

**КОСТАНАЙСКИЙ ГОСУДАРСТВЕННЫЙ
ПЕДАГОГИЧЕСКИЙ ИНСТИТУТ**

ЕСТЕСТВЕННО-МАТЕМАТИЧЕСКИЙ ФАКУЛЬТЕТ

КАФЕДРА ИНФОРМАТИКИ И КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ



**Материалы Студенческой научно-практической конференции
"Модернизация современного образования"
14 апреля 2017 г.**



г. КОСТАНАЙ, 2017 г.

УДК 37.031.2(063)
ББК 74.2
М74

М74 Модернизация современного образования. Материалы студенческой научно-практической конференции, 14 апреля 2017 г., г. Костанай. – 279 с.

ISBN 978-601-7934-00-2

В сборнике представлены научные, научно-методические статьи, написанные по материалам докладов студенческой научно-практической конференции, проходившей в Костанайском государственном педагогическом институте 14 апреля 2017 года. В конференции приняли участие студенты Естественно-математического факультета, более 80 статей по 7 специальностям.

Материалы конференции содержат фундаментальные, научные, прикладные проблемы исследований по направлениям: биология, химия, математика, физика, география, информатика, проблемы образования и воспитания в общеобразовательных учреждениях.

Материалы конференции предназначены для бакалавров, магистрантов, и других категорий исследователей.

Научные редакторы: д.и.н., профессор Абиль Е.А., к.т.н., доцент Сухов М.В., к.т.н., доцент Еслямов С.Г., доцент Тобылов К.Т., к.э.н.

ISBN 978-601-7934-00-2

© РГП на ПХВ «Костанайский государственный педагогический институт», 2017

СОДЕРЖАНИЕ

Секция 1. Географические науки и их применение в образовательном процессе	
<i>Баубекова Г.К., Зайтинова Г.Х.</i> Изучение интересов студентов ЕМФ во внеучебное время	7
<i>Баубекова Г.К., Федорова Ю.В., Горбунов Д.С.</i> Изучение уровня географической грамотности среди студентов КГПИ	9
Секция 2. Актуальные проблемы биологии и ее внедрение в образовательный процесс	
<i>Суюндиқова Ж.Т., Зарлықанова Ә.Т.</i> Жоғары оқу орындарының студенттерінің денсаулығы	15
<i>Уразымбетова Б.Б., Альманкулова.А.</i> Қостанай облысының климат жағдайында жидені өсірудің тиімділігі	18
<i>Уразымбетова Б.Б., Капанова Г.</i> Биология сабағында «Жыртқыштар отряды» тақырыбына жергілікті материал ды пайдалану	20
<i>Брагина Т.М., Баянбекова Ж.Б.</i> Анализ разнообразия основных семейств пауков (ARANEI) Костанайской области	23
<i>Брагина Т.М., Воеводина А.В.</i> Биология и экология колорадского жука (COLEOPTERA: CHRYSOMELIDAE) в условиях Северного Казахстана	25
<i>Брагина Т.М., Збираник Д.А.</i> Материалы к фауне в экологии шитоносок рода CASSIDA (COLEOPTERA, CHRYSOMELIDAE) Костанайской области	27
<i>Брагина Т.М., Молдабекова А.Е.</i> Изучение членистоногих семейство нарывники (COLITERA, MELOIDAE) Костанайской области	30
<i>Кубеев М.С., Айтжанова Д.С.</i> Қостанай облысындағы қосмекенділер мен бауырымен жорғалаушылар	32
<i>Уразымбетова Б.Б., Бугасова З.А.</i> «Биология» пәнінен зертханалық және практикалық сабақтарды өткізу	35
<i>Уразымбетова Б.Б., Досекин А.Б.</i> "Қан айналу жүйесі" тақырыбына биология сабағынан оқыту әдістемесі	37
<i>Уразымбетова Б.Б., Кожбанова И.Е.</i> Биология сабағында саралап деңгейлеп оқыту технологиясын қолдану	40
<i>Ахметчина Т.А., Такенова Н.</i> Білім беру саласында ақпараттық-коммуникациялық технологияларды пайдалану	42
<i>Кожмухаметова А.С., Студент А.</i> Бақша бүлдіргенінің (FRAGARIAANANASSA) модификациялық өзгергіштігі және оны оқып үйрену әдістері	44
<i>Кожмухаметова А.С., ж.ғ.м., Байбусинова Н.Ж., Шолақсай ауылы аймағының флорасы</i>	48
<i>Валяева Е.А., к.б.н.,Кужахметова А.Ю.</i> Видовой состав и некоторые биологические особенности земноводных Денисовского района Костанайской области	52
Секция 3. Анализ объектов окружающей среды и современные подходы в преподавании химии в школе	
<i>Важева Н.В., Ергалиева Э. М., Абдуллина Д.М.</i> Динамика активности окислительного фермента пероксидазы при хранении растительной продукции	56
<i>Жумағалиева Б.М., Худайбергенов Н.М.</i> Ақаба судың құрамындағы мыс, темір иондарын анықтау	59
<i>Абдыкаликова К.А., Ахмет А.И.</i> Кәдімгі жантақтың (ALHAGI PSEYDALHAGI) жер үсті бөлігінің құрамындағы биологиялық белсенді заттарын зерттеу	64
<i>Абдыкаликова К.А., Молдашова А.А.</i> Қызыл мияның (GLYCYRRHIZE GLABRA L) жерүсті бөлігі мен тамырындағы биологиялық белсенді заттардың мөлшерін зерттеу	68
<i>Жұмағалиева Б.М., Райымқұлова М. Қ.</i> Әртүрлі тағамдық өнімдердің құрамындағы темірдің мөлшерін зерттеу	72
<i>Таурбаева Г.У., Жұмағалиев А.А.</i> Металдарды оқыту әдістемесі	74
<i>Важева Н.В., Ергалиева Э.М., Курманаев А.А.</i> Методический подход к использованию	77

