", "colored sticks", "colored numbers," and "colored lines."

Cuisenaire rods are mainly intended for classes with children from 1 year to 7 years. Cuisenaire rods representing a number is a multifunctional mathematical guide that allows you to formulate the notion of numerical sequence, composition of numbers, relations of "more - less", and many more. The kit promotes the development of child creativity, the development of imagination, cognitive activity, fine motor skills, visual-active thinking, attention, spatial orientation, perception, combinatorial and design abilities.

We have developed the following steps of using Cuisenaire rods in arithmetic games and activities:

1. Begin by getting acquainted with the rods. Together with the child, engage with the sticks and discuss their color and length.
2. Next, have the child hold as many rods as possible in their right hand, and then the left. This will stimulate the tactile perception.
3. Lastly, lay out paths, fences, trains, furniture, various houses, and garages, etc., as well as geometric figures with the rods [1].

When familiarizing children of the upper preschool age with shape and geometric figures by means of Cuisenaire rods, we form the ability to navigate the surrounding space. The knowledge gained is also used in various activities, for example to describe an object, to compare one object to another or to measure the length of an object. In order to successfully form this knowledge, we need to create a developmental environment in which to determine the most optimal approach for forming knowledge about the shapes and geometric figures [27, 2].

All things considered, we can summarize that Cuisenaire rods can be used effectively in Mathematical lessons to introduce different shapes and geometric figures.

#### REFERENCES

1. <https://dytpsyholog.com/2016/10/17/%D0%BF%D0%B0%D0%BB%D0%B8%D1%87%D0%BA%D0%B8-%D0%BA%D1%8E%D1%96%D0%B7%D0%B5%D0%BD%D0%B5%D1%80%D0%B0-%D1%89%D0%BE-%D1%86%D0%B5-%D1%96-%D1%8F%D0%BA-%D1%97%D1%85-%D0%B2%D0%B8%D0%BA%D0%BE%D1%80%D0%B8%D1%81/>
2. Теорія і методика формування елементарних математичних уявлень у дітей дошкільного віку в таблицях, алгоритмах, фрагментах занять. Навчально-методичний посібник. Тарнавська Н. П. - Ж.: ЖДУ імені Івана Франка. - 188с.

**A. Biloshytska**

*Research supervisor: R.O. Denysyuk,  
Candidate of Chemical Sciences, Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.V. Lytnyova,  
Candidate of Pedagogical Sciences, Associate Professor*

## **STRUCTURE OF QUASICRYSTALS AND LIQUID CRYSTALS**

At the present stage of the development of technology, more and more attention of scientists and practitioners is devoted to increasing the reliability and durability of devices, machines and mechanisms. Alloys with a traditional crystalline structure, widely used for machine parts, in many cases do not fully meet the operational requirements. The open quasicrystalline alloys, due to their special crystallographic structure, have a complex of unusual properties, which make them attractive for practical use as substitutes for existing materials. At present, the alloys in more than 100 intermetallic systems have the quasicrystalline structure. Among them, quasicrystalline alloys of the Al-Cu-Fe system are characterized by high thermal stability of physical and mechanical properties.

Quasicrystal is a solid, the atoms of which are arranged in such a way that they do not form a crystal lattice, but at the same time can coherently dissipate radiation [1]. This structure is not periodic and deprived of translation symmetry. The quasicrystals were discovered by the Israeli scientist Danielle Shekman in 1984. In the laboratory, they are mainly produced in strictly controlled conditions by the rapid cooling of molten metals such as aluminium and manganese on cold surfaces. A new discovery shows that they can also occur in natural processes in the universe. Under the temperature above 500 °C, the quasicrystals become plastic because the dislocations become more mobile. The plasticity and slip nature of metals is due to the fact that they have a periodic structure with defects – dislocations.

The Austrian botanist Friedrich Reinitzer was the first to discover the liquid crystals. While investigating the newly synthesized substance cholesterylbenzoate, he found that under the temperature of 145 °C the crystals of this substance are melting, forming a cloudy liquid, which strongly diffuses light. Liquid crystals are fluids the molecules of which are in a certain order and in a certain symmetry [2]. By combining the properties of liquids and solids, liquid crystals exhibit specific effects, many of which are not observed in liquids and solids. There exists a double refraction in the liquid crystal. Its optical properties are changed under the action of an electric field, and used in digital indicators: electronic clocks, microcalculators, etc. The phase diagram shows that the temperature range of the existence of a liquid crystal is limited to the melting point of the solid crystal and the temperature of the illumination. Under this temperature a liquid crystalline solid sample becomes transparent due to the melting of the mesophase and its transformation into an isotropic liquid.

Due to the scientific and technical process, these materials are widely used in

different phases. For sure in the future they will be used even more widely in nanotechnologies. So, they are beneficial to humanity now and will be in the future.

#### REFERENCES

1. "Quasi crystals" come from the universe? [Електронний ресурс]. – Режим доступу: <http://banjalukain.com/clanak/62567/kvazi-kristali-dolaze-iz-svemira>
2. Application of liquid crystals [Електронний ресурс]. – Режим доступу: <http://moyaosvita.com.ua/fizuka/zastosuvannya-ridkix-kristaliv/>

***T. Bilyk***

*Research supervisor: N.A. Basuyk  
Candidate of Pedagogical Sciences,  
Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: O.E. Kravets`  
Candidate of Sciences,  
Associate Professor  
Zhytomyr Ivan Franko State University*

#### **SOCIAL EDUCATION OF SENIOR PRESCHOOL CHILDREN ON THE BASIS OF O.V.SUKHOMLYNSKY'S FAIRY-TALE**

Social Education is one of the important links in pre-school education. The Education of moral and ethical culture must begin from the very childhood. Social Education is necessary for preschoolers to develop the basic rules of behavior in society [1, 26 c.].

In this article we will deal with the fairy-tales written by Sukhomlynskyi used as a background for social education of preschool-children.

In modern science, the fairy-tale has gained great importance in the sphere of upbringing and teaching the preschoolers in the family and preschool educational institutions. The basic norms of child's behavior in society are laid down in this age. They learn to respect the educators, parents, the elderly, to care for environment [2, 19 c.].

In folklor of different countries, the special place belongs to the fairy-tale. It is the genre of oral folk and literary creation, through which the process of socialization of preschool children is taking place. Human socialization is implemented in preschool age, mainly through fairy-tales. The child can look at himself/herself or others from outside. Thus, child develops the reflection of his abilities.

V.O. Sukhomlynsky believed that a fairy-tale is inseparable from beauty, which promotes the development of aesthetic feelings. Thanks to the fairy-tale, the child will learn about the world not only by a must, but also by his heart. The child

responds to the events and phenomena of surrounding world, reveals his attitude to good and evil, gets the first idea of justice and injustice [2, 18 c.].

Due to the socialization of preschoolers, by means of fairy-tales, the process of child's adaptation to society is growing. The spiritual, moral and personal traits of senior preschool children are established, social relations are formed, character traits are molded, social experience of communication with other people is accumulated. Due to V.O. Sukhomlynsky's fairy-tales are very helpful in this, because they are full of spirituality and humanity [3, 176]. For a preschooler, a fairy-tale is the first recognition of life.

In conclusion, I'd like say that, the process of socialization of preschool children is impossible without a fairy-tale. The fairy-tale is the main tool by which children's social behavior skills are formed. Thus forming moral, universal values, self-esteem are implemented.

### REFERENCES

1. Bazovyi komponent doshkilnoi osvity / Naukovyi kerivnyk: A.M. Bohush, diisnyi chlen NAPN Ukrainy, prof.,d-r ped. nauk; Avt. kol-v: Bohush A.M., Bielienska H.V., Bohinich O.L., Havrysh N.V., Dolynna O.P., Ilchenko T.S., Kovalenko O.V., Lysenko H.M., Mashovets M.A., Nyzkovska O.V., Panasiuk T.V., Pirozhenko T.O., Ponimanska T.I., Sidielnikova O.D., Shevchuk A.S., Yakymenko L.Iu. – K.: Vydavnytstvo, 2012. – 26 s.
2. Bielienska H.V. Rol kazok V.O.Sukhomlynskoho v protsesi vykhovannia moralno-etychnykh yakosteï diteï starshoho doshkilnogo viku / H.V. Bielienska // Molodyi vchenyi. – 2018. -№ 8.1. –18-21 s.
3. Chepil M. Ideia dobra i liubovi u pedahohichnii spadshchyni Vasylia Sukhomlynskoho / M. Chepil. – K.: Molod i ranok, 2012. – № 1. – 168-176 s.

***I. Bondarev***

*Research supervisor: M.D. Lavrenkova,*

*Senior Lecturer*

*Baranovichi State University*

*Language tutor: M.D. Lavrenkova*

### CHINESE-BELARUSIAN INDUSTRIAL PARK "GREAT STONE"

The Chinese-Belarusian industrial park "Great Stone" is the territorial special economic zone of 112.5 sq.km created according to the intergovernmental agreement between People's Republic of China and Republic of Belarus. It is the special territory allocated for placement of a set of productions in it including living areas, shopping malls, financial and research centers. The park represents the modern international city with emphasis on high and competitive innovation technology productions with the high export potential [1].

The idea of creating an industrial zone was put forward by the Ministry of Commerce of China [4]. In 2010, the Ministry of Economy of the Republic of

Belarus and the Chinese Engineering Corporation CAMC (CAMCE) agreed to cooperate in the creation of a Chinese-Belarusian industrial park in the territory of the Republic of Belarus [2]. To begin the creation of the park, a number of documents were developed and signed.

The construction of the industrial park began on June 19, 2014, when the ceremony of solemn laying of the first stone took place, which marked the beginning of the construction of the object. The event was attended by top managers of many Chinese world-class companies. Among them were representatives of such companies as CAMC, ZTE, Lenovo Group Limited and others [4].

The park has very profitable geographic location: 25 km from the capital of the Republic of Belarus, the city of Minsk, in a unique natural complex and in close proximity to the international airport, railway tracks, the transnational automobile highway Berlin-Moscow.

The main activities of the industrial park are creation and development of productions in the following spheres:

- electronics and telecommunications;
- pharmaceuticals;
- thin chemistry;
- biotechnologies;
- mechanical engineering;
- new materials;
- complex logistics;
- electronic commerce;
- the activity connected with storage and processing of large volumes of data;
- welfare activity;
- implementation of research works.

The infrastructure of the park will include industrial, transport facilities, residential areas, social facilities, office and retail and entertainment complexes, financial and research centers. On the territory, it is planned to create separate subparks of the city of Harbin and the province of Guangdong, and also a subpark will appear for startups [2].

There is a special legal regime throughout the park, which includes, in particular, a special procedure for tax and other regulation, registration of business entities, land use and other natural resources using the customs procedure of the free customs zone in the territory of this economic zone [3].

Residents of the industrial park can be any company, regardless of the country of origin of capital. Today, more than 40 companies are residents of the industrial park. For investors, a number of benefits are provided at the construction stage as well as at the production stage. Residents are legally guaranteed the most profitable economic regime for doing business in Belarus compared to other regimes. If in the country more preferential regimes are established over time, they will also be applied to residents of the Great Stone park.

Over time, the number of investments are increasing. By the beginning of 2019 the contractual amount of investment of companies in the park reached more than \$

1 billion. It is predicted that by the end of 2020, there will be between 70 and 100 residents in the Chinese-Belarusian Industrial Park with a declared investment of \$ 2-2.5 billion.

According to Alexander Lukashenko, the implementation of this project will make it possible to receive additional 50 billion dollars from exports annually [2].

Today, the industrial park is under active construction. The deadline for construction is 2030.

The President of the Republic of Belarus, Alexander Lukashenko, called the Chinese-Belarusian Industrial Park the country's most important joint project with China. Also, in his opinion, the project will remove the problem of the financial stability of the Republic of Belarus and help the country to make a technological leap.

Visiting the park on May 12, 2015, Chinese President Xi Jinping called the Chinese-Belarusian Industrial Park "the pearl of the Economic belt of the Silk way" [2].

The Chinese-Belarusian Industrial Park is the largest industrial park in Europe created by China.

#### REFERENCES

1. Общая информация [Электронный ресурс] / Китайско-Белорусский индустриальный парк «Великий камень». Режим доступа : <https://industrialpark.by/o-parke/obshhaya-informaciya.html>. – Дата доступа : 19.03.2019.
2. Великий Камень [Электронный ресурс] / – 2019. – Режим доступа : [https://ru.wikipedia.org/wiki/Великий\\_Камень](https://ru.wikipedia.org/wiki/Великий_Камень). – Дата доступа : 19.03.2019.
3. Об индустриальном парке «Великий камень» [Электронный ресурс] – Минск, 2018. – / Режим доступа : <http://verdict.by/ru/publication/analitika/ob-industrial-nom-parkie-velikii-kamien>. – Дата доступа : 19.03.2019.
4. Китайско-Белорусский индустриальный парк «Великий камень» [Электронный ресурс] / ФБ. – 2015. – Режим доступа : <http://fb.ru/article/195721/kitaysko-belorusskiy-industrialnyiy-park-velikiy-kamen>. – Дата доступа : 19.03.2019.

***Y. Chumak***

*Research supervisor: T.V. Lytnyova,  
Candidate of Pedagogical Sciences, Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.V. Lytnyova*

## **TEACHING WRITING SKILLS TO SENIOR SCHOOL STUDENTS**

We live in the period of establishment of an independent Ukraine, fast development of relations with foreign partners. Therefore, there is a growing need for studying a foreign language with an orientation towards its practical application during communication with foreigners.

In the process of analysis of modern Ukrainian educational literature on issues of teaching foreign language writing in senior school, we made an attempt to determine the ways, methods and means of teaching the written language used in Ukrainian textbooks.

Written speech begins with internal speech. During this process, the program of utterance is being prepared, the lexical units are selected, and the combination of sentences converts into a coherent text [1]. In essence, the entire process consists of internal speaking and recording of the prepared material on paper. All this requires the automated use of sound-graphic associations. By the number of transactions, written broadcasting is more complex than oral. At the same time, the process of learning writing is facilitated. After all, the person who writes, usually has unlimited time, and it allows you to think more over the content and form of a written statement, to clearly analyze the text and correct it. Ability to find in memory the necessary means for accurate and clear expression of thought, the ability to use the dictionary and other guides makes the author more confident.

Because of regular training in writing, pupils gradually gain experience in the process of choosing words, writing skills become more stable. The ability to express in writing one's own and other's thoughts is important not only in itself, but also as a means of improving the proficiency of oral speech. It is known that oral communication becomes more meaningful, logical, when it is prepared by writing. In turn, oral and especially written speech becomes a prerequisite for the development of internal speech.

The combination of auditory and motion images of internal speech, visual and motor images in the process of writing provides an effective assimilation of knowledge. Steady associations created in this way contribute to effective perception, memorization and reproduction of the material. The participation of all the analyzers, the interaction of analysis and synthesis of awareness and involuntary writing ensure durability of memory [2]. Learned through written exercises graphic images of words are easier to recognize when reading.

During the lesson, writing is one of the most economical, reliable and effective ways to control the level of knowledge.

Thus, teaching senior school students of foreign language writing is an important component of studying a foreign language. The learning process needs to be organized in the light of the pupils' age characteristics.

#### REFERENCES

1. Vtorushina N.Y. Writing and written language in teaching foreign languages [Электронный ресурс]. – Режим доступа: [http://scjournal.ru/articles/issn\\_1993-5552\\_2010\\_1-2\\_46.pdf](http://scjournal.ru/articles/issn_1993-5552_2010_1-2_46.pdf)
2. Hyland K. *Second Language Writing*. – Cambridge University Press, 27 Oct. – 2003.

***O. Diahil***

*Research supervisor: Serhii Rudnytskyi*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.O. Makarevych*

#### CONCEPT OF POLITICAL REPRESENTATION IN WESTERN SCHOLAR TRADITION

In the political system of society, it is important to represent the interests of different social groups. It updates the concept of "political representation". Therefore, the purpose of the article is to analyze the content load of this concept of its changes in its understanding in the Western scientific tradition.

Political representation (from the Latin *repraesentatio* - representation) - representation of the subject of a social group or society as a whole in the political sphere. Signs of representation are the presence of two subjects (represented and representative), between whom there is a special connection [1].

The theory of political representation began to be developed by Marsilius of Padua who put forward the concept of the people, whose political representatives and the executors of his will are elected officials. Later, the theory of representation developed by Thomas Hobbes, who relied, in particular, on the Roman understanding of representation as the possibility of representing someone in court [2, p. III-IV].

Problems of representation were considered by French thinkers Jean-Jacques Rousseau and Charles-Louis Montesquieu in the context of the sovereignty of the people, his representation in the political system, the division of the branches of power. Also, the phenomenon of political representation was studied by Edmund Burke and James Madison [2, p. III-IV]. Edmund Burke, in particular, raised the problem of communication between the represented and the representative, the mechanism of agreeing the will of the group and the representative; a way of obtaining a representation mandate, etc. [2, p. III-IV].

The concept of political representation began to be actively developed from the 1960's, and this is attributed to A. Pitkin's work "Political Representation" [3]. The author describes the phenomenon of political representation as the necessary

procedure for the creation of political power, which is necessary for solving public and political issues.

The concept of "representation" occupies an important place in political science in the West - it was used, in particular, by American [4; 5; 6; 7], French [8; 9; 10] and German [11] scholars. In western scientific tradition, classical understanding is the representation as a group of people elected through elections. The most common is the understanding of political representation as a parliament, but often political representation means the electoral process [12, p. 223]. The meaningful load of the concept is ambiguous in various sciences, and even within the limits of one scientific discipline, therefore, it has a different interpretation in constitutional, international and civil law. [12, p. 223].

Consequently, the concept of political representation begins to be developed by Marsilius of Padua. Later, the theory of representation was developed by Thomas Hobbes, Jean-Jacques Rousseau and Charles-Louis Montesquieu. The concept of political representation began to be actively developed from the 1960's. British, German and French political scientists turned to him. In western scientific tradition, classical understanding of representation as a group of people elected through elections, so the most common is the understanding of political representation as a parliament.

## REFERENCES

1. Новітня політична лексика (неологізми, okazіоналізми на інші новотвори) / [І.Я. Вдовичин, Л.Я. Угрин, В.Г. Шипунов та ін.] ; за заг. ред. Н.М. Хоми – Львів : «Новий Світ-2000», 2015. – С. 338-339.
2. T. Żyro // *Reprezentacja polityczna* / [red. naukowa T. Żyro]. –Warszawa : Uniwersytet Warszawski, 2013. – S. I–IX.
3. Pitkin H. F. *Political representation* / Pitkin H. F. – Princeton, 1967. – 329 p.
4. Fairlie J. A. *The Nature of Political Representation* / J. A. Fairlie// *The American Political Science Review*. – 1940. – Vol. 34. – P. 236–248.
5. Grazia A. de. *Public and Republic. Political Representation in America* / A. de Grazia. – New York, 1951. – 262 p.
6. Eulau H. *The Role of the Representative: Some Empirical Observations on the Theory of Edmund Burke* / H. Eulau, J. C. Wahlke, W. Buchanan, L. C. Ferguson // *The American Political Science Review*. – 1959. – Vol. 53. – P. 742–756.
7. Ankersmit F. R. *Political Representation* / Ankersmit F. R. – Stanford University Press, 2002. – 266 p..
8. Prélôt M. *Institutions politiques et droit constitutionnel* / M. Prélôt. – Paris, 1963. – 858 p.
9. Avril P. *Les origines de la representation parlementaire* / P. Avril // *Commentaire*. – 1985. – No 30. – P. 622–627.
10. Clavreul C. *Sieyes et la genese de la representation moderne* / C. Clavreul. – Droits. – 1987. – No 6. – P. 45–55.
11. Leibholz G. *Das Wesender Repräsentation* / G. Leibholz. – Berlin-Leipzig, 1929. – 214 p

12. Szymanek J. Współczesne rozumienie pojęcia reprezentacji politycznej (zarys problemu) / J. Szymanek // Ruch prawniczy, ekonomiczny i socjologiczny. – 2005. – Rok LXVII. – Zeszyt 2. – S. 223–237.

***S. Didkivska***

*research supervisor: T. A. Vakaliuk candidate of  
Pedagogical Sciences, Associate professor  
Zhytomyr Ivan Franko State University  
Language tutor: O. I. Dienichieva*

## **OVERVIEW OF FOREIGN INFORMATION SYSTEMS FOR DATA MANAGEMENT AT UNIVERSITIES**

Moodle (Modular Object-Oriented Dynamic Learning Environment) is a course management system also known as a learning management system or a virtual learning environment. It is a freeware web application that allows you to create online learning sites. The first version of the system was published in 2002 by Australian Martin Dugiamas, the first developer who started working on this project. Moodle is an open source project. A large number of developers from all over the world are involved in its development. Moodle's Ukrainian partner is a "Tekhnomatika LLC".

Moodle includes the following modules: online testing, discussion forums, evaluation, messaging, news, event announcements, wiki movers and downloading files. The third-party developers can also create additional modules with new functionality.

The system was created in PHP using SQL-like databases.

USOS (Polish: Uniwersytecki System Obsługi Studiów) is the largest educational management system in Poland. The project was created in 1999 at the Department of Mathematics, Computer Science and Mechanics of the University of Warsaw. Today, the project is developed by the initiative of the largest and most prestigious Polish universities: The University of Warsaw, The University of Nicholas Copernicus, Jagiellonian University and Rzeszow Polytechnic. The system is designed and developed for the needs of a comprehensive electronic tool that will serve to manage the learning process at universities. One of the main modules of the system are:

- A set of students to study
- Electronic Student Tickets
- Formation of didactic proposals
- Managing the learning process
- Student applications
- Compilation of theses
- Scholarship, dormitories, payment for services
- Integration of the rules of the Bologna process
- Financial affairs (Personnel management, accounting)

With a wide range of applications USOS serves as a central point for collecting information from across the university. It improves the research management unifying university procedures and enabling effective implementation of initiatives throughout the university such as optional subjects, foreign language courses common to the students of all Faculties Certification exams. It involves the central authorization of students and staff at the university's Web sites like generating unique numbers of gradebooks and diplomas on a university scale. Data storage in digital form greatly reduces the number of traditional documents to eliminate paper protocols with evaluations, exam papers, student applications and even gradebooks.

Both of these systems are not universal but they complement each other. On the basis of USOS it is possible to automate the registration of students for subjects and greatly simplify the processes of management and data processing in the dean's office. Moodle gives an opportunity to create online courses for distance learning, knowledge assessment and audiovisual educational material publishing. Moodle also has tools for creating discussion forums for each individual subject.

### REFERENCES

1. Moodle. Wikiversity Material [Електронний ресурс] – Режим доступу:: <http://wiki.nuwm.edu.ua/index.php/Moodle>
2. Moodle [Електронний ресурс] – Режим доступу : <https://howlingpixel.com/i-uk/Moodle>
3. USOSWeb [Електронний ресурс] – Режим доступу : <https://www.usos.edu.pl/>

***L. Dobrianska***

*Research supervisor: T. V. Lytnyova,*

*Candidate of Pedagogical Sciences, Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: T.V. Lytnyova*

### WHY ARE GAMES AN IMPORTANT LANGUAGE LEARNING TOOL?

Today's students are vastly different from those who were a few decades ago. They can access a world of resources and information just at their finger tips. In line with such tech-savvy and worldly attributes, the field of English language education has witnessed rapid changes in teaching methodology, material development, and assessment.

Saadiyah (2013) highlighted that among the challenges of transferring English knowledge was the necessity to find the best approach to teach English to multilingual students. However, the traditional methods may not be enough in teaching English language. A good English proficiency comes from good grasp of grammar [1].

Teachers of foreign languages, in their purpose of supplementing lesson plans in the classroom are often found to turn to games. Games are believed to benefit learners in a variety of ways ranging from the cognitive aspects of language learning to more co-operative group dynamics (Malarcher, 1997). They have always been known as the pure symbol of fun, involvement, cooperation, and competition (Yahoui, 2012) [2].

"Games are effective tools for learning because they offer students a hypothetical environment in which they can explore alternative decisions without the risk of failure. Thought and action are combined into purposeful behavior to accomplish a goal. Playing games teaches us how to strategize, to consider alternatives, and to think flexibly" (Martinson and Chu, 2008).

Games also stimulate interactivity. The students are actively processing and working with the material as well as with classmates. In a foreign language classroom, it is imperative that the students practice speaking with each other. The goal of the foreign language learner is to speak proficiently and independently in various situations. He or she will never be able to do so unless there are ample opportunities for guided and independent practice. The interactivity among the students also promotes a community of learners. The students will begin to see each other as individuals and will learn more about each other instead of seeing what they are on the surface. Interactivity will remove stereotypes and barriers, all of which are very common in secondary schools.

Games allow the students to work as a team and to work collaboratively towards a common goal. This collaborative effort is more than just learning to work with others. It promotes a symbiotic relationship where they can learn from each other.

"Games enhance repetition, reinforcement, retention and transference" (El-Shamy, 2001). Each player's turn deals with the same concept or skill in a different way because each game has a specific learning objective in mind. Therefore, what students do not learn on their own turn, they may grasp from someone else's turn. Moreover, the responsibility for learning and practicing is the job of the student and it is willingly accepted [3].

Games, especially now with the options of playing online or changing your language settings, can serve as great way to add a bit more excitement into your lackluster learning routine.

Here are just a few reasons you should use games to learn a language:

1. You make your study time more enjoyable.
2. Context. When playing games, what you learn is given context. You aren't just memorizing a random vocabulary list or completing grammar exercises. The dialogue boxes are in reference to certain missions you need to accomplish, to describe something completed by you in the game, or to prompt you to perform an activity. When a chat is an element of the game, most of the conversation centres around the game itself.
3. Repetition. Games have recurring themes so you'll likely see certain words or phrases pop up regularly.

4. Time management. If you decide to use games to work on your language skills, there's a good chance that gaming is already something that you were doing. You're not adding something into your schedule, rather, you're combining what were two separate activities (language learning and gaming) into one single activity, thus making better use of your time.

5. Motivation. What better motivation could you have for learning new words than not being able to get to the next step in a game without understanding what's being asked of you? Games can be a great motivator for learners.

Games are an excellent way to up your language learning by making it more engaging and entertaining. They also provide you the opportunity to give the language a bit of context, making it more memorable [4].

## REFERENCES

1. Using Mobile Technology in Teaching Grammar in Higher Education Institutions: [Электронный ресурс]. – Режим доступа: <https://www.researchgate.net/publication/268516655>
2. Using Games to Teach Young Children English Language [Электронный ресурс]. – Режим доступа: <https://www.researchgate.net/publication/320345809>
3. Talak-Kiryk, Amy. Using Games in a Foreign Language Classroom // MA TESOL Collection. – 2010. – 484 p. [Электронный ресурс]. – Режим доступа: [https://digitalcollections.sit.edu/ipp\\_collection/484](https://digitalcollections.sit.edu/ipp_collection/484)
4. Language resources "Why games are an important language learning tool?" [Электронный ресурс]. – Режим доступа: <http://eurolinguiste.com/games-important-language-learning-tool/>

*V. Dolgier*

*Research supervisor: K.V. Levkivska,*

*Candidate of Pedagogical Sciences,*

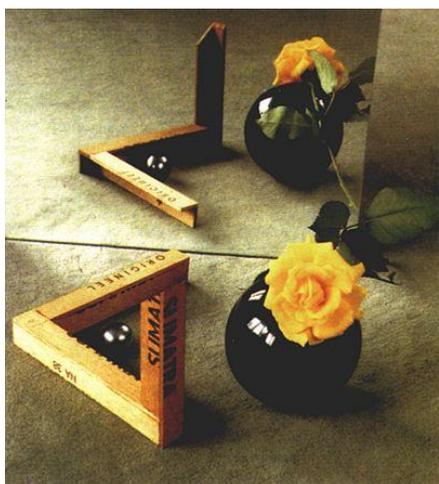
*Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: K.V. Levkivska*

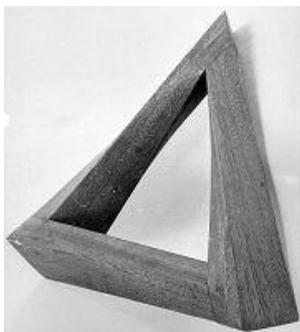
## IMPOSSIBLE FIGURES

**Impossible figures** - a special kind of objects in the visual arts. As a rule, they are called so, because they can't exist in real life. More precisely, impossible figures are called geometric objects drawn on paper, which give the impression of a conventional projection of a three-dimensional object. However, on closer examination, contradictions in the connected elements of the figure become visible.



**Img.1**

Many believe that impossible figures are really impossible and they cannot be created in the real world. However, from the school geometry course we know every figure that is drawn on paper must exist in three-dimensional space. And three-dimensional objects, when projected on a plane, we get a lot of flat shapes. This also applies to non-possible shapes. Of course, none of the impossible figures can be created by acting in a straight line. For example, if we take three identical wooden bars. You will not be able to shift them so as to obtain an impossible triangle. But, when projecting a three-dimensional figure on a plane, some lines can become invisible, overlap each other. Based on this, we can take three different bars and create a triangle, which is shown above (**img.1**). This photo was created by the artist-photographer E. Bruno. In the foreground we see the figure of an impossible triangle, and in the background - a mirror, which reflects the same figure, only from a different point of view. And we see that the figure of the impossible triangle is not closed. The fact that an impossible figure looks impossible from only one point of view is characteristic of all impossible figures. Therefore, this process is called illusion. **Illusion** (lat. *illusio*-deception, mistake) - twisted, false perception of fact.



**Img.2**

Another way to create an impossible triangle was proposed by the Russian artist and designer V. Koleychuk and published in the journal "Technical aesthetics" №9 (1974). All edges of this construction are straight lines, and the faces are bent, although in the frontal view of the figure of this curvature is not visible (**img.2**). He created such a model from wood. Our eyes are located at a certain distance from each other, and see the same object from two close, but different points of view, and our brain receives two images from our eyes and connects them into a whole picture. Previously, it was stated that an impossible object looks impossible only from one point of view, and since we see it from two points of view, we immediately notice all the illusions with which this or that object is created. If you close one eye and look at the figure, it will look impossible.

In General, a well-known impossible figures have become in the 50-ies of the last century, after the publication of the article by Roger Penrose and Lionel Penrose in the British journal of psychology, which has been described two basic shapes – the impossible triangle (also known as a Penrose triangle) and the infinite staircase. This article fell into the hands of the famous Dutch artist M. K. Escher, who then created several such impossible figures: "waterfall", etc. After him a large number of artists from around the world began to use impossible figures in his creativity. The most famous of them are *Jos de Mey*, *Sandro del Pre*, *Istvan Oros*.

The works of these and other artists are singled out in a separate direction in the visual arts - "IMP art".

### REFERENCES

1. Reutersvard O, Impossible figures. - M.: Stroyizdat, 1990, 206 p.
2. Levitin Karl Geometric Rhapsody. - M.: Knowledge, 1984, -176 p.
3. Penrose L, Penrose, R. Impossible objects, Kvant, No. 5,1971, p. 26
4. <https://im-possible.info/russian/articles/impossible-figure/index.html>

**D. Domanska**

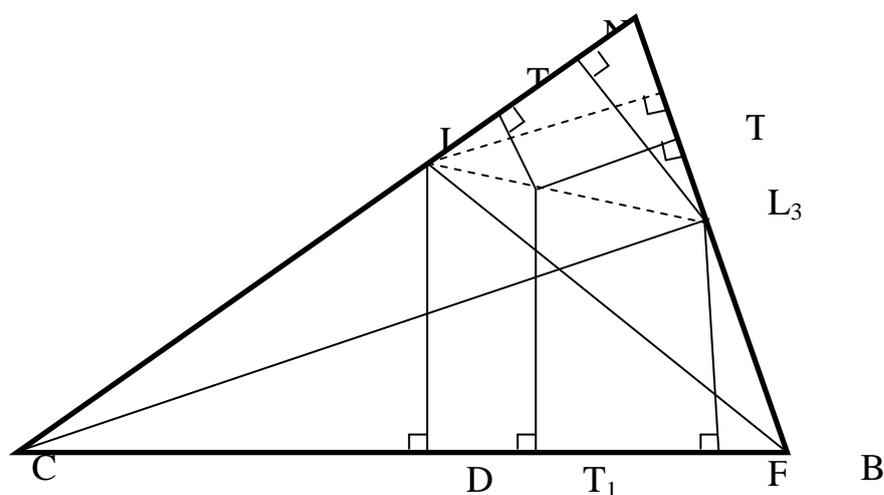
*Research supervisor: F.D. Petrov,  
Candidate of Physical and Mathematical Sciences,  
Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: K.V. Levkivska*

### BISECTING TRIANGLE AND ITS PROPERTIES

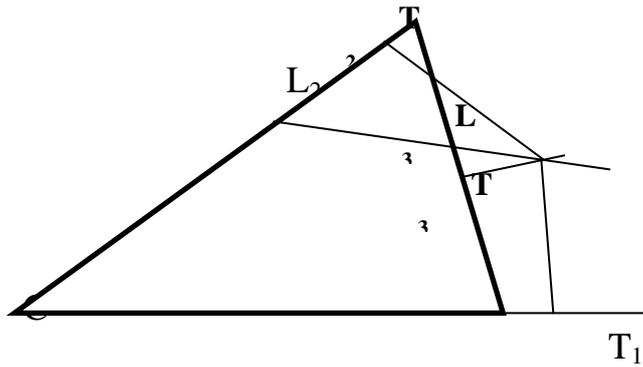
If the segments  $AL_1$ ,  $BL_2$ ,  $CL_3$  be bisects in an arbitrary triangle  $ABC$ . Then the triangle  $L_1L_2L_3$ , composed of bisectors are called **bisecting**. Bisecting triangle has a number of properties, among which are especially important put the property, about which we will lead further conversation.

*Bisecting triangle lemma:* For any point on the side (or its continuation) bisecting triangle sum (or module differences) distances from this point to two corresponding sides is equal to the distance to third party.

*Evidence:* Let  $T$  be an arbitrary point of the side  $L_2L_3$  bisectoral triangle ( $BL_2$  and  $CL_3$  – bisector in triangle  $ABC$ );  $TT_1 = x$ ,  $TT_2 = y$ ,  $TT_3 = z$  - its distances to sides  $BC$ ,  $AC$  and  $AB$  are responsibly (Fig. 1).



**Fig. 1**



Let us prove that  $x = y + z$ .  
 Denote by  $d = L_2D = L_2E$  distances from  $L_2$  to  $BC$  and  $AB$  respectively and through  
 $f = L_3F = L_3N$  distances from  $L_3$  to  $BC$  and  $AC$  respectively.  
 Let also  $L_2T = n$  and  $L_3T = q$ .  
 The size of the segment  $x$  is easy to find from the trapeze  $L_2L_3FD$ :

$$x = \frac{dq + fn}{n + q} \quad (1)$$

From the similarity of triangles  $L_2TT_2$  and  $L_2L_3N$  we have:  $\frac{y}{n} = \frac{f}{n + q} \quad (2)$

Similarly from the similarity of triangles  $L_3TT_3$  and  $L_3L_2E$  we have:  $\frac{z}{d} = \frac{q}{n + q}$

(3)

Comparing (1) with (2) and (3), we get:  $x = y + z$ .

Note that if point  $T$  is taken at the continuation of  $L_2L_3$  (beyond the point  $L_3$ ), then it will have place equality  $y = x + z$  (Fig. 2).

(Fig. 2).

Similarly, if  $T$  is on continuation  $L_2L_3$  for point  $L_2$ , then  $z = x + y$ .

Using the lemma of a bisector triangle, one can solve problems, and, using the basic properties of a bisect triangle, one can deduce theorems.

This topic on math is very necessary, because tasks with bisectors are very popular. Consequently, the theorems and the lemmas of the bisector triangle give an opportunity to solve problems of different levels of complexity.

## REFERENCES

1. <https://multiurok.ru/files/matematika-bissektralnyi-treugolnik-lemma-i-dokaza.html>
2. Издательство Основа. Журнал //«Математика. Все для учителя! Искусство решать задачи»// №7-8 (С.79-80)

***O. Dovhopiatyi***  
*Research supervisor: Ye. O. Sevostianov,*  
*Doctor of Physical and Mathematical Sciences*  
*Acting Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: O. I. Dienichieva*

## **THE ROLE OF THE SIGNIFICANCE TEST IN MODERN SCIENCE**

Significance testing is an important part of modern science. We use it in psychology and pedagogy for checking the effectiveness of various methods. The test of significance is used when it is necessary to check a certain hypothesis. The purpose of this article is to show pros and cons of using the significance test.

Imagine that you are a gambler who likes to play dice. You and your opponent are throwing the dice in turns. If somebody has more points, he will take his opponent's money. At some point in time you notice that your opponent has six points too often. You know that someone keeps statistics of your game. According to the statistic, your opponent has thrown a die 6000 times, and the highest score was dropped 1200 times. You can see that a die has 6 sides, and they should drop at approximately the same frequency. Therefore, the number of sixes that fell after 6000 throws should be approximately equal to 1000. But your opponent had 6 points 1200 times which is much more than this. But that doesn't prove that he's lying to you. It seems that you have no opportunity to prove that your opponent breaks the rules. However, the test of significance can help. Unfortunately, even this test cannot prove that your opponent is a 100% cheater. However, you can prove that your opponent is a cheater with a probability of more than 99.7% [1, p. 63]. This is a very serious argument to check your opponent if he uses a die with a displaced center of gravity or other prohibited methods. In most cases, this player will be a simple criminal.

Unfortunately, conducting scientific research has something in common with playing dice. Imagine that you are a psychologist. You have developed a new method that helps people to become more confident. Nevertheless, you have to prove that your technique is better than the traditional methods. To do it, you need to recruit two groups of people. You will use your new technique with one group of people and the classical method with another group. Let's assume that the people's confidence in the experimental group has increased more than in another group. It may seem that it proves that your technique is better. But even if you work with both groups using the same method, they will not have the same results. That is why your goal is not only to get the better results in your group but also to prove that these results were caused by your method but not by other random factors. However, even the better results in your group do not give you 100% guarantee that the secret of success is in your method. The same situation was in the previous example. We cannot be sure with the 100% probability that a person with the "lucky" dice is a cheater. Nevertheless, it is not necessary to prove that your method is effective with the 100% probability. According to the accepted

standards, you should prove that your method works with at least 95% of probability [2]. Significance testing allows to do it.

But such an approach can cause some problems. Let's return to our example with the dice. The owner of the gambling institution can use the test of significance to check the players and kick out all the players who are dishonest with the probability of not less than 95% of his institution. On the one hand, it can help to reduce the number of people who break the rules. On the other hand, some honest lucky players will be kicked out too while some cheaters are staying in this place.

We have the same situation in science. A scientist can make an absurd hypothesis and it can be proved. But the person who has created a valuable project will remain unrecognized just because he is unlucky. Moreover, even if your project fails the test of significance, you can repeat your experiment as many times as it necessary to pass the significance test. This shows that the requirements to proving the scientific significance of hypotheses need to be improved.

### REFERENCES

1. Шефтель З. Г. Теория вероятностей / Зиновий Григорьевич Шефтель. – Киев: Издательское объединение “Вища школа”, 1977. – 156 с.
2. Ellenberg J. How not to be wrong: the power of mathematical thinking / Jordan Ellenberg. – New York: The Penguin Press, 2014. – 421 p.

***O. Dubenko***

*Sprachlehrerin: I. Swiridenko*

*Kandidatin der pädagogischen Wissenschaften,*

*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

### SEKUNDÄRE PFLANZENSTOFFE UND IHRE WIRKUNG AUF DIE GESUNDHEIT

Sekundäre Pflanzenstoffe zählen nach bisherigen Erkenntnissen für den Menschen nicht zu den essenziellen Nährstoffen, haben aber Einfluss auf eine Vielzahl von Stoffwechselprozessen. Aufgrund der aktuellen wissenschaftlichen Datenlage ist es zwar generell möglich, die präventive Wirkung von sekundären Pflanzenstoffen zu bewerten, Empfehlungen für die Zufuhr einzelner sekundärer Pflanzenstoffe können jedoch weiterhin nicht gegeben werden. Der Mensch nimmt durch eine gemischte Kost täglich schätzungsweise 1,5 g sekundäre Pflanzenstoffe auf. Die Zufuhr ist bei Vegetariern oftmals deutlich höher. In den letzten Jahren hat sich der Kenntnisstand zum Vorkommen und zur täglichen Zufuhr von sekundären Pflanzenstoffen erweitert. Für die Gruppe der Glucosinolate liegt aktuellen Daten zufolge mit knapp 15 mg pro Tag eine geringere tägliche Zufuhr vor als zuvor angenommen.

Wie im Ernährungsbericht 2012 dargestellt, liegen heute zusätzlich zahlreiche Ergebnisse aus epidemiologischen Studien zum Einfluss von sekundären Pflanzenstoffen auf das Risiko für die Entstehung verschiedener Krankheiten vor.

Es ist somit generell möglich, die wissenschaftliche Datenlage für eine präventive Wirkung von sekundären Pflanzenstoffen beim Menschen zu bewerten. Allerdings ist zu berücksichtigen, dass die Daten aus epidemiologischen Studien auf der Zufuhr von sekundären Pflanzenstoffen über herkömmliche Lebensmittel beruhen. Die beobachteten präventiven Effekte können somit durch das komplexe Spektrum der in Nahrungspflanzen vorhandenen Nährstoffe Ballaststoffe und sekundäre Pflanzenstoffe ausgelöst sein.

### **LITERATUR**

1. Boeing H, Bechthold A, Bub A ua: Kritische Übersicht: Gemüse und Obst bei der Prävention chronischer Krankheiten. Eur J Nutr. 51 (6) (2012) 637–663
2. Bohn T: Ernährungsfaktoren, die die Bioverfügbarkeit von Polyphenol beeinflussen. Nutr Rev. 72 (7) (2014) 429-452

***K. Dudar***

*Research supervisor: V. V. Kyrychenro,  
Candidate of Psychological Sciences,  
Associate Professor Department of Social  
and Practical Psychology  
Zhytomyr Ivan Franko State University  
Language tutor: A. V. Kuznyetsova*

### **CRITERIA AFFECTING PEOPLE’S IMAGE OF A BEAUTIFUL PERSON**

Beauty is one of the most important human values. The criterion of beauty is a special, aesthetic feeling, perception. This criterion has a subjective character and it includes two components: general validity and individual validity. General validity doesn’t spread on the whole humanity. Beauty doesn’t belong to the universal human values. Aesthetic tastes change from generation to generation. In this case beauty is relative and depends on many factors. There is a universal human ability to differ the beautiful from the ugly. This ability is called an aesthetic taste.

The purpose of the research is to study factors affecting people’s perception of a beautiful person.

There are many criteria which influence people’s perception of beauty: fashion to a certain type of appearance and image; religion; geographical location; background; education; temperament; age; gender etc.

Due to the growing psychological interest in the issue of a beautiful person, such scholars as Andreev N. S, Scarry E., Marcus M. Mobius and Tanya S. Rosenblatt study this question from different aspects. Andreev N. S. offers a social-aesthetic view saying that the beauty of a person is defined classically in the categories of direct perception and undergoes significant changes throughout

history, which suggests the development of the phenomenon of human beauty and the means of art as the main factors of such development [2].

E. Scarry describes the issue from the social-psychological point of view; he writes that our reactions to beauty are perceptual events of deep significance for the individual and for society [1].

Marcus M. Mobius and Tanya S. Rosenblatt describe physical beauty in terms of marketing “as an opportunity to achieve a higher result not only in terms of career growth but also in terms of wages” [3].

Through the time, the standards of beauty have changed, but people still go for the beautiful. Beauty is one of the strongest and most reputable means of people manipulation in every field of life. But it is one of the most unstudied phenomena yet.

## REFERENCES

1. Scarry, E.: On Beauty and Being Just (Paperback and Ebook), Princeton University Press. March 25 and 26, 1998. 85 p.
2. Андреева Н.С. Красота человека как способ онтологизации человеческой сущности // Контекст и рефлексия: философия о мире и человеке. 2015. № 6. С. 10-19.
3. Markus M Mobius, Tanya S Rosenblat: Why beauty matters/// American Economic Review. 2006/3. № 1. Tom 96. 222-235 p.

*E. Duko*

*Le chef scientifique: I. I. Lyubanets, le maître assistant de la chaire de la formation professionnelle de langue étrangère de l'Université d'État de*

*Baranovitchi*

*Le professeur: I. I. Lyubanets*

## LA POLLUTION NUMÉRIQUE

La pollution numérique est la pollution engendrée par le fonctionnement du réseau Internet.

Alors qu'elle ne paraît qu'indolore et transparente, la pollution numérique est multiforme.

Nous retiendrons ainsi plusieurs sources de pollution: le bitcoin; les requêtes; le streaming; les mails (envoi et stockage)

Si Internet était un pays, il serait le 6ème plus gros consommateur mondial d'électricité. Les datacenters, des mastodontes du web, sont responsables de 2% des émissions de CO2 dans le monde. L'impact du numérique est de ce fait considérable [1].

Aussi Greenpeace, alerte régulièrement les citoyens sur l'impact environnemental du numérique. Le recours au numérique est très souvent présenté comme très favorable pour l'environnement. Ainsi, faire ses courses en ligne, lire

un livre sur sa liseuse, consulter un magazine sur sa tablette, sont considérés comme des activités non polluantes car elles permettent d'économiser des trajets en transports ou du papier. Mais ces activités reposent sur l'utilisation d'éléments physiques, tout aussi polluants.

L'ordre de grandeur de la consommation d'électricité par Internet s'assimile à celui de grands pays. Avec l'avènement du numérique, on avait pu imaginer la possibilité de ralentir la déforestation grâce aux économies de papier, réduire les déplacements au moyen des vidéoconférences et du télétravail, le tout sans impact environnemental. On peut constater la pollution liée au numérique durant toutes les phases du cycle de vie des produits. Lors de la fabrication, le principal facteur impactant l'environnement est l'extraction des ressources nécessaires au fonctionnement du matériel électronique. L'extraction du silicium nécessite de grandes quantités d'eau. L'eau est également polluée près des mines par les phtalates et les métaux lourds.

Dans le monde moderne, la durée d'utilisation de l'équipement n'est pas très longue : difficile de surfer aujourd'hui avec un appareil datant d'il y a quinze ans, même en parfait état de marche. Selon les données officielles, seuls 15 % des 42 milliards de kilos annuels de déchets électroniques sont collectés et recyclés par les filières officielles. La majorité sont traités en dehors de toute légalité, et on l'imagine aisément, sans la moindre attention aux impacts environnementaux (ces déchets contiennent du mercure, du cadmium, du chrome et d'autres substances très néfastes pour la santé et les écosystèmes) [2].

Pour autant, les acteurs économiques et les autorités prennent conscience de l'impossibilité de continuer à tenir le discours du zéro-impact sur l'environnement par les numériques.

La pollution numérique doit être prise à bras le corps, et cela commence aussi par la pédagogie et la sensibilisation.

En famille, en solo ou au travail, nombre d'initiatives et de gestes écolos peuvent être mis en place et initiés sans complication au quotidien. Parce que la pollution va en s'accroissant avec Internet comme source d'énergie qui croît le plus rapidement, il est crucial d'agir sans attendre.

## LITERATURE

1. La pollution numérique [Электронный ресурс]. – Режим доступа: <http://alliancegreenit.org/wp-content/uploads/Doc%20AGIT/Livre-Blanc-Pollution-Cleanfox.pdf>. – Дата доступа: 29.03.2019.
2. Чем опасен цифровой мусор и как от него избавиться [Электронный ресурс]. – Режим доступа: <https://megaplan.ru/letters/chem-opasen-tsifrovoj-musor-i-kak-ot-nego-izbavitsya/>. – Дата доступа: 30.03.2019.

***V. Dulko***

*Research supervisor: T.M. Greben,  
Master of Education, Senior lecturer,  
Baranovich State University*

*Language tutor: M.D. Lavrenkova, Senior lecturer*

## **TOURISM IMAGE AS ONE OF THE KEY FACTORS TO ATTRACT TOURISTS**

The term tourism indicates all the heterogeneous activities and services referring to the temporary transfer of people from the habitual residence to other destinations for diverse reasons. It is a social, cultural, and economic phenomenon which is very important, and, in some cases vital, for many countries. Over the past decades, tourism has experienced continued expansion and diversification, becoming one of the largest and fastest-growing economic sectors in the world. It effects the social, cultural and educational sectors of national societies and on their international relations. Due to these multiple impacts, there is a need for a holistic approach to tourism analysis, development, management and monitoring in order to formulate and implement national and local tourism policies and international agreements [1].

In connection with the development of mutual relationships between countries, building a recognizable image and a strong national brand is an important way of presenting the country's own values, and the method of improving the competitive position internationally. The increasing globalization of the contemporary tourism economy is the cause, due to which, for many countries that want to be competitive on the international tourism market, the creation of a positive tourist image of the country and building a strong national brand is a major challenge [2]. Under the competitive market environment, the importance of setting up and spreading of the tourism image are becoming prominent.

Image has become a crucial marketing tool in the tourism industry and destination marketers are increasingly confronted by product substitutability and competition within the global marketplace. Tourism image focuses on the tourists' image recognition to the sightseeing place before traveling. The creation of a distinctive and unique destination image in the tourism industry plays a vital role in positioning the destination in the consumer's mind and holds the key to differentiation.

To attract tourists, it is necessary to create a certain image of the country. After all, the purpose of visiting a country by tourists consists of receiving new information about the country, people, living in it, traditions, culture and customs. Image held by people is likely to affect their decisions concerning the selection of the country as a place of tourist destination, a place of residence or a place to run economic activity [2].

The set of macroeconomic indicators characterizing the level of development of the region, determines its image status. Equally important is such a criterion as inbound tourism — the number of tourists visiting a country. Other important

criteria include cultural wealth, the presence of historical figures and famous contemporaries, tourist infrastructure. It should not be forgotten about the number of travel agencies in the region and their potential opportunities – they work on the organization of international tours or develop local tourism. Successful tourism image construction and spread will bring eternal attraction for tourism destination. If any destination scientifically plans strategy of tourism image, creatively uses all probable media to promote its image, people will flood to this place, and the day for becoming the first-rate tourism spot is not far away.

## REFERENCES

1. Encyclopedia of Law and Economics [Electronic resource]. – Mode of access: [https://link.springer.com/referenceworkentry/10.1007/978-1-4614-7883-6\\_481-1](https://link.springer.com/referenceworkentry/10.1007/978-1-4614-7883-6_481-1) – Date of access : 19.03.2019.
2. Kotler, P. Country as brand, product, and beyond: A place marketing and brand management perspective / P. Kotler, D. Gertner // Journal of Brand Management. – 2002. Vol. 9, № 4. – P. 249–261. – Mode of access: – 10.1057/palgrave.bm.2540076 – Date of access : 19.03.2019.

*V. Dvoretska*

*Scientific supervisor: O. V. Voznyuk  
doctor of pedagogical sciences  
Zhytomyr Ivan Franko State University  
Language tutor: O. Ye. Kravets  
candidate of pedagogical sciences*

## THE DEVELOPMENT OF COHERENT SPEECH IN PRESCHOOL CHILDREN BY MEANS OF FAIRY TALES

**Relevance of research.** The development of coherent speech in preschool children is one of the most important issues of pre-school linguistics. Its relevance is caused by the priority directions of the National Doctrine of the Development of Education in Ukraine in the XXIst Century, as well as by Basic Component of Ukrainian Preschool Education, and many other normative documents.

**The purpose** of the article is a theoretical analysis of the development of coherent speech in senior preschool age children by means of the fairy tales.

**The results.** G. Leushina [3] outlines the coherent speech as the speech, the form of which is determined by its content, and its content lies in the desire or thought of the communicator. Many experts believe that the fairy tale is one of the most effective means of developing the speech abilities in the children of preschool age.

Fairy tales, according to N. Kalysheva, are oral stories, being created for the purpose of entertainment, and their content is unusual in the sense of everyday life, thus differing in a special compositional-stylistic construction [2]. The fairy tale

gives the child an opportunity to learn in a special form the extraordinary theoretical issues about the world as well as about good and evil [1].

**Conclusions.** Consequently, a fairy tale in developing the coherent speech in the preschoolers plays an important role. It enables the child to perceive, absorb and reproduce information from social environment in the process of socialization. This process finds its most consistent expression in fairy tale due to metaphorical way of understanding and exploration of the world. At the level of preschool education this pedagogical means are implemented in the development of pedagogy of teaching fairy tales (O.V.Voznyuk).

## REFERENCES

1. The basic program of a child of preschool age development "I am in the world" / Ministry of Education and Science of Ukraine, Acad. ped Sciences of Ukraine; [sci. edit and order. O. L. Kononko]. - K.: Svetich, 2008. - 430 p.
2. Kapisheva N.N. Preparation of a narrative on a series of pictures using the picture-wording plan / N. N. Kapisheva // Logopediya. - 2004. - No. 2. - P. 22-27.
3. Leushina A.M. Formation of elementary mathematical notions in preschool age children. - M., Enlightenment, 1974. - 368 pp.

**M. Dykyi**

*Research supervisor: Polishchuk Z. P.,*

*Senior Lecturer,*

*Zhytomyr Ivan Franko State University*

*Language tutor: K.V. Levkivska*

## PTOLEMY'S *INEQUALITY AND ITS APPLICATION*

The topic "Application of the generalized theorem by Ptolemy" is actual because the new standards in mathematics for the study of the geometry of 9-10 classes involve the study of the inscribed and described quadrilaterals, namely the necessary and sufficient condition for the quadrilateral, written in the circle and circle described around the circle, as well as Ptolemy's theorem. Here we offer material on the generalized form of Ptolemy's theorem It is necessary for in-depth

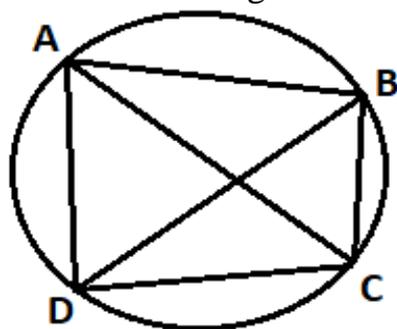


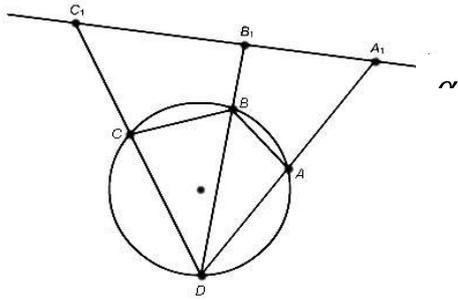
Fig.

study of geometry, preparation for various tournaments, competitions and olympiads in mathematics.

If the vertices of the cyclic quadrilateral are  $ABCD$  in order, then the theorem states that  $AC \cdot BD \leq AB \cdot CD + BC \cdot AD$  Moreover, equality is achieved only when all the points lie on one circle (Fig. 1).

We proved this inequality by inversion.

**Reasoning:**



F

Let the plane give three points  $D, C, A$  that do not lie in one straight line. Then through these points there is a single circle  $K$  (Fig. 2). Let, further  $\varphi$  is an inversion with a center at the point  $D$  and radius  $r$ . As for me, the value  $r$  does not matter for certainty we will think that  $r$  is bigger than the diameter of the circle  $K$  is larger. The shape of the circle  $K$  in relation to the inversion  $\varphi$  will be a straight line  $\alpha$  which

lies completely outside the circle  $K$  because  $r$  is the diameter of the circle  $K$  is larger. From  $C$  and  $A$  are denote images of points  $C$  and  $A$ . The points  $C$  and  $A$  are lie on the straight line  $\alpha$ . Now let's take an arbitrary point on the plane  $B$  (which does not coincide with any of points  $D, C, A$ ), and  $B$  is her image. If the point  $B$  lies on a circle  $K$  then the point  $B$  are belongs to a straight line  $\alpha$ ; If it does not lie  $B$ , then it does not belong  $K$  to the straight line  $\alpha$ . Obviously, the inverse statement is true too. Therefore, in order for the four points  $D, C, A, B$  lie in the circle  $K$ , it is necessary and sufficient that the points  $C_1, A_1, B_1$  lie on the straight line  $\alpha$ .

