



# EUROPE, SCIENCE AND WE EVROPA, VĚDA A MY ЕВРОПА, НАУКА И МЫ

INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE

JUNE, 2020 | PRAHA, CZECH REPUBLIC



PUBLISHING HOUSE

«EDUCATION AND SCIENCE» S.R.O.



**International Conference**

**EUROPE, SCIENCE AND WE  
EVROPA, VĚDA A MY  
ЕВРОПА, НАУКА И МЫ**

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June 29-30, 2020 Praha, Czech Republic  
Conference Proceedings

**Publishing House "Education and Science"  
Praha, Czech Republic**

Publishing House "Education and Science" s.r.o.,

International Conference

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*Science editor: Tomash Nejezchleb*

**ISBN 978-80-907845-0-5**

DOI: [http://doi.org/10.37057/CH\\_1](http://doi.org/10.37057/CH_1)

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Praha, Czech Republic

# CONTENTS

## AGRICULTURE

<b>1.Alikhanov B.B.</b> To way to save the planet land resource.....	7
<b>2.Ochilov Asadulla Izzatullayevich</b> Synthesis and study of complex-forming ion exchange resins containing carboxyl groups in fresh form local raw materials.....	11
<b>3.Rahmatullayev Bobur Chorshanbievich</b> Socio-economic bases of tourism development in Uzbekistan (in the example of surkhandarya region).....	13
<b>4.Reyimov Nietbay, Jaksibay Kalimbetov</b> Improvement of productivity of natural pastures in Karakalpakstan.....	15
<b>5.Seitova L.P.</b> About some aspects of implementation of Uzbekistan's environmental policy.....	18
<b>6.Tufliyev Nodirbek Khushvaktovich, Utapov Ne'matullo Egamqulovich, Nurjonov Fozilbek Allaberganovich</b> Economic efficiency of using ulv by the barrier method against locusts in Uzbekistan.....	23
<b>7.Xabibullina Elvira, Nizamiyev Rasul</b> The purpose of the correct and rational use of water resources of the republic of Uzbekistan.....	25
<b>8.Xudoyberdieva Mavluda Ibrayimovna</b> Investigation of the structure and properties of thin silicate films.....	27
<b>9.Сайитмуродова Мохитоб Султон кизи</b> Особенности выращивания зерновые культуры в системе коротко ротационных севооборотах в южных регионах Узбекистана.....	30
<b>10.Юлдашов Мурод Хударгонович, Тешаева Фарангиз Ихтиёр қизи</b> Проблемы воздействие сельского хозяйства на окружающую среду.....	32
<b>11.Яхшибоева Дамира Толиб қизи, Йўлдошова Сабохат Зариф қизи</b> Эффективность и проблемы применения пестицидов в сельском хозяйстве.....	35

## BIOLOGY

<b>12.Мухаммадий Мадина, Ўроқов Сирожиддин</b> Growing and cultivating soya beans in the specific conditions within Samarkand region's environment.....	38
<b>13.Саидмуродова З.А, Пардаева Паризода</b> Гемоглобины человека: иммунобиохимическая характеристика и медико-биологическое значение.....	41

## CHEMICAL

<b>14.Jabbarov O., Makhkamova D.</b> Agrochemical properties and their dynamics of the soils of jizzakh region.....	44
--	----

## CULTUROLOGY

<b>15.Ibrakhimov Sanjar Urunbayevich, Kadirov Abdurashid Abduganiyevich</b> Improvement of motivation of youth to performance in physical culture and sports.....	46
<b>16.Karshiboyeva Ziyoda Farhod qizi</b> Culture is a universal human virtue.....	49
<b>17.Мамажоннова Nozima Abdusattorovna</b> Stylistic modifications of speech sounds.....	52
<b>18.Matnazarova Muhayyo Akhmetjanovna</b> Ethnocultural processes in central asia.....	54
<b>19.Shakhlo Barnaeva</b> Artistic and creative heritage of the painter of zinaida kovalevskaya.....	56

## ECONOMY

<b>20.Ibragimova Madina Ismoilovna</b> The role of marketing and implementing strategies.....	58
<b>21.Khasankhonova Nodira Isametdinovna</b> Investing in human capital as investment in the future.....	61
<b>22.Khasanova Khamida, Mamatkarimova Barno</b> Risk as an economic stage in the conditions of market reforms.....	63
<b>23.Nazar Nazarov</b> Measures to mitigate the negative impact of the coronavirus pandemic on the activities of free economic zones in Uzbekistan.....	65
<b>24.Sherkuziyeva Nasiba Abrorovna</b> Managing profits as a source of dividend payments.....	68