анимированных схем на занятиях по биохимии	
Жұмағалиева Б.М., Ахметова А.Б. Ерітіндідегі фосфор қышқылының массасын анықтау	81
Секция 4. Особенности обучения и преподавания физико-математических и технических наук в современной образовательной системе	
Касымова А.Г., Ташетов М. М. Мектептегі математика курсыңда есептерді пайызбен шешу әдістемесі	84
Асқанбаева Ф. Б., Әбдіхан Г.Е. Параметрлері бар теңдеулер мен теңсіздіктерді шешу әдістері мен классификациясы	86
Калжанов М.У., Байбулатова А.М. Решение текстовых задач в средней школе	90
Калжанов М.У., Кузьмина И.В. Реализация модуля «Обучение критическому мышлению» для развития математической компетенции обучающихся	93
Демисенов Б.Н., Адильбекова Г.С., Ермакова Т.А., Катунина А. П. От Ферма и Эйлера до Куммера	97
Абдимоминова Д.К., Байраханов.Н.Б. Ағаштан кәдесый жасау	100
Касымова А.Г., Гаппаров Ж.А. Молекулалық физика бөлімінде электронды оқулықты пайдаланудың мүмкіншіліктері мен ерекшеліктері	103
Телегина О.С., Ерназар А.Е. Факультативный курс на базе STEM-образования	105
Касымова А. Г., Әлиериев Б.С. «Стационар теңдеулер үшін қойылған шектік есептер және оларды шешудің әдістері»	108
Доспулова У. К., Жусупова Д. Н. Коэффициенттері тұрақты сызықтық дифференциалдық жүйені шешудің матрицалық әдісі	112
Доспулова У.К., Кинтаева З.С. Ряды Фурье и их применение в теории дифференциальных уравнений	115
Жигитов А.Б., Момбеков Е.Ө. Ағаш-цемент композиттарынаң тұратын материалдарының құрылуын жасалуының жалпы мүмкіндіктері және ерекшеліктері	120
Нупирова А.М., Абдилазизов Ш.А. Орта мектептегі физика курсыңда "Жұмыс" және "Энергия" ұғымдарын қалыптастыру әдістемесі	123
Комиссаров С.В., Карабекова Н.Г. Изготовление изделий казахского быта с применением национального орнамента	125
Калаков Б.А. Гордиев А.А. Наглядный эксперимент, как средство формирования познавательного интереса учащихся к физике	128
Калаков Б.А., Исмагулова А.М. Үшбұрыштың тамаша нүктелері мен сызықтарының геометриясы	130
Калаков Б.А., Қошқарбек Н.Ж. Мектеп курсыңдағы туынды және интегралға факультативтік сабақтар	134
Абдимоминова Д.К., Карабасов И.С. Асыл тастардан әшекейлер жасау	137
Беркімбаи Р.Ә., Куникеева Д.Н. Математиканы оқытудың қолданбалы және практикалық бағытын жүзеге асыру жолдары	139
Касымова А.Г., Максакбаева С.К. Роль и место текстовых задач на уроках математики в 5-6 классах	143
Утина Р.К., Момыңғали Б.М. Оқу процесіндегі қолданатын ойындар және оның түрлері	145
Асқанбаева Г.Б., Мырзатаева А.Қ. Геометрия пәнінен 7 сыныптарға факультативті сабақтарды өткізу әдістемесі	148
Нупирова А.М., Дандыбаев С.Т. Физика сабағында оқушылардың білім, білік және дағдысын тексерудің жолдары	152
Абдимоминова Д.К., Тыңғазы А.Е. Шағын пәтерге арналған жиналмалы керует жасау технологиясы	154
Шағиахметова Л.М., Уразов. М.А. Способы утилизации и применения пластиковых бутылок	157
Касымова А.Г., Шамганова Н.Б. «Электродинамика» тарауы бойынша оқушылардың	160