When three points  $C_1, A_1, B_1$  lie on one straight line, then for  $C_1A_1, A_1B_1, C_1B_1$  segments are execute one and only one of three relations:

$$\begin{aligned} C_1B_1 + B_1A_1 &= C_1A_1, \\ C_1A_1 + A_1B_1 &= C_1B_1, \\ A_1C_1 + C_1B_1 &= A_1B_1. \end{aligned} \quad (*)$$

If the points  $C_1, A_1, B_1$  do not lie on one straight line, then inequalities are true for the same segments

$$C_1B_1 + A_1B_1 > C_1A_1. \quad (**)$$

Now let's write the relation (\*) and (\*\*) so that they do not include points  $C_1, A_1, B_1$ . We will use theorem by Lemma 1.

**Lemma 1.** So when a plane of inversion  $\varphi$  with a center at a point  $O$  and radius  $r$  is given. Suppose  $M$  and  $N$  are two arbitrary points of the plane, different from the point and infinitely remote point  $O_\infty$ . Then,  $M_1N_1 = MN \frac{r^2}{OM \cdot ON}$ ,  $M_1 = \varphi(M)$  and  $N_1 = \varphi(N)$ .

Using this lemma we have  $C_1B_1 = CB \frac{r^2}{DC \cdot DB}$ ,  $B_1A_1 = BA \frac{r^2}{DB \cdot DA}$ ,  $C_1A_1 = CA \frac{r^2}{DC \cdot DA}$ .

Consequently, if the points lie on a circle  $K$ , then their images  $C, B, A$  lie on the straight line  $\alpha$  and we have  $CB \frac{r^2}{DC \cdot DB} + BA \frac{r^2}{DB \cdot DA} = CA \frac{r^2}{DC \cdot DA}$ .

Let's take for the certainty that  $B$  lies between  $C$  and  $A$  when the points  $D, C, A, B$  do not lie on the circle  $K$ .

So we have  $CB \cdot DA + BA \cdot DC = CA \cdot DB$  when  $D, C, A, B$  lie on one circle and if the points do not lie in one circle.

When we will want to prove this equality we will use the Ptolemy theorem.

### Conclusions:

- 1) We considered one of the options for proving Ptolemy's inequality;

2) This inequality is used to solve problems in the circle described around the quadrilateral and construction tasks described;

3) The proposed material does not exhaust the field of application of Ptolemy's inequality. There are many other planimetry problems to apply this inequality.

### REFERENCES

1. Бакельман И. Я. Инверсия\ И. Я. Бакельман. – М.: «Наука», 1966. – 52-54с.
2. Прасолов В. В. Задачи по планиметрии: учебное пособие\В. В. Прасолов. – М.: «Московские учебники»,2006. – 155-156с.

***O. Falkovska***

*Research supervisor: T.V. Lytnyova,*

*Candidate of Pedagogical Sciences, Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: T.V. Lytnyova,*

### ENGLISH TEXTS OF SOCIAL AND CULTURAL CHARACTER AS A RESOURCE OF CRITICAL THINKING FORMATION

Socio-cultural picture of the world is fixed and verbalized in the language with the help of authentic English texts. Students learn English culture indirectly, when reading English texts with social and cultural potential. Socio-cultural texts are a fragment of national culture, which contains information about the political, economic, socio-cultural processes of modern English-speaking society and it reflects the specifics of the worldview, the world perception of native speakers-representatives of some culture [1].

The student studying the text of socio-cultural character develops the process of cognition, which occurs simultaneously on several levels. After all, the knowledge that a critically thinking person learns is constantly differentiated and systematized in terms of its degree of truth, probability, reliability. Critical thinking is based on the information received, conscious perception of their own mental activity in the intellectual environment [2]. The educational materials in the formation of socio-cultural competence are authentic English texts, which are selected with the communicative purposes of teaching a foreign language. Now much attention is paid to the fact that the training of foreign language culture is used not only as a means of interpersonal communication, but also as a means of enriching the spiritual world of the individual on the basis of acquiring knowledge about the culture of the country of the language (in its various manifestations), which is studied [3]. For example, we can use the text where there is a description of the city of London, but the name of the city can't be specified. That is, we submit training in the form of a problem, where the student must guess the description of which city is given. That is when the senior pupil has the opportunity to get acquainted with the principles, strategies and procedures of critical thinking.

Thus, we can say that critical thinking is formed in the study of the text of socio-cultural character. Critical understanding of the texts will allow to learn English culture, to look at the English-speaking world through the eyes of the English / American authors of the texts, which will help to prepare students for the knowledge of English-speaking culture.

### REFERENCES

1. Сафонова В.В. Социокультурный подход к обучению иностранным языкам / В.В. Сафонова. – М. : Высшая школа, 2001. – 311 с.
2. Павлюк Л.М. Формування навичок критичного мислення на уроках англійської мови : методичні рекомендації. – Ківерці : відділ освіти Ківерцівської районної державної адміністрації, 2014. – 48 с.
3. Теоретичні аспекти процесу формування соціокультурної компетенції учнів старшого етапу шкіл з поглибленим вивченням іноземної мови (реферат) [Електронний ресурс]. – Режим доступу: [http://coolreferat.com/Формування\\_соціокультурної\\_компетенції\\_учнів\\_старшого\\_етапу\\_шкіл\\_з\\_поглибленим\\_вивченням\\_іноземн\\_часть=2](http://coolreferat.com/Формування_соціокультурної_компетенції_учнів_старшого_етапу_шкіл_з_поглибленим_вивченням_іноземн_часть=2)

***K. Gripitch***

*Research supervisor: T.M. Greben,  
Master of Education, Senior teacher,  
Baranovichi State University*

*Language tutor: M.D. Lavrenkova, Senior teacher*

### OVERTOURISM AS ONE OF THE MOST PRESSING ISSUES OF TOURISM INDUSTRY

International tourist arrivals have almost quadrupled over the past 30 years and domestic tourism has also intensified in most developed and newly industrialized countries. The World Tourism Organization (UNWTO) focuses its advisory and technical assistance services on policies, development guidelines, management techniques and measurement instruments that allow national and local governments, as well as the tourism industry, to incorporate sustainability principles into their decision making process and day-to-day operations. As the leading international organization in the field of tourism, UNWTO promotes tourism as a driver of **economic growth, inclusive development and environmental sustainability** [1].

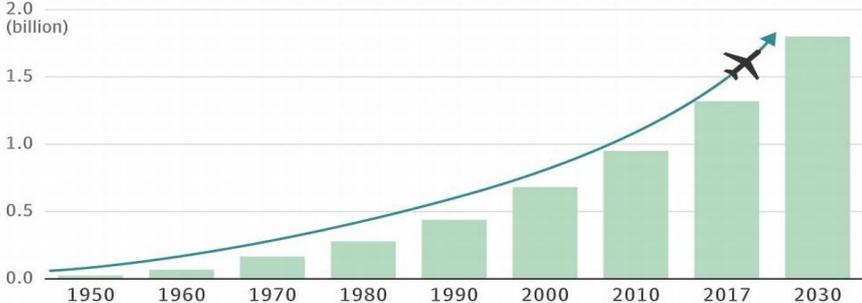
By the early 21st century, international tourism had become one of the world's most important economic activities. After careful consideration, the following advantages and disadvantages of tourism in the modern world were highlighted.

<b>Advantages of tourism</b>	<b>Disadvantages of tourism</b>
boost in country's economy due to increased number of tourists;	large numbers of tourists;

new job opening for local people;	development of illegal economic activities;
opportunities for travelers;	local people can experience loss of privacy;

When the local population orients its everyday activities too much toward tourists and has to adapt to the streams of visitors, tourism can turn into a problem. Overtourism describes destinations where hosts or guests, locals or visitors, feel that there are too many visitors and that the quality of life in the area or the quality of the experience has deteriorated unacceptably. It is the opposite of Responsible Tourism which is about using tourism to make better places to live in and better places to visit. Often both visitors and guests experience the deterioration concurrently [2].

According to world statistics, in 2017, the number of tourists traveling abroad increased by 7 percent and reached 1.3 billion people. According to UNWTO, this trend will continue at a rate of 4-5%, which exceeds the average growth of global GDP [3].



About half of them came to the 100 most popular cities: Amsterdam, Barcelona, Cinque Terre, Santorini, Venice, Dubrovnik, Paris etc. The key causes of overtourism are the following: growing number of tourists, national holidays, the summer holiday season, marketing, accessibility. Overtourism is rearing its ugly head throughout the world. But given the recent publicity surrounding the issue, governments, businesses and travelers are starting to take heed. At the 2018 Global Wellness Summit, Dr. Jean-Claude Baumgarten, the former president and CEO of the World Travel & Tourism Council, stated that wellness tourism could “be a solution to overtourism, by diversifying an established destination’s tourism product” and opening up new areas that travelers might not have previously considered [4]. Community engagement, communication, congestion management, adequate planning and product diversification are the key aspects in dealing with “overtourism”. It is necessary to build awareness among communities of the benefits of the sector, improve the use of big data to measure and manage the impact of tourists and tourist flows, and promote the development of tourism experiences that engage and benefit communities directly.

**REFERENCES**

1. Making tourism more sustainable. A guide for policy makers // United Nations Environment Programme and World Tourism Organization [Electronic resource]. – Mode of access:

<http://unep.fr/shared/publications/pdf/dtix0592xpa-tourismpolicyen.pdf> – Date of access: 10.03. 2019.

2. OverTourism [Electronic resource]. – Mode of access: <https://responsibletourismpartnership.org/overtourism/> – Date of access: 20.02.2019.
3. Овертуризм [Электронный ресурс]. – Режим доступа: <http://paikea.ru/overtourism/#i-2> – Дата доступа: 23.02.2019.
4. Powell, L. Wellness Takes on Overtourism / L. Powell, B. McGroarty // 2019 Wellness Trends, from the Global Wellness Summit [Electronic resource]. – Mode of access: <https://www.globalwellnesssummit.com/.../wellness-takes-on-> – Date of access: 10.03.2019.

***E. Gubskaja***

*Research supervisor: Shilo E. V.  
Senior teacher of the Department of  
vocational foreign-language training,  
Baranovich State University*

## **CYBERCRIME AND MONEY-LAUNDERING**

The modern society of information technologies is based on the daily use of computer equipment, communication networks, mobile communications and other technical means. The daily functioning of state structures, banking, energy, transport and many other systems is impossible without reliable work of computer equipment and communications.

Information technology has become a constant companion of modern man not only in the workplace; they have entered almost all spheres of human life.

At the same time, the information space has become a place and, at the same time, directly an instrument of crime. From now on, the crime does not require prior "treatment of the client" and personal contact with a potential victim. The main tool of the criminal is only a computer and access to information and communication systems, where he with the help of computer viruses and other illegal technical means gets access to databases, bank accounts, and automated control systems [1].

Despite the absence of a generally accepted definition of cybercrime today, there is a rather broad and comprehensive understanding of its essence and methods of its commission, as well as threats and risks, which makes it possible to develop and implement measures to counter this type of crime. The lack of physical contact with the victim or representatives of the financial institution, as well as anonymity, speed of implementation and low cost of the crime became the key to increase the interest of criminals in cyberspace. Cyberspace has become not only the scene of the crime and the receipt of illegal income, but also the place of legalization of such income. At the same time, the diversity of types of cybercrime

in the aggregate, the variety of methods used to launder the proceeds from these types of crimes, make it difficult to identify and investigate them [1].

The identified schemes and mechanisms for laundering income derived from cybercrime, suggest that the movement is carried out as traditional methods of transfer, using modern systems of urgent transfers, electronic payment systems and electronic money. In this case, funds are used in some cases for the purchase of prepaid cards, goods or services online, while in others they are transferred to gaming chips, casinos or electronic ones are transferred between electronic wallets for conversion and cash out.

In turn, the use of cash remains one of the most common ways to conceal the further movement of illicit income and the directions of its investment, as well as the sources of such funds at the time of depositing money into the banking system. This allows criminals to maintain anonymity, acquired by obtaining illegal income, and during the laundering of income. Combating cybercrime combines legal, technical, organizational and informational activities [2].

At the same time, the role of each of these activities cannot be defined as priority or secondary. Therefore, effective counteraction to money-laundering and reduction of crime in this area are possible due to timely identification of financial transactions that may be associated with money-laundering from cybercrime, and effective international cooperation, as well as cooperation between the public and private sectors.

## REFERENCES

1. Киберпреступность и отмывание денег [Электронный ресурс]. – Режим доступа: [https://eurasiangroup.org/files/Typologii%20EAG/Tipologiya\\_kiber\\_EAG\\_2014.pdf](https://eurasiangroup.org/files/Typologii%20EAG/Tipologiya_kiber_EAG_2014.pdf). – Дата доступа: 26.03.2019.
2. Cyber Criminals Have Ingenious Money Laundering Methods [Электронный ресурс]. – Режим доступа: <https://www.cybersecurityintelligence.com/blog/cyber-criminals-have-ingenious-money-laundering-methods-3280.html>. – Дата доступа: 30.03.2019.

*L. Heleveï*

*Research supervisor: A. V. Kuznyetsova,*

*Candidate of Philology,*

*Associate Professor,*

*Language tutor: A. V. Kuznyetsova,*

*Zhytomyr Ivan Franko State University*

## **THE USE OF THE ENGLISH FOLK FAIRYTALES FOR FORMATION OF ANALYTICAL SKILLS OF BASIC SCHOOL PUPILS**

The important constituent of school education is the development of young reader's competence. Reader's competence presupposes formation of pupils' analytical skills, interests and knowledge of certain subjects.

The purpose of the research is to show the process of formation of analytical skills of basic school pupils on the material of the English folk fairytales.

The use of the English folk fairytales at the lessons encourages pupils' ability to interpret adequately authentic texts and understand the peculiarities of the English-speaking countries culture, coded in the folklore. Besides, the peculiarities of the fairytale as a genre have always raised positive associations in children's mind making educational process more effective.

In literary criticism a fairytale is defined as a verbal pice of folklore that appears in the direct communication between the teller and listeners [2, 507]; it is a logical narration characterized by the invented, often fantastic content with features of the logical text. These features are:

- thematic unity;
- the title;
- semantic completeness;
- informativeness of narration;
- purposefulness;
- integration;
- structural organization;
- connection between parts;
- colloquial style of the language [2,508].

Work with the text of the fairytale presupposes performing by pupils of 5-7<sup>th</sup> forms of certain exercises based on the analytical skills, for example:

- define the main personage(s) in the fairytale and describe their/his/her features;
- put pictures with the events of the fairytale in the logical order;
- speak on behalf of the main character, explain your actions to the class;
- speak as if you're main personage's friend/enemy, say what he did right/wrong;
- make your own ending to the story[6,6].

The decision of the issue of formation of analytical skills of the basic school pupils on the material of the English folk fairytales suggests active use of up-to-

date teaching methods, which encourage pupils' creative mind, cognitive interest and associative links.

## REFERENCES

1. Галушка Г.М.. Формуємо соціокультурну компетенцію за допомогою казок/Г.М.Галушка. – Харків:Основа, 2008-94с.
2. Мірошниченко Л.Ф. методика викладання світової літератури в середніх навчальних закладах: Підр.Для студ.-філологів.-К.:Ленвіт, 2000.-240с.

*A. Hladyschuk*

*Research supervisor: S. V. Rudnytskyi  
Doctor of Political Sciences,  
Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: S. S. Kukharyonok*

## BASIC APPROACHES TO THE INTERPRETATION OF THE CONCEPT “FRAME” IN THE WESTERN SCIENTIFIC TRADITION

The topicality of the research is caused by the fact, that mass media and social networks form our vision of political reality (positive or negative) by the proper presentation of one or another phenomena and processes. The means of this representation are frames that formulate the current information in a way that causes a certain attitude to it.

Therefore, the purpose of the article is to analyse the concept «frame» in the western scientific tradition, where the relevant scientific theory was formed.

There are many definitions of the concept «frame». A word «frame» can be a verb and a noun. In the first case (to frame), it means to create a certain image of reality by a journalist, and in the second one (a frame) it is already about the result of framing, that is the creation of the image of reality.

Sociologist Ditrarn Scheufele confirms that we are processing information based on our knowledge and experience. These two components are the result of human life, through which people make conclusions about the information received not from scratch, but relying on their own experience. All people have a general idea of how books should look like, how roses smell, which taste has an orange. These mental structures that enable us to understand the world and to identify the surrounding objects. Thus, our experience is the raw material from which we create a personal model of the world and place it in frames [1].

T. Van Dijk interprets the term «frame» as follows: we understand the text only when we understand the situation, and the frames contain publicly available knowledge in this culture, describing what is typical in this society [2].

I. Goffman in his essay, «Frame Analysis» (1974), interpreted the frame both as a synonym for the «situation» and as a synonym for «determining the situation». It is simultaneously a «matrix of possible events», «an interpretation scheme»,

perception, and the means of interpretation perceived. He confirmed that in the case of occurring information about a certain event, the individual's reaction would most likely to be limited by the frames or interpretation schemes - «the primary frame». The scientist considered the central element of its culture as the primary frame of one or another social group. He understood the frames as stereotypical interpretive schemes that shape the attitude of communication participants to reality and determine their behaviour in this situation [4].

«Framing» by G. Bateson is an understanding of social reality as a finite field of meaning and some structures of situation whereby individuals understand the everyday world events, make conclusions and choices. The researcher suggested that the existence of closed semantic space, boundaries of which are not everyday items for broadcasting mechanisms of one semantic field to another [3].

Thus, «frame» is a combination of structured data or image defined concepts that serve to interpret stereotypical contexts of social reality and models of abstract images. Frame as a cognitive scheme is a tool to represent a relatively complex issues so that they become accessible to the audience.

## REFERENCES

1. Dietram A. Scheufele & David Tewksbury Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models// Journal of Communication. Vol. 57, 2007. pp. 9 – 20. URL: <https://pdfs.semanticscholar.org/c7e5/5a100d5db4d3fab0e66dadee485059263e95.pdf>
2. Van Dijk T. A. Episodic Models in Discourse Processing // Comprehending Oral and Written Language. San Diego: Academic Press, 1987. pp. 161 – 191. URL: <http://www.discourses.org/OldArticles/Episodic%20Models%20in%20Discourse%20Processing.pdf>
3. Bateson G. Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology. New York: Ballantine Books, 1972. pp. 183 – 198. URL: <http://shifter-magazine.com/wp-content/uploads/2015/11/gregory-bateson-steps-to-an-ecology-of-mind-1.pdf>
4. Goffman E. Frame analysis: An essay on the organization of experience. Cambridge: Harvard University Press, 1974. URL: <https://is.muni.cz/el/1423/podzim2013/SOC571E/um/E.Goffman-FrameAnalysis.pdf>

***I. Hohola***

*Research supervisor: S. L. Yatsenko,  
Candidate of pedagogical sciences, Associate professor  
Zhytomyr Ivan Franko State University  
Language tutor: I. V. Samoilyukevych*

## **USING INNOVATIVE TECHNIQUES IN THE PROCESS OF TEACHING THE ALGORITHM OF PERFORMING ACTIONS IN INFORMATION SCIENCE LESSONS IN PRIMARY SCHOOL**

Educators in an Information Age are in constant search for new ideas, technologies and teaching methods which will raise the effectiveness of the educational process as well as make lessons more diverse and fun. In this article, we will deal with the nature of innovation, the innovative techniques for teaching the algorithm of performing actions and give classroom examples from Information Science lessons in primary school.

Researchers understand innovation as the process of taking an idea and putting it into practice. An innovative idea must be new, useful, and surprising [1, 35]. The special brain research has actually shown that certain methods and approaches can truly enhance the learning process. If the teacher chooses the correct innovative techniques, it will help to get a positive result [2].

Among innovative techniques which can be most successfully incorporated in Information Science lessons in primary school are the following: the project method, problem-based learning and interactive techniques. In the project method students can create an interesting project to summarise the theme under study. Problem-based learning is the organization of the learning process the essence of which is the formation of problem-solving situations, the identification and solving of problems by students. Interactive techniques aim to teach a child to work in a team and listen to their friends` opinions.

One of the themes studied in the course of “Information Science” which awaits an innovative approach is “Teaching the Algorithm of Performing Actions” as it is repeatedly mentioned by students among the most difficult content areas. This theme presupposes formulating instructions for students, compiling algorithms according to the model, searching for errors in the sequence of instructions, analyzing the contents of the tasks for the construction of an algorithm by students. To support student learning in this area, we will focus on interactive techniques because they provide modeling of life situations in learning the algorithm of actions in Information Science lessons in primary school.

Below are some examples of using such interactive techniques as role-play, brainstorming and peer learning in the process of teaching the algorithm of performing actions in Information Science lessons in primary school.

In the role play format, students are united in 5-6 groups. Each group needs to create the daily programme of a member of his/her family in 5-7 instructions.

The brainstorming format implies tasks for students working as the whole class and answering a problem-solving question, for instance: what four identical numbers make one when multiplied?

Peer learning is based on pair work in which pupils describe what their partners do throughout the day in 4-6 instructions.

So, when studying the themes “Teaching the Algorithm of Performing Actions” using such interactive techniques as role-play, brainstorming and peer learning, will provide modeling of life situations in learning the algorithm of performing action in Information Science lessons in primary school. In these activities, students will be able to develop the skills of formulating instructions, compiling algorithm, looking for errors in the sequence of instructions and analyzing the content of the tasks.

## REFERENCES

1. Дячківська І.М. Інноваційні педагогічні технології: навч. посіб. / І. М. Дячківська – 2-ге вид., доповн. – К: Академвидав, 2012. – 352 с.
2. Електронний ресурс [Режим доступу]: <https://pblglobal.com/>.

***I. Holubiev***

*Research supervisor: Y.O. Sevostianov*

*Doctor of Physical and Mathematical Sciences,*

*Acting Professor*

*Language tutor: O.I. Dienicheva*

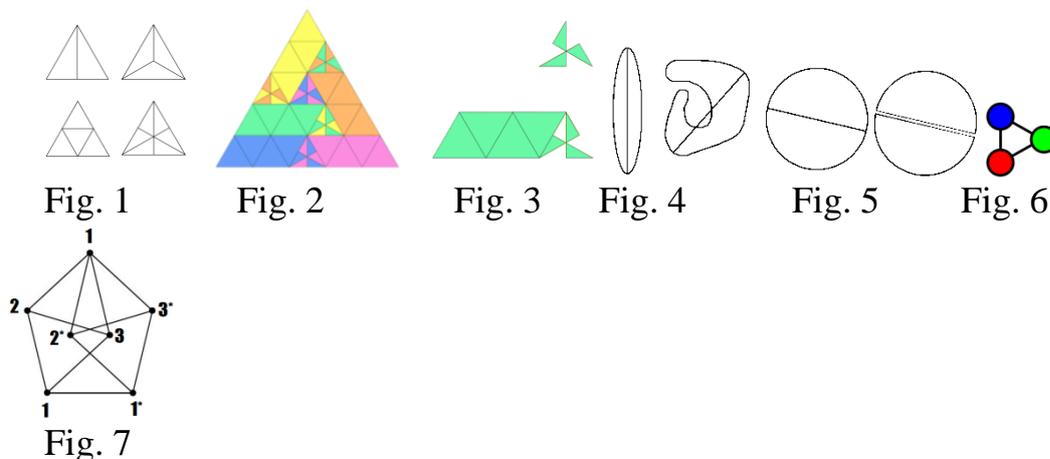
## THE LATEST DISCOVERIES AND BREAKTHROUGHS IN MATHEMATICS

Equilateral triangle is a triangle where all sides and corners are equal. It can be cut into some equal parts, they shouldn't be triangles obligatory. The word "equal" means not just the fact that the parts are equal in area but that they are completely identical accurate to mirror symmetry. We can cut right triangle into two, three, four and six equal parts (Fig. 1). But for a long time mathematicians believed that it is impossible to cut the triangle into five equal parts. Needed splitting (Fig. 2) was discovered in 2013 by Mikhail Patrakeev from Yekaterinburg. Each color is one part of the triangle (Fig. 3), although each of them is divided. There are five unconnected parts: yellow, orange, blue, pink and green. However, the question whether it is possible to split the right triangle into five connected parts still remains.

Borsuk's conjecture. Figure diameter is the longest of all straight lines which connects all pairs of points on figure contour (Fig. 4). Any figure on a plane (in two-dimensional space) can be divided into at least three figures with diameter that is smaller than in the original figure. In other words, not all figures can be divided into two figures with smaller diameters, for example, a circle (Fig. 5) where diameter divides it into two semicircles with the same diameter. The minimum

number of shapes with smaller diameters in a three-dimensional space is 4. In 1933 Polish mathematician Karol Borsuk created hypothesis which states that in  $n$ -dimensional space each shape can be divided into  $n+1$  shapes with diameters that are smaller than the diameter of the original shape. For  $n \geq 4$  the conjecture remains open. But in 2013 Thomas Jenrich showed that it is incorrect for a 61-dimensional space.

The chromatic number of the plane is the minimum number of colors in which you want to paint the plane. What is this number? This question was raised by Hugo Hadwiger and Paul Erdős in 1946. Obviously, at least three colors are required (Fig. 6). Indeed, the vertices of the right triangle with a side whose length is equal to the needed unit is impossible to paint in one or two colors. If we draw one more triangle near one side of it, we get a rhombus. On Fig. 7, its vertices are marked as 1 (upper), 2, 3 and 1 (bottom left). These numbers denote the colors. We fix the "upper" vertex 1 and move right the lower one by unit length. We get a rhombus with vertices 1 (upper), 2\*, 3\* and 1\*. The lower vertex 1 and the vertex 1\* are at a unit distance, so they can not be painted into one color. Thus, three colors are not enough. However, it is known that seven colors are enough. And in 2018, gerontologist Aubrey de Grey published an article on the Internet titled "The chromatic number of the plane is at least 5". In this article he gives an example of a set of vertices and edges with 610 vertices that can not be colored in 4 colors. Perhaps thereafter five colors will be insufficient and then maybe six, and this problem of the chromatic number of the plane will be solved completely.



## REFERENCES

1. Гипотеза Борсука: [Электронный ресурс] // Википедия. — Режим доступа: [https://ru.wikipedia.org/wiki/Гипотеза\\_Борсука](https://ru.wikipedia.org/wiki/Гипотеза_Борсука)
2. *Математика — просто* (2018) ПОСЛЕДНИЕ ПРОРЫВЫ В МАТЕМАТИКЕ — 2018 [відео] // YouTube. — Режим доступа: <http://youtube.com/watch?v=EwQV4iHdnOU>
3. *Математика — просто* (2019) ПОСЛЕДНИЕ ДОСТИЖЕНИЯ В МАТЕМАТИКЕ [відео] // YouTube. — Режим доступа: <http://youtube.com/watch?v=i69NMRgL2g0>
4. Хроматическое число плоскости не меньше 5 : [Электронный ресурс] // Хабр. — Режим доступа: <https://habr.com/ru/post/358900/>

***O. Ignatenko***  
*Research supervisor:*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: A. V. Kuznyetsova,*  
*Candidate of Philology,*  
*Associate Professor*

## **EVOLUTIONARY FORMULATED MODELS OF MAMMALS BEHAVIOUR IN STRESS SITUATION**

There are some factors which have impact on the animal organism. First of all, these are natural environment and attitude of people.

The purpose of the research is to show the stress impact on wild and domestic animals.

The effect of various stress factors on the organism of animals is caused by the stress of adaptive mechanisms, which leads to a decrease of the resistance of the organism, as well as to the suppression of reproductive and productive functions. In case of a continuous stress, the body develops functional changes that lead to deep degenerative disorders, noncompensating changes in metabolic processes and, ultimately, death of the animal. Therefore, stress prevention and stress revealing measures are very important and necessary both for the selection of stress-sensitive animals and for their separation in stressed condition. However, there are no reliable express methods for identifying animals at different stages of stress. Differentiation of stress-sensitive and stress-resistant individuals is possible on the basis of several diagnostic methods. [1]

During their life, mammals continuously improve methods of struggling for existence and reaction on stress is one of its manifestation. Here are some examples how different wild mammals react on danger.

Elephant, when angry, shake their ears and rush to the abuser, with the tail pulled up.

The hippos open mouth wide and roar in front of the enemy.

Giraffes always have a male leader. While animals of the tower are eating, he monitors whether predators are coming. Noticing danger, the male leader raises alarm.

Feeling the danger, the porcupine sits in a deep hole all day long.

Beaver noticing the enemy slaps his tail loud on the water.

The marmot is always alert, noticing the enemy, he whistles loud, and other animals run to hide in their holes.

Stress of domestic animals is usually caused by the incorrect transportation, technical noise and pain. The most prevailing symptoms of stress are fear, agitation, aggressiveness, fatigue, oppression and loss of appetite. In the stage of exhaustion the loss of weight occurs. Recovery period is 7-10 days.

Stress also hits animals when they are under the influence of a hopeless situation or they are in captivity and unable to free themselves, and when they are

torn out of their familiar surroundings. Animals suffer when their ecosystems are also in a state of stress: polluted, neglected, cut, poisoned.

To prevent stress of a domestic animal one must

- not create stressful situations;
- find opportunities to be near an animal;
- communicate with an animal and smooth it;
- provide an animal with easily digestible food and fresh water while traveling;
- use Stop-Stress drops to reduce the excitement and correction of psychogenic behavioral disorders of a cat and or a dog under stress, phobias, aggression without any reason. [2]

Both wild and domestic animals undergo stress in their life due to the activities of a man. People's task is to protect and prevent animals from stress and to learn to live in harmony with nature.

### REFERENCES

1. Парамонов О.О. Дарвінізм. Київ, видавництво «Вища школа» 1982р.
2. Ковальчікова М. Адаптація і стрес при утриманні та розведенні сільськогосподарських тварин. – Видавництво «Колос», 1986р.

***O. Ivanitska***

*Research supervisor: Z.P. Polishchuk*

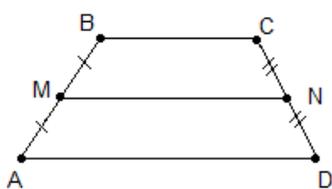
*Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: K.V. Levkivska*

### MIDDLE LINES OF TRIPPY

There are many interesting figures in geometry. In my opinion, one of the most interesting is the trapeze. It has interesting lines that have useful properties for solving tasks.



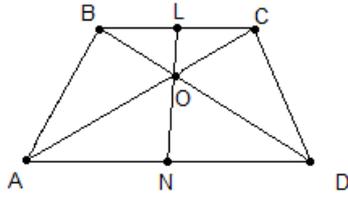
Everyone knows that the trapezoid is a quadrilateral, with two sides parallel, and two other nonparallels. And its parallel sides are called the basics, and nonparallel - sideways. [3, 29 p.]

Each trapezoid has two midpoints: the first combines the middle of the sides, the second is the middle ground. The first middle line of the trapeze parallel to its basics is equal to their half-sum (fig. 1). It's well known from school. [1, 37 p.]

$$MN = \frac{a + b}{2}.$$

(fig. 1)

Second middle line passes through the intersection of the diagonals and shares it with respect to, equal to the ratio of the basics of the trapezium [1, 37 p.]



$$\frac{OL}{ON} = \frac{BC}{AD}$$

(fig.2)

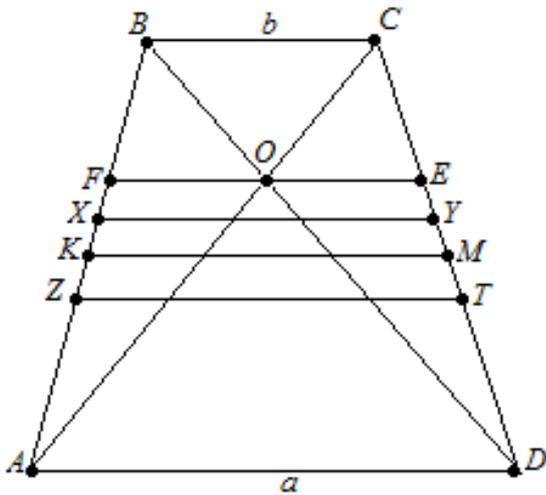
**Proof:** Let  $O$  be the point of intersection of the diagonals of the trapeze  $ABCD$ ,  $L$  and  $N$  - the middle of its foundations (fig.2). If the line  $LO$  intersects  $AD$  and the point  $N_1$ , the triangles  $OCL$  and  $OAN_1$ ,  $OBL$  and  $ODN_1$  are similar.

$$\text{So } \frac{CL}{AN_1} = \frac{LO}{ON_1} = \frac{LB}{N_1D}, \text{ or } \frac{CL}{AN_1} = \frac{LB}{N_1D}$$

Because  $CL = LB$ , then  $AN_1 = N_1D$ , that is  $N_1$  - middle segment  $AD$ . Consequently, the point  $N_1$  coincides with  $N$ , the straight line  $LO$  passes through  $N$ . From the similarity of triangles  $OBC$  and  $ODA$  it follows also that

$$LO : ON = BC : AD.$$

It is useful to know that the middle line of the  $LN$  trapeze is on the straight line, which passes through the intersection of the extensions of its lateral sides. Let the sideways  $AB$  and  $CD$  lie on the lines that intersect at the point  $P$ . A homothetic centered at  $P$ , which displays point  $B$  on  $A$ , represents a point  $C$  to  $D$ , segment  $BC$  to  $AD$ , and middle  $L$  segment  $BC$  - to the middle of  $N$  segment  $AD$ . So points  $P$ ,  $L$  and  $M$  lie on one straight line. As shown above, on this line lies a point  $O$ .



Consider the parallel basic  $ABCD$  segments  $FE$ ,  $XY$ ,  $KN$ ,  $ZT$ , which connect the points of the lateral sides of the

trapezium such that:  $FE$  pass through the point  $O$  intersection of diagonals,  $XY$  divides this trapezoid into two similar trapezes,  $KM$  - middle line of this trapeze,  $ZT$  divides this trapezoid into two equal trapezes. Let's express the lengths of these four segments through the lengths of the bases of this trapezium  $BC=b$   $AD=a$  (fig.3). [2, 46 - 47 p.]

$$FE = \frac{2ab}{a+b}$$

$$XY = \sqrt{ab}$$

$$KM = \frac{a+b}{2}$$

$$ZT = \sqrt{\frac{a^2 + b^2}{2}}$$

(fig.3)

Because,  $\triangle AFO \sim \triangle ABC$  i  $\triangle DFO \sim \triangle BAD$ , or  $\frac{FO}{b} = \frac{AF}{AB}$ ,  $\frac{FO}{b} = \frac{BF}{AB} = \frac{AB-AF}{AB} = 1 - \frac{AF}{AB}$ ,

where,  $\frac{FO}{a} = 1 - \frac{FO}{b}$ ,  $FO \left( \frac{1}{a} + \frac{1}{b} \right) = 1$ ,  $FO = \frac{ab}{a+b}$ .

Similarly, we can show that  $OE = OF$ .

So,  $FE = 2FO = \frac{2ab}{a+b}$ .

If trapezoid  $XBCY$  i  $AXYD$  similar, then  $b : XY = XY : a$ , where  $XY = \sqrt{ab}$ .

$KM = \frac{a+b}{2}$  – it's known from school.

If trapezoid  $ZBCT$  i  $AZTD$  have equal area, we will designate each of them the letter  $S$ . Let the square  $\Delta BCP$ , where  $P$ – point of intersection of straight lines  $AB$  and  $CD$ , equals  $Q$  and  $ZT=x$ . Because  $\Delta APD \sim \Delta ZPT$ , then

$$\frac{Q+S}{Q} = \frac{x^2}{b^2}, \quad \frac{Q+2S}{Q} = \frac{a^2}{b^2}, \quad \text{where } 1 + \frac{S}{Q} = \frac{x^2}{b^2}, \quad 1 + \frac{2S}{Q} = \frac{a^2}{b^2}.$$

$$\text{So } \frac{x^2}{b^2} = 1 + \frac{1}{2} \left( \frac{a^2}{b^2} - 1 \right) = \frac{a^2 + b^2}{2b^2}, \quad \text{or } x = \sqrt{\frac{a^2 + b^2}{2}}.$$

Expressions  $\frac{2ab}{a+b}$ ,  $\sqrt{ab}$ ,  $\frac{a+b}{2}$ ,  $\sqrt{\frac{a^2+b^2}{2}}$  called respectively average harmonic, geometric, arithmetic, and quadratic numbers  $a$  and  $b$ . With (fig. 3) and the previous reasoning follows that  $FE < XY < KM < ZT$ . Therefore, we have a useful geometric interpretation of known classical inequalities. If  $0 \leq b \leq a$ , then always

$$b \leq \frac{2ab}{a+b} \leq \sqrt{ab} \leq \frac{a+b}{2} \leq \sqrt{\frac{a^2+b^2}{2}} \leq a.$$

Any two of these expressions (and all expressions) are equal if and only when  $a = b$ , that is, when the trapeze  $ABCD$  degenerates into a rectangle. [2, 48 p.]

Consequently, these interesting properties of the middle lines of trapezoid will develop your knowledge of geometry. Facilitate solving tasks.

## REFERENCES

1. Генденштейн Л.Е., Єршова А.П. Наочний довідник з геометрії: довідник / Л.Е.Генденштейн, А.П.Єршова. – Харків – Тернопіль: «Гімназія» - «Підручник & посібник», 1997. – 96 с.
2. Бевз Г.П. Геометрія чотирикутника: навчально – методичний посіб. / Г.П. Бевз. – Харків: «Основа», 2003 – 78 с.
3. Чехова А.М. Геометрія в таблицях: навч. посіб. / А.М.Чехова. – Харків: Науково-методичний центр, 2003. – 165 с.

***K. Kalachev***  
*Research supervisor: L. V. Korbut,*  
*Candidate of Economic Sciences,*  
*Associate Professor,*  
*Belarusian State Economic University*

## **ECOLOGIZATION OF AGRICULTURE IN THE CONTEXT OF THE TRANSITION OF THE REPUBLIC OF BELARUS TO A "GREEN ECONOMY"**

The concept of "green" growth emphasizes the importance of integrating environmental and economic policies, allowing to identify new potential sources of economic growth without creating an "unsustainable" load on the quantity and quality of natural resources.

An important direction for the transition to a green economy, according to UNEP, is the greening of various sectors of the economy, which include: agriculture; energy; tourism; transport; fishing; forestry; industry; housing and communal services; waste disposal and recycling; water management [1].

Green economy includes a different set of ideas from other areas, both in economics and in philosophy, including the feminist economy, postmodernism, a resource-oriented economy, an ecological economy, an environmental economy, a theory of international relations, and others. The whole extensive theory of green economics can be described in three axioms:

- it is impossible to infinitely expand the sphere of influence in a limited space;
- it is impossible to demand satisfaction of infinitely growing needs in conditions of limited resources;
- everything on the surface of the earth is interconnected.

In the Republic of Belarus, at the state level, great importance is currently attached to the greening of all sectors of the economy in the context of sustainable development, and therefore the National Strategy for Sustainable Development of the Republic of Belarus for the period up to 2030 being developed is based on the principles of a green economy.

So, the main goal of the first stage of the strategy (2016–2020) is considered to be the transition to high-quality balanced growth of the economy based on its structural-institutional transformation, taking into account the principles of the green economy, the priority development of high-tech industries, which will become the basis for the country's competitiveness and the quality of life of the population. The main goal of the second stage (2021–2030) is the transition to a strong sustainability of the development and the achievement of a high quality of human development based on the further development of a "green economy", the accelerated development of high-tech industries.

It should be noted that the goals and objectives set out by the Republic of Belarus for the long-term perspective are largely interconnected with the directions

of the transition to a "green economy". The main task of the Belarusian economy at the present stage is the departure from the raw model of the economy. This direction is a priority in the concept of "green" economy.

In the context of the transition of the Republic of Belarus to the trajectory of ecological and economic development, the role of "greening" the economy of the country's regions in industry, agriculture and forestry, tourism, transport and other activities significantly increases [3, p.44].

There are many opportunities for greening economic growth in Belarus. The legislation of Belarus is developing towards harmonization with European legislation, and some important measures for this have been or will soon be taken.

## REFERENCES

1. Программа ООН по окружающей среде [Electronic resource]. – Режим доступа: <https://www.unenvironment.org/ru>. – Date of access: 25.03.2019.

2. Национальная стратегия устойчивого социально-экономического развития Республики Беларусь на период до 2030 года [Electronic resource]. – Режим доступа: <http://www.economy.gov.by/uploads/files/NSUR2030/Natsionalnaja-strategija-ustojchivogo-sotsialno-ekonomicheskogo-razvitija-Respubliki-Belarus-na-period-do-2030-goda.pdf>. – Date of access: 29.03.2018.

3. Деревяго, И. П. Потенциал развития «зеленой» экономики в Республике Беларусь / И. П. Деревяго // «Зеленая» экономика: проблемы и пути развития: материалы Междунар. науч.-практ. конф. – Минск, 2017. – С. 43-45.

*A. Kalutsky, M. Paripa*

*Research supervisor: M.D. Lavrenkova,  
Senior Lecturer*

*Baranovich State University*

*Language tutor: T.M. Greben*

## ENGLISH INTERNET SLANG

The fact is obvious that the Internet today is the most colossal source of information that humankind knows [3].

The world does not stand still. It develops, and so does humanity. Recently, many new means and channels of communication have appeared in our lives [3]. We cannot imagine our life without computers and laptops, mobile phones and smartphones, as well as programs that allow you to communicate using this technique. But a new lifestyle requires new language means of communication, or the transformation of old ones [3].

The purpose of our work is to study the characteristics and purpose of the English Internet slang [3].

The object of our research is Internet slang, because it is slang which most clearly affects our language now, and therefore, supports its life.

Slang is a set of special words or new meanings of already existing words used in various groups of people (professional, social, age, and so on) [1].

Slang is typical for any country, any language and for different groups of people. And the Internet can be compared to a large country with a huge number of different groups of people united by common interests.

Here are a few most commonly used examples of Internet slang: 1) hashtag (many sites and blogs use tags to make it easier to find the right content); 2) troll (internet trolls are people who get special pleasure to foment disputes and to interlocutors); 3) facepalm (a gesture when you cover your face with your hand, for example, if you hear something obvious or not very smart); 4) lag (this term is often used when a video game or online game is running too slow); 5) noob (a person who does not understand some topic or does not possess some skill); 6) spam (is an e-mail, which you do not need); 7) trend (is something popular or fashionable at the moment); 8) haha (this word means exactly what it looks like — laughter); 9) crush (literally translated as crush or destroy, in youth English describes the object of the speaker's insane love) [4]; 10) finesee (literally translated as subtlety and dexterity, and in slang it refers to a person who by deceptive methods or other tricks achieves the desired); 11) lit (used to describe a very fun party); 12) live (in English slang, this word describes something bright, fun, disturbing blood); 13) stan (writing hardcore fan obsessed with his idol to the bone) and many others [5].

As it turns out, the development of computer technology has the greatest impact on the development of slang. It is not surprising that mainly slang are used by young people, rather than the older generation. After all, young people always want to be unique, somehow different from older ones, and slang gives them that opportunity.

It is also important to mention such a thing as “acronyms”, which, in our opinion, along with other types of abbreviations, are one of the components of Internet slang.

Acronym is a type of abbreviation. Acronyms are formed by initial sounds (UNISEF, UNESCO). In fact, an acronym is a word that is an abbreviation that can be pronounced together, unlike other types of abbreviations that are spelled [2].

Here are some most widely used writing of a text. 1) BTW – by the way; 2) DND – do not disturb; 3) F9 – fine; 4) FYI – for your information; 5) HAND – have a nice day; 6) IYKWIM – if you know what I mean; 7) L&r – later, LTNS – long time no see; 8) MYOB – mind your own business; 9) NP – no problem; 10) Rehi – hello again; 11) YOLO – you only live once; 12) WKND – weekend; 13) ASAP – as soon as possible; 14) ATB – all the best; 15) BRO – brother; 16) CWOT – complete waste of time; 17) EZ – easy; 18) FYI – for your information [6].

One of the useful functions of acronyms is that they help greatly simplify the writing of text. It's one thing when you type “laughing out loud” and quite another when this phrase is reduced to just three letters - “lol”. This feature saves some amount of time and effort [2].

If we talk about the disadvantages of Internet slang, then it can be noted that there is a certain threshold of entry that needs to be overcome in order to calmly understand everything the interlocutor says. This problem is mainly faced by the older generation, which spends not much time on the Internet and does not keep up with the ever-growing set of new words and phrases.

The older generation also notes another negative side of Internet slang. They believe that the specifics of Internet slang manifests itself in violation of the rules of the three main components of writing: graphics, spelling and punctuation. Although we agree that illiteracy in a modern information society should not be the norm, yet, as we believe, slang is not capable of harming a beautiful, literary language.

As a result, it can be said that, as in real life, the ability to communicate on the Internet is determined by human needs. There were always people who had difficulty formulating their thoughts in a literary language, and those who owned it perfectly. That is the reason why Internet slang appeared. We believe that it is impossible to ban this phenomenon, and it is senseless to regulate this process.

#### REFERENCES

1. Сленг [Электронный ресурс] / – 2018. – Режим доступа : <https://ru.wikipedia.org/wiki/%D0%A1%D0%BB%D0%B5%D0%BD%D0%B3>. – Дата доступа : 10.03.2019.
2. Акроним [Электронный ресурс] / – 2019. – Режим доступа : <https://ru.wikipedia.org/wiki/%D0%90%D0%BA%D1%80%D0%BE%D0%BD%D0%B8%D0%BC>. – Дата доступа : 10.03.2019.
3. Научно-следовательская работа “Интернет-сленг” [Электронный ресурс] / – 2014. – Режим доступа : <https://nsportal.ru/ap/library/drugoe/2014/10/18/nauchno-issledovatel'skaya-rabota-internet-sleng>. – Дата доступа : 10.03.2019.
4. Интернет и все-все-все: 30 сленговых слов из английского языка для интернет-чайников [Электронный ресурс] / – 2019. – Режим доступа : <https://www.fluentu.com/blog/english-rus/%D0%B0%D0%BD%D0%B3%D0%BB%D0%B8%D0%B9%D0%BA%D0%B8%D0%B9-%D0%B8%D0%BD%D1%82%D0%B5%D1%80%D0%BD%D0%B5%D1%82-%D1%81%D0%BB%D0%B5%D0%BD%D0%B3/>. – Дата доступа : 10.03.2019.
5. I'm the GOAT, или Английский сленг для выживания в 2017 году [Электронный ресурс] / – 2017. – Режим доступа : <https://corp.lingualeo.com/ru/2017/04/25/angliyskiy-sleng/>. Дата доступа : 10.03.2019.
6. 100+ английских сокращений в переписке, или WUCIWUG, BRO! [Электронный ресурс] / – 2016. – Режим доступа : <https://corp.lingualeo.com/ru/2016/10/27/100-angliyskih-sokrashheniy-v-perepiske/>. Дата доступа : 10.03.2019.

***O. Karmaniuk***

*Research supervisor: K.V. Levkivska*

*Candidate of Pedagogical Sciences, Senior Teacher*

*Zhytomyr Ivan Franko State University*

*Language tutor: K.V. Levkivska*

## **OBJECTIVES OF APPLICATION OF INFORMATION TECHNOLOGIES IN THE STUDY OF LINEAR ALGEBRA**

Linear algebra is a vivid example of a fundamental mathematical theory whose methods are widely used both in mathematical theories and in applied problems [1, c.125]. Computer-based testing of success provides the opportunity to implement the main didactic principles of learning control:

- the principle of individual character verification and evaluation of knowledge;
- the principle of systematic validation and evaluation of knowledge;
- the principle of subject matter;
- the principle of differentiated assessment of the success of training;
- The principle of uniformity of the requirements of teachers to students.

From experience of leadthrough of the computer testing, it is possible to make a conclusion, that his introduction promotes:

- systematic monitoring of the quality and dynamics of academic achievements of students;
- obtaining a statistically reliable picture of the individual progress of each student;
- creation of a regional computer database of academic achievements of students on subjects for a long time of studying;
- intensification of the educational process by increasing the amount of educational material in the classroom;
- raising the interest of students in the educational process;
- opportunities for creative and practical application of knowledge, skills and abilities;
- the ability to perform tasks not only under the control of a teacher, but also to self-control educational activities.

Linear algebra is one of the most important mathematical disciplines, the basic concepts and methods of which are used in one way or another by the overwhelming majority of mathematical theories. Especially deep theoretical connections are observed between linear algebra and sections of geometry: affine, euclidean and projective. The applied methods and algorithms of linear algebra are widely used in physical, engineering and economic sciences. It becomes obvious that the methodical aspects of learning linear algebra should be given increased attention. The current discipline program contains several topics, among which:

- systems of linear equations and arithmetic  $n$ -dimensional space;
- matrices and determinants;
- vector spaces;

➤ linear operators[1,c.130-131].

You can use the EASY TEST MAKER information platform to test the knowledge of the Linear Algebra course..

The most interesting thing in Easy Test Maker is the ability to create a task where you need to choose the correct and false statements. The texts can be formatted for ease of reading on a tablet or downloaded in .pdf or .doc formats to test in a more traditional format. The service is able to mix questions and answer options to make pupils more difficult to write off.

The free version of Easy Test Maker allows you to create 25 tests without the ability to export to "paper" formats. The tariff Plus includes checking English spelling, creating an unlimited number of tests and exporting to offline formats. Premium subscription service will automatically check the results, as well as allow you to set a time limit for completing tasks and attach graphic files to surveys [2].

## REFERENCES

1. Співаковський О. В. Теорія і практика використання інформаційних технологій у процесі підготовки студентів математичних спеціальностей.
2. <http://ru.osvita.ua/school/method/technol/45747/>

***E. Khomenko***

*Research supervisor: K.V Levkivska*

*Academic, Candidate of pedagogical sciences*

*Zhytomyr Ivana Franko State University*

*Language tutor: K.V Levkivska*

## SOLVING RATIONAL INEQUALITIES GRAPHICALLY

Inequalities in modern mathematics play an enormous role. There are a number of separate branches of modern mathematics - linear and nonlinear programming, game theory, operations research, information theory, and others where irregularities are given a central place.

Two functions, joined together by the signs  $>$ ,  $<$ ,  $\geq$ ,  $\leq$  form the inequality:

$$f(x) > g(x) \text{ or } f(x) < g(x),$$

$$f(x) \geq g(x) \text{ or } f(x) \leq g(x).$$

The solution of these inequalities is called the value of  $x$  satisfying them. To solve inequality means to find a set of all its solutions or to establish that inequality has no solutions.

One of the effective methods for solving inequalities is the graphical method. But the focus of this method in practice is rather small. Because the construction of the schedule - it takes a lot of time.

Properly constructed charts help organize work, as it illustrates clearly what is known and what needs to be found.

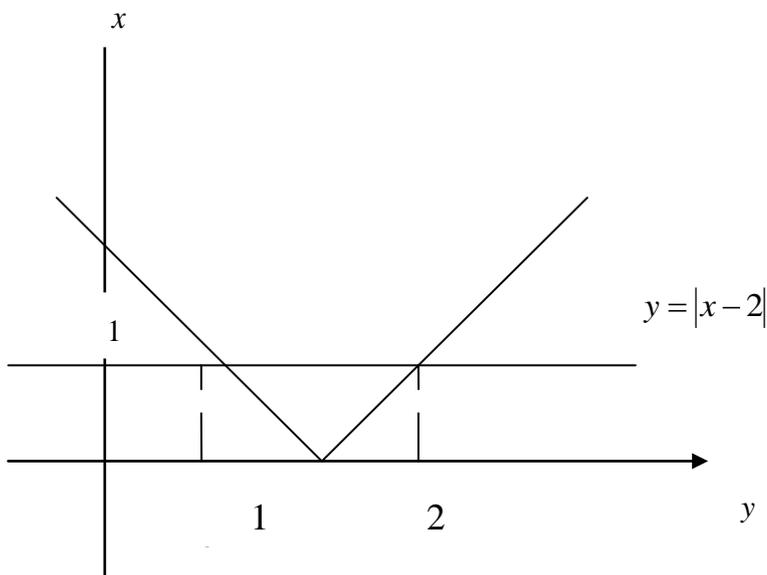
In the graphical method of solving inequalities  $f(x) > g(x)$  it is necessary to construct a graph of functions  $y = f(x)$  and  $y = g(x)$  to choose those intervals of the abscissa axis, on which the graph of function  $y = f(x)$  is located above the graph of the function  $y = g(x)$ , that is,  $x \in (x_1, x_2)$ . Similarly for:  $f(x) < g(x)$ ,  $f(x) \leq g(x)$ ,  $f(x) \geq g(x)$ .

To find the exact values  $x_1, x_2$ , we must solve the equation  $f(x) = g(x)$ .

Example: Solve inequality  $|x - 2| < 1$

The figure shows that the graph of the function  $f(x) = |x - 2|$  lies below the graph of the function  $g(x) = 1$  at  $1 < x < 3$

(To test, solve the equation  $|x - 2| = 1$ )



## REFERENCES

1. Мордкович А.Г., Семенов П.В Алгебра и начала анализа(профильный уровень) 10-11 класс –М: «Мнемозина»,2009
2. Сільвестрова І.А., Фурман М.С. Многочлени. Раціональні рівняння та нерівності –Харків: «Основа»,2004

**I. Kirey**  
*Research supervisor: L.S. Zubritskaya,*  
*Senior tutor*  
*Baranovich State University*  
*Language tutor: L.S. Zubritskaya*

## **LEARNING ENGLISH THROUGH WATCHING MOVIES**

Today, English is one of the most common and popular languages around the world. Every fifth person in the world speaks or at least understands English. There are 400 million speakers of this language on the planet, and English is the official or one of the main languages spoken in more than 50 countries. [1] More and more people are eager to learn English for a variety of purposes: getting prestigious work, studying world literature, traveling, learning about the culture of English-speaking countries, meeting people around the world, etc.

There are many ways to learn English, but if the process of learning a language is not fascinating, it will be more difficult to achieve results, so the method of learning English through watching movies or TV shows in English is now widely used.

Watching movies in English is considered a great way to learn English, because for most modern films, English is the original language. Such films contain a huge number of words, and often all the basic grammatical structures are given. While watching a movie in English, you learn phrasal verbs (“Forrest Gump”), colloquial forms of words (“Pirates of the Caribbean”) and slang (“Westworld”). Watching movies allows you to learn the correct pronunciation, as well as to develop a language perception skill by ear. You are also studying the characteristics of another culture. Watching a movie or TV series, you can get acquainted with the customs, holidays, traditions or mentality of native speakers [2].

However, this method of language learning has its disadvantages. The main disadvantage is that you can't start learning English through watching movies if you don't have a basic knowledge of English. Another disadvantage is that speaking in movies is not always clear. Heroes can use slang or word abbreviations, which can lead to difficulties during translation. Another disadvantage: watching movies doesn't allow you to understand the spelling of words, and when watching movies without subtitles, there is a possibility that a particular word will be misunderstood.

Summarizing, it is worth saying that learning English through watching movies is a great solution for both the older generation and young people. To learn English this way, there are various online resources to help you choose the right movie, or you can choose the movie that you want. There are also online resources that offer users movies that allow you to learn English, as well as the opportunity to test their knowledge.

## REFERENCES

1. Сервис для изучения иностранных языков “busuu”  
<https://www.busuu.com/ru/a/y/prichiny-uchit-angliyskiy>
2. Персональные онлайн-занятия по английскому <https://englex.ru/how-to-learn-english-by-films-and-tv-series/>

*M. Loseva, Yu. Kokhovich*  
*Research supervisor: S.A. Derman,*  
*Teacher Baranovich State University*  
*Language tutor: V.I. Markevich*

## ENVIRONMENTAL PROBLEMS OF SVETILOVSKY LAKE OF THE CITY OF BARANOVICHI

In this article one of problems of our city is considered. Owing to availability and usefulness of this material, its consideration on elective and after-hour courses is possible.

**Introduction.** Among water objects of our planet the important place is taken by lakes. They are one of the main natural resources of the earth.

**Main part.** Baranovich is a beautiful city in the Brest region of the Republic of Belarus. One of favorite vacation spots of citizens is in the Northern residential district. There is Svetilovsky lake and also an artificial pond which exists nearly 150 years.

In a warm and sunny weather families which organize picnics gather here and feed guests of the lake – ducks and swans. The big kind of fishes lives in the lake. And inveterate fishermen spend almost all day here.

The water zone is not equipped for bathing, but it is always pleasant to sunbathe and breathe fresh air at water. In the middle of a pond "The island of lovers" is built. There is an arbor and a graceful tree from metal on which branch lovers and newlyweds hang up locks and multi-colored tapes.

Beautiful landscapes and comfortable geographical location attracts to itself supporters of active holiday at water. But not at all visitors of the lake it is known about ecological culture.

Many people do not think that the garbage thrown into water does not disappear anywhere, and any foreign subject can put a trauma to the person.