## HISTORY

<b>25.Kalandarova D. U., Mustafoyev A. A.</b> Current problem of religious studies "Radicalism".....	71
<b>26.Dilshod Pirmatov</b> Assessment of conquest consequences of central asia in the periodical press of the russian empire.....	74

## JOURNALISM

<b>27.Azizbek Dabylov</b> The place of the writer atajan khalmuratov in the Karakalpak journalizm.....	77
---	----

# CONTENTS

## LITERATURE

<b>28.Ibragimova Rano Isakovna</b> The breath of the period in literature.....	79
<b>29.Ruzmatova Dilnoza Ramatjanovna</b> Major Themes in "The Kite Runner".....	81
<b>30.Кадиров К.Н.Нормухамедова Мохинур</b> Тема детства и мир героев в творчестве Марка Твена.....	83

## MEDICINE

<b>31.Khamdamov Bakhtiyor Zarifovich</b> Method of laser photodynamic therapy in the treatment of wound infection in diabetic foot syndrome.....	86
<b>32.Mirzarakhimova Z.Kh., Rakhimova G.N., Mullabaeva G.U.</b> Heart rhythm disturbances in relation to diastolic dysfunction in patients with diabetes mellitus.....	89
<b>33.Muchiashvili O.R., Abdullaeva M.A. Yusupov M.M.</b> The results of surgical treatment of aortic valve disease with a small fibrous annuli.....	90
<b>34.Radjabova Zulola Abdukhakimovna</b> Damage to the placenta during infection of the fetus with herpes virus infection.....	91
<b>35.Тешаев Октябрь Рухуллаевич, Мурадов Алижон Салимович</b> Оптимизация лечение гнойно-деструктивных заболеваний мягких тканей путем применение лазерных методов.....	94
<b>36.Хомидова Н.Р., Негматуллаева М.Н., Туксанова Д.И.</b> Влияние транексама на величину кровопотери у женщин в акушерских коагулопатических кровотечениях.....	97
<b>37.Akhmedova D.I., Ruzmatova D.M</b> CLINICAL SIGNIFICANCE OF TISSUE MARKERS IN CHILDREN'S CARDIOVASCULAR PATHOLOGY.....	101
<b>38.Madina Nazirova., Dilorom Rakhimova</b> Conditions of psychovegetative factors at regulation in patients with bronchial asthma complicated by pulmonale hypertention.....	103
<b>39.Alyavi B.A., Kamilova U.K., Rakhimova D.A</b> Medical aspects of the life sick quality of chronic obstructive lung diseases.....	104

## PEDAGOGY

<b>40.Abdusamiyev Dilmurod, Abdullayev Dilshodbek, Abdurahmonov Otabek</b> Pedagogical approach to the prevention of occupational deformities.....	105
<b>41.Almatova Feruza Avazovna</b> Authentic texts in the efl classroom.....	109
<b>42.Azatbaeva Miyasar Satbaevna</b> Computer assisted teaching a language in pre-school education.....	111
<b>43.Azatbaeva Miyasar Satbaevna</b> Computers in nursery school.....	113
<b>44.Azatbaeva Miyasar Satbaevna</b> Singing is a modern approach to teach a language.....	115
<b>45.Boykulov Suhrob Sodiqovich</b> Formation of legal training aimed at competitiveness in pupils of secondary schools.....	117
<b>46.Djalilova Nilufar Dilshodovna</b> Innovative technologies in teaching speaking skills of english lesson to medical students.....	120
<b>47.Djuraeva Ra'na Bakhrombekovna</b> Principles of application of electronic educational-methodical complexes in the educational system.....	124
<b>48.Elmirzayev Farxod Begmurot o'g'li</b> Ethics of the internet.....	128
<b>49.Axmedova F., Xabibullina M.</b> Use of modern information technologies in teaching mathematics.....	130
<b>50.Karimova Diyora Abduvahidovna</b> The use of military theme phraseologies in the language of modern mass media.....	132
<b>51.Nurullayev Mansur, Isakjanova Sabokhat, Khudayberganov Nodir</b> Theoretical foundations of problem-based learning.....	134
<b>52.Otajanov J. M.</b> The formation of professional reflection of the teacher as a tool of his development.....	136
<b>53.Гафурова Севара</b> Роль коммуникативных методов при обучении иностранному языку.....	140
<b>54.ТЛЕУБАЕВА ГУЛЬНУР САГИБАЕВНА</b> Разные мнения ученых в развитии математической способности.....	142
<b>55.Фозилова Махина Адашевна</b> Интерактивные методы при обучении английскому языку студентов неязыковых вузов.....	144
<b>56.Хамраева Ирода Сайфуллаевна</b> Features of mastering reading skills by students with intellectual disabilities.....	147
<b>57.Хафизова Машхура Аминовна</b>	