<i>Ерсултанова З.С., Зиятов А. Turbosite-жобалық жұмыстар жасау құралы</i>	234
<i>Ерсултанова З.С., Одаманова М. Интерактивтік технология негізі - педагогтардың шеберлігі және шығармашылығы</i>	238
<i>Ерсултанова З.С., Раман Ұ., Құралбай Ұ. Интерактивтік оқыту технологиясын қолдану арқылы білім алушының мамандыққа деген қызығушылығын арттыру</i>	240
<i>Есултанова З.С., Жақсылықов С. Mathcad бағдарламасының мүмкіндіктері</i>	243
<i>Айтбенова А.А., Сәбит З.С., Байбосынова Ә.Б. __VivaVideo бағдарламасының мүмкіндіктерін қолданып бейнеролик жасау</i>	246
<i>Еслямов С.Г., Брусник С. Новые средства программирования</i>	248
<i>Радченко П.Н., Мухаметов Т.Р. К вопросу сравнения лицензионных графических редакторов и графических редакторов свободного доступа</i>	251
<i>Сухов М. В., Шкаленко С. Ф. Внедрение курса «Основы робототехники в школе»</i>	254
<i>Danilova V.V., Purchel E.I. Web-quests at the english lessons</i>	256
<i>Danilova V.V., Tankibaeva D. Information and communication technologies in english learning</i>	260
<i>Danilova V.V., Dolgushkina D.A. G-Global - communicative platform</i>	265
<i>Tobylov K.T., Porova P. Specialized social networks</i>	269
<i>Тобылов К.Т., Антощук В.М. Типология электронных учебных пособий в образовательном процессе</i>	272
<i>Б.Жұмағалиева Ырысалды Жақанқызын еске алу</i>	277

- 5) Expodisc;
- 6) “Real-life” simulations;
- 7) video conference.