Already several years in a row, students of specialty "Geoecology" (picture 1), together with teachers carry out "global cleaning" of the coastal zone. Thus we join the company on volunteer cleaning of garbage “Zrobim” - the Belarusian part of the world company "Let's Do It - World Clean-up" which unites 113 countries and 16 million people seeking to make the planet free from garbage and to maintain on it purity.



Picture 1



Picture 2

The greatest number of garbage is noted near the places "chosen" by fishermen. On "The island of lovers" where newlyweds come to be photographed the garbage is scattered, waste is turned out directly on a grass.

Considering that the beach area of the lake cleans up by forces of housing and public utilities, the main attention was paid to the coastal zone which densely grew with reed.

As a result of one of our cleaning, more than 500 liters of garbage — plastic bottles, the packing remains, paper, splinters of the broken bottles, a beaten brick, the plastic stand, boards and many other things were collected. (picture 2).

Many locals do not even guess that glass decays about 10 thousand years; plastic - about 180-200 years; paper – up to 4 months.

**Conclusion.** Volunteer the movement we urge residents of our city to keep purity of lakes and to appreciate work of others. The ecology begins with each of us, and the duty of everybody is to make a feasible contribution to business of saving of the nature of the native land.

#### **References**

1. Nash Kray newspaper [Electronic resource]. 20.03.2019. — Access mode: <http://www.nashkraj.by/>. — Date of access: 20.03.2019.

***K. Kornietska***

*Research supervisor: O. E. Kravets,  
Candidate of Pedagogical Sciences,  
Associate Professor*

*Language supervisor: I. V. Samoylyukevych,  
Candidate of Pedagogical Sciences,  
Professor*

*Zhytomyr Ivan Franko State University*

## **THE FORMATION OF SOCIOCULTURAL COMPETENCE IN PRIMARY SCHOOL ENGLISH LANGUAGE LEARNERS BY MEANS OF LITERATURE**

In the content of the modern primary school education of Ukraine teachers experience difficulty teaching children to be nature conscious through the study of English as a foreign language from a very young age. That ensures the topicality of the research into the area of methodological foundational prerequisites in order to

present teaching staff with viable options. This paper aims to explore ways of teaching sociocultural competence to primary school pupils by means of literature. The following research will address this issue by analysing literary works as the source of sociocultural competence for primary school children.

The problem of sociocultural competence formation was studied by many native and foreign scientists: M. Natsiuk, I. A. Bronetko, L. A. Gorodetskaya, P. V. Sysoev, M. Bennett, M. Rogers and others. However, there is no research related to the development of this type of competence among primary school pupils.

In accordance to the foreign languages curriculum for general educational institutions in Ukraine, the basic tasks of modern teachers include the formation of the communicative competence of pupils [3]. That's why it is very important to take part in the dialogue of cultures. It gives complete understanding of a foreign language. To have a well-developed sociocultural competence means the readiness of a person for foreign intercultural communication.

A sociocultural competence includes knowledge about rules and social norms of native speakers' behavior of their language, traditions, history, culture, social system of the country and its structure [2, p. 14]. In the process of foreign language study pupils meet a new culture. It is very important to understand this and take into account the rules of behavior and norm of etiquette [1, p. 441]. Literary works are the sources of sociocultural competence in primary school English language learners.

Literature is the body of written works and accompanying illustrations produced in order to instruct primary school pupils. Literary works includes stories, fairy tales, poems, rhymes, lullabies, fables, folk songs, and others. English classes in primary school most often use poems, easy-to-read stories, rhymes and fairy tales. These genres of literature provides a wealth of possibilities for teaching English topics. They help pupils learn to recognize the existence of different linguistic and cultural systems .

In conclusion, we would like to say that by coming into contact with the English language, the pupil of junior school should be able to deepen his or her awareness of English language cultures. Thus, developing a diversified repertoire of linguistic and cultural resources by means of literature becomes a tool that may be used to interact with others.

## REFERENCES

1. Методика навчання іноземних мов і культур: теорія і практика: підручник для студентів класичних, пед. і лінгвіст. ун-тів / Бігич О. Б., Бориско Н. Ф., Борецька Г. Е. та ін. / за заг. ред. С. Ю. Ніколаєвої. – К.: Ленвіт, 2013. – 590 с.
2. Ніколаєва С. Ю. Цілі навчання іноземних мов в аспекті компетентнісного підходу / С. Ю. Ніколаєва // Іноземні мови. – 2010. – № 2. – С. 11-17.
3. Програма для загальноосвітніх навчальних закладів з англійської мови. – [Електронний ресурс] – Режим доступу: <https://mon.gov.ua/ua/osvita/zagalna-serednya-osvita/navchalni-programi/navchalni-programi-dlya-pochatkovoyi-shkoli>

*A. Korshak, T. Gritskevich*  
*Research supervisor: E.Y. Rutman,*  
*Senior lecturer*  
*Baranovich State University*  
*Language tutor M.D.Lavrenkova,*  
*Senior lecturer*

## **SELECTED ISSUES OF LIMITATION OF GIFT AND BRIBE IN CIVIL AND CRIMINAL LEGISLATION OF THE REPUBLIC OF BELARUS**

The most prominent manifestation of corruption is bribery, the public danger of which is beyond doubt. However, despite this, there are still a number of controversial, unresolved issues in the field of the criminal law characteristics of this negative phenomenon. One of them is the question of the legality of receiving an official gift in connection with the implementation of their official activities, as well as the distinction between bribe and gift. Many authors have turned to this issue, but this problem has not received a uniform solution.

The lack of consensus, as we see it, is due to the following circumstances. First, in some cases, the criterion for distinguishing a gift and a bribe is based not on objective, real-life differences between them, but on the subjective volitional factor, someone's opinion: to establish a complete ban on accepting gifts to officials; not to consider a small amount of illegal remuneration to an official as a bribe; to suppose that an official's accepting souvenirs and gifts when conducting protocol and other official events is not a bribe, etc. Secondly, since a gift and a bribe have a fundamental similarity in the subject - property gain, in some cases they are identified. And finally, the diversity of opinions on the problem under consideration is associated with the lack of a general legislative assessment of these legal phenomena [3, p. 83].

Of great practical importance is the distinction between gift and bribe. A bribe is related to the official behavior committed in the interests of the bribe taker, it is determined by official action (inaction), dependent on it. The gift is given free of charge in the absence of a counter-transfer of the thing, a right or a mutual obligation. From this it follows that the most important criterion for distinguishing these legal categories is the conditionality of bribe, which the gift does not possess. In this context, the legislator has limited only the cost of the gift. But it would be necessary to determine the number of possible gifts from one person, since there is no point in limiting the value of a gift in the absence of a restriction of "systematic" donation [1, p.56]. It is necessary in the disposition of Article 556 of the Civil Code of the Republic of Belarus, in addition to the marginal cost of ordinary gifts, to establish the impossibility of a gift by a person and his or her relatives more than once during a certain time. A reference to a reasonable timeframe occurs in many provisions of civil law and it will be appropriate to establish it for the case described above. It would be reasonable to determine the limit of the number of gifts and the period during which it will be impossible to

bestow again. This period must be reasonable, but not less than 6 months (by analogy with the period during which the court may cancel a gift made by an individual entrepreneur or a legal entity in violation of the provisions of the act of legislation on economic insolvency (bankruptcy) at the expense of funds associated with its business activity) [3, p. 133].

Abuse of the contract of donation is also possible. For example, in the course of a month in aggregate, the value of gifts may reach significant amounts. In this case, there is no violation of the law. After all, there is a gift - and there is a price not more than five times the size of the base value. The law is not broken. However, in reality this is often not a gift, but a property, for the provision of which the person who received it performs any service, abusing its official powers [1, p. 174].

Thus, taking into account the criteria identified by us for distinguishing the gift and bribe, it should be noted that a gift can be understood as a property benefit that is donated, usually not stipulated in advance and given to the donee for a variety of purposes for which it is not typical to wait for reciprocal obligations. A bribe is any property gain of a wrongful nature, which is granted to an official for performing any official actions (omissions) in the interests of the person giving or representing them.

#### REFERENCES

1. Гатин, А.М. Гражданское право / А.М. Гатин. – М.: Дашков и К, 2009. – 384 с.
2. Гражданский кодекс Республики Беларусь [Электронный ресурс] : 7 декабря 1998 г., №218-3 : принят Палатой представителей 28 октября 1998 г. : одобр. Советом Респ. 19 ноября 1999 г. : в ред. Закона Респ. Беларусь от 17 июля 2018 № 135-3 // ЭТАЛОН. Законодательство Республики Беларусь / Нац. центр правовой информ. Респ. Беларусь. — Минск, 2019.
3. Сергеев, А.П. Гражданское право : учебник / А. П. Сергеев. – М.: ТК Велби ; Проспект, 2004. – 848 с.

**V. Kortschenjuk**

*Sprachlehrerin: I.Swiridenko*

*Kandidatin der pädagogischen Wissenschaften,*

*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

#### BODENSCHÄTZE DER UKRAINE

Die Ukraine ist reich an Bodenschätzen. Sie hat Eisenerz, Steinkohle, Mangan, Nickel, Chrom, Titan, Uran, Graphit, Quecksilber, Schwefel, Salze und einige andere Bodenschätze.

Die größten Eisenerzlager gibt es bei Krywyj Rih, die nach Norden in den Vorkommen von Kremenschuh ihre Fortsetzung finden. Sie wurden gegen Ende

des 19. Jahrhunderts entdeckt. Heute werden sie auf über 15 Millionen Tonnen geschätzt.

In einer Senkung östlich des Dnipro lagern die gewaltigen Kohlenvorkommen des Donbas, die in Verbindung mit den Eisenerzvorkommen von Krywyj Rih die Grundlage für die Bergbau- und Schwerindustrie des Landes bilden. Die Steinkohlenreserven des Donezbeckens werden auf rund 40 Millionen Tonnen geschätzt. Die nicht weit davon gefundenen Manganerzlager bei Nikopol, die für die Stahlproduktion von großer Bedeutung sind, ergänzen die Rohstoffbasis dieses Industriezentrums. Mehr als ein Drittel der Manganerzvorkommen der ganzen Erde enthalten die beiden Lagerstätten von Nikopol und Welykyj Tomak.

Im Karpatenvorland wurden auch bedeutende Kohlenvorkommen im Lwiw-Wolhynischen Kohlbecken entdeckt. In ausreichender Menge sind Titan, Nickel- und Chromerze vorhanden. Vorkommen sonstiger Stahlveredler (etwa Wolfram) finden sich in der Ukraine nur in geringem Maße, auch Lagerstätten von Buntmetallen; hier ist das Land auf Importe angewiesen. Ziemlich groß sind die Uranvorkommen, sie werden auf 350 000 Tonnen beziffert, damit steht die Ukraine an der 5. Stelle in der Welt. Große Graphitvorkommen liegen im Gebiet von Mariupol. Auch Quecksilber und Bauxit sind vorhanden, außerdem Rohstoffe verschiedener Art für chemische Industrie (Schwefel, Salze), sowie für die Zementproduktion.

Erdöl und Erdgas sind nur in geringem Maße vorhanden. Auch die Erdgasproduktion ist stark rückläufig. Deshalb ist das Land auf Importe angewiesen. Die Rohstoffvorkommen der Ukraine bilden aber insgesamt die industrielle Grundlage des Landes und stellen ein großes Potential für zukünftiges Wirtschaftswachstum dar.

## LITERATUR

1. Andreas Kappeler. Kleine Geschichte der Ukraine. München 1994.
2. Martin Trescher. Die Ukraine entdecken. München 1996.

**A. Kotvitska**

*Research supervisor: I. Sverchevska*

*Candidate of Pedagogical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: S. S. Kukharyonok*

## SYMMETRY AS A MATHEMATICAL LAW OF THE BEAUTY OF CURBS AND ORNAMENTS

Mathematics is a part of human's life and the attention should be paid to way it inter connects with the other aspects of life. The relevance of the topic is determined by practical application of symmetry and its visual aspect, things which are not quite understood by students.

The purpose of this article is to explain the interrelation between mathematics and art. Symmetry (from Greek) means conformity, the presence of a certain order, regularities in the arrangement of parts. There exist such kinds of symmetry: central, axial symmetry, mirror symmetry, turning symmetry, translational symmetry. The nature defines the question of symmetry under a particular angle, as it functions as the basis of this harmony.

This article underlines translational and the other types of symmetry.

The translational symmetry is a type of symmetry characterized by multiple repetitions in the space of the same structure. It is important that the transposition step is constant and unchanged. The shifted part is called period.

The translational symmetry is related to an important concept of a two-dimensional periodic structure - a flat lattice. In order to create the lattice, it is sufficient to set its elementary cell and then transpose it parallel to itself along a straight line at a distance that is a multiple of a certain value  $a$  or along a second line at a distance that is a multiple of  $b$ . There are 5 types of translational symmetry on a plane (Fig. 1):

- A) square grid, where  $a = b, \gamma = 90^\circ$ ;
- B) rectangular lattice,  $a \neq b, \gamma = 90^\circ$ ;
- C) hexagonal lattice, where  $a = b, \gamma = 60^\circ$ ;
- D) a rhombic lattice, where  $a = b, \gamma \neq 90^\circ$ ;
- E) braid lattice, where  $a \neq b, \gamma \neq 90^\circ$ .

One of the five types of flat lattice is considered as the basis of each ornament. A striking example of translational symmetry is the art of curbs.

The curb is a periodic repeating pattern on a long strip. This type can be seen on wall paintings, galleries, etc. There are different types of curbs symmetry: translational symmetry, symmetry relative to the straight line, rotational symmetry, or a combination of different types of symmetry.

The translational, mirror and rotational symmetry can be found in ornaments. The Dutch artist Maurits Cornelis Escher created wonderful pieces of art based on symmetry. The most famous ornaments of Escher are "Flying Birds" and "Lizards"[2].

Ornament "Lizard" is a mosaic consisting of completely identical images of lizards. This mosaic is constructed in such a way that, with a dense stacking of lizards, there is no empty space between them. This ornament uses translational symmetry and rotational symmetry (Fig. 2a).

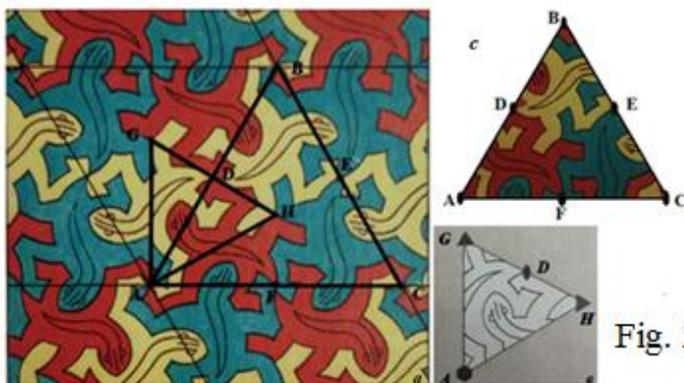


Fig. 2

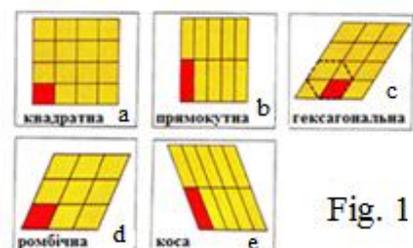


Fig. 1

What concerns translational symmetry, it can be seen that it is determined by a hexagonal lattice, and the rotational one—by the presence of rotation axes at points A, B, C, D, E, F, G, H (as shown in Fig. 2a).

Let's review to the construction of the "Lizard" ornament (Fig. 2a) using:

**Single-color ornament (Fig. 2b):**

The area of  $\triangle AGH$  is equal to the area of the lizard (depicted in parts along the entire triangle). For constructing we will be using the rotation of the axis of the 6th (axis A) and 3rd order (the axis of H or G). At first, turning the  $\triangle AGH$  at an angle of  $60^\circ$  around A, after a complete turn around A ( $360^\circ$ ), the image will be rotated around the point H to an angle of  $120^\circ$ . After completing these actions, the result is the desired ornament (Fig. 2a).

**Three-color ornament (Fig. 2c):**

We will be using  $\triangle ABC$ , which contains the image of all three-colored lizards. The area of  $\triangle ABC$  is equal to the area of three lizards.

There are two possible cases:

1. Choosing the rotation axes that pass through dots D, E, F.
2. Choosing the rotation axes that pass through dots A, B, S.

For example, the usage of a rotation axis that passes through point D. As it is a turning axis of the 2nd order, we must make a rotation of this axis relative to point D at an angle of  $180^\circ$ . After that, a  $180^\circ$  rotation should be taken to the points E and F [1, p. 36].

Similar actions should be done while constructing relative points A, B, C.

To sum it up, using mathematical knowledge, one can create a work of art that will be unique, and it will have a certain meaning. The combination of maths and art helps the student to understand that mathematics is not only a theory, but also a manifestation of perfection and harmony.

## REFERENCES

1. Тарасов Л. В. Этот удивительно симметричный мир: Пособие для учащихся / Л. В. Тарасов. – М.: Просвещение, 1982. – 176 с.
2. Левитин К. Е. Геометрическая рапсодия: Пособие / К. Е. Левитин – М.: ИД «Камерон», 2004. – 216 с.

*Y. Kovalchuk*  
*Research supervisor: I.G.Kopytsich*  
*Senior lecturer*  
*Baranovich State University, Belarus*  
*Language tutor: E.V.Shilo,*  
*Senior lecturer*

## **PROBLEMS OF THE TRANSLATION OF BELARUSIAN FAIRY TALES TO THE ENGLISH LANGUAGE**

In modern globalized society the role of the English language has changed significantly. English is used as the intermediary between the cultures of the communicants. An integral part of this process is familiarization with the national literature, which is impossible without the translation of works into English.

Modern Belarusian literature is nearly not represented into English translation. That's why we attempted to translate Belarusian tales of the modern Belarusian writer Vladimir Yagovdik.

In the process of translation some linguistic difficulties, which can be divided into several main categories, have appeared.

The greatest complexity is represented by the by non-equivalent vocabulary and phraseological unities, since they have no analogues in English. So, for example, it is rather difficult to find the perfect translation of the word «сястра-багацейка» from the fairy tale «Cuckoo's tears». The only possible lexical variant in the English language is «a reach sister», which does not fully convey the negative meaning of the Belarusian word. Using translation, we lose a certain degree of emotions. We come across the same problem while translating the phraseologism “хоць рот зашывай”. At first glance, it is possible to apply the English idiom: “Hungry bellies have no ears”. However, this phrase corresponds to the Russian phraseological unity “у голодного брюха нет уха”, which means – “a hungry person can't think of anything except food”. In the context of the fairy tale “Беднаму заўсёды цяжка, а ў галодны год – хоць рот зашывай”, the most appropriate functional analogue of the phrase “хоць рот зашывай” is the English saying “Hope is the poor man's bread”, which allows you to keep the emotional coloring of the Belarusian text. As a result, we have: “Poor man's life is always very difficult, but in a lean year only hope is poor man's bread”.

Another, rather numerous group of words that are difficult to translate, are words with diminutive suffixes, such as “вожык”, “бусляняты”, “лісічкі”, “пухнацікі”, etc. The works of V. Yagovdik are intended for children and, therefore, there are a lot of such words in them. As is known, there are no similar suffixes in English and the task of the translator is to convey the author's warm attitude towards the characters described using the means of the English language. Here we can only add the words “little”, “young”, “tiny” and the like. To convey the emotional atmosphere of the tale, we consider it is possible to add epithets that will give a certain color to the text. For example, “пухнацікі” can be translated as “little floofs” or “little fluffs”. The word “вожык” can be translated as “little

hedgehog”, or, by analogy with the English word “doggy”, it is possible to use the calque “hedgehoggy”, which conveys the diminutively meaning of the text. In the same fairy tale, we meet the expression “лісічкі-сястрычкі”. The analysis of the dictionaries allows to find the following analogues “foxy sisters”, “foxy-woxy”, “little fox sisters”. In the context of the fairy tale the “foxy sisters” will be the most appropriate.

In the same fairy tale, we meet the phytonim “лісічкі”, denoting the species of mushrooms. Although the translation of phytonyms is another problem of the translation of Belarusian fairy tales into English, in this case we can easily find the vocabulary correspondence “chanterelle”. In other cases, we use the calque and descriptive translation. For example, “жабіны вочкі” is tracing frogs’ eyes (with an explanation of forget-me-nots).

Thus, translating the modern Belarusian tale into English, the main task of a translator is to find functional analogues that not only lexically, but also emotionally convey the context of the text.

### REFERENCES

1. Голикова, Ж.А. Перевод с английского на русский / Ж.А. Голикова. — М. : Новое знание, 2007. — 287с.
2. Слепович, В.С. Курс перевода русский-английский / В.С. Слепович. — Минск : ТетраСистемс, 2001. — 272с.
3. Толстой. С.С. Как переводить с английского языка / С.С. Толстой. — Москва : Издательство ИМО, 1960. — 112с.

*V. Kravets*

*Research supervisor: I. V. Samoylyukevych ,  
Candidate of Pedagogical Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: I. V. Samoylyukevych*

### THE FORMATION OF ENTREPRENEURIAL COMPETENCE IN THE PROCESS OF TEACHING ENGLISH IN PRIMARY SCHOOL

According to the concept of the New Ukrainian School, the Ukrainian educational community has been actively involved in the implementation of EntreComp in order to integrate ten key competences into practice, one of which is entrepreneurial.

**The aim** of the article is to identify the potential of English lessons in primary school for the formation of entrepreneurial competence. We offer a subsystem of exercises for the formation of entrepreneurial competence in primary school pupils in the process of developing spoken production skills.

In our research, we use Yu. A. Bilova’s definition of entrepreneurial competence, according to which it is understood as an integral psychological quality of an individual which manifests itself in the motivated ability to generate

and implement new ideas and allows to solve various problems in everyday life [3].

By examining the EntreComp, we considered three areas of competence: Ideas and Opportunities, Resources, Into action [1, p. 13]. The first area involves such competences as spotting opportunities, creativity, vision, valuing ideas, ethical and sustainable thinking. The second area contains the following competences: self-awareness and self-efficacy, motivation and perseverance, mobilizing resources, financial and economic literacy, mobilizing others. The third area is built with planning and management, taking the initiative, coping with ambiguity, uncertainty and risk, working with others, learning through experience.

We have examined the psychological characteristics of children of primary school and identified the competences that can be successfully formed in the process of developing spoken production skills in primary school pupils [2, c. 49-57]. We also suggest the classification of exercises for developing spoken production skills, which is based on the following criteria: the direction of reception or issuance of information, the additional the level of management of student activity, the presence or absence of props, the presence or absence of a game component [2, p. 183]. We have worked out exercises for four stages of the formation of entrepreneurial competence in the process of developing spoken production skills in primary school pupils.

The exercises of the first stage include receptive exercises aimed at perceiving the information in the process of listening or reading, with a nonverbal or short verbal response. At this stage it is advisable to use verbal auditory and visual props. As the second stage aims to teach students to combine samples of entrepreneurial content into extraordinary unity, we use reproductive exercises for association, transfer with the replacement of some words with verbal and nonverbal props. At the third stage, pupils are offered reproductive and productive exercises which allow the use of different props, from substituting tables to mixed verbal-figurative props. At the fourth stage, productive exercises that presuppose combining objects in accordance with certain parameters, their advertising, demonstration of mini-projects are performed.

So, the use of the subsystem of our exercises for the formation of entrepreneurial competence in the process of developing spoken production skills in primary-school pupils shows that the competence potential of English lessons in primary school can be effectively realised to form the entrepreneurial competence of young learners.

## REFERENCES

1. Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. (2016). EntreComp: The Entrepreneurship Competence Framework. Люксембург: Publication Office of the European Union; EUR 27939 EN; doi:10.2791/593884
2. Підготовка майбутніх фахівців у контексті становлення Нової української школи: компетентнісний підхід : збірник наукових праць / за заг.

редакцією В. Є. Литнєва, Н. Є. Колесник, Т. В. Завязун. – Житомир: ФО-П «Н. М. Левковець», 2019. – С. 49-57 + CD

3. Поняття та структура підприємницької компетентності майбутніх фахівців економічного профілю / Ю. А. Білова // Оновлення змісту, форм та методів навчання і виховання в закладах освіти. - 2013. - Вип. 7. - С. 15-17. - Режим доступу: [http://nbuv.gov.ua/UJRN/Ozfm\\_2013\\_7\\_7](http://nbuv.gov.ua/UJRN/Ozfm_2013_7_7)

*D. Krot, A. Yurkovets*

*Research supervisor: E. Y. Rutman, senior lecturer,*

*Baranovich State University*

*Language tutor: M.D. Lavrenkova*

## **ABOUT COMMISSION OF SMALL HOUSEHOLD TRANSACTIONS BY JUVENILES**

The Civil Code of Republic of Belarus does not define the small household transaction and its limits. In the legislation uniform definition "the small household transaction" is not given, but in a concept two main signs are already put. First, it is the insignificant price of the transaction. Secondly, household character should be important, for example, the physical and social life of a person, including the satisfaction of material and spiritual needs such as clothing, food, and housing.

The approximate content of the concept "small household transaction" can be represented as follows: this is a transaction aimed at satisfying personal needs, it has a small amount and its purpose is executed immediately upon conclusion [3, 163].

Paragraph 2 of Article 25 of the Civil Code of Republic of Belarus provided that minors aged from fourteen up to eighteen years have the right to make small household transactions independently. These subjects have limited capacity and are called as juveniles.

The legal capacity of minors in the Republic of Belarus is expressed in the fact that they have the right to independently make small household transactions (Subparagraph 1 of Paragraph 2 of Article 27 of the Civil Code) [1].

However, one cannot agree with the resolution of this issue in Art. 27 of the Civil Code of the Republic of Belarus, which, in contrast to Art. 28 of the Civil Code of the Russian Federation, has not established the age limit from which the minors acquire partial legal capacity. Note that in the Civil Code of the Russian Federation, paragraph 2 of Art. 28, similar to paragraph 2 of Art. 27 of the Civil Code applies only to minors over the age of six [2; 1]. In the Republic of Belarus, partial legal capacity is recognized for all minors without exception, including infants, the expression of which gives rise to some doubts.

The latter is enshrined in the Civil Code of the Russian Federation [2]. We believe that securing the minimum age (6 years) for making small household transactions by analogy must be made in the Civil Code of the Republic of Belarus.

In our opinion, in order to distinguish small household transactions from other transactions, paragraph 2 of Art. 5 of the Civil Code should be supplemented with a paragraph in the following edition: “A small household transaction is a transaction aimed at satisfying material and spiritual needs, which has a small amount and a goal corresponding to the child’s age and which is executed immediately upon its conclusion”.

### REFERENCES

1. Civil code of Republic of Belarus: it is accepted by the House of Representatives 28 Oct. 1998: it is approved by Council of Republic 19 нояб. 1998: in an edition. Law of Republic Belarus of 02.10.2019//Consultant Plus: Belarus. Technology 3000 [Electronic resource] / LLC Yurspektr, Nats. Center legal inform. Republic Belarus. – Minsk, 2019.
2. Civil code of the Russian Federation: The code Grew. Federations, 30 нояб. 1994, No. 51-FZ: in an edition Feder. Law of Dews. Federations of 18.07.2009, No. 181 is the Federal Law//the Consultant Plus: Russian Federation [Electronic resource] / LLC Yurspektr. – M, 2019. – Date of access: 19.03.2019.
3. Sergeev, A. P. Civil law / A.P. Sergeev [etc.]; under the editorship of A.P. Segeev, Yu.K. Tolstoy. – 4 prod., reslave. and additional – M.: Юристъ, 1999. – 632 pages.

*L. Krut*

*Research supervisor:*

*A. V. Kuznyetsova*

*Candidate of Philology, Associate Professor*

*Zhytomyr Ivan Franko State University*

### THE ADVANTAGES OF PROJECT METHOD IN THE EDUCATIONAL PROCESS

According to the Concept of the New Ukrainian School, the pupil should be fully developed person, capable of thinking critically, a patriot and an innovator. To develop these qualities in the younger generation is the main goal of modern teachers.

In recent years, the issue of the application of modern technologies in school has become increasingly important. These are new forms and methods of teaching, in particular, new approaches to teaching foreign languages. Teachers apply new methods of engaging pupils in educational and cognitive activities, encouraging them to develop their skills such as independent information search, creative thinking, group-work, and work with large amount of information. The task of the teacher is to create proper conditions for acquiring practical skills for every pupil, to select teaching methods that would help everyone to reveal his possibilities and creativity. In our opinion, the project method is the best way to solve this issue.

The purpose of this research is to research the feasibility of using the project method in studying English. The theoretical basis of the research is works of famous American scholars and teachers of the 20<sup>th</sup> century.

«The project is a set of tools, actions of students to solve a certain problem» [1]

The founder of the project method is John Dewey, an American philosopher, psychologist, democratic socialist and education reformer, who in the 20's of the 20<sup>th</sup> century tried to change the traditional systems of learning. He is the first to combine the theory and practice, knowledge and activities, as a result of which students can accumulate their own experience. J. Dewey said that "Education is not only a preparation for life, education is life itself." His student and follower, an American teacher, W. Kilpatrick, improved the system of work on projects. According to William Heard Kilpatrick, there are 4 types of projects:

- Type 1, where the purpose is to embody some idea or plan in external form, as building a boat, writing a letter, presenting a play;
- Type 2, where the purpose is to enjoy some (esthetic) experience, as listening to a story, hearing a symphony, appreciating a picture;
- Type 3, where the purpose is to straighten out some intellectual difficulty, to solve some problem, as to find out whether or not dew falls, to ascertain how New York outgrew Philadelphia;
- Type 4, where the purpose is to obtain some item or degree of skill or knowledge, as learning to write grade 14 on the Thorndike Scale, learning the irregular verbs in French. [2]

This technology has been improving for many decades and became relevant in the twenty-first century. The advantages of the project method are the development of skills for self-searching information, work in the group, the development of autonomy and initiative, enhancement of motivation and development of aesthetic taste. Another advantage of the project method is interdisciplinary communication. In conducting research students acquire knowledge not only in English, but also in cultural studies, history, biology, art, and others. Unlike other technologies used at school, the project method makes it possible for the teacher to engage learners in real communication, which is based on research activities and cooperation.

## REFERENCES

1. Поняття навчального проекту. Етапи виконання навчального проекту [Електронний ресурс] <https://school-65.jimdo.com/> Режим доступу до ресурсу: [https://school-65.jimdo.com /поняття-навчального-проекту/](https://school-65.jimdo.com/поняття-навчального-проекту/)
2. William Heard Kilpatrick. The project method. The Use of the Purposeful Act in the Educative Process. - Teachers College, Columbia University, Eleventh Impression

*A. Kukharchuk, O. Omelyanovich*  
*Language tutor: M.D.Lavrenkova*  
*senior lecturer*  
*Baranovich State University*

## **FRANCHISE AGREEMENT AND ITS ROLE IN CONSUMER RIGHTS SECURITY**

In recent years, franchising has played a large role in the economies of many developed and developing countries. Franchising is widely used in various areas of business: the automotive industry, construction, tourism and hotel industry, catering and many others [1, p. 33]. From the point of view of recruiting license rights, the Comprehensive Entrepreneurial License Agreement (franchise) (hereinafter - the franchise agreement) is the youngest and complex legal institution in the Republic of Belarus among the entire list of contractual relations in the field of intellectual property.

Currently, 438 franchise agreements are registered in Belarus. And this figure is constantly growing thanks to the opening of new companies both in the capital and in the regions of the country [2].

Currently, the development of the franchise agreement is widely developed in theory. Many lawyers of the Republic of Belarus raise questions about the creation of a special law that would regulate franchising activities. However, no one thought about some infringement of the rights of consumers, who, in turn, have the right and should know that the goods, work, services provided to them by a commercial organization with a well-known brand are actually carried out by the franchisee, using, for example, trademark of a major manufacturer. This provision is enshrined in Art. 9104 of the Civil Code, part 8 of which states that the user is obliged to inform buyers that he uses the company name, trademark, service mark or other means of individualization of participants in civil circulation, goods, works or services on the basis of a franchise agreement [3]. But what exactly is meant by the obligation to inform buyers (customers) “in the most obvious way for them” is not disclosed anywhere, and in practice consumers often have a delusion as to who the real manufacturer of this product is. In this regard, the question arises: Is this a kind of consumer fraud? After all, the legislator has fixed the rate of part 8 of Art. 9104 of the Civil Code only on the basis of the possibility for the consumer to make requirements concerning product quality to this right holder, but not at all from the need to protect the non-property rights of the consumer, which resulted in the low quality of the legislative technique of part 8, Art. 9104 of the Civil Code. We consider it important to focus on the need to notify consumers about the sale of their products, the provision of work or services not by the franchisor, but only by the user (franchisee), as well as the inadmissibility of exclusion of the norm of Part 8 of Art. 9104 of the Civil Code, as some lawyers have recently written about. It is also necessary to fix the obligation of the user to inform buyers (customers) “in the most obvious way for them” about the use of the company name and other exclusive rights on the basis of a franchise agreement.

Such an explanation should, in our opinion, be contained not only in the norms of the Civil Code of the Republic of Belarus, but also in special regulatory legal acts.

### REFERENCES

1. Алейников, СМ. Договор франчайзинга : учеб. пособие / С.М. Алейников. — Минск : Академия Управления при Президенте Республики Беларусь, 1998. — 58 с.
2. Беларусь Мир [Электронный ресурс]. // [Электронный ресурс]. — 2019. Режим доступа: <http://www.belmir.by/2018/10/17/в-беларуси-зарегистрировано-438-договор/> — Дата доступа : 09.03.2019.
3. Гражданский кодекс Республики Беларусь : принят Палатой представителей 28 октября 1998 г. : одобр. Советом Респ. 19 ноября 1998 г. : текст Кодекса 147 по состоянию на 31 дек. 2014 г. — Минск : Нац. центр правовой информ. Респ. Беларусь, 2015. — 656 с.

**M. Kurilo**

*Wissenschaftliche Betreuerin: N. N. Krugljakova  
Sprachlehrerin: N. N. Krugljakova  
Staatliche Universität Baranovichi*

### DIGITALSTRATEGIE BYOD FÜR SCHULEN

Bring Your Own Device (BYOD) ist die Bezeichnung dafür, private mobile Endgeräte wie Laptops, Tablets oder Smartphones in die Netzwerke von Unternehmen oder Schulen, Universitäten, Bibliotheken und anderen (Bildungs-) Institutionen zu integrieren. [1] Zudem wird vermehrt mit digitalen Lehrmitteln sowie webbasierten Programmen und Datenablagen gearbeitet.

An BYOD-Schulen machen Geräte von Schülern einen wichtigen Bestandteil der Unterrichts- und Lernumgebung aus. Geräte, die früher als Ablenkungen betrachtet und aus dem Unterricht verbannt wurden, werden heute täglich im Klassenraum eingesetzt.

Dies ermöglicht die Nutzung webbasierter Programme und Datenablagen und eröffnet den Schulen neue Wege zur Einbindung digitaler Medien in den Unterricht. So können Filme, Tondokumente, aber auch interaktive Karten oder Verweise auf Webseiten direkt im Lehrmittel integriert werden. Die Möglichkeiten zur Automatisierung von Prozessen erlaubt es, personalisierte Lehrmittel anzubieten, bei denen die Lernenden ihre eigenen Kommentare und Ergänzungen bis hin zum persönlichen Portfolio direkt im Lehrmittel vornehmen können. Auch die Überprüfung des Lernfortschritts der einzelnen Lernenden kann für die Lehrperson vereinfacht werden [2].

Die Möglichkeiten zur Vernetzung erlauben es den Lernenden, sich beim “Lesen” eines digitalen Lehrmittels mit anderen Lernenden zu vernetzen, sich gegenseitig Fragen zu stellen und Antworten zu geben oder gemeinsam Lösungen und eigene Beiträge zu erarbeiten. Neben methodisch-didaktischen Vorteilen

gegenüber herkömmlichen Print-Lehrmitteln bieten digitale Lehrmittel auch ökologische Vorteile. So führt die Möglichkeit für Lehrpersonen, Ergänzungen in digitaler Form anzubringen, zu einer Reduktion des Druck- und Kopier Volumens an der Schule.

Vorteile von BYOD:

- Ökologisch sinnvoll;
- Ökonomisch sinnvoll;
- Medienpädagogisch sinnvoll;
- Lernen mit digitalen Plattformen;
- Hohe Flexibilität und Mobilität.

BYOD gilt bei Befürwortern als wichtiges Werkzeug, um pädagogische Anliegen wie die Vielfalt des Lernens zu erhöhen, oder selbstgestaltetes Lernen möglichst zu unterstützen [1].

Für die Lehrkräfte ist eine Differenzierung im Unterricht mit geeigneter Software möglich. Beispielsweise könnten im Mathematikunterricht Schüler, je nach Lernstärke, Aufgaben mit unterschiedlichen Schwierigkeitsgrad erhalten. Lernstarke Kinder langweilten sich nicht, lernschwache Kinder würden nicht überfordert [2].

Auch gibt es Möglichkeiten, „on demand“ auf Wissen zuzugreifen. Es gibt eine Vielzahl kostenloser Learning Apps oder eBooks, die schneller aktualisiert werden können als gedruckte Schulbücher.

## LITERATUR

1. BYOD [Электронный ресурс]. – Режим доступа: [https://de.wikipedia.org/wiki/Bring\\_your\\_own\\_device](https://de.wikipedia.org/wiki/Bring_your_own_device). – Дата доступа: 29.03.2019.
2. Bring Your Own Device Aspekte zum Einsatz im schulischen Unterricht [Электронный ресурс]. – Режим доступа: <https://www.bundestag.de/resource/blob/563298/56d7038d410a76945916938c820d8eb1/wd-8-043-18-pdf-data.pdf>. – Дата доступа: 30.03.2019.

*A. Kurova*  
*Research supervisor: T.I. Shanskova*  
*Doctor of Pedagogical Sciences, Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: O.E. Kravets*  
*Candidate of Sciences, Professor*  
*Zhytomyr Ivan Franko State University*

## **DEVELOPMENT OF COHERENT SPEECH OF CHILDREN OF THE SENIOR PRESCHOOL AGE AND ITS ROLE IN FORMATION OF SPEECH AND COMMUNICATIVE CREATIVITY**

**Relevance of research.** The urgent problem of modern preschool education is the problem of the development of coherent speech in preschool children.

Language is the main means of communication and understanding between people. From knowledge of the mother tongue, the ability to use language depends on the internal culture of the individual, their moral principles, social and aesthetic ideals. Therefore, education of the individual is impossible without reliance on knowledge of the mother tongue, in particular its vocabulary, grammar and coherent speech. The mother tongue is the general basis for the education and upbringing of children in kindergarten. Acquiring the native language as a means of cognition is the most significant achievement of pre-school childhood [1].

**The purpose** of the article is a theoretical analysis of the development of coherent speech in children of the senior preschool age and its role in formation of speech and communicative creativity[2].

The development of coherent speech plays a leading role in the process of speech development of pre-schoolers, since it has been proven (S. Rubinstein, A. Leushin) that not a word, namely a sentence (a coherent statement), is a communicative unit of speech. Analyzing the speech activity, psychologists and psycholinguists identified the following main types of language, such as hearing, speaking, reading, writing. Speaking and writing are types of speech activity associated with oral and written form. Learning oral and written speech is called the development of coherent speech[3].

**Conclusions.** The formation of coherent speech skills is central to the overall system of speech development in a preschool educational institution. The connection of speech as it absorbs all achievements of the child in mastery of the native language assimilated by its sound side, vocabulary and grammatical structure. By the end of preschool age, the child has to learn independently, to recreate and independently build connected expressions of different types.

### **REFERENCES**

1. The basic program of development of a child of preschool age "I am in the World". - K. : Svetich, 2009.
2. The basic component of preschool education of Ukraine // Preschool education. - 1999. - No. 1.

3. Gavrish N.V. Development of coherent speech preschoolers /N.V. Gavrish - K.: School World, 2006. - 119 p.

**N. Kuryl**

*Research supervisor: Yu.S. Shelyuk*

*Candidate of Biological Sciences.*

*Associate professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.I. Dienichieva*

## **THE USE OF INTERACTIVE TEACHING METHODS AT BIOLOGY LESSONS**

XXI century directs the system of education to the standards of European educational space. The main task is to improve the national education, its forms and methods of learning based on the new progressive tendencies. The educational system of our country is oriented on the development of the student's personality and ensuring his/her self-realization. The teachers should use the teaching methods to contribute to interactive learning methods. The following interactive teaching methods that can be used while studying the "Plants" section at the biology lessons are:

- interactive technologies of cooperative learning (work in pairs, "carousel", small group activities, "two-four-all together");
- technologies of collective-group training ("microphone", "unfinished sentences", "brainstorming", "openwork tile", "tree of solutions");
- situational modeling technologies (simulation games, role play roles);
- technology for discussing different issues ("borrowing position", "change position", "continuous scale of thoughts", discussion, debate) [1].

Thus, interactive methods of teaching help to form the student's creative personality, support the development of his/her self-realization, to activate the independent cognitive activity and to establish pedagogically expedient relationships in the system of "student-student-teacher".

## **REFERENCES**

1. Сучасний урок. Інтерактивні технології навчання: Наук.-метод. посібн. / О.І. Пометун, Л.В. Пироженко. За ред. О.І. Пометун. – К.: Вид-во А.С.К., 2004. – 192 с.

**I. Kuzmich**  
*Research supervisor: O.M. Bilobrovets*  
*Candidate of Historical Sciences,*  
*Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: S.S. Kukharyonok*

## **CHARITY IN UKRAINE DURING THE WORLD WAR I**

In Soviet times, the issues of the World War I were mainly covered through war-revolutionary events, omitting the phenomena of refugees, charity, social initiative, which ensured the development of public initiative. Investigation of issues of public, charitable, cultural and educational activities during the World War I was studied by O. Donik [1], O. Kravchenko [4], M. Zagrebelna [3], L. Zhvanko [2] and others. This topic is especially relevant in our time, considering the military situation in the country in view of the experience gained in the past.

During the war years, a large number of people needed help. Many civic organizations, committees and charitable societies were involved in the custody of refugee children, in particular Oleksiiv, Romaniv and Tetyan committees, Polish and Jewish national organizations. The All-Russian Zemsky Association and the All-Russian Association of Towns for the Help of Sick and Wounded Warriors, whose decision to institute centers in charge of the evacuation of children from the front lines to Moscow, Kyiv and Smolensk, played an important role in the organization of assistance to refugee children [4, p.15]. They also directed their efforts to provide comprehensive assistance to the military, such as the settlement, health treatment and provision of refugees with work, treatment of epidemics, and the provision of the army with basic necessities. Ekaterinoslav province allocated 100 thousand rubles for the needs of the wounded over the course of 1914 and Kyiv province – 400 thousand rubles for sick and wounded soldiers. The cities opened refugee stations that provided free or affordable lunches [3, p.64-68].

Educational establishments, not having considerable financial resources, tried to collect and transmit to the front lines various forms of children's creativity, dedication to soldiers, small gifts from student youth. Front assistance was not limited only to this. Council of the University of St. Volodymyr decided to deduct 5% of the professors' salary for the benefit of families whose members were at the front. The Kyiv Polytechnic Institute, in response to the beginning of the war, provided a space for the hospital at the premises of the institute [3, p. 183].

An important role in charitable activities was played by ethnic organizations. The Polish Victim Relief Society worked in more than 50 cities and towns. The situation of the Jewish national minority during the war was complicated by the instigation of anti-Semitic sentiments. A Central Jewish Committee for Victims of War was established in Petrograd. Registered refugees began to receive special certificates – a "refugee book", which enabled them to get a soldier [1, p.446].

Essential role belonged to private charity, in particular Tereshchenko family. Thanks to them, during the war a lot of medical wards and shelters for the

wounded and sick soldiers appeared, which they financed at their own expense [1, p.62].

Activity of various public organizations and local self-government bodies were very effective in uniting the people during the crisis period in the history. Thus, the self-organization of the local population during the World War I in the attempt to fulfill communal tasks served as an impulse for the formation of civil society.

## REFERENCES

1. Донік О. М. Діяльність громадських організацій і товариств у справі допомоги військовим і цивільному населенню в Україні у роки Першої світової війни (1914–1918) *Проблеми історії України XIX – початку XX ст.* К., 2002. Вип. IV. С. 155–182.
2. Жванко Л. М. Біженство Першої світової війни в Україні. Документи і матеріали (1914-1918 рр.) Наук. ред. О. О. Нестуля. Харків, 2009. - 360 с.
3. Загребельна Н. І. Благодійна діяльність освітян Київського учбового округу в роки Першої світової війни. *Проблеми історії України XIX - початку XX ст.* Київ, 2014. Вип. 23.- С. 182-186.
4. Кравченко О. В. Організація опіки над дітьми-біженцями: документальні джерела з фондів Російського державного військово-історичного архіву. *Вісник Київського нац. ун-ту імені Т. Г. Шевченка.* 2014. – № 3 (121). - С. 15–17.

**Ya. Kuzmuk**

*Research supervisor: O.O. Biedunkova,  
Doctor of Biological Sciences, Professor*

*National University of Water and Environmental Engineering*

## SPECIFIC AND QUANTITATIVE COMPOSITION OF PHYTOPLANKTON OF BASIV KUT RESERVOIR

The purpose of the research was to study the change specific and quantitative composition phytoplankton Basiv Kut Reservoir in the summer time.

The water-collecting area of the Basiv Kut Reservoir is located in the sector experiencing intensive man-made transformation of the natural environment in the Rivne citi (Ukraine). The area of the water table is 100.1 hectares; the average thickness of the water column is 2.7 m; the average thickness of the bottom sediments (dark grey and black mud with inclusions of vegetation and sand) is 1.3 m.

Samples of water for the study of phytoplankton were taken in five sections, in glass bottles, sterilized of hydrochloric acid (5% solution). The volume of the sample was 1000 ml. Fixation of the sample was performed formalin (1% solution). Cameral processing (work) and take a photo organisms of phytoplankton was performed using a light microscope. All work was carried out in accordance with recommendations.

A characteristic feature of the species composition of phytoplankton in water samples, selected on the 17th of June 2018, was the domination of representatives of *Cyanophita* - 4 species (65%) of the total species and *Chlorophita* - 3 species (35%) of the total species. Species composition of phytoplankton in water samples, selected on the 18th of August 2018, was characterized by the monodomination of representatives of *Cyanophita* - 2 species (99%) of the total species [1, 2].

The lake is characterized by high indicators of phytoplankton production, which during the summer season shows the transition to mono-domination of blue-green algae (from 65% to 99%), with absolute values of 3.3 million cell/dm<sup>3</sup> and 100 g/m<sup>3</sup>, respectively. Thus, the stage of "hyper flowering" of the Basiv Kut Reservoir at the end of the summer.

It is known that mass propagation of Cyanobacteria begins in stagnant zones of reservoirs at 18-25 degrees Celsius, alkaline medium, elevated concentrations of trace elements, high content of organic and inorganic phosphorus in water and a low ratio of nitrogen and phosphorus (N/P < 25).

As a result, an imbalance appears between the increase in biomass of phytoplankton, the formation of organic matter and the amount of oxygen consumed by biological degradation. Organic substances are formed more than microorganisms can decompose; accumulate organic substances contaminating water masses; the biomass of blue-green algae (Cyanobacteria) increases, which causes the flowering of water.

Summer flashes of massive Cyanobacteria development cause double damage to the water system. First, they reduce the illumination, causing the death of aquatic plants. Thus, the natural habitats of many hydrobionts are violated. Secondly, when Cyanobacteria are consumed much oxygen is consumed, which can cause the same effects as the direct introduction of organic matter into water.

Consequently, the Basiv Kut Reservoir under study requires measures to reduce the number of phytoplankton groups belonging to blue-green algae. In the world practice, the main methods of fighting the flowering of water are preventive measures. For continental reservoirs it is a prevention of contamination by organic substances, creation of coastal water protection zones and phytomelioration. The latter is the cultivation of higher aquatic vegetation in coastal zones for the containment of nutrients coming from the surface runoff.

## REFERENCES

1. ДСТУ ISO 5667-4:2003. Відбирання проб. Частина 4. Настанови щодо відбирання проб із природних та штучних озер (ISO 5667-4:1987, IDT. Київ: Держспоживстандарт України. 2004. – 7 с.
2. Анисимова О. В., Гололобова М. А. Краткий определитель родов водорослей. Учебное пособие /Ред. В. М. Гаврилов - М., 2006. – 159 с.

**J. Lapchik**  
*Research supervisor: N. P. Plahotniuk,*  
*Candidate of Pedagogical Sciences, senior teacher*  
*Zhytomyr Ivan Franko State University*  
*Educational and Research Institute*  
*of Foreign Philology*

## **HOW TO HELP YOUNG ENGLISH LANGUAGE LEARNERS LOVE WRITING**

**Introduction.** It is possible to say that writing is one of the most important competences, which is closely linked with certain kinds of language activity such as reading, speaking and listening. Our subject is to investigate the theory, consider, review and verify the effectiveness of the exercises in order to form the writing skills of young schoolchildren.

The researcher is interested in writing this topic because it might be useful for both the teachers and the students who are learning English, especially in finding a way on how to make writing easier, more interesting, challenging, and less boring.

There is a wide variety of writing tasks you may assign your students to help them hone their writing skills [1, p. 74].

**The main part.** Students start having English lessons at primary school. The main focus of teaching and learning process is to develop the children's ability in communicating, to give knowledge about the language both spoken and written, and to increase students awareness about how important it is to learn English.

Writing can be an engaging, interesting and inspiring activity for young learners. Children are active learners and thinkers, learn through social interaction and learn effectively through scaffolding by more able others, who can be adults or peers. Collaborative and well-planned writing tasks encourage the context for all of these characteristics to be fully exploited in the young learner classroom.

Writing is a complex skill to develop and master, focusing on both the end product and the steps to arrive there. Writing skills only develop when young learners are taught how to write and are given opportunities to practice these skills and strategies [3, p.14].

Writing tends to be somewhat neglected in the classroom, but it is an essential part of language development. Good writing skills are based on good reading skills, you need to recognize words in order to write and use them comprehensibly.

The developing of the language skills has always been a very hard and an interesting task. The process of writing suggests that we can actually teach students how to write with an appropriate grammar structure and an acceptable spelling. One of the effective ways to do this is to motivate the children and make them aware of the steps involved in effective writing. Some reasons why students dislike writing are:

1. Children feel that they lack sufficient knowledge of the language.
2. They believe that writing must be grammatically correct.

3. They think that formal correctness must be achieved at their very first attempt [2, p.32].

**Conclusion.** Make learning fun. Children will be distracted easily if they find their work too boring or non-engaging. In fusing learning and play, you will ensure that your pupils are engaged and absorbing information.

For elementary children, let them write, edit and illustrate their own books. This will work on developing their understanding of story and character, while simultaneously improving their ability to form correct sentences with proper spelling.

Instil the joy of writing with your young learners and you could inspire a future.

## REFERENCES

1. Gebhard, J. G. (1996). Teaching English as a Foreign or Second Language. Michigan: The University of Michigan Press. – 74 p.
2. Linse, C.T (2005) Young Learners. USA:McGraw Hill. – 32 p.
3. Richard, J. and Rodgers, T., (2001). Approaches and Methods in Language Teaching. Second Edition. Cambridge University Press. – 14 p.

*A. Lazaniuk*

*Research supervisor: A.V. Kuznyetsova,*

*Candidate of Philological Sciences, Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: A.V. Kuznyetsova*

## MULTIPLE INTELLIGENCES OF STUDENTS IN THE PROCESS OF STUDYING

People have different strengths and intelligences. Traditionally, intelligence is defined in terms of intelligence quotient (IQ) that measures a narrow range of verbal/linguistic and logical/mathematical abilities a person has. Howard Gardner in his book entitled “Frames of Mind: the Theory of Multiple Intelligences” has changed this traditional definition by providing an alternative definition of intelligence as “the ability to solve problems or to create products that are valued within one or more cultural settings” [1, p.11].

The aim of this research is to investigate different intelligence types of students in relation to the process of studying.

The theory of multiple intelligences, developed by the psychologist Howard Gardner, posits that individuals possess eight or more relatively autonomous intelligences. Today there are nine intelligences and the possibility of others may eventually expand the list. These intelligences (or competencies) relate to a person’s unique aptitude set of capabilities and ways they might prefer to demonstrate intellectual abilities.

Gardner’s Multiple Intelligences:

1. Verbal-linguistic intelligence (well-developed verbal skills and sensitivity to the sounds, meanings and rhythms of words).
2. Logical-mathematical intelligence (the ability to think conceptually and abstractly, and capacity to discern logical and numerical patterns).
3. Spatial-visual intelligence (the capacity to think in images and pictures, to visualize accurately and abstractly).
4. Bodily-kinesthetic intelligence (the ability to control one's body movements and to handle objects skillfully).
5. Musical intelligences (the ability to produce and appreciate rhythm, pitch and timber).
6. Interpersonal intelligence (the capacity to detect and respond appropriately to the moods, motivations and desires of others).
7. Intrapersonal (the capacity to be self-aware and in tune with inner feelings, values, beliefs and thinking processes).
8. Naturalist intelligence (the ability to recognize and categorize plants, animals and other objects in nature).
9. Existential intelligence (the sensitivity and capacity to tackle deep questions about human existence such as "What is the meaning of life? Why do we die? How did we get here?" [2]).

Gardner mentions that each person possesses all these eight intelligences, but they function uniquely. Gardner's multiple intelligences theory can be used for curriculum development, planning instruction, selection of course activities, and related assessment strategies.

Nowadays, multiple intelligences theory is assuming a very important place in the recognition of the diversity of the learners in their learning styles all over the world. This is due to the fact that it helps educationalists, teachers and learners prepare successfully for "individualized instruction". Consequently, many researchers stress the importance of empowering students with recognition of their intelligences in order to enhance and develop their learning.

## **REFERENCES**

1. Gardner H. *Frames of mind: The theory of multiple intelligences* / Howard Gardner. – New York: Basic Books, 1983. – 440 p.
2. Gardner H. *Multiple Intelligences: New Horizons in Theory and Practice* Paperback/ H. Gardner. – New York: Basic Books, 2006. – 320 p.

*I. Lisogurska*

*Research supervisor: G.M. Starodubets*

*Doctor of history, Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: N.M. Andriychuk*

## **THE MYSTERY OF THE TEMPLARS**

The Knights Templar was one of many similar military orders. But today, we don't often talk about the Hospitallers or Teutonic Knights. No one's making Hollywood movies or big budget television series about those orders, even though they were also very high-profile in their times. It's always the Templars.

The aim of the article is to elucidate and generalize the history of the Order and to determine the most common and mysterious legends and secrets of the Knight Templar. This theme was researched by such scientists as Bryan Hilliard, Olsen Odvar and others.

The Templars were religious men who followed a religious lifestyle based on prayer, and who also vowed to defend Christians and Christian territory against non-Christians. They formed a religious order, and organization acknowledged by the Catholic or 'Latin' Church as having special rights and duties in society. The members wore a distinctive uniform, or 'habit', and lived a communal lifestyle in the properties belonging to the order. They followed the Rule, approved by the pope, which set out their daily routine and lifestyle. The Order was set up in 1120 and was dissolved by the pope in 1312.

In Templar history there are big holes, partly because the Templar Central Archive – which was moved from Jerusalem to Akka to Cyprus – disappeared when the Ottomans took Cyprus in the 16th century. Pile onto the fact that the Templars were genuinely legends in their own lifetime.

After Clement's edict in 1312, the Templars virtually vanished from the pages of history. Of the hundreds, possibly thousands of Templars who were not arrested, there is little record of what happened to them. There exists documentation that their large fleet of ships vanished and it's possible that they fled to Scotland since the country was something a Templar stronghold at the time. They might have gone to Switzerland or hidden in the Alps which bordered southern France. Some survivors of the Templar order can be traced and they simply changed their name becoming the Knights of Christ in Portugal for example.