Advantages:

1. The information required will be more quickly and easily accessible for educational purposes.
2. Innovation in learning is growing in the presence of e-learning innovations that further facilitate the educational process.
3. Progress of ICT will also allow the development of virtual classroom or classroom-based teleconference that does not require the educator and learners are in one room.
4. System administration in an institution will be more easily and smoothly because of the application of ICT systems.

Disadvantages:

1. Progress of ICT will also occur of violation of Intellectual Property Rights (IPR) for the easy access to the data that is causing people plagiatis will commit fraud.
2. Although the system of the administration of an educational institution like a system without a gap, but if there is a recklessness in running the system would be dangerous.
3. One of the negative impact of television is to train children to think short and survive concentrated in a short time (short span of attention).

ICT is a form of advanced science technology must be optimized function, especially in the implementation of learning. ICT provides opportunities for students in the era of global competition needs to obtain adequate supplies. through innovative ICT-based learning can provide vast opportunities for students to hone and promote competence on an international scale. On the other hand, mental attitude and self-reliance in accessing any information necessary learning independently influence the value teaching student’s character it does not always depends on others [4].

BIBLIOGRAPHY

1. Davi U.K. Ltd.es, B. Dan Ellison, L. (1992).*School Development Planning*. Essex: Longman Group
2. Hartoyo (2008). Individual Differences in Computer-Assisted Language Learning. Semarang: Pelita Insani Semarang
3. Victoria L. Tinio, (1999). Modifying teaching through ICT. The American journal. 12, 56-63
4. E-source URL: <https://prinzessinnadia.wordpress.com/2013/02/01/ict-in-english-language-teaching-and-learning/>

G-GLOBAL.COMMUNICATIVE PLATFORM

*V.V. Danilova, c.p.sc., MD in Psychology and Pedagogy, seniour teacher of Foreign Languages Department
D.A.Dolgushkina, Foreign Language, 1st course*

Introduction

In order to implement the initiative of the President of the Republic of Kazakhstan Nursultan Nazarbayev, on 12th of January, 2012 the «Eurasian Economic Club of Scientists» Association launched smart network in the format of communicative Internet platform «G-Global»

1. «G-Global» is a versatile platform that creates conditions for the international expert community for interactive, open and public discussions, debates concerning the issues of the global economy.

The project is focused on discussion and elaboration of mechanisms to overcome the global financial crisis and is aimed to radically expand the number of participants in search of anti-crisis solutions.

From advantages of G-Global it is possible to allocate:

- A large number of unique information is available to downloading and use.
- Articles and discussions which have received the greatest number of responses and caused a wide response, are reflected in pages of the magazine of the Euroasian economic club of scientists - Eurasian Economic Review which leaves on a quarterly basis.
 - The unpublished materials placed during the period between annual forums automatically participate in the annual competitions G-Global in various nominations with a possibility of obtaining in a festive atmosphere diplomas and monetary prizes from organizers. In addition these competitions are an excellent opportunity to declare oneself as the worthy participant of a large-scale event of the world importance to make the contribution to improvement of an economic situation in the world. habitual things "nonprofessionals" on events in the world around)
 - Integration with the social networks focused on business professional communication
 - Unprecedented interaction with the platform of the Astana economic forum and harmonious transition to the offline mode with continuation of a debate in the course of work of a forum
 - Unique intellectual platform: 21 Nobel laureates, entering into the Astana club of Nobel Prize laureates, have made the contribution to development of G-Global.

2. STATISTICS

Statistics of the G global includes:

- registered more than 135 000 panelists
- published more than 15 000 papers and research materials
- taken more than 50 000 peer reviews
- presented more than 1 500 recommendations
- conducted more than 400 online video conferencing
- more than 1 million visits from 170 countries

G-Global Mission

Improvement of the operating efficiency of the global community through a single and equal dialogue between the peoples of the world, carrying out of researches, elaboration of recommendations and programs on current issues and trends of development of national economies and the global community through the involvement of a wide range of representatives of government, public, information and business structures.