But of all the mysteries surrounding the Knights Templars, the most puzzling one concerns their time spent in Jerusalem. The Templars literally disappeared from there for the period of nine years and what they did in their time there remains mostly unknown. There were nine middle aged monks who were hardly in a position to protect travelers coming in and out of Jerusalem. There also doesn't seem to be a written account of any pilgrims being guarded by the Templars. In 1867 a clue came to light when a British archaeological team excavated under the site of the temple mount in Jerusalem. There, they uncovered

tunnels extending vertically from a mosque for some twenty five meters which fanned out horizontally under the dome of King Solomon's temple. Templars spurs and various pieces of armaments were found as proof that the tunnels had been used by them. A prevailing theory is that the Knights Templars were digging under the Temple for treasure left there by the Jews after the invasions by the Romans in 70 AD. Other theories suggest the knights were guarding the Holy Grail and in possession of major treasures. The biblical temple of Solomon once housed the Ark of the Covenant and Ten Commandments. There are early masonic writings in the 1800's citing documents which allegedly link the Templars with the arc of the covenant and treasure buried in the Temple of Solomon. Regardless of which theory is the right one, when they emerged again in Europe they were more wealthy, powerful and influential than ever.

## REFERENCES

1. Акунов Вольфганг. История военно-монашеских орденов Европы. – Харьков: Вече, 2012. – 468 с.
2. Ольсен Оддвар. Наследие тамплиеров. Древние мистерии, тайные общества и Святой Грааль. – СПб.: Евразия, 2008. – 356 с.

*K. Litvinko*

*Research supervisor: O. S. Golovnia,  
Zhytomyr Ivan Franko State University  
Language tutor: S. S. Kukharyonok*

## INFORMATION PORTAL FOR SELECTING APPLICATIONS

Despite the fairly large quantity of informational resources on the Internet, the most necessary for society are those informational resources that are close to meeting its needs [2]. Developed resources should be grouped and placed in an easily accessible place. This place may be a website.

A website is a collection of related web resources, such as web pages, multimedia content, which are typically identified with a common domain name and published to at least one web server [1].

The website for selecting apps is an information portal [3]. Like any other website, an informational website is a window into a single information space. This site includes articles about mobile apps, their advantages and disadvantages.

The main functions of this site: to help users maximize the use of their smartphones, to simplify their life in the world of information technology, to provide an opportunity to keep abreast with new apps that will make the gadget as smart as possible.

The site with apps compilation is intended for such audience as parents, teachers, travelers, people looking for inspiration, schoolchildren and housewives.

Our site is interesting and useful. It contains information about the application that will interest the user, direct links to download the application for various operating systems.

Each page of the site has a navigation chain that makes it easy to find any section within it. It is important that the filenames and directories display their content and match the logical structure of the site.

The content of our website includes the following parts: the main page, applications, about the author and the feedback page.

The main page gives the user an idea of the structure of the site. The page contains articles that are grouped by specific categories (news, browsers, scanners, weather, calculators, galleries, translators, launchers, for health, etc.). There users can get acquainted with various categories, learn about their advantages and disadvantages, choose from the best applications that suit them most.

On the about author page you can get acquainted with the person who created this site. On the feedback page, the user can leave feedback, make suggestions for improving the structure and work of the site, suggest a topic for next apps compilation.

Such information portal is very useful in the world of information technology. It contains information on how you can use your smartphone with most benefit. This site will help you remain up to date on everything new.

## REFERENCES

1. Квинт И. Создаем сайты с помощью HTML, XHTML и CSS на 100%. 2-е изд. — СПб.: Питер, 2012. — 448 с.
2. Notepad++ [Электронный ресурс]. - Режим доступа: <https://ru.wikipedia.org/wiki/Notepad%2B%2B>
3. Теорія розробки веб-сайту [Електронний ресурс]. - Режим доступу: [https://pidruchniki.com/2015082665983/informatika/teoriya\\_rozrobki\\_veb-saytu](https://pidruchniki.com/2015082665983/informatika/teoriya_rozrobki_veb-saytu).

*T. Luzhanska*  
*Akademia Pomorska w Slupsku*  
*Research supervisor: Serhii Rudnytskyi*  
*Doctor of Political Sciences,*  
*Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: S.S. Kukharyonok*

## **THE CORRELATION BETWEEN CONTENT ANALYSIS AND DISCOURSE ANALYSIS IN THE WORKS OF FOREIGN SCHOLARS**

**The topicality of the research.** Posts in social networks, that are used by millions of Ukrainians, have a great value for the perception of Poland, that was, is and will remain our first western neighbour. That is what updates the research of the Polish posts of the Ukrainian users in social networks and in Facebook in particular.

Modern political science gives us different opportunities of posts analysis, among which it is possible to distinguish those that enable to determine by means of content analysis methods as Poland, Polish and Polish-Ukrainian relations look like in these posts. Content analysis is close to discourse analysis, and it updates the differentiation of these concepts.

Therefore, the **aim** of our research is to determine the correlation between content analysis and discourse analysis in the works of foreign scholars, who were the founders of these methods.

Content analysis is the translation in quantitative indicators of mass text (or recorded on tape) information with its further statistical processing. Its basic operations were worked out by the American sociologists such as D. Lasswell and B. Berelson [1].

Content analysis is a typical example of the applied informational text analysis, that limits to the identifying component information in it, that a researcher is interested in, and structuring it in a convenient way for further analysis. This survey of content analysis views it as “a research technique for the objective, systematic and quantitative description of the manifest content of communication”. The review covers primarily the 1935-1950 period, listing 17 types of application of content analysis with abstracts of representative studies in each type and explanatory comment on them. In addition to quantitative studies, the author considers qualitative types and gives examples of them and devotes additional chapters to the units and the categories of content analysis [2].

Content analysis is close to critical discourse analysis. Discourse analysis became an issue of scientific discussion from the middle of past century. Teun A. van Dijk is considered to be its founder. The researcher’s fundamental works are “Prejudice in Discourse” [3], “News as Discourse” [4], “Elite Discourse and Racism” [5] and others.

According to R. Wodak’s definition, discourse analysis as social practice implies dialectical connection between a certain discursive event and

situation/situations, institutions and social structures that form a discursive event [6, p. 15].

Practices of critical discourse analysis proceed from the position, that our perception of reality occurs mainly through interaction with others indirectly through the language and other semiotic systems. The critical text analysis is not conducted in isolation from the wider social context in which the text is examined. For example, N. Fairclough examines any text as a product of discursive practice, that includes its creation, distribution and interpretation, that are the elements of complex mosaic of social events [7].

Thus, content analysis is the translation in quantitative indicators of mass text (or recorded on tape) information with its further statistical processing. Discourse analysis implies dialectical connection between a certain discursive event and situation/situations, institutions and social structures that form a discursive event. Critical discourse analysis and content analysis combine common object of analysis that is social reality that they try to study and to describe, but they are distinguished by a research method.

## REFERENCES

1. Berelson B. Content Analysis in Communication Research. Pp. 220. Glencoe, Ill.: The Free Press, 1952.
2. Berelson, B. (1952). Content analysis in communication research. New York, NY, US: Free Press URL: <https://psycnet.apa.org/record/1953-07730-000> (дата звернення 28.03.2019).
3. Teun A. van Dijk Prejudice in Discourse, John Benjamins Publishing Company, Amsterdam/Philadelphia, 1984 URL: <http://www.discourses.org/OldBooks/Teun%20A%20van%20Dijk%20-%20Prejudice%20in%20Discourse.pdf> (дата звернення 28.03.2019).
4. Teun A. van Dijk News as Discourse, Lawrence Erlbaum Associates, Publishers, 1988, Hillsdale, New Jersey Hove and London URL: <http://www.discourses.org/OldBooks/Teun%20A%20van%20Dijk%20-%20News%20as%20Discourse.pdf> (дата звернення 28.03.2019).
5. Teun A. van Dijk Elite Discourse and Racism, Sage Series on Race and Ethnic Relations, volume 6, SAGE Publications International Educational and Professional Publisher, Newbury Park London-New Delhi URL: <http://www.discourses.org/OldBooks/Teun%20A%20van%20Dijk%20-%20Elite%20Discourse%20and%20Racism.pdf> (дата звернення 28.03.2019).
6. Wodak R. Disorders of Discourse / R. Wodak. – London: Longman, 1996. – 200 p.
7. Fairclough N. Discourse and social change / N. Fairclough. – Cambridge, UK: Polity Press, 1992. – 304 p.

*S. Majster, M. Chylewytsh*  
*Sprachlehrerin: I. Swiridenko*  
*Kandidatin der pädagogischen Wissenschaften,*  
*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

## **DIE GRÜNDUNG DER UNABHÄNGIGEN UKRAINE**

Die Phase der politischen, gesellschaftlichen und wirtschaftlichen Stagnation dauerte in der Ukraine noch an, als Mychajlo Gorbatschow längst seine drei Prinzipien «Glasnost, Demokratisierung und Perestrojka» verkündet hatte. Erst die Katastrophe von Tschornobyl erschütterte das starre kommunistische System.

Es organisierten sich die ersten Oppositionsgruppen, Helsinki-Aktivisten, die national-kulturelle Bewegung, die nationale Bewegung «Ruch». Die griechisch-katholische Kirche entstand neu aus dem Untergrund. Am 16 Juli 1990 erklärte die Werchowna Rada die Souveränität der Ukraine. Das bedeutete zwar nicht die Unabhängigkeit der Ukraine, doch betonte die Erklärung der Neutralität und das Recht auf eigene Streitkräfte.

Die erste war die Revolution auf Granitim Oktober 1990. Studenten aus dem ganzen Land organisierten sich und protestierten auf dem zentralen Platz von Kiew. Sie traten in einem Hungerstreik. Ihre Forderungen waren: Keine Unterzeichnung eines neuen Unionsvertrags im Rahmen der Sowjetunion, Neuwahlen des Parlaments auf der Grundlage eines Mehrparteiensystems, Rücktritt des Vorsitzenden des Ministerrats der Ukrainischen Sowjetrepublik, Rückkehr der ukrainischen Soldaten und Militärdienst ausschließlich auf dem Territorium der Republik, Verstaatlichung des Eigentums der Kommunistischen Partei der Ukraine und deren Jugendorganisation «Komsomol». Der friedliche Protest dauerte 16 Tage. Dann erfüllte das Parlament die Forderungen. Diese Revolution leitete die Unabhängigkeit der Ukraine ein. Dem gescheiterten Moskauer Putsch vom August 1991 folgte wie in vielen anderen Sowjetrepubliken auch in der Ukraine die Erklärung der Unabhängigkeit. Am 24. August verkündete die Werchowna Rada die Unabhängigkeit der Ukraine und die Schaffung eines unabhängigen Staates der Ukraine. Der Unabhängigkeitskurs wurde in der Abstimmung vom 1. Dezember 1991 von 90% der Bevölkerung bestätigt. Mit 61% der Stimmen wurde Leonid Krawtschuk zum Präsidenten der Ukraine gewählt. Am 5. Dezember 1991 beschloß das ukrainische Parlament, den Vertrag von 1922 über die Bildung der Sowjetunion zu kündigen. Nach Leonid Krawtschuk Präsident 1994 wird Leonid Kutschma. Er war bis 2005 an der Macht. Dabei wurde ein Budapest Memorandum unterzeichnet und die nationale Währung Griwna eingeführt.

Die zweite war die Orange Revolution im Jahr 2004, als Reaktion auf die Fälschung der Präsidentschaftswahl. Der Westen und das Zentrum des Landes unterstützten den Kandidaten Viktor Juschtschenko, der Osten und Süden den Kandidaten Viktor Janukowytsch. Das Ergebnis der Massenproteste war die Wiederholung der Präsidentschaftswahl, die Juschtschenko (2005-2010) gewann, sowie eine Verfassungsreform, die die Befugnisse des Präsidenten einschränkte.

Die dritte war die Revolution der Würde oder der Euromaidan 2013 und 2014. Ursachen der Revolution waren die Weigerung der Führung des Landes, das Assoziierungsabkommen mit der EU zu unterzeichnen, aber auch eine übermäßige Konzentration der Macht in den Händen von Präsident Viktor Janukowytsch (2010-2014) und dessen Umfeld. Am 21. November 2013 versammelten sich erste Demonstranten im Zentrum von Kiew. Es entstand eine Zeltstadt und es kam zu mehreren brutalen Zusammenstößen mit den Einsatzkräften der Behörden. Höhepunkt war die Erschießung friedlicher Demonstranten im Februar 2014. Janukowytsch floh schließlich nach Russland. Die Ukraine löste sich vom russischen Einfluss in Wirtschaft, Politik und Kultur. Es wurden Präsidentschafts- und Parlamentswahlen durchgeführt sowie das Assoziierungsabkommen mit der EU unterzeichnet. Im weiteren Verlauf besetzte und annektierte Russland völkerrechtswidrig die Krim und es kam zu secessionistischen Bewegungen im Osten der Ukraine, die in einem schweren bewaffneten Konflikt eskalierten, der seit 2014 andauert. Am 15. Februar 2015 wurde ein Minsk II genanntes Abkommen geschlossen, das auf die Deeskalation und Befriedung des Konflikts in der östlichen Ukraine zielt, aber erfolglos. Auf der Welle des nationalen Aufstiegs zur Macht kam Petro Poroschenko. Im Jahr 2019 werden die Präsidentschafts- und Parlamentswahlen stattfinden.

#### **LITERATUR**

1. Andreas Kappeler. Kleine Geschichte der Ukraine. München 1994.
2. Martin Trescher. Die Ukraine entdecken. München 1996.

***O. Makarchuk***

*Research supervisor: N.Y. Rudnitska,  
Candidate of Pedagogical Sciences,  
Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.E. Kravets,*

*Candidate of Pedagogical Sciences,  
Associate Professor*

*Zhytomyr Ivan Franko State University*

#### **DEVELOPING PHONOLOGICAL COMPETENCE IN CHILDREN OF UPPER PRESCHOOL AGE BY MEANS OF DIDACTIC GAMES AND EXERCISES**

In the context of present-day-changes in Ukraine, teachers experience difficulties forming phonetical competence in children of upper preschool age. This necessitates further research into the area of pedagogical foundational prerequisites in order to present teaching staff with viable options. Within this paper, the ways of phonological competence of development in children of upper preschool age will be examined. Investigated through an examination of games.

The audio language culture is an integral part of the general linguistic culture including a number of important components. Among them are a clear articulation of the sounds in the native language, the phonetic and orthoepic correctness of the language, the lingual breathing the voice's strength, the tempo of speech, the phonemic hearing and the means of intonation expressiveness (emphasis, logical pauses, rhythm, timbre, melodic, etc) [2].

Preschool age is the most conducive for forming the correct pronunciation of all of native language sounds and that's why this task is supposed to be completed in kindergarten . The educator should be an example in the use of his native language, thus speaking with a moderate voice, slowly, clearly, expressively, pronouncing all sounds in words, making logical pauses and observing the word accent.

The main methods of developing the audio language culture are didactic games and exercises. In this process all components of the audio language culture are perfected. In order to teach children correct and clear pronunciation, it is necessary to conduct such games as "Pronounce the words like me", "The orchestra", "Name and guess", "Shop", "Mosquito", "Riding on a horse", "Beetles" and "Airplanes" [1].

Consequently, the leading methods of developing the audio language culture in preschoolers are didactic games and exercises, in which all the component of the audio culture of children's speech are perfected. Timely and organized work on developing audio components culture is a solid foundation for further successful education of children at school.

#### **REFERENCES**

1. Богуш А. М. Дошкільна лінгводидактика. Хрестоматія. Навчальний посібник для студентів вищих педагогічних навч. закладів. — К.: Слово, 2005. — 720 с.
2. Навчання дітей дошкільного віку рідної мови: навчальний посібник/уклад. Л. В. Іщенко – Умань: ПП «Жовтий», 2013. – 138 с.

*N. Maksimuk*

*Research supervisor: senior lecturer M.D. Lavrenkova*

*Baranovich State University*

*Language tutor: T.M. Greben*

## **THE MOST RELEVANT METHODS OF INVESTMENTS FOR TODAY**

In this article it will be a question of the most relevant methods of investments for 2019. For a start we will talk about things which need to be known about investments.

The first that you need to know - it is necessary to invest the spare cash and by no means money which you need [1].

The second - is not present an absolute guarantee that you will manage to increase the money, and nobody can guarantee it [1].

The third - before investing money, it should be taken into account possible risks and profitability which you will be able to receive from this or that attachment [1].

The fourth - to reduce possible risks it is possible to diversify the attachments, i.e. to divide all amount of investments into parts and to enclose in different assets [1].

### **Bank deposits**

This option of investments is familiar to all. It is the simplest and a method of attachment of money, available to all. Also it is considered one of the most reliable methods of investment, but it is necessary to understand that the bank cannot guarantee total absence of risks. In this case everything comes down to the fact that it is necessary to choose more reliable bank with good interest rates of deposits [2]. Over time in banks such subspecies of deposits as accumulation accounts appeared. On the one hand, it is profitable because at any time you can withdraw the money without loss on an interest rate. On the other hand, the interest accrued on such accounts usually very small [1]. Also at the high level of inflation a part of income will "be eaten".

Summing up the result, one may say, that it is not the most profitable method of attachment of money, but risk of loss of money it is very small.

### **Real estate**

The real estate was in the price all the time, besides real estate price usually grows, and during crisis situations falls slightly. The real estate is not subject to inflation as many assets. There are several methods of earnings on the real estate [1]. The easiest way is to buy houses or apartments of a commercial real estate and to lease them. One more method which does not demand big attachments it is sublease. You rent the real estate cheaper for long term and you hand over it by the day, of course at higher price [1].

Drawing a conclusion, one may say, that the only minus in this situation is availability more - exchange of serious seed capital for investment. This method of investments will give the chance to gain monthly income with minimum risks.

Forex

Forex — the market of interbank currency exchange at free prices.

In fact Forex is a digital version of foreign exchange market where you can sell and buy currency [1]. Sense of earnings in a difference of purchase and sale price of one and other currency. On Forex you can trade or entrust the money to professional traders who already have experience of trade and knowledge of foreign exchange market [1]t. To earn on foreign exchange market most it is necessary to study sales strategy, otherwise trade will turn, some kind of, in casino and can lead to the sad end.

Summing up the result, one may say, that at skillful investment it is possible to gain high income, but this foreign exchange market is unpredictable therefore risks are very high.

### REFERENCES

1. СлоноДром.ru [Электронный ресурс] / Куда вложить деньги, чтобы получать ежемесячный доход 2019 году. – Режим доступа : <https://slonodrom.ru/kuda-vlozhit-dengi-chtobyi-poluchat-ezhemesyachnyi-dohod/>. – Дата доступа : 07.03.2019
2. Бизнес журнал ДеньгаДел. [Электронный ресурс] / Куда вложить деньги в 2019 – выгодные способы инвестирования + советы для начинающих. – Режим доступа: [https://dengadel.ru/news/kuda\\_vlozhit\\_dengi\\_v\\_2019\\_godu\\_i\\_poluchat\\_ezhem\\_esjachnuju\\_pribyl\\_15\\_variantov/2019-03-07-30](https://dengadel.ru/news/kuda_vlozhit_dengi_v_2019_godu_i_poluchat_ezhem_esjachnuju_pribyl_15_variantov/2019-03-07-30). – Дата доступа : 07.03.2019

*T. Martynenko*

*Research supervisor: T.Yu. Biloshytska,*

*Candidate of Pedagogical Sciences,*

*Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: T.Yu. Biloshytska*

### THE USE OF AUTHENTIC MATERIALS WHILE TEACHING ENGLISH

The importance of materials in language teaching and learning has been extensively acknowledged. Teaching materials are a key instrument in most language courses. Language teaching throughout the world today could not be more successful without the extensive use of commercial materials.

This paper gives an overview about material design and the use of authentic materials in the English as a second/foreign language classroom and their significance for language learners.

According to Morrow, it has been difficult for scholars to agree on a definition of the terms authenticity, authentic materials, and authentic language use in

language teaching terms. The complexity of this inconsistency lies in the multiple areas in which the term authenticity falls, and the participants involved.

A good textbook goes a long way to promote more predictable learning outcomes in the average teaching-learning situation. The use or interpretation of textbooks can promote good learning. A good textbook carries with it built-in structural scaffolding that ensures certain desirable outcomes even in situations where teachers are not prepared, not reflective, untrained and indifferent. A learner can become more independent with the help of a good textbook, in spite of bad or non-existent teaching. One of the first roles or functions of materials is that they provide opportunities for learning.

All good and authentic material has got the characteristics of having the language input and skill development; positive impression in learner's mind; useful information to deal with language; an easy familiarity; a thought provoking insight; a remedy and improvement in the deficiencies of the learning outcome; and a sense of security and confidence to the language teachers.

Various writers have pointed to particular functions fulfilled by textbooks. They play a major role in supporting and complementing the teacher, as well as supporting the learner. As a result, the most commonly found elements in ESL/EFL classrooms around the world are teachers, learners and textbooks. Since textbook or materials are such a key component of language classrooms, their suitability and effectiveness deserve critical attention.

Michael Breen (categorizes four types of authenticity language teachers are constantly involved with and summarizes them as follows:

1. Authenticity of the texts which include use of input data for learners.
2. Authenticity of the learners' own interpretations of such texts.
3. Authenticity of tasks conducive to language learning.
4. Authenticity of the actual social situation of the language classroom [1, p.26].

Textbooks are obviously the life-blood of a lively, interactive and meaningful language classroom along with other available, relevant materials. It is very important that while choosing materials for language class, teachers have to be very careful about the materials, activities and methods, be selective about authentic and genuine materials to facilitate learning the four language skills, ensure that the content or topic convey relevant messages that enrich and widen students' use of the 'real world' language and lastly pay attention to the background, needs and expectations of various target groups.

## **REFERENCES**

1. Breen M. P. Learner contributions to task design. In C. N. Candlin & D. Murphy (Eds.), *Language learning tasks*. Lancaster practical papers in English language education, 1987. –Volume 7. - Pp. 23-46.

*K. Marushchak*  
*Research supervisor: O. O. Maksymova*  
*Candidate of Pedagogical Sciences,*  
*Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor:*  
*I. V. Samoylyukevych*  
*Candidate of Pedagogical Sciences,*  
*Professor*  
*Zhytomyr Ivan Franko State University*

## **PREPARING EDUCATORS FOR SHAPING NATURE-FRIENDLY BEHAVIOUR IN CHILDREN OF MID-PRESCHOOL AGE**

In the context of modern pre-school education in Ukraine, educators experience difficulties teaching children to be nature-conscious from a very young age. This necessitates further research into the area of pedagogical foundational prerequisites in order to present teaching staff with viable options. Within this paper, ways of integration of shaping nature-friendly behaviour into the mid- preschool classroom will be examined. The following research will address this issue by literature review and scientific observation. In this article, we will deal with the concept of nature-friendly behaviour, psychological characteristics of children of mid-preschool age and ways of shaping their nature-friendly behaviour.

The concept of "nature-friendly behaviour" is based on the ecological culture of an individual and includes careful, responsible attitude to the world and love of nature [1, p. 16]. Nature-friendly behaviour of preschool children consists of the following components: 1) nature-friendly knowledge; 2) nature-friendly feelings; 3) nature-friendly mind [2, p. 86].

As the mid-preschool age is considered to be a sensitive period for the formation of personal values, ideals and norms of behavior, it is important to take into consideration such psychological characteristics as the development of thinking, imagination and the formation of voluntary memory. For the development of thinking, we recommend using educational games on natural subjects, problem-solving questions about nature and creative games. Imagination can be developed with the help of artistic activities, for example, drawing stories about birds, trees or animals. Conversations, game lessons, didactic games, arts lessons, and field trips are good stimuli for the development of attention and voluntary memory in children.

Effective forms of work that are aimed at forming nature-friendly behaviour in children of mid-preschool age can be divided into two groups:

1. indoor forms of work (environmental classes, reading of artistic works on environmental topics, lessons of kindness, quizzes, didactic games);
2. outdoor forms of work (excursions, observation, experiments, goal-oriented walks, movement games, gardening).

In conclusion, we think that in the process of preparing for shaping nature-friendly behaviour in children of mid-preschool age educators should consider children's psychological characteristics and resort to a range of indoor and outdoor activities.

## REFERENCES

1. Bazova proprama rozvytku dytyny doshkilnoho viku «Ja u sviti» / Za nauk. red. O. L. Kononko. – K.: Svitych, 2008. – 463 s.
2. Bilan O. Ekolohichne vykhovannia ditei doshkilnoho viku. – Lviv, 2006. – 212 s.

***K. Mashevska***

*Research supervisor: T.Yu. Biloshytska,  
Candidate of Pedagogical Sciences, Senior Lecturer  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## THE FORMATION OF STUDENTS' SOCIO-CULTURAL COMPETENCE THROUGH MODERN INFORMATION TECHNOLOGIES

In recent years, interest in studying foreign languages in connection with socio-economic changes has significantly increased. Training of students who are able and willing to participate in intercultural communication is most effectively carried out in the process of forming and developing their socio-cultural competence, with strengthening the language-through-culture component in the educational content.

The term “culture-through-language study” is included in the definition of teaching foreign language content. When studying foreign languages, it is necessary to include information about social experience of people whose language is being studied.

It is known that language, being one of the main features of the nation, expresses the culture of the people who speak it, that is, national culture. Therefore, foreign-language training should be provided as a source of information about the national culture of the native speakers of the target language. Given the enormous educational function of the language, language-through-culture study is a means of educating students about respect and love for the country of the target language. Language through-culture study aspect in the organization of educational material strengthens the educational focus of the teaching content, which allows foreign language training in close connection with the history and culture of the country of the target language [1, p.47].

Knowledge of nature, thinking, society, ways and methods of activity, skills and abilities to carry out activities, the basis for finding activities to solve emerging problems, the system of emotional, moral, volitional, and aesthetic educatedness are included in the concept of social experience. When studying foreign languages,

it is necessary to include information about the social experience of the people whose language is being studied.

In the work the Internet technology "Web Quest" was used, created in 1995 by American professor B. Dodge, which is a web scenario of the project assignment and includes less complicated components such as "Hot list" and "Multimedia scrapbook" (lists of certain information, multimedia and Internet sources on the topic), "Treasure Hunt" (questions about the topic are added to the sources), "Subject Sampler" (where among other things, questions of a problem nature are presumed, where one's opinion needs to be expressed) [2, p.181].

The effectiveness of using the latest information and communication technologies in the process of foreign language training of future professionals depends on the quality of didactic processing of teaching materials, i.e. methodology aimed at developing the ability to perceive foreign language and socio-cultural material.

### **REFERENCES**

1. Finayeva T.S. Tandem method of studying a foreign language // Kazan Pedagogical Journal, 2005. - № 2. - pp. 45- 51.
2. Vogel T. "Internationalization, Interculturality, and the Role of Foreign Languages in Higher Education" // Higher Education in Europe, vol.26, no.3, 2001. – pp. 381-389.

***O. Melnychenko***

*Research supervisor: M. V. Khadadova*

*Zhytomyr Ivan Franko State University*

*Language tutor: S. S. Kukharyonok*

### **CLIMATE AS A CATALYST FOR THE EVOLUTION OF THE CAUCASIAN RACE**

The intrusion of modern politics into science, namely anthropology, leads to distortion, refutation and suppression of facts in order to comply with political correctness, which can lead to both xenophobia and xenophilia of some scholars and parts of society. Therefore, the issue of races is very relevant today, and in order not to become an unfair part of a certain political ideology, it is necessary to study it out carefully.

The purpose of the article is to analyze the influence of cold climate and glaciation in the late Paleolithic period on the formation of cognitive and adaptive abilities of the Caucasian race in the temperate climate zone.

Among the historiographic studies it is worth paying attention to the works of Richard D. Ferlach "Erethus Wanders Between Us" and J. Philippe Rashton "Race, Evolution and Behaviour" [1,2].

The climate is the strongest selector for humans since humankind was exposed in the early stages of evolution to the direct influence of biotic and abiotic environmental factors [4].

In each climate and geographical zone various adaptation types of people were formed. Temperate zone is considered to be a factor that has accelerated human development.

The reason, therefore, is, firstly, more dramatic seasonal changes in temperate zone than in the tropics and secondly, much deeper climate changes that occurred in temperate zone throughout the Pleistocene (2,588 million years BC - 11,700 BC) with multiple attacks and retreat of powerful cover glaciers.

Both types of change greatly enhanced a natural selection. Seasonal changes demanded far-reaching and resourcefulness in the preparation for winter, and climate change destroyed those forms of life that could not adapt to long-term changes in temperature and humidity [3].

However, only two glacial periods influenced the evolution of a modern man, collectively referred to as the Würm glaciation.

During the main Würm glaciation, the surface of the Earth turned into cold meadows and tundra with few trees in the protected valleys of the rivers. Similar landscape exists now in Alaska. At that time people needed to make various tools of stone, wood and bone, such as spear and knife tips for successful hunting of large herbivores. People also had to solve the problem of fire, clothing and shelter. Bone sewing needles were made for cross-linking pieces of animal skins and shelters were constructed from large animal bones and skins.

Thus, the cognitive tasks of firefighting, sophisticated guns, clothing and shelters as well as the regulation of food consumption (Miller, 1991) should have been selected to increase the level of intelligence to a greater extent than the impossibility of imposing so high cognitive demands of Africa's environment to the south off the Sahara. Those, who were unable to solve these problems, died and those, who had an allele of high intelligence, survived.

In unfavorable conditions, natural selection increased the general intelligence and visual and spatial abilities through verbal ones, as visual and spatial abilities played a crucial role in the creation of complex tools and weapons, as well as in the planning and implementation of group hunting strategies (Lynn R., 1991) [2, p.288].

Consequently, climate change has accelerated the evolution of the Caucasian race. Firstly, the determining factor for the evolution of the development of the Caucasian race is the influence of the cold climate in the late Pleistocene on temperate climate latitudes, as well as the adaptation to the conditions of existence in it, the natural conditions of which were forced to show activity and ingenuity. Secondly, drastic changes in climate have contributed to the rigorous natural selection and as a result of which the number of individuals who have the maximum adaptability in the cognitive field and enhanced intelligence increases.

## REFERENCES

1. Річард Д. Ферлах «Еректус бродить між нами» / Річард Д. Ферлах; пер. з англ. Д.О. Румянцева, І.В. Журавльова. - Москва: АСТ, 2014 – 479 с.
2. Дж. Філіп Раштон "Раса, еволюція та поведінка. Погляд з позиції життєвого циклу" / Пер. з англ. Румянцев Д. О. - М.: Профіт Стайл, 2011. - 416 с.
3. Вільям Пірс «Хто ми?». [Електронний ресурс]. – Режим доступу: <https://theendofzion.com/wp-content/uploads/2014/10/William-Luther-Pierce-Who-We-Are.pdf>
4. Расы и расогенез. [Електронний ресурс]. – Режим доступу: <https://www.ronl.ru/referaty/biologiya/59144/>

***E. Meshcherina***

*Research supervisor: A.T. Itikulova*

*Teacher of the Russian language and literature department*

*Talas State University*

## INFLUENCE OF THE WORK OF Ch. AITMATOV TO THE MORAL EDUCATION OF YOUTH

In the modern world, one of the main problems of society is the problem of morality and ethics.

We, the future teachers, know perfectly well that the prosperity and development of Kyrgyzstan depends on the moral and ethical education of the younger generation.

This abstract is devoted to the question of the influence of the work of C. Aitmatov to the moral education of young people.

The topicality of this abstract is that in the modern world, with so many contradictions, cruelty, injustice, heartlessness and indifference, the education of moral youth has become the main problem of all nations. World's scientists note with alarm that in this millennium the deficit in human life is not material values, but true human qualities: kindness, mercy, compassion, honesty, responsiveness, trust, patience and responsibility (in other words, modern youth impoverished, it is proved by statistics).

The aim of the abstract:

- to show that the formation of any moral quality should be done consciously;
- to prove the importance of knowledge, on the basis of which a person will develop ideas about the essence of moral quality, about its necessity and advantages of mastering it through the works of Ch. Aitmatov.

What is moral education?

Moral education is the formation of concepts, judgments, feelings and beliefs, skills and behavioral habits corresponding to norms of society [3, p. 409].

Morality is one of such regulators, which determines the behavior of people with the help of ideas about the valuable (ideals, principles, norms) and duties,

responsibilities [4, p.8].

Albert Einstein told about morality as follows: "Morality is the basis of all human values".

"The moral qualities of a person should be judged not by his individual efforts, but by his daily life," - Blaise Pascal.

At present, our society more than ever needs an educated, intellectually and spiritually developed youth responsible for the destiny of their country.

What do we need for this?

It is necessary that the priority of the Kyrgyz state is the necessity to create modern schools, where great attention to both education and upbringing. At school each subject educates in its own way, but Russian literature is a source of creative growth, the formation of personality, moral potential.

Literature throughout national history, in the process of formation of moral and cultural values of our people, played the role of a "textbook of life," - wrote N. G. Chernyshevsky.

Literature was always a means of powerful pedagogical influence, assuming a certain role in the formation and development of the national mentality, moral guidelines, playing an important role in the humanities.

According to the great writers and leading experts, the highest level of the formation of a spiritual personality is the correspondence of its worldview, beliefs and ideals to public interests and civil self-consciousness.

"The most difficult thing for a man is to remain a man every day," said the greatest writer of the world standard, Ch. Aitmatov [2, p. 96].

It is the works of the great writer that feed the mind and imagination of the child, revealing new worlds, images and behavioral patterns to him, being a powerful tool for the spiritual development of the personality. The search for the sense of life of the heroes of Ch. Aytmatov, the desire of the heroes not to lose humanity, to be open to compassion and mutual assistance, loyalty of Aitmatov's heroes to beliefs and ideals are an inexhaustible source of moral behavior patterns and directed on the ways of finding and developing students' personality, self-improvement and development.

It is generally accepted that the works of the writer always act as a means of powerful pedagogical influence, assuming a certain role in the formation and development of the national mentality, moral guidelines, playing an important role in the humanities.

On the way to achieving this goal, the main and inexhaustible resource is the actions and personalities of the main characters – this is the source of moral growth and development of the students' personality.

The works of Ch. Aytmatov: "The White Ship", "Early Cranes", "Face to Face", "Scaffold" and others are imbued with the "thread" of nobility and dignity. Reading his works, the students are saddened or laughing, surprised or indignant, the works help schoolchildren to understand the behavior of a person, the people around him, that is, to find out in literary heroes of their own kind, help the student to solve his own problems by means of literature, understand what is good and bad, learn to deal with "bad", ask and ask questions, look for answers, talk, argue about

life, about people.

Many of the works of Ch. Aytmatov included in the school curriculum in literature are in Russian eleventh grades: “The day lasts longer than a century”, in Kyrgyz fifth grades: “First teacher”, in seventh grades: “Early cranes”, in ninth grades: “Zhamilya”, “My Popolek in a Red Scarf”. The actions of the heroes of these works make you think about life, make you form a character, help to answer questions: what is good in you and what is bad in you? Can there be a man without a single negative trait? How to determine yourself? The works of Aitmatov make a great emphasis on the inner world of a person. One of his works, which answers vital questions, is his work “The White Ship”. The main character is a boy, it embodies human qualities: kindness and purity. And when he first encounters the cruelty of people, it leads to tragic consequences, to the death of the protagonist. It is evident that he was morally superior to the society in which he was located. This is only one of the works of Aitmatov, in which the importance of the moral enrichment of the generation is expressed.

The writer in his masterpieces creates an artistic setting and life situations in which the character and actions of the main heroes are revealed. The works require the creative development of the child, the formation of its activity, independence, willingness and ability to take responsibility for their own destiny, for what is happening in society.

Works of the writer teach young people to think correctly, broader and abandon stereotypical thinking. It is necessary to bring to the consciousness of the younger generation that they should be aware that it is impossible to form moral values by telling the content of the work and imposing ready-made value concepts without its understanding, without emotional experience. Teachers should know that non-reproductive learning, an active approach and dialogue ensure the formation of moral values. The main thing is mutual understanding and comprehension, which enables the child to reflect on spiritual values, on the importance of family education, on ethnic roots. Only in this way a student will form moral convictions, worldviews and moral principles.

There is no doubt that morally enriched and highly intellectual youth will make every effort for the development and prosperity of Kyrgyzstan.

## REFERENCES

1. Апресян Р.Г. Нравственность (Новая философская энциклопедия) М: Мысль, 2000.
2. Айтматов Ч.Т. «Плаха» Новый мир, 1986 стр.96.
3. Ожегов С.И. Толковый словарь. М; 1960 стр.409.
4. Этика. Эстетика. Конспект лекций. Е. Н. Каменская. Ростов- на – Дону 2005 стр. 8.

***T. Mudrak***

*Research supervisor: T.Yu. Biloshytska,  
Candidate of Pedagogical Sciences, Senior Lecturer  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## **MULTIMEDIA RESOURCES IN TEACHING ENGLISH**

With the rapid development of science and technology, the emerging and developing of multimedia technology and its application to teaching, featuring audio, visual, animation effects come into full play in English teaching class and sets a favourable platform to reform and to explore on English teaching model in the new era. It is proved that multimedia technology plays a positive role in promoting activities and initiatives of student and teaching effectively in the classroom.

Multimedia is the combination of different content forms. It includes a combination of text, audio, still images, animation, video, or interactivity content forms. It is usually recorded and played, displayed, or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia provides a complex multi-sensory experience in exploring our world through the presentation of information through text, graphics, images, audio and video, and there is evidence to suggest that a mixture of words and pictures increases the likelihood that people can integrate a large amount of information. Students learn best by seeing the value and importance of the information presented in the classroom.

Multimedia offers teachers enormous opportunities for making learning and teaching environment meaningful and effective. The one of the ultimate goals of multimedia language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in the language learning.

### **REFERENCES**

1. Clyde William and Delohery Andrew. Using Technology in Teaching. New Haven and London: Yale University Press, 2005. – 256 p.

**R. Mukutyk**

*Research supervisor : Y.O. Kostyushko  
Docent, Candidate of Pedagogical Sciences  
Zhytomyr Ivan Franco State University*

*Language tutor: O.E. Kravets  
Candidate of Sciences, Professor*

*Zhytomyr Ivan Franco State University*

## **THE FORMATION OF MATHEMATICAL COMPETENCE IN SENIOR PRESCHOOL AGE CHILDREN BY MEANS OF DIDACTIC GAMES AND EXERCISES**

The current problem of children's logical and mathematical development at the stage of pre-school has gained ever increasing importance. Formed logic-mathematical thinking helps a modern child to analyze various processes and make decisions not only in accordance with well-developed algorithms, but also to correct their actions in changing conditions of life [3].

The recent changes in the educational process of preschool educational institutions presupposes that the attention of the educators focuses on rethinking the priority tasks of child's logical and mathematical development, as well as on choosing the most optimal and effective forms of work with preschoolers[1]. Thus, in the process of preparing for classes, the educators should pay special attention to the following positions, which should be implemented in the process of further pedagogical work:

- provision of children's logic-mathematical development in educational environment of preschool establishments;
- transfer of the position of the teacher and the child in educational process from the subject-object to subject-subject;
- giving priority to classes of integrated type.

The Basic Component of Preschool Education of Ukraine lies in the fact that children's development in educational environment is very important for developing their logical and mathematical skills. The educator should involve children as much as possible when organizing the environment, draw their interest to the follow-up activities[2].

K. Y. Kruty in her research has determined the models of mini-environments for junior and senior preschoolers. Each mini-environment consists of certain corners – the locations that stimulate child's autonomy and self-development. The specialists in pre-school education should be careful about planning these locations. Small in size, they give children the opportunity to play in small subgroups, thus communicating freely with the teacher.

Educational environment of the group, by K. Y. Kruty, presupposes the unity of several centers: cognitive, artistic-transformative, physical culture, recreation, communicative and emotionally-reflexive [1]. The very unity of these basic components creates the conditions for the educational environment to be the basis for children's logic-mathematical development. These conditions olslend to the

development of generalized ways of their mental activity, which is an important basis for the formation of their vital competencies[3].

It is important that the preschoolers' logic-mathematical development be actualized by means of game activities. In this context, every game and exercise must bring children not only joy and pleasure, but also certain benefits, as children develop and study through games.

## REFERENCES

1. Kadankova N.N. Psychological peculiarities of children in transition from junior to senior preschool age. - M., 2000. - 151 pp.
2. The basic component of preschool education in Ukraine. - K., 1998. - 47 p.
3. The basic program of development of a child of preschool age "I am in the world". - Kyiv: Svitoch Publishing House, 2008. - 430 p.

***O. Mykhailiuk***

*Research supervisor: A. P. Stadnichenko,  
Doctor of Natural Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## MYTILIDAE

The Mytilidae are a family of small to large saltwater mussels, marine bivalve mollusks in the order Mytiloida. Species in the family Mytilidae are found worldwide, but they are more abundant in colder seas, where they often form uninterrupted beds on rocky shores in the intertidal zone and the shallow subtidal.

The marine mussels belonging to the family Mytilidae (50 genera, 400 species) are characterized by presenting stunning variability in shape and color. Such variability, added to the scarcity of reliable morphological characters for their identification, can mislead recognition.

Mussels are common on many of our shores and mangroves, stuck to rocks, tree roots and other hard surfaces. Some create 'nests' out on the sand or mudflats. The two-part shell is generally tear-drop shaped (rounded at one end and pointed at the other). Although thin, the shell is quite strong. Instead of gluing down one valve to a rock like oysters do, mussels attach themselves with byssus threads.

Mytilids include the well-known edible sea mussels. A common feature of the shells of mussels is an asymmetrical shell which has a thick, adherent periostracum. The animals attach themselves to a solid substrate using a byssus.

Many morphological features of adult mussels are variable and often of limited value in establishing taxonomic relationships. Synonymies in the Mytilidae are numerous, the genus *Perna* notwithstanding.

## REFERENCES

1. Sax, D.F., J.H. Brown. The paradox of Invasion // Global Ecology & Biogeograph. - 9(5), 2000. - Pp. 363-371.

*V. Mykhailovska*

*Research supervisor : N.P. Plakhotniuk*

*Senior lecturer, candidate of pedagogical sciences*

*Zhytomyr Ivan Franko State University*

*Language tutor: N.P. Plakhotniuk*

## DIDACTIC GAMING TECHNOLOGIES IN THE FORMATION OF ENGLISH GRAMMAR COMPETENCE

Today, teachers review ways to influence the mind, will and emotions of students to bring them into the rich world of culture and traditions of the country they are studying. The ways and means of forming all the types of speech skills (reading, speaking, listening and writing) are also reviewed.

Didactic gaming technologies in addition to the traditional lessons produces an activation of the learning process and stimulation of the cognitive interest. One of the most urgent questions of didactics is to increase the motivation of pupils to the educational activity. A real way to maintain cognitive motives of pupils is to provide them with an activity which has a personal meaning for them. It can be communication, labour, cognition or game [3].

Didactic games are fun activities that promote interaction, thinking, learning, and problem solving strategies. The games often have an aspect that permits the players to produce information in a short time period. Some didactic games require the players to engage in a physical activity and/or complete a mental challenge.

The use of didactic gaming technologies as an educational technique is an efficient instrument of managing the learning practice, stimulating the intellectual practice of students and allowing to make the learning process exciting and entertaining. More appropriate definition of a game for our research is given by A.A. Derkach. He considers educational game as competition which is used in the learning process and contains an educational problem or a problem situation, the decision of which should provide the achievement of a specific training goal. Didactic games for the development of grammatical skills can achieve the following goals [2]:

- to help students use linguistic samples, which contain grammatical structures difficult for understanding;
- to create the natural conditions that would encourage the child to use this or that sample;
- to help children to express their linguistic activity in a foreign language on their own;

A game is a powerful motivation to learn English grammar and an efficient tool for a language teacher. An educational game is an organized task

which requires an intense emotional and mental strength. The positive fact is that this way pupils learn grammar rules – so, the gaming method contains large educational potential. For pupils the game is first of all an entertainment. A game at the lesson contributes to the important methodological problems:

- it creates a psychological readiness of learners for speech communication;
- it provides a natural necessity for a multirole repetition of the studied grammar material;
- it trains students to choose the right grammatical constructions [2].

Thus the didactic game is one of the ways of organizing the educational cognitive activity. The use of didactic game in teaching is not simply an entertainment or an organization form at the lesson. A game has a great heuristic and persuasive potential. So the game can not only be an entertainment but also the main technology of learning grammar material.

As a conclusion we should note that one of the most important problems existing in the methods of English grammar teaching is the problem of organization of education with the use of didactic games, and at the same time, it is one of the most efficient techniques. The use of games at the lessons has a great meaning for the acquisition of new ideas or the formation of new skills. A game is also very significant for the development of the emotional and intellectual sphere of students. The pedagogical potential of games is that they can arouse pupils interest, stimulate their mental and verbal activity, learn the new lexical items, create an atmosphere of competition and cooperation when doing exercises.

## **REFERENCES**

1. Lapidus, B. A. To the problem of differentiation of language material / B. A. Lapidus // *Inostranniye yazyki v shkole*. 1974.- N.8.- 23 p
2. Bondarko, A. V. Functional grammar/ A. V. Bondarko— L.: Nauka,1984.
3. Popova, E.I. Functional and cognitive approach to teaching foreign-language monological statement/ E.I. Popova // - *L.LGPI*. 1987.- P. 140-146

*A. Mykhaliuk, I. Usyk*

*Research supervisor: G.M. Starodubets,  
Doctor of Historical Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: S.S. Kukharyonok*

## **THE CRUSADES: CAUSES AND CONSEQUENCES**

The period of the Crusades is considered to be the 11th-13th centuries. The term "Crusade" was not used at that time, but the terms "trip to Jerusalem", "a pilgrimage to the Holy Sepulcher" were used, and the soldiers were called as soldiers of Christ, the people of God or Jerusalem. These trips to the Middle East became the symbol of the medieval era.

The Crusades were the military-colonizing movements of the Western European knighthood, partly burghers and peasants, which were carried out in the form of religious wars, under the slogan of the liberation of Christian shrines in Palestine from the authority of Muslims [1, p.44].

The Crusades received a controversial assessment in history, because they were caused by a whole complex of socio-economic, foreign policy and religious-psychological factors. Initially, they were massive and spontaneous, and their participants were representatives of different sections of the population from different countries of Europe. The initiators of their conduct, as a rule, were rulers of the great states of Western Europe, with the support of the Roman popes and the Italian sea republics.

The main reasons for this massive military movement to the Middle East were:

1. *Economic*. Europe was captured by the wealth of Byzantium, which always brought a large assortment of spices, jewelry, silk and others for sale.

2. *Religious*. The Catholic Church, headed by the Pope, considered it not fair that the Holy Sepulcher, a large Christian shrine, was in the possession of Muslims.

3. *Worldview*. Participation in the holy campaigns was considered by their participants as a means of redemption of their own sins and the possibility of being in paradise in case of death.

4. *Greed of the church*. The hierarchs of the Catholic Church sought to enrich themselves by seizing new lands and expanding their influence beyond Europe.

These campaigns lasted almost two centuries, from 1096 to 1270, and attempts to revive them were carried out until the end of the Middle Ages, although they were largely unsuccessful.

Scientists agree that the consequences of the Crusades were:

1. The outflow of Europe's most restless elements of knighthood, which prevented centralization of the European states.

2. By the end of the 13th century the covetousness of the papacy contributed to the fall of the general prestige of the Catholic Church.

3. Large human losses have caused a shortage of workforce in Europe.

4. Familiarity with the culture and way of life of the Arab countries changed the way of life of European feudal lords.

5. The role of European merchants in the international trade has grown, as a result of the collapse of Constantinople and the weakening of the position of Byzantium and Arabs in the trade of the Eastern Mediterranean.

6. Europe has borrowed a lot from the Arabs in the field of technology, crafts, culture and everyday life.

## REFERENCES

1. Балух В.О. Історія середніх віків: У 2-х т.-Т.2. Високе і пізнє Середньовіччя: курс лекцій. Чернівці: Наші книги, 2016. – 616 с.
2. Мельник Л.М. Хрестові походи в середньовічній трансформації римо-імперської традиції. Всесвітня історія. 2014. №2. – С.23-34.

3. Успенский Ф. И.: История крестовых походов. М. : Изд-во Сретенского монастыря, 2006. – 704 с.

***K. Myronova***

*Research supervisor: O.M. Kaminskyi,*

*Candidate of Chemical Sciences, Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: T.V. Lytnyova,*

*Candidate of Pedagogical Sciences, Associate Professor*

## **RADIOACTIVE ELEMENTS**

Radioactive elements arose during the creation of the Earth. The block of data from different sciences – chemistry, physics, geology, astrophysics, and others – suggests that several billion years ago, on the eve of the formation of our planet, the substance of the Earth was in conditions favourable for the formation of radioactive and non-radioactive elements. The appearance of the main part of radioactive isotopes, both as the long-lived, that is, those that have survived until now, and short-lived, which have so far completely disintegrated, is dated by that time [1]. All surrounding objects of wildlife and inanimate nature just as all the people living are radioactive. The fact that natural radioactive elements are often scattered in insignificant quantities throughout the biosphere is typical for them. Humanity has adapted to a certain level of radiation for the time it has been existing on the Earth.

Traditionally, talking about radiation and radioactive elements we mainly mean human activity. This can include nuclear weapons or peaceful nuclear technologies such as energy or medicine. A human has learnt to use atomic energy and radioactive elements for own needs.

It is important to understand that products may contain both natural and artificial radionuclides connected with human activity. In Ukraine, artificial pollution of products in certain areas happened as a result of the Chernobyl accident in 1986.

However, a human has learnt to use radioactivity in favourable goals. Currently, radiation is used in medicine in the treatment of some forms of cancer, and also in X-ray examination.

## **REFERENCES**

1. Енергетика: історія, сучасність і майбутнє. Т. 1. Від вогню та води до електрики / В.І. Бондаренко, Г.Б. Варламов, І.А. Вольчин, І.М. Карп. – К., 2006. – 300 с.

*A. Nidzelska*

*Research Supervisor: Kuznyetsova G. V*

*Candidate of Philological Science,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

## **THE ROLE OF NATIONAL AND CULTURAL STEREOTYPES IN POLITICAL DISCOURSE**

The issue of stereotyping is closely related to the problems of language, mentality and culture interaction, which is the critical question of cognitive linguistics and linguacultural studies. English-language media texts dominate the world media not only regarding quantity but also in terms of the impact on the mass reader and the world socio-political processes.

This article aims to assess the impact of stereotypes in political discourse and highlight national and cultural stereotyping in the English-language mass media political discourse.

According to W. Lippmann, stereotypes are defined as relatively fixed and oversimplified generalizations about groups or classes of people. They are caused by intercultural or interethnic contacts, when the most typical characteristics of this or that national group of culture are easily identified.[3]

In linguistic terms, stereotypes can be perceived as stable, repetitive, and not appearing by accident combinations, fixed in collective memory on the level of lexemes. Stereotypes have their formal linguistic, mental and behavioral parameters and, being a basic component of a certain society's linguistic worldview, reflect specific for this society interpretation of visual environment. [1]

The most traditional stereotypes are the ethnic and cultural ones, shared not only within one culture but even broader, the opinions about the typical images of the representatives of different nationalities. It's impossible to understand a country without seeing how it varies from others.

In cognitive and ethno-linguistics, it is customary to subdivide ethnic stereotypes into auto-stereotypes and hetero-stereotypes. The auto-stereotype is a self-concept of the involved ethnic group; the hetero-stereotype is the concept that the group has about another ethnic group. .[4]

Stereotypes are widely used in mass media political discourse; their main objective is to manage public consciousness, to form a certain attitude, a viewpoint on the particular topical issue. Since stereotypes are characterized by stability and fixed emotional coloring, a single use of a stereotype in the text allows impressing the reader with the desired attitude towards the referent. [2]

However, the authors of political media texts often increase the impact effect by using auto-stereotypes and hetero-stereotypes simultaneously, creating in such a way the impact of opposition. [1]

Currently, mass media play the leading role in the formation and development of ethnic stereotypes. The effective use of stereotyped ideas increases the

pragmatic impact of the political media texts and is able to have a significant effect on the reader's worldview.

## REFERENCES

1. Berezovich, E. L. (2009). Ethnic stereotypes in different cultural codes. Conference "Stereotypes in language, communication and culture" (pp. 22-31). Moscow.
2. Burlaka A. Lingvokul'turni osoblivosti politichnogo diskursu / A. Burlaka. – Sumi, 2012. [Elektronnij resurs]. – Rezhim dostupu : <http://essuir.sumdu.edu.ua/bitstream/123456789/25457/1/Burlaka.pdf>
3. Фоменко О. С. Лінгвістичний аналіз сучасного політичного дискурсу США (90-ті роки ХХ століття): Авто-реф. Дис. канд. філол. наук: 10.02.04 / – КНУ ім. Тараса Шевченка. – К., 1998. – 18 с.
4. Липпман У. Общественное мнение / Уолтер Липпман : [пер. с англ.. Т.В. Барчунова]. – М.:Институт Фонда "Общественное мнение", 2004. – 384 с.

*S. Nykodyuk*

*Research supervisor: I.O. Poita,*

*Candidate of Economic Sciences*

*Zhytomyr Ivan Franko State University*

*Language tutor: A.V. Kuznyetsova,*

*Candidate of Philology, Associate Professor*

## CAUSES AND CONSEQUENCES OF MIGRATION FOR UKRAINE

Economic and political instability of Ukraine and the beginning of the process of European integration of Ukraine have contributed to the development of migration flows from our country.

The purpose of this research is to determine factors affecting the migration of the Ukrainian working population and its consequences.

Since its independence, Ukraine is trying to take up European values and the direction to European integration has always been a key priority of foreign policy of Ukraine. For Ukraine labour migration has been characteristic for many years, but the reasons for migration changed. Instead of the ethnic character, the immigration of the late 1990s-early 2000s was caused mainly by unemployment [2].

Today, Ukraine is an exporter of labour to the European countries. The main reason for this is a big difference in the wages of European countries and Ukraine. According to the rated average wage in Europe, Ukraine ranks the last, as the average wage of employees in Ukraine is 190 euros. Compared to other European countries, the average wage in Ukraine is 2.5 times lower than in Russia, 4.5 times than in Poland, 9 times than in Spain, and 23 times lower than in Belgium.

13 July 2017, the European Union approved a visa-free regime for Ukraine, then migration activity of the population increased, as well as the number of illegal immigrants [1].

Migration has positive and negative consequences for Ukraine. Positive effects include the flow of extra foreign currency to Ukraine in the form of remittances of labour emigrants and investments into the economy through the creation of joint stocks with foreign founders. One more advantage is the ability to implement their abilities abroad, to raise the level of qualification and to have a decent salary for migrant qualified employees. The motivation for more productive activity of Ukrainians to improve the level of labour, wages, and competition with foreign employees is also an advantage. One more benefit is the reduction of percentage of unemployment in the national labour market, and lowering of social tension [3].

There are also negative aspects of growth of migration processes. With the increase in emigrants there is a hidden diminution of the population of Ukraine. The problem is the reduction of pensions and social funds due to the absence of deductions from wages of wage earners. An important issue is the discrimination and exploitation of our citizens by local employers and the growth of crime and social tension in society through interethnic conflicts. There is worsening of family relationships due to the long absence of family members [3].

Thus, European integration processes produce a significant impact on the migration processes in Ukraine with and both positive and negative consequences.

## REFERENCES

1. Зарплати в Європе: какое место занимает Украина в рейтинге [Електронний ресурс] - Режим доступу: <http://podrobnosti.ua/2219762-zarplaty-v-evrope-kakoe-mesto-zanimaet-ukraina-v-rejtinge.html>
2. У 2017 році Україну покинули більше 1 млн громадян – Клімкін [Електронний ресурс] - Режим доступу : [https://dt.ua/UKRAINE/u-2017-roci-ukrayinu-pokinuli-bilshe-1-mln-gromadyan-klimkin-270089\\_.html](https://dt.ua/UKRAINE/u-2017-roci-ukrayinu-pokinuli-bilshe-1-mln-gromadyan-klimkin-270089_.html)
3. Як українці розуміють євроінтеграцію: очікування та настрої суспільства/[Електронний ресурс] – Режим доступу : <http://dif.org.ua/ua/publication/press-relizy/jak-ukrainci-rozumiyut-evrointegraciyu-ochikuvannja--ta-nastroi-suspilstvs.html>

***M. Ogorodnik***  
*Research supervisor: V.V.Gorbunova*  
*Doctor of Psychological Sciences,*  
*Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: S. S. Kukharyonok*

## **COMPARATIVE ANALYSIS OF THE ACHIEVEMENT MOTIVATION OF ORTHODOX AND PROTESTANT CONFESSIONS**

In the modern world, quite often we encounter the concept of motivation, motive and need. This is due to the rapid pace of development of science and the spread of psychological knowledge. The problem of motivation is quite significant for our society, because every person wants to be successful. The concept of motivation has no unambiguous interpretation. It is the result of the versatility and significance of this issue. This topic is found in the works of foreign scientists (J. Atkinson, W. MacDougall, D. McClelland, G. Murray, H. Hechauzen) and domestic researchers (N. Baturin, V. Vivalanas, M. Magomed-Eminov, O. Shpakovskaya).