Objectives and Tasks of G-Global

Creating the conditions for the global expert community for interactive, open and public discussions and debates.

Bringing together representatives of governments, major international organizations, scientific and business communities to develop the project of World Anti-Crisis Plan (draft plan of the global reforms).

Exchange of views between different segments of population, representatives of different sectors and levels of government by placing and receiving analytics, forecasts and recommendations in online mode.

Using a wide range of experts from around the world in on-line mode for elaboration, improvement and evaluation of measures on:

- stabilization of the international monetary system and regulation of financial markets;
- introduction of supranational payment unit (and then currency) of a fundamentally new class;
- creation of a nuclear-free world, promotion of global security, first of all, in the Euro-Atlantic and Eurasian space;
- expansion of cultures and civilizations dialogue, implementation of global energy and environmental development concepts, including Kazakhstani initiative «Green Bridge».

3. In general, the idea of G-GLOBAL of all for half a year after start has shown the improbable demand.

Because of this idea there comes the opportunity to find the response to the system crisis which has struck global economy, moral foundations of the world and the international relations. G-GLOBAL considers the increased influence level in geopolitics and geo-economy of non-state actors - the international non-governmental organization, private structures, the multinational companies, politicians and citizens of various countries of the world. As the civilization idea of information era of G-GLOBAL is focused on all countries, all zones of Internet space, millions of users of Worldwide network interested in reforming of the world and creation of a fair and safe world order. I am convinced that together we will be able to achieve a main goal of G-GLOBAL - to offer the world community attractive and effective model of world relationship in the 21st century.

4. The communicative G-GLOBAL platform created at the initiative of Kazakhstan became some kind of public diplomacy. G-GLOBAL not just unilateral information transfer, but conducting dialogue on the most topical global problems of mankind which need to be resolved the whole world. Important in this row as the example of development of the state with centuries-old history, becomes the forthcoming World Fair EXPO-2017 - a peculiar deification of technological and innovative and historical and cultural development of the nation.

5. As a teacher, you can use the G Global articles to create exercises such as true or false , also as tasks to understand the text with questions for verification.

Also materials from G-global can be used for ordinary reading. So students not only improve their reading skills but are also aware of the developments in the scientific environment.

On the platform G-global, articles are posted both in Russian and in English. We think that it's a great advantage for preparing exercises for translation. In this way, students can learn terms from various areas that in the future will be very useful.

To improve their writing, students can write articles that will later be published directly on the platform itself.

Advantages of publishing publications for students:

- Issue of a collection of the best works for the forum - from the posted material on the site will be selected the best publications for further posting in the collection to the forum;
- Exchange of scientific ideas and experience with researchers from all over the world;
- Establishing scientific contacts at the global level;
- Work is underway to assign the status officially published for all scientific articles and publications posted on the G-Global website;
- Conducting competitions for the best solutions to pressing global problems, for example, the issue of a single world currency.

We choose this topic for research because it seems to us that improving the language skills with the help of not just art texts but also texts or tasks with very diverse terminology from very different areas is very effective.

Exercises in English - is the main way to consolidate the information studied and the repetition of the previously traversed material. We necessarily practice the whole theory on exercises, because it is the repeated use of certain rules in practice and gives its positive result, leaving in our memory information on the English language.

Ex:

<http://group-global.org/ru/publication/54689-foreign-language-cross-cultural-communication-aspects-learning-languages>

Task 1. True or False?

1) World processes in global education haven't impact on the development of education in Kazakhstan. **F**

2) Language changes the basis for effective international and intercultural understanding. **F**

- 3) New socio-economic and political situation leads to the increase of requirements to the level of language proficiency of the learners.T
- 4) Each culture sets a range in which the boundary separating one name from another.T

Task 2. Match the words with their definition:

Language	Process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits.
Cross-cultural communication	Cultural determinant that determines the human perception of reality on which he speaks and expresses his thoughts.
Education	Field of study that looks at how people from differing cultural backgrounds communicate

Task 3. Complete the sentences with words below.