Besides, the issue of motivation is relevant in the religious sphere. The concept of motivation was studied by such Christian scholars as J. Adams, A. Men, E. Welch, etc.

The aim of the article is to analyze psychological and religious approaches to studying the issue of achievement motivation.

For the first time, the motive of achievement was identified by G. Murray. He defined the motive of achievement as a stable personality trait. These motives were analyzed by such scholars as D. McClelland and J. Atkinson. H. Heckhausen defines these motifs as the motive to achieve success and the motive to avoid failure. The researcher highlights such concepts as attribution of success and failure [4].

Foreign scholar D. McClelland says that motivation is related to conscious instincts, for example with such intrinsic intentions as "I want to be a driver," "I want to learn how to play football," "I want to solve this problem" [2].

Protestant researcher J. Adams notes that human behaviour is governed by the "desire of his heart", which prompts him to act. Under the word "heart" the scientist means the center responsible for freedom, mind and feeling. In Christian tradition, the main motivation is also the Scriptures [1].

Christian scholar E. Welch claims that our "heart" urges us to take active action that is not always constructive. Scientists note that the main motivation of a Christian is that everything he does is to do as the Lord [3].

Summarizing this information it can be concluded that psychological and Christian approaches to the interpretation of the concept of motivation have a certain difference. Christian scholars in their writings rely on the Bible. Psychological schools in their conclusions are based on empirical research. The

concept of motivation, that is, the motive for action, outlines both Christian and psychological approaches.

#### REFERENCES

1. Адамс Дж. Учебник по христианскому душепопечению. Х.: Cospel literature servicts. – 2002. – С. 305 – 307.
2. Макклеланд Д. Мотивация человека. - СПб.: Питер. - 2007. - С. 92 - 93.
3. Уелч Э. Депрессия. Х.: Тюльпан. – 2009. – С. 110 - 115
4. Хекхаузен Х. Мотивация и деятельность / Х. Хекхаузен. - 2-е изд. - СПб. : Питер ; М. : Смысл, 2003. - 860 с. : ил. - (Мастера психологии).-С. 38- 50.

***K. Olekhnovych***

*Research supervisor: M.K.Patsyuk*

*Candidate of Biological Sciences, Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: Kuznyetsova A. V.*

*Candidate of Philology, Associate Professor*

#### THE DISTRIBUTION OF NAKED AMOEBAE IN THE SOILS OF THE FOREST AREAS OF UKRAINE

In forest areas of Zhytomyr region (Ukraine), naked amoebae are represented by 14 species from 10 families and 11 genera. These species are *Deuteramoeba mycophaga* Pussard, Alabouvette et Pons, 1980, *Saccamoeba stagnicola* Page, 1974, *Saccamoeba* sp., *Korotnevella stella* Schaeffer, 1926, *Vexillifera* sp., *Vannella lata* Page, 1987, *Cochliopodium* sp., *Mayorella cantabrigiensis* Page, 1983, *Mayorella* sp., *Thecamoeba striata* Penard, 1890, *Filamoeba nolandi* Page, 1967, *Vahlkampfia* sp.(1), *Vahlkampfia* sp.(2), *Naegleria gruberi* Schardinger, 1899 [1, 3].

Almost 50 % of the species belong to the class Discosea. Classes Tubulinea and Heterolobosea are represented by three species each, comprising 21.4 % of the found species. Class Variosea is represented by a single species, *F. nolandi* (7 %).

The found amoebae belong to nine morphotypes. The most morphotypes are discovered in soils of oak and mixed forests. These soils contain amoebae of all identified morphotypes.

Three species of naked amoebae, *Vahlkampfia* sp. (1) and *Vahlkampfia* sp. (2), *N. gruberi*, belong to the eruptive morphotype, typical to all soils of forest areas in Zhytomyr region. Amoebae of the monotactic (*Saccamoeba stagnicola*, *Saccamoeba* sp.), mayorellian (*M. cantabrigiensis*, *Mayorella* sp.) and dactylopodial (*K. stella*, *Vexillifera* sp.) morphotypes are typical for soils of oak and mixed forests. Similarly, amoebae of the orthotactic (*D. mycophaga*), striate (*T. striata*), fan-shaped (*V. lata*) and lens-like (*Cochliopodium* sp.) morphotypes are typical for those forest areas of Zhytomyr region.

For certain morphotypes, we analyzed the frequency of findings in soils of forests of Zhytomyr region. The most wide-spread are amoebae of eruptive (79.77 %), striate (47.62 %), fan-shaped (53.58 %), mayorellian (61.91 %) and lens-like (52.38 %) morphotypes, comprising 55.5 % of all morphotypes.

The influence of temperature factor on the distribution of naked amoebae can be estimated only in case of year-round observations. Such observations were carried out in the soils of mixed forest of Popelnianski district. The study was conducted predominantly in the warm dry season with no precipitation [2].

Among the eleven species identified, ten species were found in all seasons of the year and recorded throughout the range of temperature changes (from 7.38 ° C to 18.83 ° C). The frequency of the findings of these species in soil samples during the study period is: *Vahlkampfia* sp. (1) and *Cochliopodium* sp. – 100%; *Vahlkampfia* sp. (2) – 68%; *D. mycophaga* and *S. stagnicola* – 57%; *T. striata* and *V. lata* – 89%; *M. cantabrigiensis* – 93%; *K. stella* and *Vahlkampfia* sp. (2) – 82%. *Mayorella* sp. (1) was found at soil temperatures of 7.38 ° C and 8.48 ° C, and the frequency of excavations in the samples under consideration is a small species (14%). As for the naked amoebae morphotypes defined in the soils of mixed forest Popelnianski district, Zhytomyr region identified amoebae that belong to 8 morphotypes. All morphotypes in the frequency of findings are numerous in the soil samples of the investigated forests and remain for the entire specified temperature range (7,38 °C to + 18,83 °C).

## REFERENCES

1. Patsyuk M.K. Morphotypes in Naked Amoebas (Protista): Distribution in Water Bodies of Zhytomyr and Volyn Polissia (Ukraine) and Possible Ecological Significance / M.K. Patsyuk // *Vestnik zoologii*. – 2014. – 48 (6). – P. 547–552.
2. Patsyuk M.K. Seasonal changes in the species composition of naked amoebas (Amoebina) of the Teterev river (the Town of Zhitomir) / M.K. Patsyuk // *Hydrobiological Journal*. – Vol. 52 (4), 2016. – P. 55–62.
3. Smirnov A. An illustrated list of basic morphotypes of Gymnamoebae (Rhizopoda, Lobosea) / A. Smirnov, A. Goodkov // *Protistology*. – 1999. – Vol.1. – P. 20–29.
4. Smirnov A.V. Bare lobose amoebas: biodiversity, systematics and phylogeny / A.V. Smirnov // *Ecology of free-living simplest terrestrial and aquatic ecosystems: IV International Symposium: Abstracts, October 17 – 21. 2011, Tolyatti, Russia*. - Tolyatti: Kassandra, 2011. – p. 61.

**A. Olijnyk, M. Kolomietz**  
*Sprachlehrerin: I.Swiridenko*  
*Kandidatin der pädagogischen Wissenschaften,*  
*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

## **DIE NUKLEARKATASTROPHE VON TSCHERNOBYL**

Im April 1986 wurde Tschornobyl über Nacht weltbekannt. 30 Kilometer vom Atomkraftwerk entfernt ist mit Stacheldraht ein äußerer Ring um den Ort der Tragödie von 1986 gezogen. In der Nacht vom 25 zum 26. April wurde am Block 4 vor dem Abstellen des Reaktors zu Wartungsarbeiten ein Experiment durchgeführt. Der Reaktor geriet außer Kontrolle. Die radioaktive Wolke kontaminierte zuerst Belarus, dann drehte sich der Wind in Richtung Polen, am 30. April aber blies er nach Süden. Doch die Behörden schwiegen...

### **Ursachen des Tschernobyl -Unfalls.**

Es gibt verschiedene Ansätze, um die Ursachen der Tschernobyl-Katastrophe zu erklären, die als offiziell betrachtet werden können. Die Schuld an der Katastrophe wurde zunächst nur den Mitarbeitern auferlegt. Ein schwerwiegender Verstoß gegen die Betriebsregeln des KKW in dieser Version durch das Personal des Kernkraftwerks Tschernobyl ist:

- Durchführung eines Experiments zu jedem Preis, unabhängig vom Zustand des Reaktors;
- Produktion eines funktionalen technologischen Schutzes, der den Reaktor einfach stoppt;

Der Beratende Ausschuss für nukleare Sicherheit hat jedoch 1993 einen neuen Bericht herausgegeben, in dem die folgenden Unfallursachen aufgeführt sind:

- Der Reaktor wurde nicht ordnungsgemäß und gefährlich gebaut.
- Das Personal wurde nicht über die Gefahr informiert.

### **Brandlöschung.**

Eine Liquidation der Folgen des Unfalls führte zur Bildung einer Regierungskommission, die vom stellvertretenden Vorsitzenden des Ministerrates der UdSSR, Boris Evdokimovich Shcherbin, geleitet wurde. Während des Brandes schickte die Sowjetregierung sogenannte "Liquidatoren" in die Abwasserarbeiten auf dem Gelände, welche entfernen die radioaktive Staubschicht, die alles bedeckm Tag nach der Katastrophe sind die drei weiteren Tschernobyl-Blocks abgeschaltet. Aus 80 Hubschraubern werden Blei, Sand in den Reaktor geworfen, um den Brand unter Kontrolle zu bekommen. Erst am 6. Mai ist der Brand gelöscht und die Freisetzung von radioaktiven Stoffen in die Atmosphäre gestoppt. So entwickelten westliche Staaten 1994 Hilfsmaßnahmen, um die Schließung des unsicheren Kraftwerkes zu erreichen. Das Kraftwerk wurde aber erst am 25. Dezember 2000 stillgelegt.

### **Folgen des Unfalls**

- *Die gesundheitlichen Folgen*

Das Gesundheitsministerium und die Klinikärzte in Kyiw widerlegen heute die beschönigenden Berichte der ersten Jahre nach der Katastrophe. Nach sowjetischen

Angaben wurden 31 Menschen durch diesen Unfall getötet, die Zahl der durch die Strahlung verursachten Todesfälle ist bis heute unbekannt.. Eine große Zahl von erkrankten Soldaten und Feuerwehrleuten wurde gar nicht in die Statistik aufgenommen, viele von ihnen sind nicht mehr am Leben. Nach dem GAU von Tschernobyl die Krebserkrankungen, besonders Leukämie und Schilddrüsenkrebs, zunehmen. Zudem werden wesentlich mehr genetische Schädigungen und eine höhere Säuglingssterblichkeit festgestellt. Erkrankungen in Folge der Reaktorkatastrophe wird es vermutlich noch mehrere Generationen lang geben. Das Immunsystem der Kinder in den betroffenen Gebieten ist sehr schwach. Banale Erkältungen, kleine Wunden heilen schlecht. Immer wieder werden Kindergruppen zu Erholung und Gesundung in verschiedene europäische Länder geschickt, auch in die Bundesrepublik.

## LITERATUR

1. Ukraine: Wir lesen, sprechen und diskutieren. Навчальний посібник з німецької мови. – Київ: ТОВ «ВП Логос», 2004. – 256 с
2. Article: «Hintergrund: Tschernobyl – Chronik einer Katastrophe»; Text: Martina Frietsch, Daniela Hindemith

*T. Opanasiuk*

*Research supervisor: I.A. Sverchevska*

*Candidate of Pedagogical Sciences,*

*Associate professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: S.S. Kukharyonok*

## THE GENERALIZATION OF THE GOLDEN SECTION

The golden proportion as a measure of perfection and beauty is a great example of where you can meet maths in everyday life. It is everywhere: in different lines, figures, buildings, etc. Even more often, the “footprint” of maths is found in nature. However, not everything in our lives is subject only to such ratio. It gives reasons for searching the regularities that can be found in the generalizations of the golden proportion [2].

**The golden section** is the division of the segment AB with the point C into two parts that  $\frac{AB}{AC} = \frac{AC}{CB}$ . If you mark this ratio  $\frac{AB}{AC} = x$ , you'll get equation  $x^2 = x + 1$ . (1.1)

A positive root of this equation  $\varphi = \frac{\sqrt{5}+1}{2} = 1,618 \dots$  is called the **ratio of the golden section**, and the equation (1.1) is called **the formula of beauty** [4, p.22].

For the golden section, such properties are performing: [3, p.74]

- 1°  $\varphi^n = \varphi^{n-1} + \varphi^{n-2}$ ,  $n \geq 2$ ,  $\varphi$  – the root of the equation  $x^2 = x + 1$ .
1. 1.2

2° The ratio of the golden section is related to the Fibonacci sequence  $\dots, -3, 2, -1, 1, u_0 = 0, 1, 1, 2, 3, \dots$ , with equality  $\varphi^n = u_n \varphi + u_{n-1}$ . (1.3)

**The golden  $\beta$ -section** is the division of the segment AB with the point C into two parts that  $\frac{AB^2}{AC^2} = \frac{AC}{CB}$ . If you mark this ratio  $\frac{AB}{AC} = x$ , you'll get equation of the ratio of the  $\beta$ -section:  $x^3 = x^2 + 1$ . A positive root  $\beta = 1,465 \dots$  1, p.111 (2.1)

The properties of the  $\beta$ -section:

1°  $\beta^n = \beta^{n-1} + \beta^{n-3}, n \geq 3, \beta$  – the root of the equation  $x^3 = x^2 + 1$ . (2.2)

2° The ratio of the  $\beta$ -section is related to the sequence of numbers  $u_{n+1} = u_n + u_{n-2}$   
 $\dots, 0, 1, u_0 = 0, 0, 1, 1, 1, 2, \dots$ , with equality  $\beta^n = u_n \beta^2 + u_{n-2} \beta + u_{n-1}$ . 2.3

**The golden  $\gamma$ -section** is the division of the segment AB with the point C into two parts that  $\frac{AB^3}{AC^3} = \frac{AC}{CB}$ . If you mark this ratio  $\frac{AB}{AC} = x$ , you'll get equation of the ratio of the  $\gamma$ -section:  $x^3 = \frac{1}{x-1} \Rightarrow x^4 - x^3 = 1 \Rightarrow x^4 = x^3 + 1$ . (3.1)

There are two real roots,  $\gamma \approx 1,380 \dots$   
 $\gamma_1 \approx -0,819 \dots$

The properties of the  $\gamma$ -section:

1°  $\gamma^n = \gamma^{n-1} + \gamma^{n-4}, n \geq 4, \gamma$  – the root of the equation  $x^4 = x^3 + 1$ . (3.2)

2° The ratio of the  $\gamma$ -section is related to the sequence numbers  $\dots, -5, 6, -4, 2, -3, 3, -1, 1, -2, 1, 0, 1, -1, 0, 0, 1, u_0 = 0, 0, 0, 1, 1, 1, 1, 2, 3, 4, 5, \dots$ ,  $u_{n+1} = u_n + u_{n-3}$  with equality  $\gamma^n = u_n \gamma^3 + u_{n-3} \gamma^2 + u_{n-2} \gamma + u_{n-1}$ . 3.3

Therefore, the certain regularities of the similar properties of the golden section and its generalizations are followed.

The following tasks can be solved with these properties:

**Task № 1.** Prove that: **a)**  $\varphi - 1 = \frac{1}{\varphi}$ ; **b)**  $\beta - 1 = \frac{1}{\beta^2}$ ; **c)**  $\gamma - 1 = \frac{1}{\gamma^3}$ .

**Task № 2.** Prove that: **a)**  $u_n \varphi + u_{n-1} \cdot u_{-n} \varphi + u_{-n-1} = 1$ ;

**b)**  $u_n \beta^2 + u_{n-2} \beta + u_{n-1} \cdot u_{-n} \beta^2 + u_{-n-2} \beta + u_{-n-1} = 1$ ;

**c)**  $u_n \gamma^3 + u_{n-3} \gamma^2 + u_{n-2} \gamma + u_{n-1} \cdot u_{-n} \gamma^3 + u_{-n-3} \gamma^2 + u_{-n-2} \gamma + u_{-n-1} = 1$ .

**Task № 3.** Find the real roots of the equation:  $x^4 + 3x^3 + 3x^2 + x - 1 = 0$ .

There are other ways to solve the equations, but we have chosen a new, more convenient one.

Lately, pupils do not want to learn maths because they think that knowledge in this field is never used in everyday life. Thus, the problem of how to interest pupils in maths is only growing every year. Therefore, it is very important to find ways and means by which we can show the applied orientation of gained knowledge. For example, pupils can study mathematical patterns of beauty: proportions,

symmetries, geometric forms, etc. In this case, the proportion is the best example, as a measure of perfection and beauty.

### REFERENCES

1. Сверчевська І. А. Про одне узагальнення «золотого» перерізу // Вісник ЖДПУ. – Вип. 11. – 2003. – С. 111-114
2. Стахов. О. П. Коды золотой пропорции. – М.: «Радио и связь», 1984. – 152 с.
3. Попов Є.Д. Алгебраїчні властивості відношення золотого перерізу//У світі математики. - Вип.11. - 1980. - С.74-88.
4. Бендукидзе А.Д. Золотое сечение // Квант. - 1973. - № 8. - С. 22-27.

***I. Oshurkevich***

*Research supervisor: E.Y. Rutman, Senior lecturer,  
Baranovich State University  
Language tutor: M.D. Lavrenkova,  
senior lecturer, Baranovich State University*

### ABOUT THE SUBJECT OF THE POWER SUPPLY CONTRACT

Energy plays a special role in the production and sale of products by economic entities, as well as in everyday life. Timely production of energy in the required amount and its continuous supply to consumers is one of the determining factors of stable operation of production units, communication facilities of settlements, including street lighting, radio, television, communications and more. In accordance with part 1 of article 510 of the Civil code of the Republic of Belarus, under the energy supply contract, the energy supplying organization undertakes to supply the subscriber (consumer) through the connected network energy, and the subscriber undertakes to pay for the received energy, as well as to comply with the regime of its consumption stipulated in the contract, to ensure the safety of operation of the energy networks under its jurisdiction and the serviceability of the devices and equipment used by it related to energy consumption[3].

It is important to note that the subject of the energy supply contract is energy. The subject of this agreement, in turn, is its essential condition. Therefore, examine the energy supply contract, which determines the importance such a thing as "energy". If we turn to the encyclopedic data, we find the following definition: "Energy (from Greek. energia-action, activity) is a General quantitative measure of various forms of motion of matter; in physics, various physical processes correspond to a particular type of energy: mechanical, thermal, electromagnetic, gravitational, nuclear, and so on" [1, p.1406]. The modern civilistic understanding of energy was expressed By R. Savatier: "Legally, energy can be expressed only in the form of an obligation. This thing is always certain generic characteristics that are expressed only in the results of its use" [5, p. 186]. That is, the legal concept of energy comes from the process of its transfer to the subscriber.

It should be noted that both legal and encyclopedic definition of the concept of energy is directly related to the process, that is, energy implies an action, movement, use. Energy as a subject of legal regulation is characterized by signs and features that distinguish it from other objects and phenomena of the material world. It is its features that determine the need and importance of independent regulation of energy relations, that is, the need for special rules governing legal relations related to the supply of energy through the connected network" [2, p.158].

The features of energy, as the subject of contractual relations, include the following.

1. Energy cannot be detected as a thing.
2. It is impossible, unlike other things (goods), to accumulate and store.
3. The energy consumed during transmission and can not be returned.
4. And most importantly, the process of energy production is usually continuous and is associated with its transportation and consumption.

Highlighting the features of the energy of contractual relations, it should be concluded that the energy as such is not enough for the implementation of the energy supply contract, it is necessary the process of its transmission through the connected network.

Thus, the subject of the energy supply contract is, in our opinion, not just energy, but the process and its transfer, since without it it is impossible to produce the energy necessary for the implementation of the energy supply contract.

## REFERENCES

1. Большой энциклопедический словарь / общ. ред. А.М. Прохорова. — М. : Советская энциклопедия, 1999. — 1631 с.
2. Витрянский В.В. Договор купли продажи и его отдельные виды / В. В. Витрянский. — М. : Статут, 1999. — 284с.
3. Гражданский кодекс Республики Беларусь [Электронный ресурс] : 7 декабря 1998 года, № 218–З : принят Палатой представителей 28 окт. 1998 г. : одобрен Советом Республики 19 нояб. 1998 г. : в редакции от 9 янв. 2017 г., № 14–З // Эталон–Беларусь / Нац. центр правовой информ. Республики Беларусь. — Минск, 2019.
4. Маньковский, И. А. Гражданское право. Особенная часть : учеб. пособие / И. А. Маньковский, С. С. Вабищевич. — Минск : адукацыя і выхаванне, 2013. — 368 с.
5. Саватье, Р. Теория обязательства. Юридический и экономический очерк / Р. Саватье. — М. : Прогресс, 1972. — 440 с.

## THE IDEA OF HOMOGENEITY IN SYSTEMS OF RATIONAL EQUATIONS

**Aim:** studying and using the idea of homogeneity in systems of rational equations; finding ways to apply the idea of homogeneity to solving systems of rational equations.

A homogeneous polynomial of two variables  $x$  and  $y$  is called the polynomial of the form  $a_0x^n + a_1x^{n-1}y + a_2x^{n-2}y^2 + \dots + a_{n-1}xy^{n-1} + a_ny^n$ , де  $a_i$   $i = 0, 1, \dots, n$  - is some real number.

**Example 1.**  $x^2 - 2xy - 3y^2 = 0$ , Let  $y=tx, t \neq 0, x \neq 0$ . Then  
 $x^2 - xy - 2x - 3y = 6$ .

$$x^2 - 2x^2t - 3t^2x^2 = 0, \quad x^2(1 - 2t - 3t^2) = 0,$$

$$x^2 - x^2t - 2x - 3xt = 6; \quad x(x - xt - 2 - 3t) = 6;$$

We divide the first equation of the system on the second:

$$\frac{x^2(1-2t-3t^2)}{x(x-xt-2-3t)} = 0, \quad \frac{x(1-2t-3t^2)}{x-xt-2-3t} = 0. \text{ From here } D=16, t_1 = -1; t_2 = \frac{1}{3}.$$

Then this system in the condition is equivalent to a set of two systems of equations:

$$\begin{array}{lll} & & x = \frac{3}{2}, \\ & & y = -\frac{3}{2}; \\ y = -x, & y = -x, & x = -2, \\ x^2 - xy - 2x - 3y = 6; & 2x^2 + x - 6 = 0; & y = 2; \\ y = \frac{1}{3}x, & y = \frac{1}{3}x, & x = 6 \\ x^2 - xy - 2x - 3y = 6; & \frac{2}{3}x^2 - 3x - 6 = 0; & y = 2; \\ & & x = -\frac{3}{2}, \\ & & y = -\frac{1}{2}; \end{array}$$

Answer:  $(-2; 2), \frac{3}{2}; -\frac{3}{2}, (6; 2), -\frac{3}{2}; -\frac{1}{2}$ .

We now consider a system of equations in which the left-hand sides of the equations of the system are homogeneous polynomials. Such a system is solved by a standard replacement  $y=tx$ , де  $t \neq 0; x \neq 0$ .

**Example 2.**  $x^2y^3 + x^3y^2 = 12$ , Let  $y=tx, t \neq 0, x \neq 0$ .  
 $x^2y^3 - x^3y^2 = 4$ .

Then  $x^2(xt)^3 + x^3(xt)^2 = 12, \quad x^5t^3 + x^5t^2 = 12, \quad x^5t^3 + t^2 = 12,$   
 $x^2(tx)^3 - x^3tx^2 = 4. \quad x^5t^3 - x^5t^2 = 4. \quad x^5t^3 - t^2 = 4.$

We divide the first equation of the system on the second, then we have:  
 $\frac{t^3+t^2}{t^3-t^2} = 3, \frac{t^2(t+1)}{t^2(t-1)} = 3, \frac{t+1}{t-1} = 3; t + 1 = 3t - 3; 2t=4; t=2.$

The original system of equations is transformed into such a system:

$$\begin{aligned} y &= 2x, & y &= 2x, & x &= 1, \\ x^2(2x)^3 - x^3 & 2x^2 = 4. & x^5 &= 1. & y &= 2. \end{aligned}$$

Answer: (1;2).

### **Conclusions:**

1. In the examples given, we considered various methods of applying the idea of homogeneity in systems of rational equations.
2. The simplest methods of solving the system data are indicated.

### **REFERENCES**

1. Корнієнко Т.Л. Алгебра. 10-11 класи. Методи розв'язування рівнянь, нерівностей та їх систем: Розробка занять/ Т.Л.Корнієнко, В.І.Фіготіна.- Х.:Вид-во «Ранок»,2009. -336с.-(Факультативи та курси за вибором).
2. Завало С.Т. Практикум з розв'язування задач. Алгебра./ Завало С.Т.- К.:Вид-во «Вища школа», 1975. -195с.
3. Завало С.Т., Костарчук В.М., Хацет Б.І. Алгебра і теорія чисел, ч.1- К.:Вид-во «Вища школа»,1974.-458с.

***A. Osypchuk***

*Research supervisor: T. A. Vakaluk,*

*Candidate of Pedagogical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O. I. Dienichieva*

### **THE USE OF CLOUD TECHNOLOGIES IN EDUCATIONAL PROCESS**

Modern information society is characterized as a society that widely uses information and communication technologies (ICT). The rapid development of ICT caused the fact that a modern teacher should have not only professional competence aimed at the use of traditional learning technologies but also know how to use the Internet optimally, understand modern pedagogical technologies of distance learning, teach his or her subject using various means of communication.

Today more and more students use various gadgets (mobile phones and tablets) and spend a lot of time surfing social networks or playing games. Though, there are different productive ways of using these modern tools. Therefore, it's up to the teachers to provide the educational process with high-quality electronic learning software that can be used not only for computers but also for modern devices.

One of the modern ICT types is cloud technology. Cloud technology is the technology that provides Internet users with access to computer server resources and with ability to use the software as online services [1, p.45].

The necessary components to work in the "cloud" are the Internet, computer, browser, the company that provides cloud services, digital skills.

Advantages of using Cloud Technologies are:

- does not need powerful computers;
- cheaper than the purchase of software and its update;
- unlimited data storage;
- access from different devices and ability to work from anywhere;
- data protection from loss (security due to centralization of data);
- performing various learning activities such as monitoring and evaluation, online testing;
- savings in employment of technical specialists [2; 3].

The increased usage of different types of cloud technologies takes place in many areas of life: medicine, business, science, entertainment. However, one of the most important application spheres must become education. It is difficult to argue that the use of cloud technologies in modern education will significantly increase the impact of the educational process.

It is cloud technologies that will allow the knowledge to overcome all existing barriers: geographical, technological, social and make learning easy and accessible to everyone.

## **REFERENCES**

1. Матеріали VIII Міжнародної науково-практичної інтернет-конференції // Проблеми впровадження інформаційних технологій в економіці. – 2012. – 420с.
2. Вакалюк Т. А. Перспективи використання хмарних технологій у навчальному процесі загальноосвітніх навчальних закладів України / Т. А. Вакалюк, В. В. Поліщук // Педагогіка вищої та середньої школи.– Випуск 46. – Кривий Ріг, 2015.– С. 114-119.
3. 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.

*I. Ovdiychuk*  
*Research supervisor: I.R. Dzik,*  
*Senior Lecturer*  
*Baranovich State University*  
*Language tutor: M.D. Lavrenkova*  
*Senior Lecturer*  
*Baranovich State University*

## **REALIZATION OF THE RIGHT TO ENVIRONMENTAL INFORMATION**

One of the most relevant areas of development of the theory of environmental law and the practice of applying the norms of environmental legislation is the problem of exercising the right of citizens to environmental information. Note that in addition to information on the state of the environment and its pollution, environmental information also includes information on all types of factors, activities, actions, administrative measures that affect or may affect the environment and may have an impact on human health.

In Art. 34 of the Constitution of the Republic of Belarus, citizens are guaranteed the right to receive, store and disseminate complete, reliable and timely information about the activities of state bodies, public associations, political, economic, cultural and international life, the state of the environment [1].

The concept of "environmental information" is also enshrined in Article 74 of the Law of the Republic of Belarus "On Environmental Protection". In accordance with Art. 12 of the Law of the Republic of Belarus "On Environmental Protection" citizens realize the right to environmental information by taking part in the discussion of materials on environmental impact assessment, making proposals for activities related to this area, in the manner prescribed by the legislation of the Republic of Belarus, etc. [2].

The social institutions of state power at all levels, as well as the competent state authorities in the field of environmental protection, are obliged to provide information to citizens on environmental issues and materials on environmental impact assessment.

An important aspect in the process of implementing the right to environmental information is the receipt by citizens and public organizations of complete, reliable and timely information [3, p. 39].

Such a property of information as completeness means the adequacy of the data provided to solve the currently necessary tasks. Ecological information should be provided to the extent to which it has an entity obliged to provide it, that is, specially authorized state authorities in the field of environmental protection and environmental management.

Reliability of information can be described as the consistency of data with real facts. It must be confirmed by the competent authorities, officials, or confirmed by state examination. The timeliness of providing information can be designated as its relevance regarding the moment of receiving information. Information about the

possible threat to human health and the necessary measures to prevent and eliminate harm should be communicated as soon as possible.

The legislation of the Republic of Belarus contains a sufficient number of rules defining the right to receive comprehensive environmental information, but citizens do not always have the opportunity to obtain data that meets all the above criteria. There is still no effective legal mechanism for environmental protection, as provided for in Art. 21 of the Constitution of the Republic of Belarus, in accordance with which ensuring the rights and freedoms of citizens of the Republic of Belarus is the highest goal of the state [4, p. 25-27].

Thus, taking into account the above, the legislation should develop, eliminate problems and contradictions in legal regulation, solve emerging problems, respond to the requirements of social development.

In order to ensure the right to implement environmental information, it is advisable to involve citizens and public associations to participate in law-making already at the stage of preparing normative acts affecting environmental issues, environmental rights and interests of citizens. This practice will provide an opportunity to take into account the interests of citizens and the implementation of their protection, make real the existence of a balance between the necessary use of natural resources and constitutional requirements.

#### **REFERENCES**

1. Конституция Республики Беларусь 1994 г. (с изменениями и дополнениями, принятыми на республиканских референдумах 24 ноября 1996 г. и 17 октября 2004 г.). – Минск : Амалфея, 2005. – 39 с.
2. Об охране окружающей среды [Электронный ресурс] : Закон Респ. Беларусь, 26 нояб. 1992 г., № 1985-ХІІ; в ред. Закона Респ. Беларусь от 21.07.2017 г. // КонсультантПлюс : Беларусь / ООО «ЮрСпектр», Нац. Центр правовой информ. Респ. Беларусь. – Минск, 2019.
3. Бринчук, М. М. Экологическое право (право окружающей среды) : учеб. для высш. юрид. учеб. заведений / М. М. Бринчук. – М. : Юристъ, 1998. – 119 с.
4. Кутузов, В. И. Законодательное обеспечение права граждан на экологическую информацию / В. И. Кутузов // Журнал российского права. – 2002. – № 8. – С. 25-27 с.

**V. Ovsejuk**

*Le chef scientifique: I. I. Lyubanets, le maître assistant de la chaire de la formation professionnelle de langue étrangère de l'Université d'État de Baranovitchi*

*Le professeur: I. I. Lyubanets*

## LA CRIMINALITÉ SUR LE NET

Au cours des dernières années, l'Internet a connu une croissance explosive.

Alors que l'Internet connaît une grande expansion, le crime en ligne augmente également. Les cyber-criminels, comme on les appelle, largement envahissent le monde virtuel, commettant des délits, tels qu'utilisation de codes d'accès confidentiels, piratage, fraude, sabotage informatique, trafic de drogue, "cyber-harcèlement" etc. [1].

Les criminels informatiques sont aussi variés que les différentes formes de crime qu'ils pratiquent.

Le piratage de sites confidentiels, grâce à des techniques sophistiquées permettant d'imiter les codes d'accès ou de contourner les dispositifs de sécurité, est devenu un cyber-délit de plus en plus répandu. Une fois qu'ils ont obtenu un accès, les pirates peuvent "injecter" des virus, envoyer des messages injurieux ou voler des données précieuses, y compris des informations sur les cartes de crédit et des documents confidentiels sur les sociétés [2].

Ciblés au hasard, les virus informatiques qui passaient auparavant d'un ordinateur à l'autre par le biais de disquettes "infectées" sont aujourd'hui transmis par les réseaux et se dissimulent souvent dans des messages e-mail ou des programmes téléchargés à partir d'Internet.

Les cyber-harceleurs ont également recours à l'e-mail pour envoyer des messages de menace à d'autres personnes, en particulier aux femmes. On estime qu'environ 200000 femmes sont harcelées chaque année.

Les délinquants se sont aussi servis des e-mails et des "espaces de discussion" du réseau Internet pour dénicher des proies vulnérables.

En plus de s'attaquer aux pages web privées, les criminels peuvent ouvrir leurs propres sites web pour escroquer des clients ou vendre des biens et des services illégaux, tels qu'armes, drogues, médicaments interdits ou sans ordonnance etc.

Comme le cyber-crime progressait, de nombreux pays ont adopté des lois pour punir ce nouveau phénomène, tel que le piratage. Ils ont aussi pu adapter les législations déjà existantes, afin que les peines pour délits traditionnels, fraude, vandalisme et sabotage s'appliquent aussi au monde virtuel [1].

Certains pays disposent de groupes spécialisés dans la recherche des cyber-criminels.

En dépit de ces efforts, les responsables du respect de la loi sont encore confrontés à de nombreux problèmes. Le problème majeur étant notamment que de tels délits traversent facilement les frontières, ce qui fait des procédures d'enquête sur les délinquants, de même que de leurs poursuites et de l'application de leurs peines, de vrais casse-têtes juridiques et législatifs. Et, une fois qu'un délinquant a

été repéré, les responsables doivent décider de l'extrader pour un procès qui se tiendra ailleurs ou de transférer les preuves, et quelques fois les témoins, à l'endroit où les délits ont été commis [2].

Les défis qu'affrontent les responsables du respect de la loi, à travers le monde, mettent en évidence le besoin urgent d'une coopération mondiale, en matière d'actualisation des législations nationales, des techniques d'enquête, de l'assistance légale et de l'extradition, afin de suivre le rythme des cyber-criminels.

#### LITERATURE

1. Компьютерные преступления [Электронный ресурс]. – Режим доступа: [https://www.pravo.vuzlib.su/book\\_z1436\\_page\\_13.html](https://www.pravo.vuzlib.su/book_z1436_page_13.html). – Дата доступа: 28.03.2019.
2. Преступления против информационной безопасности в соцсетях и способы защиты от киберзлодеев. [Электронный ресурс]. – Режим доступа: <http://pravo.by/novosti/obshchestvenno-politicheskie-i-v-oblasti-prava/2018/september/30618/>. – Дата доступа: 26.03.2019.

*Kh. Padyuka*

*Research supervisor: N.P.Banera, Associate Professor*

*Language tutor: O.Ye. Misechko, Professor*

*Lviv Institute of Economics and Tourism*

#### THE ROLE OF ECONOMIC ANALYSIS IN THE SYSTEM OF TOURISM ENTERPRISE MANAGEMENT

In modern conditions of management, a high level of competition in the market of tourist services requires control over the efficiency of making managerial decisions. Sustainable functioning of the system of management is possible on the basis of information provided by accounting services. The accounting information needed for decision making is available through economic analysis.

Accounting data and, especially, the economic analysis of the tourist enterprise activity significantly depends on the specific features of the tourist product, namely the following:

1) demand for travel services is quite flexible in relation to the level of incomes and prices, but it greatly depends on political and social conditions in the country;

2) the consumer, as a rule, cannot see the tourist product before consuming it, while consumption in most cases is carried out directly at the place of production of this service;

3) the consumer him/herself covers the distance to the product and place of the tourism service, and not vice versa;

4) the tourist product is created by the efforts of many enterprises, each of which has its own methods of work, specific needs and different commercial goals;

5) a high quality of tourist services cannot be achieved if there are even insignificant shortcomings, since tourist service consists of a huge amount of small details, every one of each matters;

6) the quality of tourist services also depends on external factors that might produce a force majeure effect (natural conditions, weather, tourism policy, international events, etc.) [2, p. 73].

Economic analysis of the enterprise activity, in particular the tourist enterprise, helps to identify shortcomings and hidden reserves, increases the efficiency of the use of resources, reduces the cost of tourism services, that is, acts as an element of the management system. It also serves as informational support, highlights the activities of all the components of the enterprise, processes and provides new information on the situation at the enterprise, thereby contributing to its management and control.

Of course, economic analysis cannot help with the preparation of managerial decisions in relation to all the activities of the tourist enterprise, but it is a reliable tool for solving problems of economic character.

The main tasks of the economic analysis of tourism enterprises are:

1) to create an information base for the assessment of enterprise development and managerial decision-making;

2) to provide integrated approach in assessing the development of the tourist industry;

3) to forecast economic and social development of tourist enterprises [3, p. 155].

In the course of economic analysis in the tourism industry, the following informational support can be used:

- financial statements of the enterprise;

- information obtained during the expert evaluation;

- information obtained through questionnaires for business managers and consumers/tourists;

- information obtained from other internal documentation of the enterprise.

In the process of managing a tourist enterprise, economic analysis should be carried out constantly, since it allows us to identify new trends in the work of the business entity that require changes in the operational management of its financial and economic activities.

Decisions made on the basis of the results of economic analysis promote the economical use of resources, prevent unnecessary expenditures and miscalculations, help to solve problem situations. Through the identification and implementation of available opportunities to increase and reduce the cost of tourism services, the analysis will increase the economic efficiency of the enterprise. With the support of economic analysis, rapid adaptation to changes in market conditions, prediction of possible changes in the behaviour of partners, and avoidance of unjustified economic risk is achieved.

Thus, economic analysis completes a general management function and, as well as accounting, has a paramount importance to the enterprise.

## REFERENCES

1. Вагнер І. Економічний аналіз як сучасний інструмент прийняття стратегічних управлінських рішень [Електронний ресурс]. – Режим доступу : [http://nbuv.gov.ua/UJRN/VInau\\_econ\\_2013\\_20\(1\)\\_\\_9](http://nbuv.gov.ua/UJRN/VInau_econ_2013_20(1)__9).
2. Дядечко Л. П. Економіка туристичного бізнесу / Дядечко Л. П. – К. : Центр навч. л-ри, 2007. – 224 с.
3. Кальченко О.М. Методичні аспекти оцінювання ефективності функціонування підприємств туристичної сфери в інноваційних умовах / О.М. Кальченко // Вісник Чернігівського державного технологічного університету «Галузевий аспект розвитку національного господарства». – 2012. – Вип. 4 (62). – С. 154-161.
4. Коваленко О.В., Зайцева М.О. Роль і місце економічної діагностики на підприємстві [Електронний ресурс]. – Режим доступу : [http://nbuv.gov.ua/UJRN/Traeiv\\_2013\\_1\(2\)\\_\\_48](http://nbuv.gov.ua/UJRN/Traeiv_2013_1(2)__48).

***L. Panasiuk***

*Research supervisor: O.V.Anichkina  
Candidate of Pedagogical Sciences,  
Zhytomyr Ivan Franko State University  
Language tutor: O.I. Dienichieva*

## METHODS OF FORMATION OF EXPERIMENTAL SKILLS BY MEANS OF SOLVING EXPERIMENTAL TASKS

The solution of experimental tasks is one of the key points in the study of chemistry. It is considered to be the type of training that provides deeper and more complete learning of the teaching material. The ability to solve problems is developed in the process of learning. The solution of experimental tasks in chemistry is an important component of mastering the knowledge of the basics of chemical science. The need to use experimental tasks in the process of studying chemistry is due to a number of reasons, namely: 1) chemistry is an experimental science and the acquisition of experimental students' abilities is the basis for the formation of the future chemist-researcher; 2) the ability to see creative solutions to the chemical problems in the process of solving experimental tasks [1].

In conclusion, to raise the level of competence and self-development of students in the conditions of improving their chemical education, much attention should be paid to the solution of experimental tasks. This method will not only qualitatively help to master the basic educational material but also transfer this knowledge into everyday life.

## REFERENCES

1. Полетило С.А. Особливості використання експериментальних задач на сучасному уроці фізики [Електронний ресурс]. – Режим доступу:

***M. Panchuk***

*Research supervisor: O.M. Bilobrovets*

*Candidate of Historical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: S.S. Kukharyonok*

## **THE IMPLEMENTATION OF THE IDEA OF UKRAINE'S UNITY IN THE PROCESS OF STATE BUILDING**

The idea of the unity of the Ukrainians within the state has been relevant for many centuries. Only in the twentieth century it became possible due to the Act of Unification of the UNR (the Ukrainian People's Republic) and the ZUNR (the Western Ukrainian People's Republic). An insight into this process is especially important at the centenary of the event that played a significant role in the formation of the Ukrainian state within its borders. The issue of the unity of Ukraine was investigated in the works of I. Raykivsky [3], O. Lyubovets [2], O. Rublev [4] and others.

The main aim of the study is to identify the reasons for the emergence of the idea of Ukraine's unity in the political environment of Galicia and Naddniprianshchyna, and to clarify the peculiarities of its implementation.

The first explorers of the Ukrainian national idea in Galicia with the understanding of the unity of the Ukrainian people on both sides of the Zbruch border, became leaders of the "Rus Trinity". The interest of the circle of the Galician and Rusyn intellectuals in the national cultural processes of Naddniprianshchyna was explained by the desire to resist the Poles in Galicia and the gradual activation of the national development.

During the revolution of 1848-1849 in Galicia, manifestations of Rusyn self-awareness were obvious. Having received the sanction of the authorities, the representatives of the spiritual elite initiated the creation of separate national representative organization on April 20 (May 2) in 1848 in Lviv. It was the Chief Rus Council under the guidance of Bishop G. Yakhymovych.

During the 1880s the ideas of the Rusyns' national identity deepened; trips of the Naddniprianian scientists to Galicia were carried out. The national movement intensified in Galicia. The Naddniprianian leaders had relations with the editorial office of "Dila" in Lviv and they expressed the desire to learn more about the development of the national movement in their letters.

The intellectuals that spread the modern Ukrainian self-awareness in the masses played a key role in the national movement of both Galicia and Naddniprianshchyna [3, p. 102].

The Ukrainian Revolution of 1917-1921 became a turning point in the formation of the Ukrainian national identity. Naturally, the Ukrainians living on both sides of the border had linguistic, confessional and cultural differences. Therefore, to be united in a single state it was necessary to overcome them. Following the proclamation of the ZUNR between the governments of the UNR and the ZUNR, negotiations for the unification began.

An example of Galicians in the provincial community of Ukraine has become a catalyst for the transition of spontaneous ethnic self-identification of the Naddniproianians to a conscious national ethnic identity [1, p. 290].

This way, born in Galicia at the beginning of the nineteenth century, the idea of the unity of the Ukrainian people entered into the consciousness of the Ukrainians of Galicia and Naddniproianshchyna over the course of the century, and thanks to the efforts of the intellectuals got implemented in January 1919 in the Act of the Unification of the ZUNR and the UNR.

### REFERENCES

1. Басара-Тилішак Г. На шляху до Злуки: галицький чинник у розвитку української національної ідентичності на Наддніпрянщині (1917 – початок 1919 рр. // Україна: культурна спадщина, національна свідомість, державність. 2009. Вип. 18. – С. 289-299.
2. Любовець О. М. Ідея соборності як програмний принцип українських політичних партій (1917-1920 рр.) // Соборність як чинник українського державотворення. Київ, 2009. – С. 105-122.
3. Райківський І. Ідея української соборності в південноукраїнській Галичині (XIX– початок XX століття). Івано-Франківськ, 2016. – 392 с.
4. Рубльов О. С. Західноукраїнська інтелігенція у загальнонаціональних політичних та культурних процесах (1914-1939). Київ, 2004. – 629 с.

*E. Panteleeva, E. Savchenkova*

*Research supervisor : E. Y. Rutman, senior lecturer,*

*Baranovichi State University*

*Language tutor: M.D.Lavrenkova*

### LEGAL PERSONALITY OF A PHYSICAL PERSON (INDIVIDUAL) IN INTERNATIONAL ASPECT

The concept of legal personality is fundamental in both international and domestic law. In domestic science of international law, there is a widespread point of view, according to which an essential attribute and main evidence of international legal personality is the right to participate in the creation of international law: international law subjects are provided with law-making and law enforcement functions in the field of international cooperation [1, p.124].

The theory of international law contains various approaches to the definition of an individual's international legal personality:

1) a natural person (individual) is not recognized as a subject of international law, although it remains possible for him to be the addressee of certain rules and the bearer of international rights and obligations in a specific legal relationship;

2) the natural person (individual) is the only subject of international law. Such a position proceeds from the fact that the object of protection of international law is the person and his interests, in the service of which it should be, and consequently, all international law is made up of actions regarding individuals;

3) the individual is a derivative, secondary subject of international law, existing and acting along with other, main subjects. The essence of this concept is that states have the right to create and vest any other, different from states, entities, and individuals with international legal personality. The refusal of this right leads to the limitation of the sovereignty of states [2, p.127].

International legal personality testifies not only to the ability of a person to submit to the regulatory impact of international law, to have international rights and obligations, to participate in international legal relations, but also to the presence of a person not of any, but of strictly defined rights and obligations expressing the specificity of a subject of international law [3, c.493].

The operation of international law with respect to individuals is generally not direct, since the addressee of the relevant rules are States and the implementation of obligations is carried out in domestic law [4, c. 333].

It is possible to recognize international legal personality in persons with a special status in international intergovernmental organizations (for example, officials or employees) and in international bodies where they act in their personal capacity (judges, arbitrators, etc.) [8, p. 56].

Thus, it can be concluded that the individual has limited international legal personality, which means that he should be considered as a special subject of international law. But for the most part, individuals do not have contractual international legal capacity and therefore are not parties to the creation of rules of international legal relations. Over time, the role of the individual will change and his legal personality will expand. To date, there are no restrictions on the essence of the legal regime in the world, so that States can provide individuals with any rights that would arise from the terms of treaties, as well as take measures to create a legal framework that would be able to protect them.

## REFERENCES

1. Заблоцкая, В. В. Проблема правосубъектности индивидов в международном праве / В. В. Заблоцкая // Право Беларуси: история и современность : сб. материалов Междунар. науч.-теорет. конф. студентов, магистрантов и аспирантов «Развитие институтов гражданского права в законодательстве Беларуси от Статута ВКЛ 1529 г. до Гражданского кодекса Республики Беларусь 1998 г.» (Минск, 24 нояб. 2009 г.) и Респ. науч.-теорет. конф. студентов, магистрантов и аспирантов «Декларация о государственном суверенитете Белорусской ССР от 27 июля 1990 г. и ее место в развитии конституционного процесса в Республике Беларусь»

- (Минск, 16 нояб. 2010 г.) / Белорус. гос. экон. ун-т ; редкол.: И. В. Вишневецкая (отв. ред.) [и др.]. — Минск, 2010. — С. 124-125.
2. Лисник, Н. П. Проблема международной правосубъектности индивида / Н.П. Лисник // Міжнародні читання з міжнародного права пам'яті професора П.Є. Казанського : матер. третьої міжнар. наук. конф. (м. Одеса, 2–3 листопада 2012 р.) / відп. за випуск М. І. Пашковський ; НУ «ОЮА». — Одеса : Фенікс, 2012. — С. 127-129.
  3. Кожеуров, Я.С. О международной правосубъектности индивида / Я.С. Кожеуров // Lex Russica. Научные труды МГЮА. — М.: Изд-во МГЮА, 2004. — № 2. — С. 489-513.
  4. Толстых, В.Л. Курс международного права : учебник. М. : ВолтерсКлувер. — 2010. — 1056 с.
  5. Кузнецова, И.С. Правосубъектность индивида в международном праве // Актуальные проблемы международного публичного и международного частного права : сб. науч.тр. — Выпуск 7. — Минск, 2015. — С. 50—58.

***A. Pavlosyuk***

*Research supervisor: O.Y. Prokuda,*

*Senior Lecturer, Master of Laws*

*Baranovich State University*

*Language tutor: M.D. Lavrenkova*

*Senior Lecturer*

*Baranovich State University*

## **THE LEGAL STATUS OF CIVIL SERVANTS**

A civil servant is a citizen of the Republic of Belarus who, in accordance with the procedure established by law, occupies a public office, is empowered and performs official duties for monetary remuneration from the republican or local budgets or other sources of funding provided by legislation (Article 5 of the Law of the Republic of Belarus "On Public Service in the Republic of Belarus" (further - the Law on Civil Service)) [2].

The most important element of the institute of public service is the legal status of a public servant [1, p. 285].

The rights of a public servant are enshrined in Article 20 of the Law on Civil Service. A public servant has the right to fix his official duties in writing and to create appropriate conditions for their execution, to make decisions or participate in their preparation in accordance with his official duties, to visit state agencies and other organizations in the prescribed manner to fulfill official duties, to receive materials necessary for the performance of official duties from citizens, state bodies and other organizations of information, to get advanced training and retraining at the expense of the relevant budget or other sources of funding stipulated by the legislation, to get promotion, civil servant's class, salary and additional labor incentives, to participate in the competition for a vacant state

position, as well as the right to publications and speeches related to the performance of official duties in accordance with the provisions established by the Law on Civil Service and other legislative acts, etc. [2].

Section 21 of the Law on Civil Service contains the obligations of a public servant. So, a public servant is obliged to maintain the constitutional order of the Republic of Belarus, to ensure strict compliance with the norms of the Constitution of the Republic of Belarus and other legislative acts, to perform official duties within the powers granted to him by the legislation, to observe the restrictions related to public service established by the Constitution of the Republic of Belarus, the Law on Civil Service and other legislation, to ensure respect for and protection of the rights and legitimate interests of individuals and legal entities in accordance with the procedure established by law, orders, orders of managers issued within their competence, to comply with the culture of communication, etc. [2].

An important factor in the sphere of activity of civil servants is the behavior outside the service. Immoral behavior, especially of law enforcement officers, officials in the fields of education, health care and some others, can be not only a reason for dismissal, but also causes significant damage to the civil service [1, p. 292].

## REFERENCES

1. Административное право Республики Беларусь : курс лекций / И. И. Мах. – Минск : Амалфея, 2008. – 704 с.
2. О государственной службе в Республике Беларусь : Закон Респ. Беларусь, 14 июня 2003 г. № 204-З : с изм. и доп. : текст по состоянию на 9 января 2017 г. // Эталон – Беларусь [Электронный ресурс] / Нац. центр правовой информ. Респ. Беларусь. – Минск, 2019. – Режим доступа : <http://www.pravo.by>. – Дата доступа : 25.02.2019.

***K. Pertsova***

*Research supervisor: T.Yu. Biloshytska,  
Candidate of Pedagogical Sciences, Senior Lecturer  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## THE FORMATION OF STUDENTS' FOREIGN LANGUAGE COMMUNICATIVE COMPETENCE THROUGH INTERACTIVE LEARNING TECHNOLOGIES

Communicative competence is defined as a certain level of language proficiency, speech and social-cultural set of knowledge, skills and abilities that enable to vary acceptably and appropriately their communicative behavior in a communicative way depending on the functional predictors of foreign language communication and creates the basis for the qualified information and creative activities in various fields. The structure and the levels of foreign language

communicative competence of students are correlated with the willingness of the student to use the possibilities of foreign language.

The analysis of scientific studies has shown that the problems of formation of communicative competence arouse a constant interest in the field of foreign language education. The researchers note the high potential for successful teaching result. The possibility of using interactive teaching methods in the formation of foreign language communicative competence of students remains less investigated.

The requirements for professional communicative competence include such speech quality and speech behavior as the correctness, accuracy, clarity, expressiveness, richness of language; logic, argumentation, evidence of given conditions, the ability to defend own point of view in a dispute; the ability to listen to the communication partner, tact, care; the ability to build a strategy of speech behavior in different situations [1, p.36].

The essence of interactive learning is that the learning process is organized in such a way that almost all the trainees are involved in the learning process. Cooperative activities of students in the process of learning the educational material means that each student contributes own special differential contribution, while that the exchange of knowledge, ideas and ways of activity take place. Moreover, this happens in an atmosphere of goodwill and mutual support, which allows not only to gain new knowledge, but also to develop the cognitive activity, to bring it to a higher form of cooperation and collaboration [2, p.139].

The use of interactive technologies during the English language lessons implies the organization and the development of such a dialogue communication that leads to the understanding, interaction and cooperative solving the training tasks.

The interactive form of teaching implies different methods: the method of problematic exposition; presentations, discussions, case studies, group work, brainstorming, the method of critical thinking, quizzes, mini-researches, business games, role plays, the method of questioning and others.

Interactive learning technologies allow us to simultaneously solve several problems. The most important is that they allow to learn the course material and to include the motivational sphere of the student into the educational process, in other words, trainees feel interest during the class; they also develop creative abilities, the capacity for further self-development and self-education, communicative skills; help to establish the emotional contacts between trainees; implement educational objectives, as they accustom students to work in a team, to listen to their comrades.

## **REFERENCES**

1. Zimnayay I. A. Key competencies—A new paradigm of education result // Higher education today, 2003. - № 5. - Pp.35-41.
2. Chetverikova L. I. Interactive forms and methods of teaching English // New production technologies in teaching foreign languages in high school and college, 2004. – Pp. 137-141.

***K. Petruk***  
*Research supervisor: A. P. Stadnichenko,*  
*Doctor of Natural Sciences,*  
*Professor,*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: T.Yu. Biloshytska*

## **SYSTEMATICS OF ANNELIDA**

Annelida, traditionally divided into Polychaeta and Clitellata is an evolutionary ancient and ecologically important group comprising approximately 16,500 species occurring in marine, limnetic and terrestrial habitats. Their biological importance relies not only on the comparatively high number of species but also on their often high abundance.

Although some species can be found in the plankton throughout their entire life span, annelids usually constitute a significant part of the endo- and epibenthos where they occupy almost every existing ecological niche in the marine environment. They occur from the deep sea to the supralittoral zones of sandy beaches. However, the vast majority of the limnetic and terrestrial species belong to only one clade, called Clitellata, the members of which show specific adaptations to terrestrial life. Obviously due to subsequent adaptive radiations, this broad ecological range occupied by annelids resulted in a high morphological diversity.

Systematics of Annelida has been undergoing major reassessments after a period of relative stability. Annelida is divided into two major groups which are called Polychaeta and Oligochaeta. The classificatory concept of subdividing polychaetes into Errantia and Sedentaria has been widely accepted.

## **REFERENCES**

1. Struck T. H. Direction of evolution within Annelida and the definition of Pleistoannelida //Journal of Zoological Systematics and Evolutionary Research 49: 2011. - 340-345.

**M. Polishchyk**  
*Research supervisor: Z. P. Polishchyk*  
*Senior Lecturer*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: K. V. Levkivska*

## APPLICATION OF CHAIN FRACTIONS IN CHRONOLOGICAL ORDER

From astronomy it is known that the year has 365.24220 ... the so-called "middle" days. Of course, this ratio of the duration of the year to the duration of the day can not be used for chronology. It has always been replaced by simpler, losing accuracy. At the same time, from year to year, the error accumulates. To compensate for it, one day is added to one year, and this year is called leap.

Let's consider the problem of alternation of leap years. Let's represent the length of the year in the form of a chain fraction.

$$365,24220 = 365 \frac{1211}{5000} = 365 + \frac{1}{4 + \frac{1}{7 + \frac{1}{1 + \frac{1}{3 + \dots}}}}$$

Find a few first approach fractions.

$$\frac{P_0}{q_0} = 365; \quad \frac{P_1}{q_1} = 365 + \frac{1}{4} = 365 \frac{1}{4}; \quad \frac{P_2}{q_2} = 365 + \frac{1}{4 + \frac{1}{7}} = 365 \frac{7}{29}; \quad \frac{P_3}{q_3} = 365 + \frac{1}{4 + \frac{1}{7 + \frac{1}{1}}} = 365 \frac{8}{33}; \quad \frac{P_4}{q_4} = 365 + \frac{1}{4 + \frac{1}{7 + \frac{1}{1 + \frac{1}{3}}}} = 365 \frac{31}{128}$$

Each approach fraction provides a solution to the calendar problem. For example, approximation  $365 \frac{1}{4}$  - leads to Julia Caesar's solution: one leap year from every four. Nobody suggested using approximation  $365 \frac{7}{29}$ , considering that the next approximation  $365 \frac{8}{33}$  would be much more precise. The calendar, according to which the leftist should have been considered 8 years out of every 33, was proposed by a great philosopher, mathematician, astronomer and poet Omar Khayyam (1040-1123).