- 1) Stepping up with the times, our country is looking for new ways to enter the global arena of _____.
- 2) In the new situation of development of society the _____ becomes a category, a real need in a practical and intellectual activity of man.
- 3) For representatives of other cultures the same color is given another _____.
- 4) Therefore, the psychological aspect of cross-cultural is an important factor of _____ when learning a foreign language.

Science and technology, knowledge of a foreign language, interpretation communication

Task 4. Answer the questions.

- 1) How do you think what is language?
- 2) Because of what factors do we need to strengthen the psychological orientation of foreign language teaching?
- 3) What is the paradox of culture according to E. Hall?

Task 5. Write a 3-4 sentences using each of these words.

Foreign language, cross-cultural communication, aspects of learning languages, development, educational system, knowledge, professional competitiveness.

Ex:

The advantages of using games in teaching a foreign language

<http://group-global.org/ru/node/34285>

Task 1. Explain the highlighted words.

- 1) The **President** of the Republic of Kazakhstan Nursultan Abishuly Nazarbayev in his address in 2012, "**Knowledge** of three languages should become a standard practice for us," to the Kazakhstani's citizens emphasized that, "We need the English **language** to enter the global arena."
- 2) Game forms can be used at all levels of learning, from the reproductive **activity** by transforming the **main goal** - creative-search activities.
- 3) In our **opinion** phonetic games should teach people to pronounce correctly by training them to associate letters with their phonetic values.

Task 2. Put the words in the correct order.

- 1) Games, students, are, vocabulary, these, to assist, in, and expanding, acquiring, designed.
- 2) "Is, a **game**, rules, fun, a goal, and, with, an element, an activity, of."
- 3) Can, acquisition, making, lower, anxiety, thus, likely, games, the, of, input, more.

Task 3. Correct the following sentences.

- 1) Fictional examples of language used that are simpler than our own everyday language
- 2) Creative-search activity is more effective if it is preceded by reproduce and transforming activity in which students learn the techniques of teaching.
- 3) As we move forward phonetic games are implemented at the level of words, sentences, rhymes, tongue twisters, poems and songs.

Task 4. Translate these sentences into Russian.

- 1) We are strongly confident that lexical games' purpose is to focus students' attention solely on the lexical material.
- 2) To sum up, games have a great pedagogical value providing language teachers with many advantages when they are used in foreign language classes.
- 3) The experience gained in games of this type can be used by students in the classroom in the future in a foreign language.

REFERENCES:

1. Theses from the Speech of the President of the Republic of Kazakhstan Nursultan Nazarbayev at the V Astana economic forum, on May 23, 2012.
2. <http://group-global.org/ru>
3. <https://greenkaz.org/index.php/component/k2/item/848-info-kommunikativnaya-ploshchadka-g-global>
4. <http://engblog.ru/exercises>

SPECIALIZED SOCIAL NETWORKS

*Tobylov K.T., c.e.s., ass.proff. of KSPI
Popova P., Foreign Language, 1st course*

The way we communicate has changed and social networks are now the center of our daily lives. We update our friends about our whereabouts, discuss what we had for dinner and post updates on events and cool articles we've read (feel free to share this one too).

Social networking sites (SNS) are examples of Web 2.0 technologies, which can help people find connections that may be hidden in the real world. «A social network is a social structure consisting of individuals or organizations that are like-minded and are tied by specific types of interests, values, visions, friendships, kinships, lifestyles, etc» (Northern Illinois University, 2009). Social networking sites are not only creating connections between people, but also providing great value for the educational sector and other organisations. Current popular social networking sites include FaceBook, Twitter, Instagram, ВКонтакте, LinkedIn, Friendster, MySpace, Hi5, Bebo, and Windows Live Space.

- Facebook
- Twitter
- Instagram
- ВКонтакте
- LinkedIn
- and other.