Obviously, the chain fractions give an opportunity to predict the following average lengths of leap years and to establish the error.

$$\frac{P_5}{q_5} = 365 + \frac{1}{4 + \frac{1}{7 + \frac{1}{1 + \frac{1}{3 + \frac{1}{5}}}}} = 365 \frac{117}{484} \quad \frac{P_6}{q_6} = 365 + \frac{1}{4 + \frac{1}{7 + \frac{1}{1 + \frac{1}{3 + \frac{1}{5 + \frac{1}{20}}}}}} =$$

$$365 \frac{2362}{9771} \quad \frac{P_7}{q_7} = 365 + \frac{1}{4 + \frac{1}{7 + \frac{1}{1 + \frac{1}{3 + \frac{1}{5 + \frac{1}{20 + \frac{1}{6}}}}}}} = 365 \frac{14289}{59110}$$

## REFERENCES

1. Сушкевич А. К. Теория чисел. Элементарный курс: Учебник для вузов\А. К. Сушкевич. – Харьков: Харьковский государственный университет имени А. М. Горького, 1954. – 44-45с.
2. Завало С.Т., Костарчук В.Н., Хацет Б.И. Алгебра і теорія чисел: В 2-х ч.:підручник\ С.Т. Завало, В.Н. Костарчук, Б.И. Хацет. - К.:Вища школа, 1976. - 384 с.
3. Устинов А. Цепные дроби вокруг нас №2: навч. пос.\А. Устинов. –К.: Квант, 2010. – С.32-34.

***M. Polischyk***

*Research supervisor: Serhii Rudnytskyi*

*Zhytomyr Ivan Franko State University*

*Language tutor: Makarevych O. O.*

## APPROACHES TO THE INTERPRETATION OF THE CONCEPT OF “POLITICAL REPRESENTATION”

In the Ukrainian political sciences, the concept of "representation" is used mainly in relation to interests – it refers to the representation of the interests of social groups in the political system. But the concept of political representation can carry much wider semantic load, which arises from its initial significance and the fact of its long-term use in Western scientific literature. Therefore, the purpose of this article is to analyze the approaches to the concept of "political representation".

The concept of political representation appeared in Roman law, in the writings of medieval theologians. The political representation was studied by Marsil Paduaans who put forward the concept of the people whose political representatives are elected representatives [1, p. 3-4]. Then the theory of representation was developed by T. Hobbes, the French thinkers J.-J. Russo and S.-Louis Montesquieu, E. Burke and J. Madison [1, p. 3-4].

Thorough development of the theory of political representation took during the Great French Revolution, with the beginning of the proliferation of representative forms of government in Europe. It is believed that from that time the term began to be used in the socio-political thought in its modern meaning. In modern times, political representation was devoted to the work of A. Pitkin "Political Representation" [2], in the earlier problem was investigated by G. Leibholts [3], J. Fairlie [4], M. Sobolewski [5], M. Prelo [6].

The problem of political representation was developed in Poland by representatives of legal sciences. After 1988, the issue of political representation was considered in the context of the problems of electoral behavior, the representativeness of political parties [7, p.131].

In the Ukrainian scientific tradition, the term "representation" is used in philosophy, history, psychology, sociology, linguistics; it means representing one

through the other: thus, philosophers investigate the representation of the sacred in art, knowledge in the educational space, and archetypes in the gender stereotypes of Ukrainian culture.

Sociologists consider the representation of social reality in the texts of mass communication, the orientation of the population - in public communication. Linguists write about the representation of desire in syntactic constructions; psychologists consider the representation of the environment in the mind.

In the Russian scientific tradition, the concept of representation used in philosophy, psychology, sociology, social knowledge in general, and means representation of one in another [8, p. 230-231].

Thus, in the Eastern tradition, the concept of "representation" is used primarily in relation to interests in such sciences as political science, social philosophy and economics. In political science in the West, the concept of "representation" occupies an important place – it was used in particular by American, German, French and Polish scholars in relation to the parliament.

### REFERENCES

1. *Żyro T.* Wstęp / T. Żyro // *Reprezentacja polityczna* / [red. naukowa T. Żyro]. – Warszawa : Uniwersytet Warszawski, 2013. – S. I–IX.
2. *Pitkin H. F.* Political representation / Pitkin H. F. – Princeton, 1967. – 329 p.
3. *Leibholz G.* Das Wesender Repräsentation / G. Leibholz. – Berlin-Leipzig, 1929. – 214 p.
4. *Fairlie J. A.* The Nature of Political Representation / J. A. Fairlie// *The American Political Science Review*. – 1940. – Vol. 34. – P. 236–248.
5. *Sobolewski M.* Reprezentacja w ustroju współczesnych demokracji burżuazyjnych / M. Sobolewski. – Kraków, 1962. – 212 s.
6. *Prélot M.* Institutions politiques et droit constitutionnel / M. Prélot. – Paris, 1963. – 858 p
7. *Stasiak D.* «Przewrót reprezentacyjny» a polityczna rola ekspertów / D. Stasiak // *Reprezentacja polityczna* / [red. naukowa T. Żyro]. – Warszawa : Uniwersytet Warszawski, 2013. – S. 117–144.
8. Рудницький С.В. Поняття «політична репрезентація» в українському політологічному дискурсі // *Studia Politologica Ucraino-Polona*. Випуск 6. – Житомир-Київ-Краків : Вид. О.О. Євенок, 2016. – С. 228-237.

***T. Polishchuk***

*Research supervisor: O.V. Voznyk*

*Candidate of Pedagogical Sciences, Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.E. Kravets*

*Candidate of Sciences, Professor*

*Zhytomyr Ivan Franko State University*

## **DEVELOPING SPOKEN PRODUCTION SKILLS IN CHILDREN OF UPPER PRESCHOOL AGE BY MEANS OF PLOT-BASED ROLE PLAY**

In the context of modern preschool education in Ukraine, the problem of the formation monolingual speech in upper preschool age children is acute and important. This requires further research into the means of development of children's speech and the feasibility and effectiveness of their use in preschool age. In this paper, the ways of forming speech in upper preschool age children will be considered. Subsequent studies using the analysis of the influence of plot-role-playing games on the development of child's speech will solve the problem of forming the lingual-monologic competence within general speech culture in upper preschool age children.

During preschool age, the most intensive development occurs not only in many organs and systems of a child's body, but also in the development of speech. The phonetic aspect is being improved, the vocabulary is being increased, and the child starts to understand the speech activities in general. Complex speech structures also appear. The preschooler is actively learning the language because it enables him/her to meet his/her needs for communication. The greatest development of speech is carried out in senior preschool age, when most systems of a child's body have already been formed [2].

Improvement of vocabulary, sound perception and the grammatical side of speech contribute to the development of monologue speech, as well as of various forms of communication.

Different kinds of dia-monological speech are being developed, such as speech-explanation, speech-reasoning, situational spontaneous expressions, contextual speech and unconventional forms of communication. Until the age of six, all functions and forms of speech are formed. But in spite of this, it must be remembered that in upper preschoolers the cases of specific speech development requiring individual work often occur [1].

In view of the fact that the game is a leading activity of preschool children, it must be given a prominent place in the child's speech development. Educators, psychologists, sociologists and scientists have been interested in psychological aspects of games for a long time.

Plot-role game is an image game realized according to the children's ideas, which is revealed through relevant events (plot and scenario) and role play [2].

By their content, they reflect human activities and the relationship between people. In plot-role games children try to reflect the world around themselves, creating the necessary conditions for language development. [3].

In conclusion it's important to stress the fact that plot base role play is the main source of developing spoken production skills in children of upper preschool age.

In the process of the game there is a comprehensive development of all mental processes, which promotes the development of children's speech. In senior preschool age, the children use complicated plot-role games with complex relationships that are related not only directly to the game, but also to the situations springing up in accordance to its organization.

### REFERENCES

1. Богуш А.М., Гавриш Н.В. Дошкільна лінгводидактика: Теорія методика навчання дітей рідної мови: Підручник/ За ред.А.М. Богуш. —К.: Вища шк., 2007. – 542 с.
2. Дошкольная педагогика: В 2 ч. / Под ред. В. И. Логиновой, П. Г. Саморуковой. – Ч. 2. – М., 1988.
3. Стародубова Н.А.. Теорія і методика розвитку мовлення дошкільнят, М. 2006.

*V. Polkhanova, V. Rusy*

*Research supervisor: T.M. Greben,  
Master of Education, Senior lecturer,  
Baranovichi State University*

*Language tutor: M.D. Lavrenkova, Senior lecturer*

### CHATBOT AS MEANS OF DIGITAL MARKETING

Digital marketing is the marketing of products or services using digital technologies, mainly on the Internet, but also including mobile phones, display advertising, and any other digital medium [1]. The benefits of digital marketing are becoming more prevalent every day. More and more consumers are researching and buying products online. According to Forbes, 82% of consumers conduct research online [2]. With the development of e-commerce, it is important to look for new ways and methods of Consumer-Vendor Interaction. And one of them is gaining popularity. Chatbots are getting necessary means of digital marketing. A chatbot is a computer program designed to communicate with humans by chat.

A chatbot is an artificial intelligence software that can simulate a conversation (or a chat) with a user in natural language through messaging applications, websites, mobile apps or through the telephone. A chatbot is often described as one of the most advanced and promising expressions of interaction between humans and machines. However, from a technological point of view, a chatbot only represents the natural evolution of a Question Answering system leveraging Natural Language Processing [3].

The term “ChatterBot” was originally coined by Michael Mauldin (creator of the first Verbot, Julia) in 1994 to describe these conversational programs. Chatbots are used in many areas of life. Today, most chatbots are accessed via virtual assistants such as Google Assistant and Amazon Alexa, via messaging apps such as Facebook Messenger or WeChat, or via individual organizations’ apps and websites. Chatbots can be classified into usage categories such as conversational commerce (e-commerce via chat), analytics, communication, customer support, design, developer tools, education, entertainment, finance, food, games, health, human resources (HR) and marketing [4].

How does it work? There are two different tasks at the core of a chatbot: user request analysis and returning the response. Chatbot returns a response based on input from a user. This process is quite complex. The first task that a chatbot should perform is to analyze the user’s request, to identify the user’s intent and to extract relevant entities. Once the user’s intent has been identified, the chatbot must provide the most appropriate response for the user’s request. The answer may be:

- a generic and predefined text;
- a text retrieved from a knowledge base that contains different answers;
- a contextualized piece of information based on data the user has provided;
- data stored in enterprise systems;
- the result of an action that the chatbot performed by interacting with one or more backend application;
- a disambiguating question that helps the chatbot to correctly understand the user’s request [3].

Chatbot applications streamline interactions between people and services, enhancing customer experience. At the same time, they offer companies new opportunities to improve the customer’s engagement process and operational efficiency by reducing the typical cost of customer service.

To be successful, a chatbot solution should be able to perform both of these tasks effectively. Human support plays a key role here. Regardless of the kind of approach and the platform, human intervention is crucial in configuring, training and optimizing the chatbot system.

## **REFERENCES**

1. Digital marketing [Electronic resource]. – Mode of access: <https://en.wikipedia.org/wiki/Digital-marketing> – Date of access: 16.03.2019.
2. Standberry, S. Top 10 Benefits of Digital Marketing & Why Digital Marketing is a Must for Every Small Business / S. Standberry // LIFE Marketing: Social Media Management Company [Electronic resource]. – 2017. – Mode of access: <https://www.lyfemarketing.com/blog/benefits-digital-marketing/> – Date of access: 16.03.2019.
3. Chatbot: What is Chatbot? Why are Chatbots Important? [Electronic resource]. – Mode of access: <https://www.expertsystem.com/chatbot/> – Date of access: 16.03.2019.

4. Chatbot Use in Distance Teaching and Mobile Learning Chatbot: What is Chatbot? Why are Chatbots Important? [Electronic resource]. – Mode of access: <https://games.dtml.org/post/chatbot-use-in-distance-teaching-and-mobile-learning> – Date of access: 16.03.2019.

**A. Prokopchik**

*Research supervisor: I.G.Kopytsich*

*Senior lecturer*

*Baranovich State University, Belarus*

*Language tutor: I.G.Kopytsich*

## **MUSEUM EXPLICATION AND ITS ROLE IN CREATING A MULTICULTURAL SOCIETY**

Today, translation and culture are so closely interconnected that it becomes impossible to ignore the presence of cultural aspects of translation. Translation is now regarded as a “point of contact between cultures”, which emphasizes its most important role in the process of intercultural communication. In this case, a translator acts as a mediator between two cultures, and the perception of another nation’s culture fully depends on him. Hence, a translator must take into account a huge number of peculiarities in order to transfer the meaning of the statement from one language to another as accurately and as close as possible to the original.

Since cultural aspects affect not only certain layers of vocabulary, but in many cases determine the structural features of the language, in modern linguistics appeared a direction which studies all the details and interconnections between culture and language. “Language is a mirror of the culture, it reflects not only the real living conditions of the people, but also the public self-consciousness, mentality, national character, lifestyle, traditions, customs, morality, value system, world view, vision of the world etc”[1]. At the same time, the question of the possibility of a complete culture’s transfer from one language to another remains open, and especially when it comes to interaction with elements of the country’s cultural heritage.

One of the most significant cultural heritage units is a museum. Museums preserve the aesthetic and cultural value and originality of the exhibits and become a center of communication during the visits. A particular case of communication is intercultural one, which, in case of proper functioning, promotes mutual understanding between representatives of different nationalities. The museum provides an opportunity for a multicultural community with different ideas, attitudes, traditions and experiences, to engage in a dynamic process of intercultural communication.

An obligatory component of the museum’s exhibition is an explication. According to the Cambridge Dictionary, explicate means “to explain something in detail, especially a piece of writing or an idea” [2]. So “explication is a brief written accompaniment of the museum exposition which contains an explanation

and assessment of the historical and artistic phenomenon introducing visitors to the content, iconography, and history of the works on display” [3].

The main features of the museum explications are the brevity and pithiness of the information contained in them. Explication has syntactic, lexical and pragmatic peculiarities. Its text is close to the publicistic style: it consists of short sentences with headings for each individual text and verbal phrases. Historicisms and archaisms are typical to explication texts. Such a text is designed not only for a representative of the same culture, but also for a representative of a foreign language and a different culture. A foreign visitor can experience difficulties in understanding or perceiving certain definitions, as they relate to a foreign culture. That is why linguoculturological translation is important. It should include the replacement of “unclear” definitions, descriptions, explanations, interpretations. The greatest difficulties in translating are caused by proper names (names, surnames, toponyms) and everyday realities. The majority of lexical units reflecting linguistic and culturological realities are translated by equivalent utterances, transcription and transliteration, using explanations and footnotes. Proper names and toponyms are translated by transliteration and do not require any explanation.

So in order to simultaneously preserve the national coloring and achieve the goal of communication translating, transliteration, selection of equivalent utterances and a descriptive method can function separately or in combination. However, it is worth noticing that it is impossible to produce a completely identical translation of the realities in the museum explication, not only because of the specific names and lack of equivalents in the translation language, but also due to the peculiarities of the museum etiquette and the functions it performs.

## REFERENCES

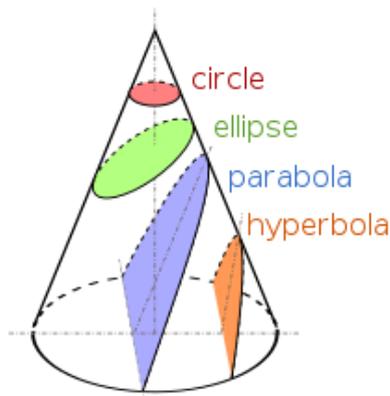
1. Тер-Минасова, С.Г. Язык и межкультурная коммуникация/ С. Г. Тер-Минасова. – М.: Слово, 2000.
2. Cambridge Dictionary [Электронный ресурс]. Режим доступа: <https://dictionary.cambridge.org/ru/словарь/английский/explicate?q=explicati> on. – Дата доступа: 23.03.2019.
3. Краткий словарь музейных терминов [Электронный ресурс]. Режим доступа: <http://artmuseumtomsk.ru/page/115>. – Дата доступа: 22.03.2019.

**A. Radchuk**  
*Research supervisor: I.G. Lenchuk*  
*Professor,*  
*Doctor of pedagogical sciences,*  
*Candidate of technical sciences*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: D. Yu. Bilinsky*

## CONIC SECTION

Conic section or intersection is a curve that is obtained by plane, surface and dual cone (cone with two symmetrical parts) intersection called the secant plane. To simplify the description we will consider that it is a correct round cone, though it is redundant, because the notion is relevant for any dual cone that can form a circle when crossing the plane. Plane that passes through top of a cone will cross the cone at the point in a straight line or intersecting lines. Such case is called degenerate and is of no interest to us and therefore this case is not usually considered as a conic section. If it is not explicitly said otherwise, then non-degenerate variants are considered the conic section.

There are three types of conic intersection: ellipse, parabola and hyperbola.



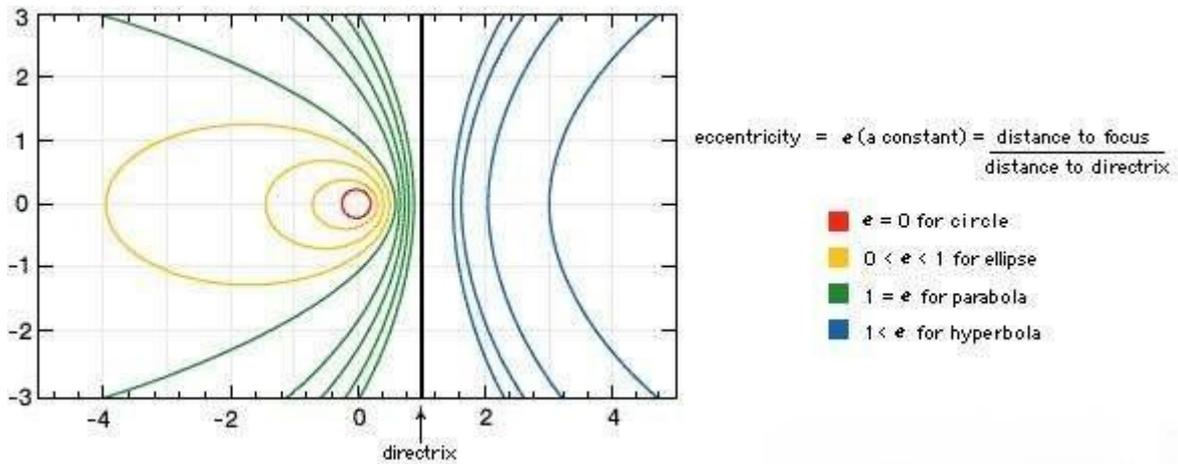
Circle is special case of ellipse, although historically it was considered as the fourth type (by Greek geometer Apollonius). Circle and ellipse appears when the intersection of plane and cone forms closed curve. Circle is formed when a secant plane is parallel to the plane of the main circle that forms cone for proper cone. This means, that secant plane is also perpendicular to the cone axis of symmetry. If secant plane is parallel to one of the straight line, that forms a cone, then the conic section is unlimited, not closed and is called parabola. The remaining option of

intersection is hyperbola. In this case secant plane will cross both halves of the cone, forming separate unbounded curve.

### **Eccentricity**

All non-degenerate conic sections, except circles, can be described with the next method: select point  $F$  on a plane, line  $d$  and set a real number  $e > 0$ . Then geometric location of the points, for which distance to the point  $F$ , and to the line  $d$  differs in  $e$  times, is a conic section.

Point  $F$  is called **focus** of conic section, line  $d$  – directrix, number  $e$  – eccentricity. Depending on the value of eccentricity, we receive:



- if  $e < 0$  – ellipse;
- if  $e = 0$  – circle;
- if  $e = 1$  – parabola;
- if  $e > 0$  – hyperbola;

## REFERENCES

1. Akopyan A. V. , Zaslavsky A. A. Geometric properties of second-order curves. - Moscow: ICESM, 2007. – 136 p.
2. Bronshtein I. N. General Properties of Conical Sections. 1975.

***D. Regenel***

*Research supervisor: V.V.Gorbunova*

*Professor of the Department ,*

*Doctor of Psychology, Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: A. V. Kuznyetsova,*

*Candidate of Philology, Associate Professor*

## MOTIVATION FOR CREATION OF SOCIAL ENTERPRISES

Social stability is one of the most important criteria for the success of any country [1]. Today most countries face a huge number of social problems [2].

At the moment, Ukraine is not able to perform its social duties so properly, because it has limited resources for this.

One possible solution to this situation is the creation of social enterprises.

A social enterprise plays the role of an agent of changes [4] and development, a kind of catalyst for society. A social enterprise can be confidently called the driving force of certain changes in the country, it is the solution for such social problems as poverty, environmental pollution, unemployment, diseases, crime, etc. [3]

The enterprise applies a variety of innovative approaches in search of a solution to a particular social problem. [3]

There is no single officially agreed definition for social enterprise. According to Oxford University's Business School: "A social enterprise is a professional, innovative and persistent approach to stable changes that solve social problems and use market opportunities.

Some researchers have developed certain criteria or factors to define the social enterprise itself and its characteristics. Following the idea of the American scholar Gregory J. Dis, the social enterprise creates a certain social value or support for a certain social group of the population in need of this support and it finds innovative methods to implement this mission; the social enterprise will move with the time, constantly adapting to new requirements; the social enterprise must act decisively, but not be limited to the resources available; the social entrepreneur takes a big responsibility for the results of his activities. [2]

One of the main questions that scholars are interested in studying the phenomenon of a social enterprise is people's motivation to create their own enterprises in the social sphere.

The purpose of this paper is to summarize all the possible motives encouraging people to create their own social enterprises.

After studying the theoretical grounds of the question, it can be said that these motives are as follows:

- 1) Altruism as a desire to work for the benefit of society.
- 2) Personal interest to the problem.
- 3) The desire to be realized.
- 4) The desire to be useful for society, one's understanding of being efficient.
- 5) Aspiration to create innovations, new ideas or projects that were not yet realized by anybody.
- 6) An opportunity to be a master, a mentor for someone. Sharing experience with someone.
- 7) Aspiration for autonomy in one's activities.

This list can be enlarged but we have presented generalized motives, mentioned in most research works on this issue. There are very few works on this topic, and the requirements of the time provide opportunities for further research of this issue.

## **REFERENCES**

1. Галушка З.І. Феномен соціального підприємництва: поняття та перспективи розвитку в Україні / З.І. Галушка // Вісник КНУ ім. Т. Шевченка. – 2013. – Вип. 148. – С. 15–17.
2. Наумова М. Сутність соціального підприємництва та його роль у соціально-економічному розвитку суспільства / М. Наумова // Україна: аспекти праці. - 2014. - № 4. - С. 34-39.
3. Mthombeni, S. E. (2015). Motivating factors of social entrepreneurs : the experiences of social entrepreneurs based in Gauteng . University of Pretoria

**V. Romanchuk**  
*Research supervisor: D.A. Stepanchykov*  
*Candidate of Physical and Mathematical Sciences,*  
*Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: D. Yu. Bilinsky*

## **INFLUENCE OF CELLULAR NETWORKS ON BEE POPULATIONS**

Bees play an important role in maintaining ecological balance as an integral part of many trophic chains and the largest group of pollinators in ecosystems associated with flowers. However, recent trends are alarming, as their populations are steadily declining around the world.

The decrease in the number of bees can be explained with electromagnetic pollution. Cellular communication systems are the main source of this pollution.

The work of telecommunication networks requires reliable and fast data transmission lines. Radio communication is carried out by satellite channels with the use of space repeaters, radio relay lines with the use of ground repeaters and means of cellular communication. Base stations and mobile phones are the main elements of the cellular communication system. Base stations support radio communication with mobile phones. This means that base stations act as sources of electromagnetic radiation in the ultra-high frequency (UHF) range. The feature of the cellular communication system is the efficient use of the radio frequency spectrum allocated for work, which consists in the multiple use of the same frequencies, the use of various access methods, which enables the process of telephone communications of a significant number of users. The system uses the principle of dividing the territory into zones, or "cells", usually with a radius of 0.5-10 km.

Investigation of the electromagnetic situation on the territories adjacent to the base stations showed that the radiation level there is close to the background level and many times smaller than the maximum permissible level set by the sanitary norms. Thus, it is considered that the base station, established in accordance with the rules in force, do not endanger the people. However, this is not the case with bees. Bees unlike human beings have, at least, three types of navigation: visual, navigation by the Sun and by the magnetic field of the Earth.

A bee does not visually remember the route, but creates an electromagnetic field - a kind of "driving radio station", which signals are taken by insects during the flight and they can fly to this source of radiation. Correction of the flight relative to the external magnetic field is possible due to the presence of magnetite in the body of the bee.

Field power is very small and depends on the number of bees that are involved in its creation. Bees regularly restore it. Taking into consideration that each family has its own radiation frequency, the apiary field represents a kind of cellular telephone exchange. The channels of this station work for each family separately.

Electromagnetic radiation has 2 effects: thermal, that works at very close distances directly to the source of radiation and non-thermal. The effect of the latter is harmful due to possible resonance of so-called "bee driving radio station" and the radio signal frequencies. The radio signals of cellular networks destroy the bee navigation system.

The lifespan of a bee flying on a honey harvest is very short - only 30-45 days, while the bee that goes in the winter, lives up to 7 months. An insect that appeared in August is exposed to irradiation within 3-5 months until the hives prepare for winter. The effect of irradiation accumulates and the level of damage to the visual cortex of the brain increases with time. After hibernating bees that leave hive, cannot return home and die. As a result, the hive cannot resist viral and fungal diseases because of quantity shortage.

Therefore, taking into consideration the growing role of telecommunication networks in general and cellular networks in particular in our lives, the problem of electromagnetic pollution unequivocally needs to be solved. Provided effective measures for the salvation of bees are not taken today, humanity will soon face numerous consequences; the main one is the aggravation of the food crisis.

#### **REFERENCES**

1. Арнаута О.В. Перспективи вивчення причин і наслідків масової загибелі медоносних бджіл / О.В. Арнаута //Біологія тварин. Вип. 1. – 2017. – С. 9-15.

***V. Rusy, V. Polkhanova***

*Research supervisor: T.M. Greben,  
Master of Education, Senior lecturer,  
Baranovichi State University*

*Language tutor: M.D. Lavrenkova, Senior lecturer*

#### **TOP MARKETING TRENDS IN WEBSITE DESIGN 2019**

Marketing is used to generate revenue for a company by providing quality business for the company and attracting genuine clients. Digital marketing is nothing but a marketing which is done online. In digital marketing, we generate clients and increase number of sales of our product or services online by some simple strategies like Search Engine Optimization (SEO) on-page/off-page, Pay per Click (PPC), Social Media Optimization, email marketing etc. [1]. A website plays a vital role while performing digital marketing. Website is a soul of digital marketing and digital marketing cannot be performed without having a website. Website is the most important part of any business which reflects a company in just a small computer, tablet or mobile screen [1]. Without a great design you could be losing customers who didn't find your site attractive or laid out in a way that was easy to use. You can have a website that technically functions properly with all the right features but if its design off-putting it can tarnish your

brand and will ultimately result in less traffic and conversions. Many elements that gained popularity in the later part of 2018 will continue to emerge as trends in 2019 and it's very important to know and use them correctly for your website design. The most significant of them are follows:

—*Color*. Bright colors are in because of their ability to draw attention quickly. Beyond their power to stand out, brands are more willing to be seen as a bold organization. As a result, we are seeing more clients wanting to boldly take risks with color variations, blends, and saturation.

—*Typography*. Look for bolder typography with large fonts that dominate the page. Use less of the cursive style and thin lines, and more fonts that allow letters to be clear, obvious, and thick [2].

—*White space*. Web design is moving in more of a “less is more” mindset. That means we're seeing websites opt for simpler layouts with greater amounts of white space. Using white space to separate the different sections on your pages helps improve readability and makes it easier for users to digest important information [3].

—*More customer illustrations*. Customers gravitate towards brands that are authentic and appear confident in the market. Customer illustrations give a brand a platform to express itself, tell its story and differentiate itself in the market [2].

—*Integrated animations will help improve navigation*. Micro-animations can both grab users' attention and guide them on their journey through the website by showing them that they are in the right place.

—*The Use of Organic Shapes*. An organic shape is any shape that's irregular and uneven. They appear more hand-drawn and humanistic. With their unusual appearance, these can be used to grab a user's attention and add a personable touch to your site. When combined with an illustration or image, they can also really add a nice level of depth to your site, breaking up the monotony of the same circles and squares we're used to seeing in design [3].

—*Mobile first design*. A statistical analysis predicts that there will be around 3 billion smartphone users by 2020. That is a huge market. What these statistics imply is that **your content on the internet should be easily consumable through smartphones [4]**.

From an aesthetic point-of-view, websites continue to move toward the clean and practical style of design. From a user experience point-of-view, companies make a push to make their sites accessible for everyone, because more and more people are becoming more reliant on their smartphones to help make last-minute purchases or spur-of-the-moment decisions every day.

## REFERENCES

1. Garg, B. What is the role of website in Digital Marketing for Every Business? / B. Garg // Digital Marketing Blog [Electronic resource]. – Mode of access: <http://digitalmarketingdeal.com/blog/what-is-the-role-of-website-in-digital-marketing-for-every-business/> – Date of access: 10.03. 2019.

2. Top Marketing Trends 2019 Part 3: Website Design [Electronic resource]. – Mode of access: <https://www.bluetext.com/top-marketing-trends-website-design-3> – Date of access: 17.03.2019.
3. Web Design Trends for 2019 You Can't Ignore [Electronic resource]. – Mode of access: <https://www.webdesignbites.com/2019/02/28/web-design-trends-for-2019-you-cant-ignore> – Date of access: 17.03.2019.
4. Let's Design Mobile First | Webjeda [Electronic resource]. – Mode of access: <https://blog.webjeda.com/mobile-first-web-design/> – Date of access: 18.03.2019.

***D. Rybak***

*Research supervisor: Z. P. Polishchuk*

*Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: K. V. Levkivska*

## APPLICATION OF GRAPH THEORY

The theory of graphs is a section of mathematics in which graphs and their properties are studied. The graphs are usually depicted in the form of points (vertices) connected by segments (edges). The graphs can be set graphically, in the form of lists of edges, using incidence and adjacency matrices. Everything in the real world is connected: cities can be represented as a network of streets, a railway and a flight network. The web pages are linked by links. Various components of the electrical and electronic circuit or computer chip are connected. Ways of outbreaks of diseases form a network. Analysis and optimization of networks can be accomplished using the theory of graphs. Graf is one of the simulation tools, Models of various objects in the form of graphs can have common properties. The general properties of certain groups of graphs are the subject of study in the theory of graphs.

The theory of graphs is widely used in logistics. Intelligent transport systems can work by collecting location data from car navigators and transferring information to drivers where and how to drive fast to reduce overall overload. The theory of graphs is already used by airlines that want to combine a large number of Cities in the most efficient way, to create a system moving a large number of passengers with the fewest possible trips. This problem is similar in essence to the problem of salesman. At the same time, air traffic controllers should make sure that hundreds of planes are in the right place at the right time and prevent possible accidents. Solving this problem would not be possible without computers and the theory of graphs. Count is a tool for solving many topology tasks. It is precisely the solution of the Euler problem of the Königsberg Bridges (Fig. 1) with the help of the graph, which formalized the beginning of the topology as a section of mathematics. Euler proved that the solution to this problem does not exist. To prove, he marked each section of land with a point (vertex), and each bridge is a

line (edge), connecting the corresponding points, thus, having received a graph (Fig. 2)

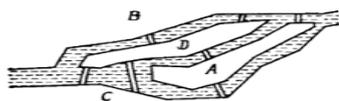


Fig 1.

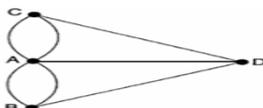


Fig 2.

Another well-known is the famous topological problem of four paints, which also has no solution. It arose when creating geographic maps. The hypothesis of the four colors refers to the problems of graph theory, since each card generates a graph in which the countries (including the outer area) are the vertices, and each two vertices are joined by a rib if their respective countries are adjacent. It is obvious that such a graph can be constructed on the plane of the continuity of the edges (in points other than the vertices of the graph).

Pages on the Internet can be represented as the vertices of the graph, and the presence of a link between the pages as an edge incident to the corresponding vertices. The first search engines on the Internet searched for the keyword and created a hierarchy of pages by the number of views. Using such a system, they could not determine if the request page was spam or spam.

**Conclusions:** The theory of graphs is used in various fields of knowledge and has a wide application application from visual representation of objects and connections between them, to the creation, formalization, analysis and transformation of models.

## REFERENCES

1. <https://cyberleninka.ru/article/n/prikladne-zastosuvannya-teoriyi-grafiv-u-riznih-sferah-zhittya-suspilstva-ta-okremoyi-osobistosti>
2. [https://pmaniv.io.ua/s2574640/teoriya\\_grafiv](https://pmaniv.io.ua/s2574640/teoriya_grafiv)
3. [https://pidruchniki.com/1081080641436/logistika/zastosuvannya\\_teoriyi\\_grafiv\\_logistitsi\\_turu](https://pidruchniki.com/1081080641436/logistika/zastosuvannya_teoriyi_grafiv_logistitsi_turu)

*A. Samoliuk*

*Research supervisor: G.M. Starodubets  
Doctor of Historical Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: S.S. Kukharyonok*

## **THE ORGANIZATION OF LABOUR IN CRAFT GUILDS IN MEDIEVAL EUROPE**

A characteristic feature of the medieval crafts in Western Europe was its guilds organization - the association of artisans of a certain profession. The craft guilds were organized because urban artisans needed a certain union to protect their production and income from feudal lords. Therefore, the main function of the craft guilds was the approval of a monopoly on this type of craft and the establishment of control over the production and sale of handicraft products. In most cities, belonging to the guilds was a prerequisite for practicing crafts. This eliminated the possibility of competition from those who did not belong to the craft guild [2, p. 473].

The members of each guild were interested in the fact that their products were provided with unimpeded sales. Therefore, the craft guilds strictly regulated production and kept watch that every master output product of a certain type and quality [5]. The craft guilds inspected attentively so that none of them would have displaced other masters from the market, producing more products. Until a certain time, the craft guilds created the most favourable conditions for the development of productive forces and commodity urban production. Therefore, until the end of the 14<sup>th</sup> century craft guilds in Western Europe played a progressive role.

The main production section was a workshop, which, as a rule, belonged to the master who could be a member of the craft guild. Each artisan kept a secret of his own skill. That is why, the parents were forced to give their children to learn from a master. After completing the training, the student became an apprentice. An apprentice could become a master after taking the exam – submitting a masterpiece (a sample of a particular product) [1].

Subsequently, the craft guilds began to restrain the development of productive forces. Joining the guilds for new members became difficult. The desire of the craft guilds to preserve small-scale production, to put all in the same conditions inhibited technical progress. The strict regulation of production and sales led to stagnation in the development of science, technology and, consequently, the decline of industry in the 14<sup>th</sup> century [3, p.28].

The process of a prolonged crisis of a craft guild system began. The masters became more and more exploited the apprentices. Property differentiation increased. Masters could be only close relatives of the members of the craft guilds or those who pay a large contribution, which contributed to the process of locking craft guilds. Therefore, in the 14<sup>th</sup> and 15<sup>th</sup> centuries they began to restrain the development of productive force [4].

Thus, we can say that in the 14<sup>th</sup> and 15<sup>th</sup> centuries the role of craft guilds changed. Their conservatism, the desire to preserve small-scale production, to prevent technical improvements, turned craft guilds into a brake of technological progress and the further growth of production. From the environment of small artisans and merchants, a wealthy head of craft guilds gradually allocated, which exploited small masters – direct producers.

## REFERENCES

1. Ковальчук В.М. – «Світова економіка: її історія та дослідники». Навч. посіб. - К.: Центр учбової літератури, 2011. - 524 с.
2. Капраль М.М. ЦЕХИ [Електронний ресурс] // Енциклопедія історії України: Т. 10: Т-Я / Редкол.: В. А. Смолій (голова) та ін. НАН України. Інститут історії України. - К.: В-во "Наукова думка", 2013. - 688 с.: іл.. – URL: <http://www.history.org.ua/?termin=Тsekhy>
3. Боєва С.Ю. – «Феодалізм у західній Європі: генезис, характерні риси, тенденції розвитку» [Електронний ресурс] // Сторінки історії. Збірник наукових праць. – 2018. - № 46. – С. 27-28. – URL: [http://historypages.kpi.ua/article/view/136721/pdf\\_31](http://historypages.kpi.ua/article/view/136721/pdf_31)
4. Короткий курс лекцій з дисципліни «Історія економіки». URL: [https://studme.com.ua/17370324/politekonomiya/istoriya\\_ekonomiki.htm](https://studme.com.ua/17370324/politekonomiya/istoriya_ekonomiki.htm)
5. Стаття – «Структура та організація управління цеху». URL: <https://bookster.com.ua/struktura-ta-organizatsiya-upravlinnya-tsehu/>

*I. Sapotnitskaya*

*Sprachlehrerin: I.Swiridenko*

*Kandidatin der pädagogischen Wissenschaften,*

*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

## NAHRUNGSERGÄNZUNGSMITTEL: EINSTUFUNG UND EINFLUSS AUF DEN MENSCHLICHEN KÖRPER

Nahrungsergänzungsmittel sind natürliche Verbindungen oder Chemikalien, die normalerweise nicht alleine konsumiert werden, sondern in begrenzten Mengen speziell in anderen Lebensmitteln enthalten sind. In verschiedenen Ländern werden mehr als 500 Nahrungsergänzungsmittel für die Lebensmittelproduktion verwendet.

Mit der Industrialisierung im 19. Jahrhundert und der einhergehenden Landflucht beziehungsweise Urbanisierung veränderten sich auch deren Ernährungsgewohnheiten. Verdorbene Lebensmittel führten zu Vergiftungen und Todesfällen, während sich gleichzeitig die chemische und medizinische Wissenschaft entwickelte. Heute geben die Haushalte in Deutschland im Durchschnitt weniger als 15 Prozent der Gesamtausgaben für Nahrungsmittel aus. Dieser Entwicklungsstand und Lebensstandard wäre ohne die vernünftige Verwendung von Lebensmittelzusatzstoffen nicht möglich gewesen.

Durch die auf der Zunge befindlichen Geschmacksrezeptoren registrieren wir die allgemein bekannten Grundgeschmacksarten süß, salzig, sauer und bitter. Inzwischen haben Wissenschaftler herausgefunden, dass wir Geschmacksrezeptoren für einen fünften Geschmack haben: Umami. Neben diesen Geschmacksrichtungen werden beim Verzehr eines Lebensmittels auch die durch das Kauen freigesetzten Aromastoffe wahrgenommen, die für den sensorischen Gesamteindruck eine wichtige Rolle spielen.

Natürliche Aromastoffe werden aus pflanzlichen oder tierischen Rohstoffen gewonnen. Es ist jedoch nicht zwingend, dass die deklarierte Geschmackssorte aus der genannten Frucht stammt wie beispielsweise das Vanilleextrakt aus der Vanilleschote oder das Menthol aus der Pfefferminze. „Künstliche Aromen haben keine Ähnlichkeit mit der chemischen Beschaffenheit des Aromas pflanzlichen oder tierischen Ursprungs.

Der Geschmacksverstärker Mononatriumglutamat – oder auch nur kurz Glutamat genannt – ist in der Lage, den Eigengeschmack einer Speise zu betonen. Da die Glutaminsäure eine Aminosäure ist, ist sie damit ein Baustein fast aller Proteine. Somit ist sie ein natürlicher Bestandteil unserer täglichen Nahrung.

Es gibt Ergänzungen, die unter den Anordnungen der höheren Behörden als sicher gelten, aber bei manchen Menschen können sie Asthmaanfälle oder Arrhythmien verursachen. Für solche Menschen ist es wichtig zu wissen, was genau hinter dem Code verborgen ist, sodass Sie die Reaktion des Körpers auf das eine oder andere Nahrungsergänzungsmittel vorhersagen können. Zum Beispiel erinnern wir uns an Glutamat. In der Lebensmittelindustrie ist diese Substanz als Natriumglutamat bekannt, ein E621-Geschmacksverstärker. Dieses Nahrungsergänzungsmittel kann eine Reihe von Nebenwirkungen verursachen. Menschen, die empfindlich auf Glutamatnatrium reagieren, können Asthmaanfälle, Urtikaria und Kopfschmerzen haben.

## LITERATUR

1. Teuteberg, Hans-Jürgen: Die Rolle des Fleischextrakts für die Ernährungswissenschaften und den Aufstieg der Suppenindustrie: Kleine Geschichte der Fleischbrühe. Vorwort
2. Schobert, Astrid: Zusatzstoff-Ampel. S

***M. Savchuk***

*Research supervisor: T.V. Lytnyova,  
Candidate of Pedagogical Sciences, Associate Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.V. Lytnyova*

## **TEACHING LISTENING COMPREHENSION OF FOREIGN TEXTS TO JUNIOR STUDENTS OF THE FACULTY OF NATURAL SCIENCES**

The paper considers both the general characteristics and features of the audience and the factors of the formation of speech competence in junior students of the Faculty of Natural Sciences.

Listening is a type of speech activity that provides understanding of what is perceived by hearing and belongs to the oral form of speech. Listening is an active process, which is carried out on the basis of anticipation (prediction) of what will be said [1, p. 224].

The relevance of this article is determined by the tendency to study the psychological and pedagogical peculiarities of the process of teaching foreign language text to junior students of the natural faculty and finding the most optimal ways of developing their competence in listening comprehension.

Listening competence can not be clearly professionally oriented in case of learning foreign language as a speciality. First of all this means that such a competence should provide oral professional communication in a foreign language – both at the level of performance of basic and immediate professional duties and at the level of professional oral communication with foreign colleagues [2, p. 193]. This is the starting point for teaching foreign languages at universities.

One of the necessary conditions for the formation of English competence in listening in the process of independent work is the rational selection of audio texts and the creation of a proper subsystem of exercises.

Early beginning of speech practice among junior students of the Faculty of Natural Sciences is especially important for listening because it is the most difficult to develop that type of speech activity [2, p. 46]. Therefore, its volume should be as large as possible in the first year of studying.

In order to overcome the false tendency "trying to hear as much as possible", at the initial stage it is necessary to teach students to perceive the text mainly focusing on awareness of the general meaning and meaning without trying to hear every word and not paying particular attention to individual words or even parts of the audio text that were missed or remained incomprehensible [2, p. 167]. Consequently, exercises for listening should be directed to the general content (theme, idea, main events, actions, actions of the characters, the result, the author's relation to the active persons, etc.).

Upon reaching the initial stage, the level at which junior students of the Faculty of Natural Sciences understand most of the audio texts globally, at the main stage can set the task of teaching the detailed understanding of audio materials [2, p. 168]. This means that senior students should hear and understand every word, and

therefore they must be able to reproduce the details of the text listened. Thus, tasks for verifying the comprehension of the text listened should include exercises to reveal details, certain nuances of the text.

Junior students of the Faculty of Natural Sciences often complain about the very fast pace of speech in audiomaterials that they are listening to. More often this is an illusion that it is connected with too slow performance of students operations necessary to achieve understanding, that is the students themselves are "slowly" listening [1, p. 15]. This is most often the case for students who have had little practice in listening, that is, students of the first year.

To solve this problem by reducing, slowing down the pace of speech, which is perceived in audio texts is inappropriate at the initial stage of learning. This will only lead to the fact that mastering the perception of the speech at the normal middle temple will be delayed and will become very complicated [2, p. 167]. In addition, students must get used to the usual language pace of speech, because the main of practical problems is the ability to communicate. Of course, it's not possible to immediately present the text for listening at the authentic pace, especially for junior students.

#### **REFERENCES**

1. Тарнопольський О.Б. Методика навчання іншомовної мовленнєвої діяльності у вищому мовному закладі освіти : Навчальний посібник. – К. : Фірма "Інкос", 2006. – 248 с.
2. Загальноєвропейські Рекомендації з мовної освіти: вивчення, викладання, оцінювання / наук. ред. укр. видання д-р пед. наук, проф. С.Ю. Ніколаєва. – К. : Ленвіт, 2003. – 273 с.

***A. Savytska***

*Research supervisor: O.S. Mykhailova,  
Candidate of Pedagogical Sciences, Associate Professor  
Zhytomyr Ivan Franko State University*

#### **USING VIDEO SUPPORT IN THE PROCESS OF LEXICAL COMPETENCE FORMATION AT THE ENGLISH LESSONS AT PRIMARY SCHOOL**

Teaching English in 21<sup>st</sup> century can't exist without IT- technologies, which provide modern technological support to learning process. Information and digital competence is one of the ten key competencies of new educational standards of the New Ukrainian School. From a great variety of modern IT-tools - video is one of the most popular and useful learning tool at the English lessons at primary school.

Nowadays video helps to teach and speak with new generation on available to them level of perception of information. Video helps to integrate the outside world into the classroom, stimulates for the classroom activities, makes learning process

more interesting and easier for understanding, and intends learners to communicative situation [1].

Using video during learning lexical units shouldn't be just a passive operation. By watching video, as a rule, we involve visual and auditory memory. But for better result we should involve as much senses as it possible.

Learning new vocabulary by video can be connected with some activities: learning names of actions should combine pronouncing and simultaneously acting movements; names of object can be shown by pantomime; dialogues can be accompanied by expression of emotions. Teacher can prepare flash cards which children can fulfill by new lexical material during watching video. Visualizing information from video would help to memorize lexical units better. For example, children watch places to visit on video, paint them on papers and then after re-review learners try to write the names of every picture with the help of teacher and so on. By video support tools we can learn lexical units by modern and efficient way, but only correct applying would help to achieve the aim of the lesson.

## REFERENCES

1. Benefits for Teacher Using Video in the Classroom [Electronic resource]. – Mode of access: <https://filmora.wondershare.com/video-editing-tips/benefits-for-using-video-in-classroom.html>

*A. Sazontova*

*Research supervisor: A. P. Stadnichenko,  
Doctor of Natural Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## PHYLUM MOLLUSCA

Mollusca is the second largest phylum of invertebrate animals. Molluscs are one of the most diverse invertebrate groups with more than 100 000 described species. Most of them are marine. Many mollusks also live in freshwater and terrestrial habitats. They are highly diverse, not just in size and in anatomical structure, but also in behaviour and in habitat.

The distinguishing features of mollusks are:

- A large, muscular foot variously modified for locomotion, digging, attachment, and prey capture.
- A mantle, a highly modified epidermis that covers and protects the soft body. In most species, the mantle also secretes a shell of calcium carbonate.
- A visceral mass housing the internal organs.
- A mantle cavity, the space between the mantle and viscera. Gills, when present, are suspended within this cavity.
- A radula, a protrusible, rasp-like feeding organ present in most, but not all, species. In herbivorous mollusks (e.g., chitons and snails), the radula is used for

scraping algae from rocks. In carnivores, the radula can be fang-like and is used for piercing prey (e.g., squids and octopods), or may be pointed and used for drilling through shells (e.g., some snails) [1, p.35].

Molluscs can be divided into five principal classes, namely Gastropoda, Bivalvia, Scaphopoda, Polyplacophora and Cephalopoda.

## REFERENCES

1. Vaughn C.C., Gido K.B., Spooner D.E. Ecosystem processes performed by unionid mussels in stream mesocosms: species roles and effects of abundance. *Hydrobiologia*, 2004. - 527 p.

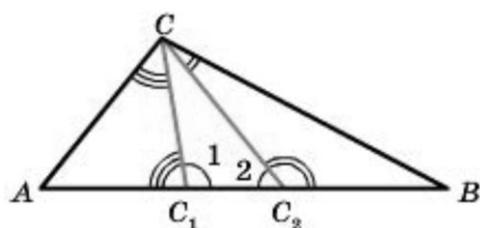
**S. Shcherba**

*Research supervisor: Z. P. Polishchuk*

*Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Languagetutor: K.V. Levkivska*



## TRIANGLE INEQUALITY IN TRIGONOMETRY

Everyone is well aware of the triangle's inequality from school. By the theorem, each side of the triangle is less than the sum of its two other sides.

Reasoning:

Consider the triangle ABC.

It must be proved that: 1)  $AB < AC + CB$ ; 2)  $AC < AB + BC$ ; 3)  $BC < BA + AC$ .

We prove the first of these inequalities (the other two prove the same).

We can prove the method from the opposite. Imagine this inequality be wrong.

1) If  $AB > AC + CB$ , then on the AB side, the points  $C_1$  and  $C_2$  can be marked such that  $AC = AC_1$  and  $BC = BC_2$  (as shown in the figure) because we assumed that  $AB > AC + CB$ , then  $AB > AC_1 + BC_2$ . So the segments  $AC_1$  and  $BC_2$  have no common points. The angle  $AC_1C$  and angle  $BC_2C$  are sharp as corners on the basis of equidistant triangles  $AC_1C$  and  $BC_2C$ , respectively. Then the corners 1 and 2 are dull like corners, adjacent to the sharp ones. There was a contradiction: in the triangle  $C_1CC_2$  two dull angles.

2) By analogy, we can show that the equality  $AB = AC + CB$  leads to contradiction.

The inequality we prove to be the source of many trigonometric inequalities. Trigonometry in literal translation from Greek means "measuring triangles" and plays an important role in the course of elementary mathematics.

Based on examples, we propose to consider an interesting inequality

*Example*. Prove the inequality in a triangle

$$(\sin A + \sin B - \sin C)(\sin A - \sin B + \sin C)(\sin B + \sin C - \sin A) \leq \sin A \sin B \sin C.$$

To prove it, we may use the Greek mathematical lemma of Heron of Alexandria. For the sides of the triangle  $a, b, c$ , inequality is performed

$$(a + b - c)(a - b + c)(b + c - a) \leq abc.$$

And we notice that  $(a + b - c)(a - b + c) = a^2 - b - c^2$ ;

$$a^2 - b - c^2 \leq a^2 \quad (1).$$

Similarly  $(a - b + c)(b + c - a) \leq c^2 \quad (2)$

and  $(b + c - a)(a + b - c) \leq b^2 \quad (3).$

After multiplying the inequalities (1), (2) and (3), we get

$$(a + b - c)^2(a - b + c)^2(b + c - a)^2 \leq a^2b^2c^2.$$

Hence, taking into account that  $a + b - c > 0$ ,  $a - b + c > 0$ ,  $b + c - a > 0$ , we have inequality from the above-stated lemma. Equality is achieved only with  $a = b = c$ . From the inequality of the lemma using the sine theorem we obtain:

$$(\sin A + \sin B - \sin C)(\sin A - \sin B + \sin C)(\sin B + \sin C - \sin A) \leq \sin A \sin B \sin C.$$

Equality is achieved only with  $A = B = C = 60^\circ$

It is successfully proved.

As a result, we have considered the inequality of the triangle and its interesting application in Trigonometry.

## REFERENCES

1. Мерзляк А., Полонський В., Якір М. Геометрія підруч. для 7 кл. загальноосвіт. навч. закладів: підручник- X. :Гімназія, 2015.-224 с.
2. Ушаков Р. П. Колекція тригонометричних нерівностей. – К.: Техніка, 1998. – 86с.

***O. Shevchuk***

*Research supervisor: Serhii Rudnytskyi Docent,*

*Doctor of Political Sciences*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.O.Makarevych*

## INDICES FOR CONFLICT LEVEL MEASURING IN EVENT ANALYSIS

**The topicality** of the work is that Ukrainian-Polish relations are not in the best condition. This requires the study of their dynamics with the help of event analysis, which shows the nature, frequency and specificity of the actions of the Polish and Ukrainian sides. An appeal to an event analysis, in turn, updates the question of choosing a scale for measuring conflicts..

That is why, **the purpose of the work** is to analyze the contradictory scales in the scientific literature and the choice of scale that can be used to describe the actions of the legislative authorities of Poland and Ukraine.

Event analysis as a method of research was first used in 1960. Its essence lies in systematically formalizing the presentation of interactions between policy makers within a certain scale, which reflects the state of conflict / peace processes. The first systematic presentation of his methodology and tools is contained in the work of the American scientist C. McLeland, which, according to A. Akhremenka, can be considered the founder of the given direction. [1, c. 237].

Event analysis uses the WEIS (World Event Interaction Survey), Goldstein, Azar and Olzak scales. Coding system WEIS developed by C. McLeland.

The WEIS coding scheme classifies events into 63 specific categories; these are organized into 22 general categories such as "Consult", "Reward", "Protest" and "Force". Examples of WEIS event codes: 11. Reject: 111 Turn down proposal; reject protest demand; threat 112-Refuse; oppose; refuse to allow; 12. Accuse 121 Charge, criticize, blame, disapprove; 122 Denounce, denigrate, abuse; 13. Protest 131 Make complaint (not formal) 132 Make formal complaint or protest, 18. Demonstrate, 181 Non-military demonstration; walk out on 182 Armed force mobilization, exercise and/or display [2, p. 10].

The classic scale that transforms the values of codes into interval values is the Goldstein scale, which allows you to work with WEIS encodings at an interval level and apply complex statistical methods to work with event data [3].

Edward E. Azar, however, used a scaling approach to events study (where he assessed the intensity of the actions of specific nations when they had interactions with one another). Azar's 13-point measurement scale is based on evaluating data within the context of "... who does what to whom and/or with whom and when" and the scale rated from low to high the violence intensity between two nations. It is this measurement of intensity of violence that this thesis will concentrate on and in particular the use of Edward Azar's 13-point interval scaling approach for national event prediction [4, p. 15].

S. Olzak in the research "The Global Dynamics of Racial and Ethnic Mobilization" outlines the intensity of non-violent actions on a five-point scale [5, p. 80].

*Categories of Nonviolent Ethnic Protest and Ethnic Rebellion,  
Minorities at Risk Data Set*

<i>Level</i>	<i>Nonviolent Protest</i>	<i>Conflict and Rebellion</i>
0	No events recorded	No events recorded
1	Verbal opposition <i>Petitioning, leafleting, agitation, etc.</i>	Political banditry, <i>Sporadic terrorism</i>
2	Symbolic resistance <i>Sit-ins, blockage of traffic, sabotage, etc.</i>	Campaigns of terrorism
3	Small demonstrations <i>A few demonstrations, rallies strikes, and/or riots &lt; 10,000 participants</i>	Local rebellions <i>Armed attempts to seize power in a locale</i>
4	Medium demonstrations <i>Rallies, strikes and/or riots &lt; 100,000 participants</i>	Small-scale guerilla activity <i>&lt; 1000 armed fighters Sporadic armed attacks (&lt; 6 per year) Attacks in small part of group's area</i>
5	Large demonstrations <i>Mass demonstrations, rallies, strikes and/or riots &gt; 100,000 participants</i>	Intermediate guerilla activity <i>1 or 2 traits of small-scale activity 1 or 2 traits of large-scale activity</i>
6	—	Large-scale guerilla activity <i>&gt; 1000 armed fighters Frequent armed attacks (&gt; 6 per year) Attacks affect area occupied by group</i>
7	—	Protracted civil war <i>Fought by rebel military units with military base areas</i>

The scale of violent actions for Olzak: 1. Acts of sabotage. 2. 1-2 clashes 3. Fighting in a limited area. 4. Collisions in different territories. 5. Localized efforts to achieve power [6].

Consequently, different types of scales are used in political research. The most well-known are WEIS (World Event Interaction Survey), Goldstein, Azar and Olzak. Coding system WEIS developed by C. McLeand. In turn, the Goldstein scale translates the values of codes into interval values. The Azar 13-point measurement scale is based on data evaluation in the context of "who does, who and / or with whom and when", and Olak defines the intensity of violent and non-violent actions on a five-point scale.

Comparing different scales for the event analysis it can be argued that in order to study the activity of the parliaments of Ukraine and Poland in shaping the historical policy concerning our countries, it is necessary to apply its own scale of events. This will make it possible to simplify the coding system and make the charts more simple and accessible for analysis.

## REFERENCES

1. Ахременко А. Политический анализ и прогнозирование : учеб. пособие / А. С. Ахременко. – М.: Гардарики, 2006. – 333 с.
2. McClelland, Ch. A. Event-Interaction Analysis in the Setting of Quantitative International Relations Research. University of Southern California, 1967.

3. Gerner D.J., Schrodtt Ph. A. Analyzing International Event Data: A Handbook of Computer-Based Techniques. Cambridge University Press, 2000.
4. Edward E. Azar's Early warning model – Does it work? Donald E. Childre, Jr. Captain, USAF AFIT/GLM/LSM/90S-10, 1990.
5. Olzak S. The Global Dynamics of Racial and Ethnic Mobilization”, Stanford University Press, 2006, 288 p.
6. Olzak S. The Global Dynamics of Racial and Ethnic Mobilization, Stanford University Press, 2006, 288 p. URL: <https://bit.ly/2TErueo> (дата звернення 20.01.2019).

***B. Shevtsov***

*Research supervisor: L. V. Gutsalo*

*Candidate of Historical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: S. S. Kukharyonok*

## **THE FIRST AND SECOND PUNIC WARS: CAUSES AND CONSEQUENCES**

The foreign policy of Rome was characterized by constant wars. After defeating their neighbours, the Romans captured the right bank of the Tiber River in the 5th century BC, and then waged wars that ended with the complete subordination of Central Italy to Rome. At the beginning of the 4th century BC Rome became a very powerful member of the Latin federation. The Roman Legion defeated the Macedonian Phalanx of Pirras, despite the menacing elephants. After the conquest of Italy, the Romans put their eyes on the territory outside of the Apennine Peninsula. The Romans faced one of the largest states in the Western Mediterranean - Carthage. The international relations in the Western Mediterranean in the middle of the 3rd century BC were determined by the absolute superiority of Carthage.

Polybius referred the first agreement between Rome and Carthage to the 6th century BC. In 348, a new treaty, that regulated trade relations, was signed. But the situation changed when Rome was at the head of Italy and the Greek cities were under its authority, with which Carthage was often hostile. Capturing the whole of Italy, Rome intended to capture the rich island of Sicily. At that time, Carthage had a dominant position on the island and did not want to give way to Rome [1, p. 168-169].

The reason for the First Punic War was a conflict in 264, because of the Sicilian city of Messani, captured by the Mamertines - former mercenaries of the Syracuse tyrant Agathocles [2, p. 442]. The new ruler of Syracuse - Hieron II began military action against the Mamertines who at the same time asked both Rome and Carthage for help. The Roman legions suddenly appeared there. Clashes between the Roman and Carthaginian troops began [3, p. 28]. The war cost a lot of

effort and money to Carthage. An uprising of mercenaries and slaves began in Carthage. Rome at that time retained neutrality, and only when the uprising was suppressed, Rome used the weakness of Carthage, seized Sardinia and strengthened in Corsica [1, p. 172]. After the First Punic War, Rome took a leading position among the Mediterranean states.

The circumstance that led to the Second Punic War was the conflict in the city of Sagunt. Of all the coastal cities of Spain, only Sagunt remained under the control of Carthage. It joined the alliance with Rome. Hannibal besieged the city and burned it in 219 [3, p. 127-129]. Negotiations began between Rome and Carthage. The Senate demanded Hannibal to be given to Rome. The Carthage Senate refused and thus the war started. In the spring of 218, the Hannibal Army, which numbered 80,000 infantrymen, 12,000 riders and 37 battle elephants, campaigned [4, p. 250]. Hannibal intended to invade Italy from the north. He, in his turn, defeated both Roman consuls almost without loss. In June 216, the famous Battle of Cannes, in a small town of Apulia, took place. The battle ended with the complete Hannibal's victory. In the spring of 202, at the Battle of Zami, Hannibal was defeated the first and last time in his life. [3, p. 457-459]. The following year, a peace treaty was signed. Its conditions were heavy and humiliating for the Carthaginians. They lost all their overseas possessions, including Spain and they were forbidden to wage wars even with neighbouring tribes without the permission of the Roman Senate. In addition, Carthage was to pay a huge indemnity (10,000 talents) and give the Romans all its military fleet and battle elephants.

Thus, the Second Punic War ended, which led to the collapse of the colonial state of Carthage and finally broke its military and political power. Analyzing all given above facts, we can sum up, that the victory in this war had enormous consequences for Rome. From the great Italian state Rome became a powerful slave-owning state, which after the displacement of Carthage appeared on the position of an absolute hegemony of the entire Western Mediterranean.

## REFERENCES

1. Машкин Н.А. История древнего Рима. М.: Высшая школа, 2006. - 753 с.
2. Момзен Т. История Рима: в 5т. СПб.: Наука, Ювента, 1994. Т.1. - 732 с.
3. Ревяко К.А. Пунические войны. Минск: Университетское, 1988. - 272 с.
4. Шифман И.Ш. Карфаген. СПб.: Изд-во С.-Петербург.ун-та, 2006. - 518 с.

*A. Shimanskaya, K. Skidan*  
*Research supervisor: T.M. Greben,*  
*Master of Education, Senior teacher,*  
*Baranovich State University*  
*Language tutor: M.D. Lavrenkova, Senior teacher*

## **THEORIES OF LEADERSHIP**

Leading is the art of influencing and motivating people to perform in a manner to achieve a common goal. The sum total of a leader's roles, tasks and responsibilities and interpersonal influences constitutes leadership [1]. The term leadership is a relatively recent addition to the English language. It has been in use only for about two hundred years, although the term leader, from which it was derived, appeared as early as A.D. 1300.

There are numerous explanations, classifications, theories and definitions of leadership in the contemporary literature. The earliest theories tend to focus on the character and personality of successful leaders, whilst later theories concentrate on what leaders actually do rather than on their qualities. The theories emphasize the traits and behaviors that individuals can adopt to boost their own leadership abilities.

Let's look at a number of basic theories, as well as some tools and models that apply to each of them.

### **1. "Great Man" Theories.**

"Great man" theories assume that the capacity for leadership is inherent – that great leaders are born, not made. These theories often portray great leaders as heroic, mythic and destined to rise to leadership when needed. Such theories suggest that people cannot really learn how to become strong leaders. It's either something you are born with or born without. It is very much a nature (as opposed to nurture) approach to explaining leadership [2].

### **2. "Trait" Theories.**

Traits are external behaviors that emerge from the things going on within our minds – and it's these internal beliefs and processes that are important for effective leadership. "Trait" theories assume that people inherit certain qualities and traits that make them better suited to leadership. Trait theories often identify a particular personality or behavioral characteristics shared by leaders. For example, traits like extroversion, self-confidence, and courage are all traits that could potentially be linked to great leaders. Trait theories help us identify traits and qualities (for example, integrity, empathy, assertiveness, good decision-making skills, and likability) that are helpful when leading others. However, none of these traits, nor any specific combination of them, will guarantee success as a leader [3].

### **3. Behavioral Theories.**

Behavioral theories of leadership are based upon the belief that great leaders are made, not born. According to this theory, people can learn to become leaders through teaching and observation. In the 1930s, Kurt Lewin developed a

framework based on a leader's behavior. He argued that there are three types of leaders: autocratic leaders, democratic leaders, laissez-faire leaders [2].

#### **4. Contingency Theories.**

In 1951 Fiedler began to develop the first contingency leadership theory. It was the first theory to focus on how situational variables interact with leader personality and behavior. Contingency theories of leadership focus on particular variables related to the environment that might determine which particular style of leadership is best suited for the situation [2]. According to this theory, no leadership style is best in all situations.

How to become a great leader? The answer to this question is simple: there is no single recipe, and each leader has his own way. I adhere to the theory that leaders are not born, but made. It's not enough just to be born. It is necessary to cultivate character, firmness, responsibility. If you think about it, the best leadership advice is the oldest: the Golden Rule. Work from that principle of treating others as you wish to be treated and before you know it, you will find you're already there: the best leader you wish you had [4].

#### **REFERENCES**

1. Chakrabarti, B. 6 Leadership Theories to define Effectiveness of Leaders / B. Chakrabarti // SCRIBBLE AND SCRAWL Lifestyle, Culture, Travel Blog [Electronic resource]. – Mode of access: <https://life11.org/2014/12/06/6-leadership-theories/> – Date of access: 15.03. 2019.
2. Amanchukwu, R. N. A review of leadership theories, principles and styles and their relevance to educational management / R. N. Amanchukwu, G. J. Stanley, N. P. Ololube // Scientific & Academic Publishing [Electronic resource]. – Mode of access: <http://article.sapub.org/10.5923.j.mm.20150501.02.html#Aff1> – Date of access: 15.03. 2019.
3. Cherry, K. The eight major theories of leadership / k. Cherry // verywell mind [electronic resource]. – mode of access: <https://www.verywellmind.com/leadership-theories-2795323> – date of access: 17.03.2019.
4. Peck, D. How to become the leader you wish you had / d. Peck // vunela [electronic resource]. – mode of access: <https://vunela.com/how-to-become-the-leader-you-wish-you-had/> – date of access: 19.03.2019.

***I. Shkyliuk***  
*Research supervisor: O. K. Tkachenko,*  
*Candidate of Physical and Mathematical Sciences,*  
*Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: O. I. Dienichieva*

## **PROSPECTS OF APPLICATION OF LIQUID CRYSTALS IN MEDICINE**

Liquid crystals (LC) are the unique substances that can be found in the intermediate stage between an isotropic liquid and a solid crystal. Basically, they are divided into two classes: thermotropic and lyotropic. In thermotropic LC orientation of molecules and phase transitions depend on the temperature and pressure. In lyotropic LC the anisotropic properties are manifested in a certain solvent and they can have several phases the appearance of which is determined by the concentration in the solution.

Low viscosity and anisotropy of physical properties help to effectively orient and reorient LC molecules with minimal impact of various factors. This fact determines their prospects in the application of medicine.

LCs are used to detect inflammatory processes or malignant tumors due to the property to change the color (glow) with temperature change (luminescence). To improve vision, people sometimes need glasses or lenses which could change their refraction properties but it would not be too expensive or large. Here LC will be useful. They can change the orientation that leads to the variation of their refractive index depending on the current change [1].

Modern research in the field of Biophysics shows that many processes in our body are occurred in the LC state, for example, the functioning of cell membranes and DNA, the transmission of nerve impulses and muscle work etc.

LC gives rise to the muscles and nerves. The properties such as molecular mobility, structural order, reaction to various external influences (light, sound, magnetic fields) interconnect the cell with LC. It allows us to see the structural specifics of living systems.

Blood forms a LC phase and it is characterized by increased viscosity that prevents the flow of movement. In recent years, there has been a link between various diseases and the LC state of substances, because LC are solvents based on which it is possible to significantly understand the causes of certain diseases [2].

LCs are used in thermography. Band thermometers are developed on the basis of LC. To measure the temperature is enough to put a thermometer consisting of two films between which a LC can be found. The color of the thermometer determines the temperature almost immediately, in less than 1 second. The method of thermography is used in medicine for rapid diagnosis of diseases accompanied by a local increase of body temperature. Newborns with low and extremely low body weight are very sensitive to the temperature changes. If you measure their

body weight using conventional methods, it simply becomes impossible, that is why the LC thermometers are often placed in incubators [2].

Today, scientists are actively investigating the occurrence of diseases due to the penetration of bacteria into the mucus, taking into account that the mucus is a LC liquid.

LCs are unique in their property structures that have found their wide application not only in technology but also in medicine. Due to their similarity to other organic compounds in our body, they can become a wonderful prototype, and in some cases, a substitute for research. The study of LC is necessary to understand the processes associated with the mechanism of development of bacteriological diseases which will allow them to cure and create reliable vaccines.

## REFERENCES

1. G. Meier, E. Sackmann, J.G. Grabmaier. Applications of Liquid Crystals. Springer New York, 2004, 120 - 136;
2. Беркоу. Сучасна медицина енциклопедія. ВМедА. М. 2004.

**A. Schumskaja**

*Wissenschaftliche Betreuerin: Krugljakova N. N.  
Staatliche Universität Baranovichi*

## CYBERKRIMINALITÄT

Was ist Cybercrime? Es handelt sich demnach um kriminelle Machenschaften, beispielsweise Zuwiderhandlungen des Strafrechts, die in einem Raum stattfinden, welcher weltweit durch das Internet erreichbare Informationsstrukturen bezeichnet, dem sogenannten Cyber-Raum.

Cyberkriminalität meint nichts anderes als Kriminalität im Internet.

Egal ob als Cybercrime, Internet-, Computer- oder Cyberkriminalität – all diese Begriffe stehen synonym für Straftaten, die sich gegen das Internet, Datennetze, informationstechnische Systeme oder deren Daten richten sowie mit Hilfe von Informations- bzw. Kommunikationstechnik verübt werden. Die Schadenhöhe bei solchen Cyber-Angriffen kann beträchtlich sein [1].

Das Internet wird zunehmend zum Schauplatz von Verbrechen. Sabotage, Datenklau und Attacken auf Server und Kontrollmechanismen in Industrieanlagen machen Sicherheitsbehörden überall auf der Welt Sorgen [1].

In dem Handbuch zur Vorbeugung und Kontrolle von Computerverbrechen (englisch: Manual on the Prevention and Control of Computer Related Crime) führen die Vereinten Nationen hinsichtlich der Computerkriminalität folgende Beispiele an: Betrug; Fälschung; unerlaubter Zugriff auf Daten.

Die Bedrohungen aus dem Internet wird sehr oft unterschätzt.

Insbesondere die Infizierung und Manipulation von Computersystemen durch Viren und Schadsoftware ist eine gängige Praxis.

Das Hacken von Profilen auf Sozialen Netzwerken ist eine Form der Cyberkriminalität.

Mittels Trojanern, auch Malware genannt, oder anderer Programme werden persönliche Daten und Zugangsberechtigungen erfasst. Dadurch kann die Identität des Betroffenen gestohlen werden, was es dem Täter beispielsweise ermöglicht, Bank-Konten zu hacken oder auf Social-Media-Plattformen, zum Beispiel Facebook oder Twitter, zuzugreifen [2].

Auch Kryptotrojaner (Ransomware) werden dazu genutzt, sich finanziell zu bereichern. Mittels solcher Malware werden die infizierten Geräte gesperrt. Die erneute Freigabe erfolgt dann erst nach der Zahlung eines eingeforderten Lösegeldes.

Die Ermittlungen der Polizei wegen Cyberkriminalität werden nicht selten dadurch erschwert, dass sogenannte Hacker oftmals sozial unauffällig sind und nicht über lange Vorstrafenregister verfügen.

Die Versicherungsunternehmen reagieren mit der Cyber-Versicherung auf die Steigerung der Internetkriminalität in den vergangenen Jahren. Eine Cyber-Versicherung versichert ein Unternehmen gegen Hackerangriffe und sonstige Formen der Cyber Kriminalität. Auch als Privatperson haben Sie die Möglichkeit, sich gegen die Auswirkungen eines Cyber-Angriffs zu schützen [2].

Unser wichtigster Tipp: "Schalten Sie den gesunden Menschenverstand ein". Wenn ein Angebot zu gut klingt, um wahr zu sein, wenn eine Email-Adresse irgendwie merkwürdig aussieht, wenn ein angeblich offizieller Text einer Behörde oder einer Bank Rechtschreib- und Grammatikfehler enthält, ist Vorsicht geboten.

## LITERATUR

1. Четырнадцатый Конгресс Организации Объединенных Наций по предупреждению преступности и уголовному правосудию [Электронный ресурс]. – Режим доступа: [http://www.unodc.org/documents/congress//Documentation\\_14th\\_Congress/DiscussionGuide/A\\_CONF234\\_PM1\\_r\\_V1806331.pdf](http://www.unodc.org/documents/congress//Documentation_14th_Congress/DiscussionGuide/A_CONF234_PM1_r_V1806331.pdf). – Дата доступа: 26.03.2019.
2. Cyberkriminalität – Gefangen im Netz von Virenattacken [Электронный ресурс]. – Режим доступа: <https://www.anwalt.org/cyberkriminalitaet/>. – Дата доступа: 27.03.2019.

**V. Sionchuk**  
*Research supervisor: O.I. Zhukovsky*  
*Candidate of Historical Sciences,*  
*Associate Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: S.S. Kukharyonok*

## **EDUCATION IN THE DOMESTIC POLICY OF P. SKOROPADSKY'S GOVERNMENT**

The education is always a part of policy of any government. A question of national education was an integral and ponderable part of the state building of Pavlo Skoropadsky's Hetmanate. It is cultural and educational achievement that should be considered as the most effective of all spheres of the government's domestic policy of the Hetmanat.

The purpose of the article is to outline the main achievement of Pavlo Skoropadsky's government in the sphere of education and to clarify the previously known, but insufficiently investigated facts of Hetman's government activity.

During P. Skoropadsky's governance, 17 laws, 14 decrees, 2 statutes and 1 instruction related to the development of education, science and culture were prepared and approved. This complex of official documents testified to the great work of the government in reforming and creating new higher, secondary and primary educational institutions of Ukraine [1].

In May 1918, The Ministry of National Education (headed by Mykola Vasylenko) approved a plan for organizing Ukrainian studies courses for educators. In total, in May 1918 about 50 new Ukrainian schools were founded, and around 150 new Ukrainian-language gymnasiums were created during P. Skoropadsky's Hetmanate.

Thus, in August 1918, the head of the Ukrainian Hetman State adopted a law "About compulsory study of the Ukrainian language and literature, history and geography of Ukraine in all secondary schools".

During the Hetmanate period there have been notable changes in the sphere of higher education management. This problem was dealt with by a special commission headed by a prominent scientist V.Vernadsky. Thanks to its work and financial support from the government and various interested organizations in the capital, a state university was opened on the basis of the Kyiv National University. Besides the university in Kamianets-Podilskyi was founded [2].

It should be emphasized that, during P. Skoropadsky's governance, firstly, Ukrainian national university education acquired a state-legal character. Secondly, it became an emerging functional system. Hetman gave a principled agreement to the founding of Ukrainian universities as centers of national culture, approved the laws on the basis of which university institutions were created [3].

Thus, the main achievements of the domestic policy of P. Skoropadsky's government were reached in the sphere of education, science and culture.

Universities, schools, scientific and cultural institutions were opened. Furthermore, the teaching of subjects was carried out mainly in the Ukrainian language.

## REFERENCES

1. Кудлай О.Б. Законотворча діяльність українських урядів доби гетьмана Павла Скоропадського в галузі судочинства та реформування судової системи(за матеріалами газети «Державний Вістник») [Електронний ресурс] / О. Б. Кудлай // Гетьманат Павла Скоропадського: історія, постаті, контрверсії : [матеріали Всеукр. наук. конф., 19–20 трав. 2008 р.]. – Режим доступу: <http://coollib.com/b/256112/read>.
2. Папакін Г. Павло Скоропадський і державотворчі процеси доби Української революції 1917-1921 років / Г. Папакін // Вісн. держ. служби України. - 2008. - № 2. - С. 30-42.
3. Завальнюк О. М. Гетьманат Павла Скоропадського: розбудова національної університетської освіти [Електронний ресурс] / О. М. Завальнюк // Гетьманат Павла Скоропадського: історія, постаті, контрверсії : [матеріали Всеукр. наук. конф., 19–20 трав. 2008 р.]. – Режим доступу: <http://coollib.com/b/256112/read>

*O. Skreminska*

*Research supervisor: Z.V Zalibovska-Ilnitska,*

*Candidate of Pedagogical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.I. Dienichieva*

## SOCIAL PROBLEMS OF INTERGENERATIONAL RELATIONS

The problem of understanding between the senior generation and young people will always exist. The culture of education of one generation is different from the culture of education of another one. Various factors can influence on this process: the economic development of the country, the values of different generations and changes in the society etc. The conflict begins when the older generation completely imposes their experience on the young generation regardless of their opinion and without allowing them to gain their own experience. Consequently, to transfer the experience the older generation should rely on the necessity of knowledge that the younger generation can use in the modern world [1, c.38].

It should be mentioned that during this time period children begin to live separately from their parents and learn from their mistakes ignoring someone else's experience [2, c.113].

Therefore, there is an inevitable problem associated with the attitude of the present generation to the previous one. The senior generation must be capable of changing beliefs and principles and at the same time this generation preserves the common values of the world.

## REFERENCES

1. Аметова Є. Р. Про значення сім'ї у формуванні вільної особистості дитини // Педагогіка і психологія. -2006. -№ 2. - С.36-43
2. Лисовский В.Т. «Батьки» і «діти»: за діалогу взаєминах: Соціол. публіцистика // Соціол.исслед. - 2002. - №7. -С.111-116.

*T. Sotnikova, I. Oshurkevich*  
*Research supervisor: E. Y. Rutman,*  
*Senior lecturer,*  
*Baranovich State University*  
*Language tutor: M.D.Lavrenkova,*  
*Senior lecturer,*  
*Baranovich State University*

## CONCEPT, SIGNS AND FEATURES OF THE PERFECTION OF SMALL HOUSEHOLD TRANSACTIONS BY MINOR IN THE REPUBLIC OF BELARUS

A small household transaction is usually defined as a transaction committed to meet the personal daily needs of a citizen - the Civil Code of the Republic of Belarus does not give a precise definition and does not single out its limits [1].

The main feature of a small household transaction is the possibility of its making by incapable subjects of civil law relations.

The main problems associated with the implementation of small household transactions are: the need to determine the minimum age for their conclusion of small household transactions by minors and the definition of the limits (in monetary terms) of small household transactions [2]. For their solution and successful consolidation in practical application it is necessary to give an exact concept of a small household transaction.

A significant part of such transactions is made daily by minors under the age of 14 years (minors), as is the importance of problematic issues within the framework of the designated topic.

The general definition of a small household transaction can be formed on the basis of a comparison of signs and criteria that confer a small household transaction on scientists from different countries.

Thus, according to the Civil Code of the Republic of Kazakhstan, minors up to 14 years of age are entitled to independently perform only small household transactions that are appropriate for their age and are executed at the time of the commission itself (clause 2 of Article 22) [3]. This leads to signs of a small household transaction made by minors (hereinafter referred to as the transaction): the ratio of the needs and age of the subject, as well as the execution of the transaction when making.

According to the Civil Code of the Republic of Moldova, minors from 7 to 14 years old have the right to make small household transactions that are subject to

execution at the time of their execution - (clause A of clause 22) [3]. The signs of the transaction are as follows: a clear definition of the minimum age of the subject - 7 years and the execution of the transaction at the time of the commission.

Under the Civil Code of the Republic of Tajikistan, minors from 6 to 14 years old have the right to independently perform small household transactions executed at the time they are committed and do not require the preparation of one document signed by the parties [3]. The signs of such a transaction are a clear definition of the minimum age of the subject - 6 years; execution of the transaction at the time of the transaction; oral nature of the commission.

The Civil Code of Ukraine contains the following definition: a transaction is considered a small household if it satisfies the household needs of a person, meets his physical, spiritual or social development and concerns an item that is of low value [3]. The signs of the transaction are as follows: the ratio of needs and age of the subject; household nature of the transaction; insignificant transaction price.

Thus, according to the scientists of the post-Soviet space, the most common signs of a small household transaction are : the execution of the transaction at the time of the transaction, a clear definition of the minimum age of the subject, the ratio of needs and age of the subject. In our opinion, these signs do not fully reflect the essence of a small household transaction; we consider it appropriate for the completeness of the definition to include in it related attributes: household character and low transaction price, as well as such a sign as an oral character.

Turning to the interpretation of the constituent parts of the concept, we see:

According to the interpretation of Kuznetsov's dictionary, "small" means small in size, volume, size, and "household" means ordinary, everyday [4].

Based on the foregoing, we consider it possible to add the second paragraph of Article 27 of the Civil Code of the Republic of Belarus in the following edition: "Juveniles aged from six to fourteen years are entitled to independently perform:

1) small household transactions - transactions of insignificant size, satisfying the daily needs of the person, executed at the time of the conclusion, concluded orally.

2) transactions aimed at obtaining benefits free of charge that do not require notarization or registration or state registration;

3) transactions involving the disposal of funds provided by a legal representative or, with the consent of the latter, by a third party for a specific purpose or free disposal. "

## REFERENCES

1. Гражданский кодекс Республики Беларусь : принят Палатой представителей 28 окт. 1998 г.: одобрен Советом Респ. 19 нояб. 1998 г. : в ред. Закона Респ. Беларусь от 02.10.2017 г. // Консультант Плюс : Беларусь. Технология 3000 [Электронный ресурс] / ООО «ЮрСпектр», Нац. Центр правовой информ. Респ. Беларусь. – Минск, 2019.
2. Сотникова, Т.М. О совершении мелких бытовых сделок малолетними / Т.М. Сотникова // Актуальные проблемы права и пути их решения : Сборник материалов II ежегодной научно-практической конференции .,

Донецк, 26 октября 2017 г. / Донецк: ГОО ВПО ДАВД МВД ДНР, 2018. – 254 с.. – Донецк, 2018. – С. 199-200.

3. С.Букшина, С. В. Мелкая бытовая сделка: понятие и осуществление несовершеннолетним [Электронный ресурс]. – Режим доступа: <http://izvestia.asu.ru/media/files/issue/10/articles/ru/103-106.pdf>. – Дата доступа: 01.03.2019.
4. Толковый словарь Кузнецова [Электронный ресурс]. – Режим доступа: <https://gufo.me/dict/kuznetsov>. – Дата доступа: 13.03.2019.

**A. Stasevich**

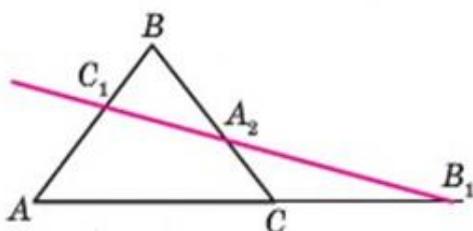
*Research supervisor: Z.P. Polishchuk*

*Senior lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: K. V. Levkivska*

## APPLICATION OF THE MENELAUS'S THEOREM



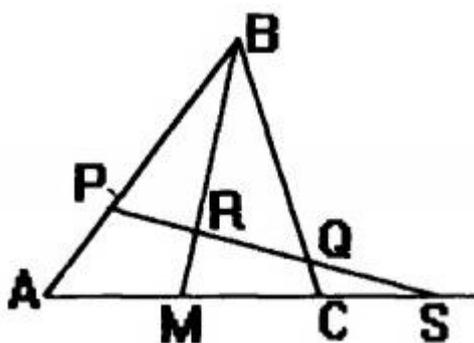
The Menelaus's theorem is studied in schools with an advanced course in mathematics and it is used in elementary mathematics.

The theorem was formulated by Menelaus of Alexandria (I century BC) - a Greek geometer and astronomer.

We formulate the theorem. On sides AB and BC the ABC triangle (Figure 1) indicates the points  $C_1$  and  $A_1$  respectively, while on the extension of the AC side, the point  $B_1$ . In order for points  $B_1, A_1, C_1$  to lie in one line, it is necessary and sufficient to be executed:

$$\frac{AC_1}{C_1B} \cdot \frac{BA_1}{A_1C} \cdot \frac{CB_1}{B_1A} = 1$$

Application of the theorem:



- finding the lengths of relations of segments, squares;
- proof of the affiliation of three points in a straight line;
- proofs of the theorems (Desargue, Papp, Gauss, and Pascal).

Consider the example of the application: finding the lengths of the ratio of the segments.

Given a triangle ABC, in which BM is the median. Point P lies on the side AB, point Q - on the BC side, with  $\frac{AP}{PB} = \frac{1}{3}$ ,  $\frac{BQ}{QC} = \frac{5}{1}$ .

The segment PQ crosses the median BM at R. Find  $\frac{BR}{RM}$ .

Solution

Direct PQ is not parallel to AC, since  $\frac{AP}{PB} \neq \frac{CQ}{QB}$ . We continue to cross it with a direct AC at point S (Figure 2).

We write down the Menelaus's theorem for the triangle ABC and the cut PS:

$$\frac{AP}{PB} \cdot \frac{BQ}{QC} \cdot \frac{CS}{SA} = 5 \cdot \frac{1}{3} \cdot \frac{CS}{SA} = 1$$

Where we find that  $\frac{CS}{SA} = \frac{3}{5}$ .

If  $AM = MC = x$ , then  $\frac{CS}{CS+2x} = \frac{3}{5} \Leftrightarrow CS = 3x$ . It follows that,  $SM = CS + x = 4x$ ,  $SA = CS + 2x = 5x$ .

Let's write down the Menelaus's theorem for the ABM triangle and the sequential PS:

$$\frac{AP}{PB} \cdot \frac{BR}{RM} \cdot \frac{MS}{SA} = 1 \Leftrightarrow \frac{1}{3} \cdot \frac{BR}{RM} \cdot \frac{4x}{5x} = 1 \Leftrightarrow \frac{1}{3} \cdot \frac{BR}{RM} \cdot \frac{4}{5} = 1,$$

where do we find that  $\frac{BR}{RM} = \frac{15}{4}$

Answer:  $\frac{BR}{RM} = \frac{15}{4}$ .

Thus the theorem allows solving quite complicated exercises.

## REFERENCES

1. А.Г. Мерзляк, В. Б. Полонський, М. С. Якір: Геометрія: підручник для 8 класу з поглибленого вивчення математики . –Х.: Гімназія, 2011. – С. 97-98.

***I. Stepanchuk***

*Research supervisor: T.S. Guzhanova*

*Candidate Philological Sciences, Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: O.E. Kravets*

*Candidate of Sciences, Professor*

*Zhytomyr Ivan Franko State University*

## THE USE OF VISUAL METHODS IN THE DEVELOPMENT OF FLUENT SPEECH IN JUNIOR PRESCHOOL AGE CHILDREN

The development of child's personality is impossible without the language and its in fluent speech. «The native word is the basis of any mental development and the treasury of all knowledges» said K.D. Ushinsky .It is an open secret that, basics of language are molded in early childhood. So, this period occupies an important place in further development of the child's personality. Children speak quite clearly by the end of preschool age. They pronounce sounds, can independently formulate their own opinions, have their vocabulary, join the conversation with adults and peers, can speak on a given topic etc. In order to achieve these objectives, the method of visibility in interaction with others is used [2].

The problem of the development of coherent speech, and especially the teaching of children with the help of illustration, has been the focus of attention of psychologists, linguists, educators and methodologists for a longtime [3].

Mnemotechnique is a system of methods and techniques that effectively train memory, successful children's recognition of the objects features of nature and the surrounding world, as well as effective reproduction of the story structure.[1]

For junior groups in the institutions of pre-school education, simple cards are used – mnemo-squares.

These are vivid single images which can mark a certain word, phrase, subject matter, or a mode of an action. After assimilation of simple cards, a teacher complicates the task, offering a child mnemo-route being a square of 4 pictures. "Strolling" about these the child learns to make a simple narrative of two or three sentences.[4]

It is very important to select correctly and accurately the drawings and symbols for the tables, and the images must be clear. They must not cause negative associations in a child.

#### REFERENCES

1. Крутій К.Л. Використання схем-моделей у лексико-граматичній роботі з дітьми дошкільного віку/ К.Л. Крутій, О.І. Білан. – Львів: Проман, 1997. – 42 с.
2. Поніманська Т.І. Дошкільна педагогіка: підручник// Т.І. Поніманська. – 2-ге вид., доповн. – К.: Академвидав,2013. – 464 с.
3. Стародубова Н.А., Теорія і методика розвитку мовлення дошкільнят, М. 2006.
4. Ушакова О.С. Развитие речи дошкольников / О.С. Ушакова. – М.: Изд-во ин-та психотерапия, 2001. – 240 с.
5. Krutu K.L. Using schema-models in lexical-grammar work with preschool children / K.L. Kruty, O.I Bilan - Lviv: Proman, 1997. - 42 p.
6. Ponimanska T.I. Preschool Pedagogy: Textbook // T.I. Ponimanska - 2nd form., Supplement. - K. : Akademvidav, 2013. - 464 p.
7. Starodubova N.A., Theory and methodology of the development of preschool children speech, M. 2006.
8. Ushakova O.S. Development of preschool children speech / O.S. Ushakova - Moscow: Publishing-in-psychotherapy, 2001. - 240 p.

## **FALSIFICATION OF CAVIAR**

In the world there are such methods and types of caviar falsification: assortment falsification, qualitative, quantitative and informative.

Assortment falsification includes re-grading and replacing one type of caviar with another. Re-grading of caviar is only the substitution of the 1st grade salmon for the 2nd one.

The substitution of valuable types of caviar for surrogates is widely used in our country. Nowadays technology for the production of artificial caviar has developed. These types of proteincaviar are as close as possible in appearance to natural products. But you can recognize falsification by its consistence and flavor.

Natural caviar should have a faint smell of fish, while the artificial one has a smell of herring. Natural caviar sprays and bursts in the mouth, while artificial caviar sticks to the teeth.

Natural red caviar has a bright-orange or pink-red colour, and artificial red caviar is usually a dull red-orange colour.

Qualitative falsification includes violation of the prescription composition, the introduction of foreign additives, violation of technological processes and storage conditions.

Violation of the prescription composition of black caviar occurs due to the introduction of additional salt or boric acid.

Violation of the prescription composition of red caviar is due to the introduction of boric acid, vegetable oil, glycerin.

Quantitative falsification includes deception of customers associated with deviations of mass parameters that exceed the maximum permissible norms of deviations. To identify this type of fraud is very simple, having previously measured the net mass of cans of caviar.

Informative falsification of caviar involves deceiving a consumer through inaccurate information about the product. Quite often the following data are indicated incorrectly: a product name, a manufacturer, quantity of goods, food additives.

Also the informative falsification includes forging a certificate of quality, customs documents, a barcode, the date of production of caviar products.

## **REFERENCES**

1. Gol, A., Gol A., Ryabchenko N. Falsification of fish caviar in Ukraine – Journal of Falsification. 2018. 22(1) – pp. 120-123
2. Mirolnik A. M., Skvoriantan R. O., Why is caviar so expensive? FT Magazine Food & Drink. 2019. 02 (4) – pp. 12-17

3. Fake caviar vs Real Caviar [Website]:  
<https://globalseafoods.com/blogs/news/real-caviar-or-fake>

**A. Sych**

*Research supervisor: O.E. Kravets,  
Candidate of Pedagogical Sciences,  
Associate professor  
Zhytomyr Ivan Franko State University*

## **THE FORMATION OF GRAMMAR COMPETENCE IN PRIMARY SCHOOL PUPILS BY MEANS OF GAMES**

There is no doubt that the grammatical aspect plays an important role in studying and teaching a foreign language. Researchers continue to explore grammar which is an essential part of mastering a foreign language. However, formation of grammatical skills depends on various factors. Nowadays, "imitative" method is commonly used to teach grammar engagingly and effectively. One of the characteristic features of modern general education school is implantation of foreign language education for primary school students. According to the Common European Framework of Reference for Languages (CEFR), primary school pupils must gain A-1 level of foreign language competence.

First of all, it is necessary to identify primary school students' interests, needs, motives, abilities, talents and psychophysiological characteristics in order to formulate their grammatical competence. As a rule, learning grammatical material is carried out in three stages: 1) presentation of linguistic notions through the analysis and synthesis of grammatical phenomena 2) practicing 3) usage in speech. Consequently, when foreign language is introduced as a subject in primary school children can already understand some grammatical concepts, and they are capable of comprehending grammatical phenomena of the foreign language. Teacher's goal is to find ways to motivate students to improve their communicative skills. Game is a very effective way of learning. It allows pupils to discover new information effortlessly. However, it is important to answer following questions before choosing a game. Is this game suitable for certain age of students? Which game is better? What skills and abilities does it develop?

All in all, it is important to select proper exercises for teaching certain topics. To sum up, teacher's goal is to formulate students grammatical competence, using various methods and games.

### **REFERENCES**

1. Бех П. О. Концепція викладання іноземних мов в Україні / П. О. Бех, Л. В. Биркун // Іноземні мови. – 1996. – № 2.
2. Державний освітній стандарт з іноземної мови (загальна середня освіта) V-IX класи / керівн. автор. колективу С.Ю.Ніколаєва. – К. : Ленвіт, 1998. – 32 с.

3. Загальноєвропейські Рекомендації з мовної освіти: вивчення, викладання, оцінювання / Науковий редактор українського видання доктор пед. наук, проф. С.Ю. Ніколаєва. – К.: Ленвіт, 2003. – 273 с.
4. Мірошник І.В. Методика формування англомовної граматичної компетенції в учнів початкової загальноосвітньої школи : дис. ... канд. пед. наук : 13.00.02 / Наук. кер. канд. пед. наук, доц. М. Л. Писанко / Мірошник Ірина Василівна. – К., 2013. – 439 с.

***V. Tatarinovich***

*Research supervisor: T.M. Greben,  
Master of Education, Senior teacher,  
Baranovichi State University*

*Language tutor: M.D. Lavrenkova, Senior teacher*

## **HUMAN RESOURCES MANAGEMENT AS PRIMARY MEANS OF PERSONNEL POLICIES**

Of course all of us know and understand what management is, but not everyone knows the main tasks of the manager. One of them (and in my opinion the most important) is personnel management (or human resources management). Human resource management (HRM or HR) is the strategic approach to the effective management of people in an organization, so that they help the business gain a competitive advantage. It is designed to maximize employee performance in service of an employer's strategic objectives [1].

How to be a good manager? What are the best methods to manage the staff? or How to be a leader on the work among personnel? Whether you are at work or at home, whether you are part of a team, a leader or a supervisor, your job will be easier if you learn how to be a good manager. Here is a piece of advice to help you learn management and leadership.

First of all, you should *consider your staff separately*. This means that you should find appropriate, individual and unique approach to every single one. This approach applies on the small groups like chiefs, or heads of departments, branches of the production. Manager should pay a little attention to the work of employees and this will be enough. Sometimes a cup of tea can change attitudes for the better. And even a simple thank you is enough.

*Help your staff*. As Paul Santagati said “There's no team without trust”. He knows what he talks about. Paul has a point; he is the Head of Industry at Google. Gaining trust may be the most difficult and complicated work to do. But the result is worth it! The Staff, who trust you and believe in you, are the best way for a successful company. Studies show that psychological safety allows for reasonably risk-taking. Speaking your mind, creativity, and showing your neck out without fear of having it cut off are just the types of behavior that lead to market breakthroughs. At such companies it is so much easier to set objectives and goal, reach all the tasks and make progress. Mutual understanding and respect, friendly

atmosphere prevailing in the collective help manager carry out its work effectively [2].

*Arrange some kind of entertainment.* This may start from the mini-game during breaks and ending with a party or corporate events. Friendly atmosphere in collective is a central key to reach all the goals of firm. Variety of research and studies have proved, are proving and will prove this one hundred times.

*Give staff a degree of flexibility.* This “act first, think later” brain structure shuts down perspective and analytical reasoning. Barbara Fredrickson at the University of North Carolina has found that positive emotions like trust, curiosity, confidence, and inspiration broaden the mind and help us build psychological, social, and physical resources. We become more open-minded, resilient, motivated, and persistent when we feel safe. Humor increases, as does solution-finding and divergent thinking – the cognitive process underlying creativity.

*Not to be afraid to make mistakes.* We humans hate losing even more than we love winning. The greatest businessmen, creators, politics reach the height thanks to learn from the mistakes of the past. Without mistakes, people wouldn't be people.

*Encourage staff.* What really matters in the workplace is helping employees feel appreciated. Rewards signal to employees that they did a good job and that their manager cares about them. As the research shows it will encourage employees to want to work even harder. Especially younger generations, who care more about being appreciated than money and a job is not just a paycheck for them; people seek meaning in their work. Being given cash alone can look like an empty gesture or a mere financial transaction and may not act as a strong motivator to work hard and eager [3].

And if you give cash, include a meaningful note about how significant they are. Managers should also include a sincere handwritten note explaining why the employee deserved the bonus.

And in conclusion I would like to share this incredible quote, which is actually truthful. As Simon Sinek, writer and motivating speaker, says “When we tell people to do their jobs, we get workers. When we trust people to get the job done, we get leaders” [4].

## REFERENCES

1. Human resource management [Electronic resource]. – Mode of access: [https://en.wikipedia.org/wiki/Human\\_resource\\_management/](https://en.wikipedia.org/wiki/Human_resource_management/) – Date of access: 14.03.2019.
2. Delizonna, L. High-Performing Teams Need Psychological Safety. Here's How to Create It / L. Delizonna // Harvard Business Review [Electronic resource]. – Mode of access: <https://hbr.org/2017/08/high-performing-teams-need-psychological-safety-heres-how-to-create-it/> – Date of access: 14.03.2019.
3. Gerdeman, D. Forget Cash. Here Are Better Ways to Motivate Employees / D. Gerdeman // Harvard Business School. Working Knowledge - Business Research for Business Leaders [Electronic resource]. – Mode of access:

<https://hbswk.hbs.edu/item/forget-cash-here-are-better-ways-to-motivate-employees> – Date of access: 14.03.2019.

4. *Sinek, S. Together is Better: A Little Book of Inspiration / S. Sinek* – Penguin UK, 2016. – [Electronic resource]. – Mode of access: [https://play.google.com/store/books/details/Simon\\_Sinek\\_Together\\_is\\_Better?id=Asi-CwAAQBAJ](https://play.google.com/store/books/details/Simon_Sinek_Together_is_Better?id=Asi-CwAAQBAJ) – Date of access: 14.03.2019.

***I. Teteruk***

*Research supervisor: L.V. Gusalo*

*Candidate of Historical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: S.S. Kukharyonok*

## **THE TRIPLE SYSTEM OF ANTHROPOGENESIS**

Anthropogenesis (Greek *ανθρωπος* - *man*, *γενεσις* - *emergence*) is the study of human's origin and development biologically, psychologically and socio-culturally.

There are some theories that try to explain the origin of human and his formation process. The problem is that society has not yet found a consensus in choosing one or another theory as the leading one. All existing theories can be divided into three groups:

1. **Religious theory.** A number of religions claim that a man has appeared in the world due to a certain influence of the higher being. The most common concept is the appearance of life through divine origin.

2. **The theory of foreign origin.** This theory states that life on Earth was invaded by alien creatures, who in turn carried out genetic tests on the body of the monkey and created similar ones (researcher Zacharia Sitchin), new biological beings. It is explained by an existing Rhesus conflict: all creatures had Rh-positive blood until a new kind of monkeys were bred, which had Rh-negative (Michael Cremo, Richard Thompson).

3. **The theory of evolution.** It is a well-known fact that the innovator of this theory was Charles Darwin. It was based on gradual natural selection, where the strongest survived, who later adapted and evolved into a more vivid creature. This process was carried out only under certain climatic conditions and under certain difficult circumstances, which led one or another animal to development. Thus, at a certain stage of evolution, a prototype of a human began to appear, which in the future was the basis for the appearance of *Homo sapiens* [1].

All of these theories are correct in their own way, but there is still no particular solution to this issue.

Therefore, I want to suggest my own theory of the "The triple system of anthropogenesis". It states that none of the universally accepted world theories of

the origin of human can exist separately. They harmoniously complete each other in the correct interpretation.

The beginning of all that exists in our universe was the emptiness of antimatter, which had no concrete form, density, odor, which was nothing, but about 20 billion years ago there was the Big Bang, which took place under Divine influence, and this is what our universe created. After the explosion, a certain singularity, which acquired specific forms and temperature, was formed, this was the starting point of everything that exists in the world. Further development would not have been possible without the explosion [3].

Over billions of years, millions and billions of stars were born, lived and blew, which in turn carried away new elements throughout the universe. If you consider which of the main chemical elements are stars, then you can distinguish 5 main elements - hydrogen, helium, oxygen, carbon and nitrogen. Strangely enough, but these elements are throughout the universe, and most importantly, these elements are an integral part of every living organism and human being as well, since hydrogen and oxygen form water, and a human body is made up of 65% water. Why could some kind of life be created in the boundless universe? It was this form that either lived or was located on the planet Earth for some time, or the meteorites brought the traces of the life of those beings, which led to the population of our planet the first extremely stable bacteria [2].

For millions of years, bacteria began a leisurely, but steadily progressive development, evolutionary processes left alive the most stable forms of life, which subsequently multiplied and replaced them with even better adapted and developed creatures. For millions of years, this process has led to the formation of the crown of evolutionary human development.

To sum it up, each of the three theories of anthropogenesis are interrelated and in their study as a whole, a person is still able to find the consensus in the unity of theories of the human origin, and in the future the way how to prove this theory will be invented.

## REFERENCES

1. Мотузьяний В.О. Біологія / Мотузьяний В.О. – К.: Світ успіху, Вища школа, 2005. – 622 с.
2. Ніл Деграсс Тайсон. Астрофізика для тих, хто цінує час. — К. : КМ-Букс, 2018. — 200 с.
3. S. W. Hawking Thomas Hertog. Multiverse // Journal of High Energy Physics. – 2018. - №13. – 103.

**A. Tolkach**

*Research supervisor: A. V. Kuznyetsova,  
Candidate of Philology,  
Associate Professor,  
Zhytomyr Ivan Franko State University  
Language tutor: A.V. Kuznyetsova,*

## **MANIPULATIVE TECHNOLOGIES IN MASS MEDIA**

Mass media manipulation is a kind of psychological influence which remains unnoticed and is realized through the press, radio, television, Internet, cinema, billboards, social networks, and causes the object of influence of intentions that change its desires, mood, behavior, views, etc. It is aimed at changing the direction of audience activities, ideas, points of view and motives.

The purpose of the research is to classify manipulation technologies in modern mass media.

### **There are three levels of manipulation:**

1. Strengthening the necessary manipulator of ideas, installations, motives, values, norms that already exist in the minds of people.
2. Partial, small changes in the views on certain events, processes, facts. It also affects the emotional and practical attitude of people to a particular event.
3. Radical changes in life settings by spreading sensational, dramatic, and extremely important messages.

### **There exist certain tools of manipulation:**

- *Spiral of silence*. For the first time this phenomenon was investigated by E. Noel-Neumann. An individual is more inclined not express his views if they are not supported by the majority. Before announcing his point of view in public, a person scans the "climate" of social mood around him.

- *Disinformation* (deception) is a way of psychological influence, which consists in deliberate providing false information to competitors/opponents or audiences.

- *The technique of "sandwich"*. The name "sandwich" means the layering of materials of a different nature. This manipulative effect is to counter positive and negative news.

- *Creation of information reality*. A person without access to all events in the world needs information about the processes, which affect his interests and contribute to the orientation of the information flow.

- *Anonymous authority links*. References to non-existent authority provide serious and weighty information in the eyes of ordinary public. At the same time, the source is not identified and the journalists are not responsible for the false report.

- *Emotional resonance*. The way of creating a certain mood in a wide audience with the dissemination of propaganda information.

• *Everyday story*. If you want to get people "accustomed" to violence, blood, murder, etc., then the media announces them on a daily basis. In a few weeks the population does not react to the most terrible crimes.

• *Presence effect*. It includes a series of tricks, they are used in "reports from the scene" and in the criminal chronicle. In this way, television channels are filming videos of criminals' detentions.

### **Conclusion**

The recent media policy has led to a significant reduction in the ability to think critically in the mass audience. However, it is not necessary to dramatize the situation too much. The current social order cannot be eliminated. One must admit that the media cannot function in a society without certain rules of production of "reality". It is impossible to abolish these rules even for important moral reasons. However, too frequent abuse of the manipulative potential of the media is not in the interests of the general public. This undermines the "healthy" potential of symbolic politics in the media.

### **REFERENCES**

1. Лавлінський Р. Механізми формування соціальний стереотипів у суспільстві засобами мас-медіа / Р. Лавлінський // Наукові записки [Національного університету "Острозька академія" ]. Сер. : Філософія. – 2010. – Вип. 7. – С. 164-176. – Режим доступу: [http://nbuv.gov.ua/UJRN/Nznuoafs\\_2010\\_7\\_18](http://nbuv.gov.ua/UJRN/Nznuoafs_2010_7_18).
2. Присяжнюк М.М. Прийоми маніпулювання свідомістю людей через засоби масової інформації / М.М. Присяжнюк // Сучасні інформаційні технології у сфері безпеки та оборони. - №1(1). – 2008. – С. 51-58.

***D. Tolpichina***

*Research supervisor: O.A. Chemerys*

*Candidate of Pedagogical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor: S.S. Kukharyonok*

### **USING SOFTWARE TO TEACH GEOMETRY**

A significant factor in improving the efficiency of the educational process is the introduction of modern information and communication technology. This also refers to such discipline as mathematics. An important aspect of information and communication technology is the use of educational software. Current systems of computer mathematics, which are intended for use in the study of individual sections or certain topics related to function graphs or, for example, solving equations systems, are relevant.

Nowadays there are so-called dynamic systems. A dynamic system is one which state changes with time [2, c. 1]. They are connected with mathematical

modeling. Everything in nature is dynamic: economics, ecology, sociology, human life, life of the country, life of the planet, etc. The theory of dynamic systems can use different mathematical methods depending on modeling. On this basis certain software tools, dynamic systems of mathematics, which are useful in the study of various mathematical disciplines in particular the geometric cycle, are created.

Systems of dynamic geometry Gran-2D and DG are intended for computer support of the study of the school course of planimetry. DG is a program-methodical complex of educational assignment "Dynamic geometry". The Gran-2D tool is intended for graphical analysis of systems of geometric objects on a plane (the name comes from Graphic Analysis 2-Dimension). Gran-2D and DG help in solving tasks on the plane and refute certain assumptions. By creating dynamic models and analyzing dynamic expressions one can conduct GMT studies, look for extreme values of certain quantities, look for regularities whose application can lead to the proof of theorems etc. [1, c. 113].

Another system of dynamic mathematics is GeoGebra. GeoGebra is a free educational software product designed to study and teach maths in secondary schools and higher educational establishments, which combines dynamic geometry, algebra, mathematical analysis and statistics. The functionalities of GeoGebra in the field of geometry are presented fairly widely. They are:

—the construction of various geometric figures on a plane (points, lines, vectors, angles, polygons, bisector angles, perpendiculars, circles, circular arcs and conical sections, tangents to a circle, etc.);

—the computation of areas: polygon; circle; part of plane, bounded by ellipse; sector;

—finding of degrees of angle; length of the segment; perimeter of the polygon; vector length; angle tangent between the direct and positive direction of the abscissa axis, etc.;

—the transformation of figures on a plane: symmetry with respect to a point and a straight line; a rotation around a point; a parallel transfer;

—finding of the points of intersection of two figures (two straight lines, a straight line and a circle); the middle of the segment; center of the circle (ellipse).

As we see, dynamic systems of mathematics are widely used in the study of mathematical disciplines, in particular, disciplines of the geometric cycle. The combination of internal richness and results with exceptional application value contributes to attracting more and more specialists from different fields to the study of dynamic systems. In Ukraine, a considerable attention is paid to the development of the theory of dynamic systems. One of the most important components of this development is the numerous conferences and mathematical schools regularly conducted by the Ukrainian mathematicians.

## REFERENCES

1. Корольовський В.В. Інноваційні інформаційно-комунікаційні технології навчання математики [навч. посібник] / В.В. Корольовський, Т.Г.

Краматенко, С.О. Семеріков, С.В. Шокалюк – Кривий Ріг, книжкове видавництво Киреєвського, 2009. – 324 с.

2. Arrowsmith D. K. An Introduction to Dynamical Systems / D. K. Arrowsmith, C. M. Place. — 1. — Cambridge University Press, 1990. — 432 с.

***N. Trochschuk***

*Wissenschaftlicher Berater: O. Bilobrowez*

*Kandidat der Geschichtswissenschaften,*

*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

*Sprachlehrerin: I. Swiridenko*

*Kandidatin der pädagogischen Wissenschaften,*

*Dozentin Zhytomyrer Staatliche Iwan-Franko-Universität*

## **ORTHODOXER KIRCHENKONFLIKT IN DER UKRAINE**

Die Geschichte der orthodoxen Kirchen in der Ukraine ist vielschichtig. Um 988 war eine einheitliche russisch-orthodoxe Kirche in der Kiewer Rus gebildet worden. Wegen der andauernden Gefechte zwischen von Moskau unterstützten Separatisten und ukrainischen Soldaten in der Ostukraine war in Kiew der Ruf nach einer eigenen Kirche immer lauter geworden.

In der Ukraine wurde am 15. Dezember 2018 eine eigene orthodoxe Nationalkirche gegründet. Bei einer Synode in Kiew stimmten die Bischöfe von zwei orthodoxen Kirchen für eine Vereinigung. Die Synode wählte den Metropolitan Epifani von Perejaslawl zum Oberhaupt der neuen Kirche.

Am 6. Januar 2019 war in Istanbul das Dokument (Tomos) zur Unabhängigkeit der Ukrainischen Autokephalen Orthodoxen Kirche vom Ökumenischen Patriarchen Bartholomäus unterzeichnet worden. Die ukrainische Kirche wird formal allen anderen bestehenden 14 orthodoxen Landeskirchen gleichgestellt.

Für die Ukraine ist es der Aufbruch in religiöse Eigenständigkeit ohne Moskau. Die russisch-orthodoxe Kirche lehnt die neue ukrainische Kirche strikt ab.

Einer Umfrage zufolge betrachten die meisten Ukrainer die Gründung der eigenständigen orthodoxen Landeskirche als wichtigstes nationales Ereignis des Jahres 2018.

## **LITERATUR**

1. Thomas Bremer: Die orthodoxen Kirchen mit nicht-kanonischem Status (Ukraine). Wissenschaftliche Buchgesellschaft, Darmstadt 2013, S. 115-120.
2. Alfons Brüning: "Einfach orthodox?" Ukraine: die Gläubigen und die Gesellschaft. Zeitschrift Osteuropa 8-9/2018, 119-138.

***T. Troianchuk***

*Research supervisor: O.V. Tolstova  
Candidate of Pedagogical Sciences,  
Associate Professor of the Department  
of Algebra and Geometry  
Zhytomir Ivan Franko State University  
Language tutor: K.V. Levkivska*

## MULTIMEDIA TECHNOLOGIES AT MATH LESSONS

**Multimedia** is a means of learning a lesson that promotes the development of motivation, communication skills, as well as the acquisition of skills and the accumulation of factual knowledge. Multimedia also takes into account the ethical moment - computer technology will never replace the cooperation of teachers and students.

It is important for students to understand that multimedia software offers great opportunities. This understanding should grow into the interest not only of students but also of the teacher, which will enable him to take a fresh look at the methodology of constructing lessons.

*The methodology of using multimedia technologies involves:*

- ✓ improvement of the system of management training at different stages of the lesson;
- ✓ enhancement of training motivation;
- ✓ Improving the quality of education and upbringing, which will enhance the informational culture of students;
- ✓ Demonstrating computer capabilities: this is not just a means for the game, but also for learning.

*The multimedia lessons allow you to solve the following didactic tasks:*

- ✓ to master the basic knowledge of the subject;
- ✓ systematize the acquired knowledge;
- ✓ develop self-control skills;
- ✓ generate motivation for learning;
- ✓ provide students with educational and methodological assistance during the independent study of the educational material.

The presented technology can be regarded as an explanatory and illustrative method of learning, the main purpose of which is the organization of assimilating students through information of the educational material and ensuring its successful perception, which increases when the visual memory is connected, as it is known that most people remember 5% of the heard and 20% of what they saw.

The use of multimedia presentations in the study of mathematics promotes the active development of students, makes it possible to integrate the student's and teacher's learning activities and combine an individual approach with different forms of collective learning activities.

Thanks to the multimedia support of classes, the teacher saves up to 30% of the training time, than when working on a class board. He does not think that he lacks

space on the board, is not worried about which quality of chalk, whether it's clear, and whether everything is written, does not waste time wiping and writing again. By saving time, the teacher increases the density of the lesson, enriching it with new content. Removed another problem. When the teacher turns to the board, he involuntarily loses contact with the class. Sometimes he even hears the noise behind his back. In the mode of multimedia support, the teacher constantly "holds his hand on the pulse, sees the reaction of students, timely responding to a changing situation. The center of gravity is transferred from learning to study. This is not an ordinary "stumbling" of students, not an extensive increase in knowledge, but a creative approach to learning all participants in the educational process. The lesson creates an environment of interaction and mutual responsibility. Only in the presence of high motivation of all participants in educational interaction possible positive result of the multimedia lesson.

## REFERENCES

1. <https://naurok.com.ua/multimediyeni-tehnologi-na-urokah-matematiki-30906.html>

*E. Tsvirko*

*Research supervisor: L. V Lagodich,  
Candidate of Economic Sciences,  
Associate Professor,  
Belarusian State Economic University*

## FEATURES OF THE DEVELOPMENT OF THE MARKET OF ORGANIC PRODUCTS IN THE REPUBLIC OF BELARUS

The development of organic agriculture in the Republic of Belarus is important from the point of view of: providing the population with high-quality food; reducing the negative impact of chemically synthesized products on the environment and human health; development of small and medium enterprises; increasing the export potential of agricultural products. The main principles of organic production: economic efficiency; environmental safety; social responsibility.

Currently, there are 20 the largest producers of organic products in the republic, including farms, personal farms, agricultural and other organizations (vegetables, berries, cereals, goat milk and yoghurt, pond fish). Organizations have certificates for organic products.

There are 7 organizations registered in the Republic of Belarus that are accredited in the EU for issuing certificates for the production of organic products, including: Organic Standard (Ukraine), Ecocert SA (France), Control Union Certifications (Netherlands), CERES GmbH (Germany), Kiwa BCS Öko-Garantie (Germany), Ecoglobe (Armenia), Ekoagros (Lithuania).

Currently, according to expert data, there are 6 exporters of organic products in Belarus (export of birch sap, medicinal herbs, wild berries) about 27 producers (farms, personal subsidiary farms, educational and experimental farms, etc.) are operating organic products (vegetables, berries, goat milk, yoghurts, pond fish and cereals) [1].

The production of organic (ecological) food products is a new market opportunity for Belarusian producers of agricultural products.

The market of organic products in Belarus is currently in the formative stage, but several large players are already standing out there, occupying certain market segments. The first segment of the market are manufacturers specializing in the import of foreign organics. In the Republic of Belarus, these are mainly trading companies selling organic products abroad: EcoBar (<https://ecobar.by>); Biobeauty (<https://biobeauty.by>).

The next segment is the producers selling the so-called farm products (Peasant farm “DAK”; Peasant farm “Vermi Ecoproduct”; Peasant farm “EcoFol”). The above-mentioned manufacturers focus on the active contact with customers, conduct informational and educational activities on the Internet, explain why farm products are more expensive than usual and what their advantage is. On the websites of these companies, you can find a large amount of information about the farmers with whom they cooperate, offers for the outings on the farm and the production works.

The third block in the market is organizations that promote the idea of professional certification that would meet international standards for eco-manufacturing. (Organic Standart LTD, Ekoagros, Kiwa BCS Oko-Garantie GmbH, Ecoglobe, Abcert AG).

The fourth segment of the market for environmentally friendly products, a relatively new format that emerged not so long ago and is gaining popularity, is eco-markets, specializing in the sale of exactly “eco”, “bio” and “organic” products (“OliveBel”, “Hlebdoma (Bread-at-home)”, “EcoBar”, “Shanti Shop”).

In order for the final product to receive organic status, it must pass all the way from the farm to the counter, subject to a number of basic parameters: organic farming and animal husbandry, organic raw materials, organic ingredients and the technological process. Organic is only a completely natural product [2].

## REFERENCES

1. Список органических производителей Беларуси [Электронный ресурс]. – Режим доступа: <https://ecoidea.by/ru/content/project/3314>. – Дата доступа: 25.03.2019.
2. Григорук, В. В. Механизм стимулирования производства продукции органического сельского хозяйства / В. В. Григорук. – Алматы, 2017. [Электронный ресурс]. – Режим доступа: [agroekonom.kz/.../Григорук-В.В.-Стимул.-пр-ва-продукц.-органич.-сл.хоз-ва.pdf](http://agroekonom.kz/.../Григорук-В.В.-Стимул.-пр-ва-продукц.-органич.-сл.хоз-ва.pdf). – Дата доступа: 28.03.2019.

***A. Tuchapets***

*Research supervisor: T.I. Bozhuk,*

*Doctor of Science in Geography*

*Language tutor: O.Ye. Misechko*

*Lviv Institute of Economics and Tourism*

## **THE INFLUENCE OF PHYSICAL RECREATION ON ENVIRONMENTAL IMPROVEMENT**

Tourism is developing rapidly in the world. New destinations are emerging, tourism infrastructure is improving, and because of the tourism the economies of the countries are improving. However, in addition to the positive effects of tourism, there is still a negative impact, especially on the environment. Negative influences are: pollution of water in rivers, lakes, seas and bad quality of air, growth of emissions of harmful components by vehicles, the unauthorized placement of temporary recreation facilities, pollution with environmental wastes, the unintentional fire in the forests etc [3]. Such kinds of tourist recreation as hunting, fishing, harvesting plants are causing significant damage to wildlife and a decrease in the number or even the complete disappearance of the fauna and flora in certain areas. Population growth in tourist regions, the construction of new tourist facilities require the usage of as many natural resources as possible, which increases the burden on the environment [2]. Therefore, in order to improve the condition of the environment, it is necessary to promote such types of recreation and tourism which produce a positive impact on the environment.

Together with the development of active tourism and the promotion of a healthy lifestyle, physical recreation is gaining popularity. Physical recreation it is any types of mobile activity created to restore the forces used in the process of professional activity. It is an organized recreation with the use of physical exercises and other movable actions as well as natural forces. This type of recreation is achieved through the combination of methods, means and forms of physical culture. Also, it is kind of rest provided by various types of disease prevention in stationary conditions by excursion and tourism measures in the process of exercises on a fresh air[1].

Physical recreation popularity is accompanied by appearance of new directions and types of tourism, expansion of tourism markets and new territories, formation of new tourist products. It is aimed at improving the ecological condition of the environment in the following ways:

1. Preservation of natural complexes for the purpose of further organization of recreation in ecologically clean territories.
2. Restoration of polluted territories for the purpose of their further usage in recreational activities.
3. Avoiding mass tourism. Tours for the improvement of health are created for small groups (to ensure high quality), or individual tours are organized. Thus, the natural territory is not harmed.

4. The ecoconcept is becoming more and more popular and propagandized. The number of eco tours, eco territories, eco restaurants, eco hotels etc. is increasing. Physical recreation supports life in the eco style. Eco tours, fitness eco tours which are a kind of physical recreation are organized more often. Active weekend in the eco style are becoming more popular. All these elements are the part of physical recreation [1].

To sum up it is important to admit that physical recreation is aimed at maintaining a healthy lifestyle, restoring and preserving natural complexes, organizing small tourist groups or individual trips to reduce the load on natural complexes, supporting eco-friendly rest, serving as an impetus for the development of an eco-friendly tourism infrastructure.

### REFERENCES

1. К. Cordes. Applications in recreation and leisure for today and the future [Електроннийресурс]. – Режимдоступу: <https://www.sagamorepub.com/sites/default/files/2018-07/applicationsinrecli.pdf>
2. Кифяк В.Ф. Організація туристичної діяльності в Україні: Навч. посіб. / В.Ф. Кифяк. -Чернівці: Книги - XXI, 2003. - 300 с.
3. Кубай Д. Екологічні аспекти сучасного розвитку туризму/ Вісник Львівського університету. Серія міжнародні відносини. – 2008. – С. 142-146.

***S. Vashchuk***

*Research supervisor: N. Y. Rudnitska*

*Candidate of Pedagogical Sciences,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

*Language tutor:*

*I. V. Samoylyukevych*

*Candidate of Sciences, Professor*

*Zhytomyr Ivan Franko State University*

### DEVELOPING ACTIVE VOCABULARY IN CHILDREN OF MID-PRESCHOOL AGE BY MEANS OF PLOT-BASED ROLE PLAY

In the context of modern preschool education in Ukraine, educators face the connected with language development of children. This requires further research in the field of teaching the native language to children of mid-preschool age. In this paper, ways to enrich the active vocabulary of children of mid-preschool age, means by of plot-based role play will be considered.

The problem of the development of children`s active vocabulary was investigated in many directions. In particular, the enrichment of vocabulary was carried out. For example: peculiarities of the formation and development of the

dictionary of children during preschool childhood (M. M. Konin.). Methodology for the development of vocabulary of preschool children was developed by A. M. Borodich.

In accordance with the basic component of pre-school education in the development of the vocabulary of preschool children, there are two sides: the quantitative growth of the vocabulary and its qualitative development, that is, the mastery of the meaning of words[1]. The content of the vocabulary involves the continuous expansion, deepening and synthesis of knowledge about the world of object. It is determined on the basis of an analysis of the general program for the development and upbringing of children: the vocabulary that is necessary for the child to communicate, meet their needs, orientation in the environment, knowledge of the world, development and improvement of various activities. From this point of view, the content of the vocabulary distinguishes words that denote material culture, nature, man, his activities, ways of doing things, words that express the emotional and value relation to reality. Depending on the age and level of development of children's speech, the content of vocabulary work gets more complicated in several directions (VI I. Logininova) is step by step:

Step One: Expansion of the vocabulary on the basis of familiarisation with the range of objects and phenomena;

Step Two: Assimilation of words on the basis of deepening knowledge about objects and phenomena of the surrounding world;

Step Three: The introduction of words that denote elementary concepts based on the distinction and generalization of objects on essential features[3].

The plot-based role play is a leading activity for preschoolers, which satisfies the age-related needs of children and helps them to acquire knowledge and skills[4].

To develop creativity and activate children's vocabulary, it is precisely in plot-based role play, it is advisable to use professions which are little known to children, such as: a pilot, the captain of the ship, an interior designer, and those which are well-known to them, for example: a doctor, a cook, a teacher, etc. [2].

Consequently, for the harmonious development of the child, the development of an active vocabulary plays an important role. In pre-school childhood, the most typical kind of activity of children is a game, therefore, one needs to focus on the development of the vocabulary through the game.

## REFERENCES

1. Базовий компонент дошкільної освіти України  
<https://mon.gov.ua/storage/app/media/doshkilna/bazovij-komponent-doshkilnoyi-osviti-na-sajt-ostatochnij.pdf>
2. Богуш А. М. Мовленнєвий компонент дошкільної освіти. / А.М.Богуш. – Х.: Вид-во «Ранок», 2011. – 176 с.
3. Bohush A. M. Mowlennyevyy komponent doshkil' noyi osvity. / A.M.Bohush. – KH.: Vyd-vo «Ranok», 2011. – 176 s.

4. Логинова В.И., Максаков А.И., Попова М.И. Развитие речи детей дошкольного возраста: Пособие для воспитателя дет. сада. / Под ред. Ф. А. Сохина. — 2-е изд., испр. — М.: Просвещение, 1979. — 173 с.
5. Loginova V.I., Maksakov A.I., Popova M.I. «Razvitiye rechi detey doshkol'nogo vozrasta» Posobiye dlya vospitatelya detskogo sada./ Pod red. F. A. Sohina. — 2-e izd., ispr. — М.: Prosveshcheniye, 1979. — 173 s.
6. Жуковская Р. И. Игра и ее педагогическое значение. — М.: Педагогика, 1975. — 111 с.
7. Zhukovskaya R. I. Igra i yeye pedagogicheskoye znacheniyе. — М.: Pedagogika, 1975. — 111 s.

***Y. Venzhega***

*Research supervisor: Y.V. Chernyak,*

*Senior Lecturer,*

*Candidate of Historical Sciences*

*Baranovich State University*

*Language tutor: M.D. Lavrenkova*

*Senior Lecturer*

*Baranovich State University*

## **POLITICAL REGIMES**

The notion of a political regime entered the science of national state law in the early 60s. The term "political regime", as well as the concept of the political system of society, appeared in our science under the influence of the works of scientists of the socialist countries, and came to them from the countries of the West.

Most often, the concept of a political regime is defined as follows: a political regime is a combination of real means and methods by which power is exercised in a particular state.

It is necessary to distinguish two main groups - democratic and non-democratic political regimes.

The democratic regime is characterized by a real and significant influence of the majority of the population on public administration.

The second form of political regime is the non-democratic regime. Most often it is called totalitarian, although the term "authoritarian" is sometimes used. The authoritarian regime is most often an intermediate form between the democratic and non-democratic regime [1, p. 235].

The totalitarian regime is such a form of exercising power in which, there is no multi-party system, free general elections, there is no democratic constitution, citizens cannot defend their rights in court, the court is not independent.

Totalitarian regimes have several varieties. The most extreme form of the totalitarian regime is the fascist regime.

The fascist regime means the complete prohibition of any parties other than the dominant one, merging this single party with the state apparatus, prohibiting fundamental rights and freedoms, applying political terror, creating places of deprivation of liberty for opponents of the opposition regime [1, p. 236].

At one time, racist regimes were extremely undemocratic. The racist regime is a kind of state in which all power in the country belongs to persons belonging to the same (white) race, and black people, or the so-called colored ones, are not allowed to power [2, p. 148].

Autocratic regimes in a number of states of the Arab East can be attributed to the number of authoritarian regimes. This mode means that power is in the hands of one person (usually an absolute monarchy), but citizens do not feel oppressed and enslaved, moreover, they perceive the dominant state of things not just as normal, but as the ideal form of the state [1, c. 238].

The military regime can be a type of totalitarian or authoritarian regime. This means the complete dominance of the army from top to bottom. If the army does not respect any democratic rights, then this will be a totalitarian military regime, and if there are any elements of respect for human rights, then this will be a kind of authoritarian regime [1, p. 239].

Thus, it should be concluded that political regimes play a huge role in our lives. Thanks to them, every civil society chooses for itself the most optimal mode for the life of its generation. And in order not to make mistakes in the choice of this regime, it is necessary to know about the existence of negative regimes for the life of society that are aimed at the destruction of the people.

## REFERENCES

1. Чудаков, М.Ф. Конституционное (государственное) право зарубежных стран: Учеб. пособие / М.Ф. Чудаков. — Минск : Новое знание, 2001. — 576 с.: ил.
2. Конституционное право зарубежных стран: Учебник для вузов / Под общ. ред. чл.-корр. РАН, проф. М.В. Баглая, д. ю. н., Ю.И. Лейбо и д. ю. н., проф. Л.М.Энтина. — Минск : Норма, 2004. — 832 с.

**A. Vikarchuk**

*Language tutor: A.V. Kuznyetsova,*

*Candidate of Philology,*

*Associate Professor*

*Zhytomyr Ivan Franko State University*

## **USE OF DIDACTIC MATERIAL IN THE PROCESS OF TEACHING ZOOLOGY AT SCHOOL**

Cognitive activity of pupils is an important indicator of the effectiveness of the school educational process. One of the ways to encourage the educational and cognitive activity of schoolchildren is the use of the didactic material in the educational process. The didactic material develops creativity, desire to learn and pupils' enthusiasm.

The purpose of the research is to find out the peculiarities of use of the didactic material while teaching of zoology at the basic school.

Such famous educators as J. Kamensky, I. Pestalozzi, K. Ushinsky, N. Krupskaya, A. Makarenko, V. Sukhomlinsky studied the issues of using the didactic games in the educational process. The use of didactic materials in the process of teaching biology at school is very important, because with it the subject becomes easier to teach and study.

The didactic material increases the efficiency of pupils' perception of the topic, it varies their educational activities, brings an element of curiosity at the lesson, and as a result it increases pupils' progress. Besides, the didactic material arises pupils' background knowledge, creates necessary associative links helping them to understand the new topic better [1].

At the biology classes pupils gradually form the ability to focus their attention on the subject by means of various didactic games and cards. Managing pupils' attention in the proper direction, the teacher lays foundations for the development of such an important quality as research and creative interest.

The didactic material has an importance in moral education of children. They have the possibility to work with peers (collective lessons). Didactic cards give positive results precisely if they are planned. Using didactic cards will produce a good result only when the teacher understands clearly the tasks that can be given at the lesson. Age and psychological peculiarities of children should be also taken into consideration.

To better prepare students for various topics in biology, the teacher can create a varied didactic instrumentarium for pupils to encourage their interest in the subject and to motivate them for further leaning.

### **REFERENCES**

1. Семенов В.Г. Дидактична гра як форма навчання / В.Г. Семенов // Радянська школа. – 1989. – №3. – С. 64-66.

**A. Voloshchuk**

*Research supervisor: I.O. Poyta,*

*Candidate of Economics Sciences*

*Zhytomyr Ivan Franko State University*

*Language tutor: N.M. Andriychuk*

## **MARKETING COMMUNICATIONS IN THE BANKING MANAGEMENT SYSTEM**

Effectively to manage a bank, it is necessary to work out and plan effective marketing communications. Among the list of works that is every day executed by a manager, work with information occupies 50-90%.

Marketing Communication refers to the means adopted by the companies to convey messages about the products and the brands they sell, either directly or indirectly to the customers with the intention to persuade them to purchase [1]. In the course of the research, five flows of connections in the banking sector which combine the internal and external environment of the bank were identified:

- The *first flow* forms the interaction between managers and the staff of the regional representation;
- The *second flow* serves business transactions directly between the Bank's staff, the clients and the partners;
- The *third connection flow* enables effective interaction with the top officials from government agencies, partners and the local community;
- The *fourth flow* allows to use the potential of the management and staff of the regional office to influence local media and, with their help, create a positive image of the bank;
- The *fifth flow* allows you to interact with a mass audience through local media, promoting the values and the ideas of the bank, promoting its products and services, etc [2].

The most important part in our case is the second flow which allows to interact with clients and partners. This can be done using marketing tools. However, it's not easy to choose marketing communications to operate effectively on the market, because the banking product is difficult to sell. People do not always have the opportunity to buy and use it.

To attract customers, you need to apply the following marketing communications: advertising, sales promotion, public relations, personal sales and direct marketing. However, the most important thing is to stimulate final users. Taking into account the existing peculiarity in the banking sector, the following promotion tools for final users can be used: price discounts (discount on seasonal sales, bank discounts, national, secular, religious holidays, and discounts for certain categories of consumers); awards; lotteries, contests, quizzes, sweepstakes and games; exhibitions and fairs.

Consequently, it is necessary to form an effective set of promotion of banking products on the market depending on the specific communication goals, the specifics of banking products and the possibilities of the bank. It should be added

that in the course of the research it was discovered that it is inappropriate to use such marketing tools as racks and corporate clothing of the staff at the place of sale (in the bank). Avoid advertising in transport and reduce the amount of print advertising, which is inferior to the efficiency of modern communication tools. To attract customers it is necessary to stimulate them with various means.

### REFERENCES

1. Marketing Communication [Електронний ресурс] – Режим доступу : <https://businessjargons.com/marketing-communication.html>
2. Особливості PR-діяльності регіональних представництв банків [Електронний ресурс] – Режим доступу : [http://www.blagodeteleva-vovk.com/strategy/pr\\_cherkassy.html](http://www.blagodeteleva-vovk.com/strategy/pr_cherkassy.html)

***S. Voroshkevich***

*Research supervisor: I.V. Shulenkova,*

*Senior Lecturer*

*Baranovichi State University*

*Language tutor: M.D. Lavrenkova,*

*Senior Lecturer*

*Baranovichi State University*

### THAILING BY ABUSE OF SERVICE POWERS AS A CORRUPTION CRIME

The legal definition of corruption is enshrined in Art. 1 of the Law of the Republic of Belarus of July 15, 2015 No. 305-Z “On the fight against corruption” [1].

Essentially, corruption involves the deliberate use by a public official or equivalent of his official position and the opportunities associated with it.

The indicated intentional use by an official of his official powers and the opportunities associated with him is precisely the case when the investigated type of theft is committed. According to Art. 210 of the Criminal Code of the Republic of Belarus (hereinafter - the Criminal Code), embezzlement by abuse of official powers should be understood as taking possession of property or acquiring the right to property committed by officials using their official powers [2].

The decision of the Plenum of the Supreme Court of the Republic of Belarus No. 15 of December 21, 2001 “On the Application by the Courts of Criminal Law on theft of Property” clarifies that the analyzed theft is characterized by the use of official authority by an official to seize property or acquire the right to it. It does not matter whether the property is directly owned by the official or entrusted to other persons through whom the official has the right to manage and dispose of them by virtue of official authority [3].

The essence of the theft, committed by abuse of official authority, is that the official performs such actions in the service, which formally correspond to his

competence and authority, but are essentially illegal, as committed contrary to the interests of the service. In the event that an official does not have the authority for operational management of property, and has only access to it, this kind of action must be qualified as theft (Article 205 of the Criminal Code). Therefore, qualifying the actions of an official under art. 210 of the Criminal Code, it is important to bear in mind that service powers are used by the guilty not just to gain access to the property, but to seize it.

According to V. V. Khilyuta, the principal features of the theft, by abusing official authority, to which particular attention should be paid, are signs of gratuitousness and a mercenary purpose. Unfortunately, the courts do not always take into account that the abuse of official authority, which was committed for mercenary motives and caused property damage, was not associated with gratuitous seizure of property (for example, concealment by entangling the accounting of deficit resulting from official negligence, the temporary use of property without the intention to turn it into their own property, the use of inventory items for other purposes, etc.) does not constitute a crime as provided for by Art. 210 of the Criminal Code [4, p. 159-160].

The legislator provides for increased responsibility for theft by abuse of official authority, committed repeatedly or by a group of persons in a preliminary conspiracy (part 2 of article 210 of the Criminal Code) on a large scale (part 3 of article 210 of the Criminal Code), organized in a group or on a large scale (Part 4 of Art. 210 of the Criminal Code) [2].

The study of judicial practice has shown that some courts make mistakes in qualifying the actions of the perpetrators according to these criteria. Thus, the court of the Frunzensky district of Minsk recognized the chief accountant M. of a limited liability company, previously convicted of the theft, guilty of the theft by abusing official authority only on a qualifying sign of the theft - on a large scale. The court did not justify in its verdict the exclusion from the accusation of a qualifying sign of theft that was committed again [5, p. 49].

Summarizing the above, we believe that the main difference between embezzlement through the abuse of official powers and other corruption crimes is the direction of the criminal intent, and, subsequently, the end of the crime. In particular, when committing a crime under Art. 210 of the Criminal Code, the intent of the perpetrator is aimed at the unlawful seizure of property.

## REFERENCES

1. О борьбе с коррупцией [Электронный ресурс] : Закон Респ. Беларусь, 15 июля 2015 г., № 305-3 // Нац. правовой Интернет-портал Респ. Беларусь. —23.07.2015. — 2/2303.
2. Уголовный кодекс Республики Беларусь [Электронный ресурс] : 9 июля 1999 г., № 275-3 : принят Палатой представителей 2 июня 1999 г. : одобр. Советом Респ. 24 июня 1999 г. ; в ред. Закона Респ. Беларусь от 17 июля 2018 г., № 131-3 // Нац. правовой Интернет-портал Респ. Беларусь. — 28.07.2018. — 2/2569.

3. О применении судами уголовного законодательства по делам о хищениях имущества [Электронный ресурс] : постановление Пленума Верховного Суда Республики Беларусь, 21 дек. 2001 г., № 15 : в ред. постановления Пленума Верховного Суда Республики Беларусь от 24 сент. 2009 г. № 8 // Нац. реестр правовых актов Респ. Беларусь. — 2009. — 6/778.
4. Хилюта, В. В. Хищение путем злоупотребления служебными полномочиями как коррупционное преступление по уголовному законодательству Беларуси / В. В. Хилюта // Актуальные проблемы экономики и права. — 2010. — № 4. — С. 158–161.
5. О практике применения судами законодательства по делам о хищении путем злоупотребления служебными полномочиями (ст. 210 УК) (по материалам обзора) / Судовы веснік. — 2014. — № 3. — С. 47–51.

***B. Vyshnivska***

*Research supervisor: A. P. Stadnichenko,  
Doctor of Natural Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## **THE RED BOOK OF UKRAINE**

The Red Book of Ukraine is an official state document established for definition the rare and endangered species of animals, plants and fungi, as well as some local subspecies that exist within the territory of Ukraine and its continental shelf and marine economic zone [1].

The rare and endangered species of animals, plants, and fungi that are listed in the Red Book are unique, inimitable, unrenovable resources. They are significant site of nature because of that characteristics. In whole, the Red Book is recognized as one of the cadastre of natural objects that is operated in Ukraine.

All species are divided into the following groups in the Red Book of Ukraine: 1- probably extinct; 2- endangered; 3 – decreasing number; 4 – rare; 5 – uncertain status; 6 – rehabilitated and rehabilitating. All wildlife species are subject to the special preservation on the all territory of Ukraine regardless of their group in the Red Book. Absolute prohibition for any kind of their using (collection, stocking, hunting, catching and others) or to change the conditions of their habitat is also noted in the legislation [2, p.255]. Consequently, objects from the Red Book of Ukraine have a special legal status that is grounded, first of all, on their protection by the state.

## **REFERENCES**

1. Law of Ukraine “On the Red Book of Ukraine” № 30555-III of February 2, 2002 // Golos Ukraini № 48, March 14, 2002.

2. Chornous O. Red lists and conservation of nature (on the example of Ukraine) / O. Chornous // Часопис Київського університету права. - 2013. - № 3. - С. 252-257.

**S. Wenchak**

*Lwiwer institut für Wirtschaft und Tourismus  
Wissenschaftlicher Leiter T. I. Perunchak  
Lwiwer institut für Wirtschaft und Tourismus*

## **PROMOTION DES GRÜNEN TOURISMUS IM KARPATENREGION**

Die Erholung mit wild lebenden Tieren und authentischen karpatischen Siedlungen wird jedes Jahr immer beliebter. Der Vorteil eines solchen Urlaubs liegt auf der Hand – frei von chemischen Emissionen der Bergluft, umweltfreundlichen Produkten und köstlichem Quellwasser. Alle Familienmitglieder werden heute vom trendigen "grünen Tourismus" profitieren, der bescheidene Arbeit auf dem Land und die Kommunikation mit Haustierenerfordert. Die Bereiche, die in dieser Präsentation vorgestellt werden, verdienen Aufmerksamkeit, da sie alle Ressourcen für die Entwicklung des ländlichen Tourismus besitzen. Mein Ziel ist es, Sie mit ihnen bekannt zumachen und sie zufördern.

Yaremche. Es gilt als die Hauptstadt des Karpaten-Tourismus. In Yaremche wird die ursprüngliche Huzul-Farbe harmonisch mit der entwickelten Infrastruktur des Touristenzentrums kombiniert. Junge Menschen interessieren sich viele Möglichkeiten für Freizeitaktivitäten - Wandern und Holz, verschiedene Ausflüge, Rafting, Skifahren und Schlitten – im Winter - Reiten, Bergfahrräder, ATV (Quadrozykl) in den Rest der Saison. Ältere Menschen haben die Möglichkeit, ihre Gesundheit in Sanatorien zuverbessern. Die besten Hotels in Yaremche sind Premier und Vita Park Stanislavskiy. Preis für zwei Nächte im Premier Hotel (3250 hrn.) Und Preis für zwei Nächte im Vita Park Stanislavskiy (1700 hrn.)

Mykulychyn. Ruhe in Mykulychyn – mildes Klima, Kiefernwälder, duftende Wiesen der Karpaten, reine Bergluft. Für einen ruhigen Familienurlaub werden spezielle Routen und Ausflüge auf dem Gebiet des Karpaten-Naturparks entwickelt. Unter den Naturdenkmälern von Mykulychyn können Sie den Wasserfall Zhenetsk Guk (18 m), die Berggipfel Makovytsya (985 m), Yavirnyk-Gorgan (1432 m), Velyka Rokyta (1100 m), loswerden. In den letzten Jahren hat das Jeppin. Die besten Hotels in Mykulychyn sind Eva und Girska Sonata. Preis für zwei Nächte im Eva Hotel (1600 hrn.) Und Preis für zwei Nächte im Girska Sonata (1376hrn.)

Lazeshchina . Siedlungen an der Grenze der Gebieten Transkarpatien und Iwano-Frankiwsk. Das Dorf ist beliebt bei Wanderwegen nach Petrosberg (2020 m) und Hoverlaberg (2061 m). Lazeshchina wird jedes Jahr Veranstaltungsort des koloritreichen Festivals "Hutsuler Ripe". Die ist ein echtes Kartoffelparadies. Die Teilnehmer der Festspiele bereiten grosse Anzahl der Gerichte, die nur aus

Kartoffeln zubereitet werden. Die besten Hotels in Lazeshchina sind Parlament und Dzvin Karpat .Preis für zwei Nächte im Parlament Hotel (3600hrn.) Und Preis für zwei Nächte im Dzvin Karpat (2000hrn.).

Tatariv. Der bekannte, traditionsreiche Ort im Flusstal der Prut liegt . Seit dem Ende des neunzehnten Jahrhunderts wurde Tatariv in ganzer Europa als trendiger Genesungskurort bekannt. Das örtliche Wasser ist reich an Silber – ein echtes Naturwunder, das die Einwohner von Tatariv und ihre Gäste extrem schön und attraktiv macht. Tatariv ist ein idealer Erholungsort für Berg-und Wandertourismus, stille JagdnachBeeren und Pilzen. Die besten Hotels in Tatariv sind Pihy und Tatariv DeLuxe . Preis für zwei Nächte im Pihy Hotel (4000 hrn.) Und Preis für zwei Nächte im Tatariv DeLuxe (3100hrn.)

Am Ende kann man hinzufügen, dass diese Dörfer ein großes Potenzial für die Entwicklung des ländlichen Tourismus haben. Sie haben die Mittel, um diesen Tourismus zu verbessern und zu modernisieren. Sie können es selbst überprüfen, also willkommen in der Karpatenregion.

### LITERATUR

1. Die Geschichte des Dorfes Mykulychyn : [Website] :  
[http://ukrainica.org.ua/ukr/projects/sela\\_ukraini/istorii\\_sel/1253-1253.html](http://ukrainica.org.ua/ukr/projects/sela_ukraini/istorii_sel/1253-1253.html)
2. Lazeshchina : [Website] : <http://guide.karpaty.ua/uk/places/lazeshchyna>
3. Grundinformationen über Dorfer : [Website] : <https://uk.wikipedia.org/wiki/>
4. Grundinformationen über Dorfe : [Website]:  
<http://www.yaremcha.com.ua/index.html>

***Y. Yakimchuk***

*Research supervisor: Rutman E. Y.,*

*senior lecturer,*

*department of civil and criminal law disciplines*

*Educational Institution Baranovichi State University*

*language tutor: M.D. Lavrenkova, senior lecturer*

### CONTRACTING AGREEMENT: SPECIFIC FEATURES OF CERTAIN LIMITATIONS ISSUES

Legal relations between business entities in a market economy arise and develop, as a rule, on the basis of the free will of the parties. The basis for the emergence and existence of these relations is a contract.

The contract is the most common legal fact giving rise to a binding legal relationship. At the same time, it is a legal means of establishing property rights — property rights, economic management, operational management, etc. [1, p. 144].

Article 880 of the Civil Code of the Republic of Belarus contains the concept of a commission agreement. Under the commission agreement, one party (the commissioner) undertakes, on behalf of the other party (the principal) for a fee, to

perform one or several transactions on its own behalf, but at the expense of the principal [2].

The agreement of the commission is one of the most important contracts by means of which the relations of representation in trade and intermediary operations are regulated.

By legal nature, this agreement is consensual, mutual, paid, mutually agreed, compromise [3, p. 241].

The agreement of the commission is in many respects similar to the agreement of commission and with other agreements regulating relations on representation in trade and intermediary operations. However, a commission contract is an independent type of contract, having its own characteristics enshrined in legislation.

As of today, the law does not provide for the contract of assigning any particularities in terms of its form. Therefore, the general rules on the form, transactions and the form of the contract apply to it. This means that contracts between legal entities or with their participation must be clothed in writing, unless otherwise provided by law. In relations between citizens, the written form should be observed only in cases when the amount of the contract exceeds ten basic values.

It should be borne in mind that the form of the contract is determined not only by the amount of remuneration to the attorney, but also by the price of the transaction that he is obliged to make with third parties [4, p. 285].

Thus, it would be advisable to recommend the conclusion of commission agreements in writing, regardless of the composition of the parties to this agreement, the size of the commission and the amount of the transaction assigned to the commissioner. If the agreement of the commission is in a more “rigid” form - notarial, then to a greater extent this would guarantee the observance of the rights and interests of the parties to the commission obligation. In this case, the contract would have been previously investigated by a notary.

## REFERENCES

1. Правовое регулирование предпринимательской деятельности в Республике Беларусь : практ. пособие / В.А. Витушко, А.А. Головкин, М.Г. Пронина, В.И. Семенов [и др.] ; под общ. ред. В.А. Витушко, В.И. Семенова. – Минск : МНО, 2012. – 785 с
2. Гражданский кодекс Республики Беларусь [Электронный ресурс] : 7 декабря 1998 г., № 218-3 : принят Палатой представителей 28 окт. 1998 г. : одобр. Советом Респ. 19 ноября 1998 г. : в ред. Закона Респ. Беларусь от 17 июля 2018 г., № 135-3 // Нац. правовой Интернет-портал Респ. Беларусь. — 31.07.2018. — № 2/2573.
3. Маньковский, И. А. Гражданское право. Особенная часть : учеб. пособие / И. А. Маньковский, С. С. Вабищевич. — Минск : Адукацыя і выхаванне, 2013. — 368 с.
4. Комментарий к Гражданскому кодексу Российской Федерации : постатейный ; под ред. Т. Е. Абовой. — М. : НОРМА, 2004. — 786 с.

**A. Yukhymchuk,**  
*Research supervisor: I. V. Samoylyukevych,*  
*Candidate of Pedagogical Sciences, Professor*  
*Zhytomyr Ivan Franko State University*  
*Language tutor: I. V. Samoylyukevych*

## **PEDAGOGICAL PREREQUISITES FOR INTEGRATING DIFFERENT FORMS OF ART IN LITERARY LESSONS IN PRIMARY SCHOOL**

New tendencies in the development of modern society, which are based on humanistic grounds, have influenced the definition of the main goal of studying in primary school as the formation of a harmoniously and comprehensively developed personality of each pupil. The realization of this goal is possible, in particular, due to the implementation of integrated links between Literary and Art lessons into the teaching process. In this article, we will deal, firstly, with the most popular forms of art that we can use in primary school; then with some pedagogical ideas and examples of practical activities from Literary lesson in primary school.

According to the Curriculum for general educational institutions (Grades 2-4), integration works best in Literary lessons in primary school with such forms of art as music, drama and fine arts. Music and painting facilitate the development of the emotional sphere of primary-school pupils in general and children`s perception of poems. In its turn, using drama in literary lessons helps to develop children`s oral speech skills and to overcome any potential problems; besides children can get experience working with the audience.

Having analyzed the data obtained during the teaching practice in Zhytomyr School 21, we determined the following specific prerequisites that ensure the effective organization of the educational process of the integration of different forms of art in Literary lessons. First of all, it is the relevance to the topic and the didactic goal of the lesson. The next prerequisite presupposes taking into account the level of development of pupils and their age-related and individual characteristics to implement the principles of accessibility and differentiation in learning. In addition, the nature of educational material and the time allocated for studying the topic are very important for a harmonious combination of teaching methods. Only the complex consideration of these prerequisites will ensure the success of integration.

Examples of practical activities which aim to integrate different forms of art in Literary lessons in primary school may include the following: verbal painting, illustration, reading in part, drama, reading poems or lyrics against the musical background, storytelling using body language [2, p. 7]. For instance, verbal painting can be used in Literary lessons (Grade 2) on the topic «Lesya Ukrainka «Beauty of Ukraine, Podollya!» to develop children`s ability to express thoughts and to extend their concentration span. This method implies using figurative means of language in communication (epithets, metaphors, similes etc.) and involves the

following steps: 1) reading a poem; 2) determinations of the numbers of pictures that can be create; 3) determination of objects on each picture; 4) finding words from a poem for help in the painting process; 5) oral description of own picture [1, p. 85-86].

In conclusion, we think that Literary lessons have a considerable potential for integrating reading with different forms of art.

## REFERENCES

1. Антонюк Н. А. Уроки літературного читання: Методичні рекомендації / Н. А. Антонюк. – К.: ТОВ ВПЦ Літопис – ХХ, 2015. – 96 с.
2. ЛІТЕРАТУРНЕ ЧИТАННЯ. Програма для загальноосвітніх навчальних закладів для 2-4 класів / О. Я. Савченко, О. В. Мартиненко, В. О. Науменко, Н. М. Колеснікова, Л. І. Лаптева [Електронний ресурс]. – Режим доступу: [http://old.mon.gov.ua/images/files/navchalni\\_programu/2012/ukr/02\\_lit\\_chit.pdf](http://old.mon.gov.ua/images/files/navchalni_programu/2012/ukr/02_lit_chit.pdf)

*O. Zagryva*

*Research supervisor: K.V. Levkivska,  
Candidate of Pedagogical Sciences,*

*Senior Lecturer*

*Zhytomyr Ivan Franko State University*

*Language tutor: K.V. Levkivska*

## THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN STUDIES

Information and communication technologies occupy a leading role in human life. The development of modern society cannot be imagined without computer technology. Recently, ICTs are increasingly used in a wide variety of spheres of life, especially in the educational process.

The interactivity and intensification of the learning process necessitated the use of computer technologies that are related to education and training. That caused an increasing interest in the study and research of ICT. This topic in Ukraine is devoted to the research of such scholars as V. Yu. Bykov, V.F. Zabolotny, G.O. Kozlakova, O.M. Bondarenko, O.A. Mishchenko.

The use of computers in the sphere of education initiated the beginning of evolution, outdated methods, facilities and technologies of studies. To the basic factors of wide application of information and communication technologies it is worth taking the following:

- the use of ICT greatly accelerates the transfer of knowledge;
- such technologies help a person adapt better and faster to the environment and to abrupt social changes;

- effective implementation of computer technologies contributes to the process of modernizing the traditional education system.

The Internet became a great example of the successful use of information technologies. This is a world computer network, which gives actually unlimited possibilities to collect, maintain and distribute various information. The internet quickly occupied a leading role in mass media (MASS-MEDIA), in science, education and in other spheres of life. Introduction of the Internet in the process of studies gave a shove to high-quality new development of education. But we should remember that the organization of educational process demands lots of expenses in comparison with the use of traditional technologies. Basic difficulties of the use of ICT in studies consist in absence of basic methodical base in relation to their use and methodologies of development of computer technologies for the system of education.

Analyzing the progress of the use of ICT in modern education in Ukraine, it is important to mark the sequence of changes of traditional looks to the process of studies which enables to promote the qualifying level of society.

Summarizing the information above it is possible to come to the conclusion, that the application of information and communication technologies in education enables to promote quality of studies, creates new facilities of influence, it is more effective for the teachers of higher educational establishments to co-operate with their students.

#### **REFERENCES**

1. Биков В.Ю. Моделі організаційних систем відкритої освіти : монографія / В.Ю. Биков. – К. : Атіка, 2009. – 684 с.
3. Заболотний В.Ф. Дидактичні засади застосування мультимедіа у формуванні методичної компетентності майбутніх учителів фізики : автореф. дис. на здобуття наук. ступеня докт. пед. наук : спец. 13.00.02 “Теорія та методика навчання (фізика)”/В.Ф. Заболотний . – Київ. – 2010. – 38 с.
4. Козлакова Г.О. Теоретичні і методичні основи застосування інформаційних технологій у вищій технічній освіті: Монографія. – К. : ІЗМН, ВІПОЛ, 1997. – 180 с.

***K. Zakharchenko***

*Research supervisor: O. S. Humankova  
Candidate of Pedagogical Sciences, Associate Professor  
Zhytomyr Ivan Franko State University*

*Language tutor: O.E.Kravets  
Candidate of Sciences, Professor*

*Zhytomyr Ivan Franko State University*

## **THE FORMATION OF THE BASES OF LINGUISTIC AND SOCIOCULTURAL COMPETENCE IN PRESCHOOL CHILDREN WITH THE USE OF AUTHENTIC MATERIALS**

The article is devoted to the problem of forming linguistic and sociocultural competence in preschool children. The problem of linguistic and sociocultural competence formation is very important while teaching the English language to preschool children. At the age children learn how to use their native language. As well as a second language at the same time they can better get the linguistic and sociocultural information of other countries. The author of the article thinks that the realization of this issue can be achieved through the use of authentic materials, such as: songs, poems, fairytales, etc. [3]

The problem is relevant in modern society. The ideas about the importance of parallel study of language and culture appeared in the nineteenth century within the so-called direct methods of language learning. These methods have the emphasis that each language reflects different worldviews and different systems of concepts, as well as the of values of the representatives of other linguistic cultures, which the learners it these foreign languages are to be familiarized. And this circumstance make up a certain scientific problem.[2]

In order to address these issues, the linguistic and socio-cultural competence should function successfully in intercultural communication. This provides mutual understanding of the partners being the representatives of various cultural and linguistic communities with numerous differences. Mastering a foreign language, preschool children will get acquainted with the world of another culture. Thus, the major purpose of the method of teaching foreign languages is to develop country study motivation. At the heart of this motivation is the interest to communicate directly life abroad, with the people of the country whose language is being studied. [3]

In the process of this work, dramatization is an effective means of attracting preschoolers to the culture of the country whose language is being studied. It will allow children to place themselves in the role of a foreign-speaking character and to somehow feel some of the features of this characters life. Another means of forming socio- cultural competence in preschool children is the use of video materials of the country whose language is being studied. [1]

To ensure effective communication between the representatives of different cultures, it is not enough to overcome only the language barrier, but also to

overcome the cultural barrier. Children must understand the meaning of the knowledge of both native culture and the culture of other countries.

## REFERENCES

1. Гальскова Н.Д. Межкультурное обучение: проблема целей и содержания обучения иностранным языкам / Н.Д.Гальскова // Иностранные языки в школе. – 2004. – № 1. – С.3-8.
2. Елизарова Г.В. О природе социокультурной компетенции / Г.В.Елизарова // *Studia Linguistica*. 8. Слово, предложение и текст как интерпретирующие системы.– СПб.: Тригон, 1999. – С.274-281
3. Редько В.Г. Компетентнісно орієнтоване навчання іноземних мов учнів початкової школи: лінгводидактичний аспект / В.Г.Редько // Проблеми сучасного підручника: зб. наук. праць/ [ред. кол.; голов. ред. – О.М.Топузов]. – К.: Педагогічна науковий вісник ужгородського університету. Серія: «педагогіка. Соціальна робота». – 2017. – ВИПУСК 2 (41) 23 думка, 2017. – Вип.18. – 282 с

**A. Zaruba,**

*Lwowski instytut gospodarki i turystyki  
Kierownik badań: H.O. Wypasniak,  
Lwowski instytut gospodarki i turystyki*

## MIEJSCE NOWYCH TECHNOLOGII W USŁUGACH HOTELARSKICH

W ostatnich latach rośnie zainteresowanie tematyką innowacji w wielu różnych branżach, zwłaszcza w branży turystycznej i hotelarskiej. To prowadzi do powstania licznych opracowań naukowo-badawczych w zakresie innowacji turystycznych<sup>1</sup>. Przegląd badań w tym obszarze pozwala stwierdzić, że opracowania te wciąż jednak są fragmentaryczne i rozproszone, ponieważ jedni badacze koncentrują się na analizie wymiaru ekonomicznego, z kolei inni – na czynnikach determinujących zmiany czy też roli przedsiębiorczości<sup>2</sup>.

A.-M. Hjalager wyróżnia pięć rodzajów innowacji w turystyce:

- 1) *innowacje produktowe (usługowe),*
- 2) *innowacje procesowe,*
- 3) *innowacje w zarządzaniu,*
- 4) *innowacje marketingowe*
- 5) *innowacje instytucjonalne*

---

<sup>1</sup> OECD, *Innovation and growth in tourism*, Organization of Economic Cooperation and Development, Paris 2006; M. Peters, B. Pikkemaat, *Innovation in hospitality and tourism*, Haworth, Binghamton 2006.

<sup>2</sup> E. Paget, F. Dimanche, J.-P. Mounet, *A tourism innovation case. An actor-network approach*, "Annals of Tourism Research", vol. 37, no. 3, 2010, pp.828-847.

Rozwiązania technologiczne oraz innowacje z nimi związane, będąc podstawą koncepcji innowacji procesowych, często wykorzystywane są razem z przebudowanym planem technicznym wykorzystywanych czynności manualnych. Dobrym przykładem tego rodzaju innowacji w turystyce mogą być rozwiązania procesowe w kuchniach poszczególnych restauracji.

Technologie odgrywają dziś dużą rolę w naszym życiu codziennym. Nasze technologie – telefony, samochody etc. – stają się coraz doskonalsze. Dlatego hotele muszą być również rozwijać się technologicznie, aby zaspokajać potrzeby gości.

Starwood Hotels & Resorts Worldwide, Inc. jesienią 2014 roku wprowadził na rynek Starwood Preferred Guest® (SPG®) Keyless, mobilny i bezkluczkowy system wejścia, który umożliwia gościom korzystanie ze smartfonu jako klucza do drzwi pokoju hotelowego.<sup>3</sup> Dzisiaj Keyless SPG firmy Starwood jest najpopularniejszą technologią bezkluczową w hotelach tej sieci.

Starwood wprowadza również SPG Keyless, aby umożliwić wielu gościom korzystającym z tego samego pokoju możliwość korzystania z centralnego zamka. Potrzebują tylko konta SPG i aplikacji SPG.

Digitalizacja procesów biznesowych w sferze hotelowej pozwala również na wdrażanie wysokich technologii w typowych hotelach.

Na przykład Brytyjska sieć hotelowa Village Hotels niedawno wprowadziła swoje samoobsługowe kioski hotelowe, które są oparte na chmurze pracującej dzięki systemowi zarządzania hetras. Nowe partnerstwo oznacza, że goście Village Hotels mogą wygodnie zameldować się w pokojach bez konieczności konsultowania się z tradycyjnym konsjerżem.<sup>4</sup>

To tylko nieliczne innowacje, które hotele zapewniają swoim gościom, przecież istnieje wiele innych innowacji, które hotele muszą połączyć, aby stworzyć atmosferę komfortu. Więc dzisiaj jest dobry czas na tworzenie i wprowadzanie innowacji. Nowoczesne technologie pozwalają nam uprościć życie gości, sprawić, że będą czuli się jak w domu.

## BIBLIOGRAFIA

1. OECD, *Innovation and growth in tourism*, Organization of Economic Cooperation and Development, Paris 2006; M. Peters, B. Pikkemaat, *Innovation in hospitality and tourism*, Haworth, Binghamton 2006.
2. <sup>1</sup> E. Paget, F. Dimanche, J.-P. Mounet, *A tourism innovation case. An actor-network approach*, "Annals of Tourism Research", vol. 37, no. 3, 2010, pp.828-847.
3. Starwood Expands SPG Keyless Locations and Functionality, Hospitality technology [Zasób elektroniczny]: <https://hospitalitytech.com/starwood-expands-spg-keyless-locations-and-functionality>

---

<sup>3</sup> Starwood Expands SPG Keyless Locations and Functionality, Hospitality technology [Zasób elektroniczny]: <https://hospitalitytech.com/starwood-expands-spg-keyless-locations-and-functionality>

<sup>4</sup> Digitized Check-In Kiosks, TrendHunter.com [Zasób elektroniczny]: <https://www.trendhunter.com/trends/self-service-hotel>

4. Digitized Check-In Kiosks, TrendHunter.com [Zasób elektroniczny]:  
<https://www.trendhunter.com/trends/self-service-hotel>

***M. Zarukina***

*Lwiwer institut für Wirtschaft und Tourismus*

*Wissenschaftlicher Leiter T. I. Perunchak*

*Lwiwer institut für Wirtschaft und Tourismus*

## **ARTEN UND SORTIMENT DES FISCHKAVIARS**

Als Rogen wird die Gesamtheit der reifen Eier weiblicher Fische und anderer Meerestiere wie Seeigel, Garnelen und Muscheln bezeichnet. Der Rogen der Störe wird als (echter) Kaviar bezeichnet und als Delikatesse vermarktet.

Herstellung des Fischkaviars. Stör wird in Netzen gefangen und schonend behandelt. Eier werden zu Lebzeiten durch einen "ikryanshik" (Kaviarhandler) entnommen. Eimembranen verschlechtern sich und reißen, wenn der Fisch tot ist. Die Eiersäcke werden zur Trennung über eine Reihe von Sieben gerieben, mit frischem Wasser gespült und abgelassen. Fettgewebe und Membranen werden aus dem Kaviar entfernt.

Man unterscheidet vier Sorten des Störkaviars:

- Belugakaviar gilt als die feinste und teuerste der Kaviararten. Außerdem ist er mit 3,5 mm Durchmesser der größte. Die Eier sind hellgrau bis anthrazitfarben und mit einer sehr dünnen Haut versehen. Beim Anheben mit einem Stäbchen oder kleinen Löffel entsteht ein leises, schmatzendes oder knisterndes Geräusch - der Kaviar "singt",

- Ossietrakaviar hat einen Durchmesser von 2 mm (Russischer Stör). Im Vergleich mit dem Beluga-Kaviar ist Ossietrakaviar mehr hartschaliger. Das Korn ist silbergrau bis schwarz und hat meist einen goldenen Schimmer. Am häufigsten wird in Westeuropa der Sibirische Stör, *Acipenser baerii* gezüchtet. Der sibirische Stör bietet einen dunkleren Ossietra von anthrazit bis schwarz und ein würziges Aroma. Seine Körngröße ist je nach Alter des Störes von 2,2–2,5 mm im Durchschnitt.

- Sevruga sind die Eier des Sevruga-Stör (*Acipenser stellatus*, Sternhausen) und haben eine sehr dünne Schale und einen Durchmesser von 2 mm. Die Eier kommen in allen Grautönen vor. (rote oder orange Deckelfarbe; kräftig würzig).

Andere Kaviarsorten:

- Weißer Kaviar. Störe mit einer Pigmentstörung („Albinos“) werden gezüchtet und liefern einen gelblich-weißen Kaviar. Dieser Kaviar gilt als das teuerste Lebensmittel der Welt. Es werden jährlich nur rund 12 kg hergestellt. Eine der wenigen Produktionsstätten liegt bei Salzburg.

- Press Kaviar. «Pajusnaja» ist eine alte russische Spezialität, die nahezu in Vergessenheit geraten ist. Der Kaviar wird homogenisiert (verliert also seine Körnigkeit) und langsam in einem komplexen Trocknungsprozess verdichtet.

- Lachskaviar wird nicht als klassischer Kaviar bezeichnet, weil die Eier eine natürliche rötliche Färbung aufweisen und wesentlich größer sind, dasselbe gilt für die im Vergleich zum Lachskaviar etwas kleineren Eier des Forellenkaviars.

In der japanischen Küche wird eine große Anzahl verschiedener Sorten benutzt, darunter die folgenden, welche vor allem roh in Sushi verarbeitet werden: Ikura – Lachsrogen. Große, rot-orange Einzelkugeln. Kazunoko – Heringsrogen, gelb oder blassrosa. Ist von Oberfläche und Aussehen fest und gummiartig und wird normalerweise eingelegt. Tobiko– Rogen von fliegenden Fischen, sehr knusprig, rötliches Orange. Mentaiko – Alaska-Seelachsrogen, gewürzt mit Paprika und umwickelt mit einer dünnen, elastischen Membran. Mentaiko ist normalerweise rosa bis dunkelrot.

### LITERATUR

1. Kaviarsorten [Website]: <https://www.kaviarsorten>
2. Kaviar [Website]: <https://de.wikipedia.org>
3. Kaviar – das schwarze gold russland [Website]: <https://www.gutekueche.at/kaviar-das-schwarze-gold-russlands-artikel-1030>

*E. Zhuravlyova, C. Gubko*  
*Research supervisor: E.A. Belaya,*  
*Candidate of Pedagogical Sciences,*  
*Professor*  
*Baranovichi State University*  
*Language tutor: E.V. Shilo*

### «SMALL MOTHERLAND» IN THE TEXT OF LITERATURE AND CULTURE

2019 is declared as the Year of the Small Motherland in the Republic of Belarus. This decision was made «... in order to stimulate the socio-economic development of the regions, the formation of an active citizenship among the population, the preservation of historical, cultural and spiritual heritage» [1]. In modern literary studies, there is an actual interest in the so-called local texts. We believe that Baranovichi region is an object of historical and cultural landscape, with a rich potential for research in this direction. It causes stable associations with such historical events as the First World War, the division of Belarus according to the Riga Treaty of 1920 and its reunification in 1939. A month after the reunification of Western Belarus with the BSSR, Baranovichi region was formed, which existed until 1954. It also included the ancient city of Novogrudok, the first capital of the Grand Duchy of Lithuania (now it is located in Grodno region). This fact allows us to expand the concept of «Baranovichi text» by introducing to the study works of art dedicated to the land of Novogrudok. This is the very cultural landscape in which the national history symbolically displayed, both majestic and tragic.

We set a goal to include such a bright page as the poem of the millstones of slander in the local text of our small homeland – Baranovichi region. The poem was written by Ales Yagodnitsky, whose childhood and youth were spent in Novogrudok, which belonged to Baranovichi region. The hero of the poem, miller Tikhon Soroka, a hard-working and honest man, finds himself in difficult life circumstances that are emerging at the beginning of World War II. This time is characterized by the author's metaphor «between the swastika and the star» [2, p.192]. Having fear for the fate of loved ones, Tikhon formally agrees to cooperate with the German police, but in fact renders assistance to Soviet soldiers who were surrounded and were hiding in the mill. At the end of the war no one could confirm this fact of his biography; Tikhon is arrested and expelled. The traitor's mark, the «enemy of the people» remains on him even when he returns home. So that it would not break the lives of grandchildren, Tikhon decided to commit a suicide. The finale of the poem (in the spirit of the Soviet time) is filled with optimistic pathos, but the whole artistic structure of the work stimulates the reader to think over the fate of the individual in the common fate of the nation and on the fate of their small homeland during times of severe trials for all humanity. A separate page of the work is an image of the post-war Novogrudok, the majestic traces of its ancient history and the dramatic marks of new time.

Thus, in the modern socio-cultural space of Belarus, two trends are actualized, which guide us in our research. The first is the all-round attention of the state and society to the «small homeland». The second is the formation of a local text as a scientific problem. Their successful implementation will certainly contribute to the formation of civic consciousness and youth spirituality. We consider the possibility of presenting the results of research in a foreign language as one of the conditions for professional self-improvement.

#### REFERENCES

1. Афіцыйны інтэрнэт-партал Прэзідэнта Рэспублікі Беларусь [Электронны рэсурс]. – Рэжым доступу: <http://president.gov.by/by/>. – Дата доступу: 27.03.2019.
2. Ягадніцкі, А. Выбраныя творы / А. Ягадніцкі. – Баранавічы : Выдавец А. Г. Хахол, 2018. – 230 с.

**A. Zinchuk**

*Research supervisor: A. P. Stadnichenko,  
Doctor of Natural Sciences, Professor  
Zhytomyr Ivan Franko State University  
Language tutor: T.Yu. Biloshytska*

## **THE MOST COMMON HELMINTHIASIS OF UKRAINE**

Helminths are worms causing a wide variety of diseases globally called helminthiasis. Helminthiasis are the most common and most massive parasitic diseases of man, in which there are complex interactions between two living organisms - a parasite and a host. Helminthiasis are illnesses, caused by parasitic worms - helminths. Diseases in humans cause more than 250 types of worms, about 20 of them are found in Ukraine.

Helminthiasis are caused by the parasitic worms of three classes: round worms — nematodes (Nemathelminthes), cestodes (Platyhelminthes) and trematodes (Trematoda). The source of helminths can be the infected people (anthroponosis helminthiasis) and zoo (zoonotic helminthiasis) [1, p.4].

Helminths have a difficult biological cycle of development, including a few stages: egg, larva (sometimes a few stages), adult worm. An epidemic process depends on the features of biology of parasite. The infected people present a direct danger for circumferential only at contact helminthiasis (enterobiasis, hymenolepiasis). At an enterobiasis eggs arrive at maturity in the perianal folds, at hymenolepiasis mature eggs are selected with feces. An infection takes place at a domestic contact with a patient through the articles of everyday life and dirty hands.

### **REFERENCES**

1. Manual of helminthiasis : for the students of medical faculty / comp. E. V. Ryabokon, T. E. Onishchenko, L. O. Ushenina [et al.]. - Zaporozhye : [ZSMU], 2013. – 66 p.

**ДЛЯ ПОДАТОК**

# ДЛЯ НОТАТОК

**ДЛЯ ПОДАТОК**

Наукове видання

**Україна. Європа. Світ: актуальні проблеми та міждисциплінарні  
досягнення розвитку іншомовної компетентності**

Матеріали V Міжнародної науково-практичної студентської конференції

**17 квітня 2019 року**

Надруковано з оригінал-макета авторів  
Підписано до друку 13.04.19. Формат 60x90/16. Папір офсетний.  
Гарнітура Times New Roman. Друк різнографічний.  
Ум. друк. арк. 13,75. Обл. вид. арк. 13,01. Наклад 100. Зам. 28.

---

Віддруковано ФО-П Левковець Н. М.  
Свідоцтво про державну реєстрацію суб'єкта підприємницької  
діяльності – фізичної особи: серія ВОО №762297 від 15.02.2005 р.  
Електронна пошта: levkovetz@ukr.net