# CONTENTS

---

Игровые технологии обучения русскому языку как иностранному для студентов-архитекторов.....150

## PHILOLOGY

**58.Reipova A. K.**

Some problems in teaching speaking skills.....155

**59.Khodjayeva Yulduzkhon**

The importance of communicative approach in foreign language teaching.....158

**60.Khodzhaeva Saodathan Saidullaevna**

Using motivational techniques to develop speaking and reading skills of esp learners.....160

**61.Mardiyeva D. N.**

Role-playing and business games in russian language lessons.....162

**62.Musaeva Gavhar Islomovna**

The use of zoom program in distance learning english verbs.....164

**63.Nuratdinova Jupargul Satbaevna**

Developing speaking in writing classes.....166

**64.Primbetova Guljaxon Abuovna**

Psychocorrection activities for children and adolescents who are bad-tempered.....168

**65.Хамидова Наргиза Мирвахидовна**

Сравнительный анализ глаголов японского и узбекского языка.....170

## PHILOSOPHY

**66.Kutimova Gulnara Tatlimuratovna**

Social structure of society as integrated totality of all communities functioning in it.....173

## SOCIOLOGY

**67.Malikov Turdali Toshmirzaevich**

Axiological approach to the analysis of spiritual culture of Uzbekistan.....175

## STATE AND LAW

**68.Темурмалик Самиев**

Как цифровая судебная экспертиза может помочь бороться с финансовыми преступлениями?.....179

## TECHNOLOGY

**69.Abdiyev X.D.**

Color scheme of the interior.....182

**70.Dinora Matyoqubova Saburjanovna, Matkarimova Nazokat Yuldashevna, Radjapov Aybek Allaberganovich**

Requirements for 3d editorial programs used in the educational process.....184

**71.Nosirov Kh.Kh., Arabboev M.M., Begmatov Sh.A.**

Rescue robots and its applications.....187

**72.Khasanov Bobirmirzo Maxmudali o'g'li, Akramova Gulkhayo Abidovna, Tuychiyev Abdumalik Tursunovich.**

Research into the extraction of plastics.....189

**73.Nasimova Sh.S., Xujayorova O.B., Mamadalliyeva F.L.**

Small architectural forms in landscape design.....192

**74.Umurzakova S. A.**

Zoning of the interior.....194

**75.Акимниязова Гульмира Абдинаимовна.**

Методы реставрации стеклянных артефактов в полевых условиях.....196

**76.Сабирова Умида Фархадовна**

Высшее образование узбекистана в реализации потенциала молодежи.....198

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## AGRICULTURE

### TO WAY TO SAVE THE PLANET LAND RESOURCE

**B.B. Alikhanov,**  
**Ecological Party of Uzbekistan**

*Resume: At present, the Earth is going through one of the most difficult periods in its biological, ecological history. The detrimental effects of climate change are clear. The loss of biodiversity continues.*

*The problems of regulating the impact of man on the ecosystem are becoming increasingly relevant. An important step is the adoption of the UN Declaration on Environment and Development, as well as an action program called "Agenda 21".*

*Uzbekistan is fulfilling its obligations to achieve the Millennium Development Goals. To overcome the negative consequences of processes associated with land degradation, a number of important state programs and decisions have been adopted. The Ecological Party believes that it is important to consolidate the efforts of state bodies and public associations in implementing practical measures aimed at protecting and rational use of natural resources.*

*Keywords: Earth Day, ecology, ecological system, anthropological influence, biodiversity, rationality, regulation, management, government programs, consolidation of efforts.*

На 63-й сессии Генеральной Ассамблеи ООН 22 апреля 2009 года был установлен Международный день Земли, проводимый под эгидой ООН. Этот день ежегодно отмечается во всех странах, начиная с 2010 года, как всемирный праздник планеты.

Принятие дня Земли - обусловлено тем обстоятельством, что антропогенное воздействие на окружающую среду (нерациональное использование земельных и водных ресурсов, процесс урбанизации, сокращение лесного фонда и др.) изменение климата и другие факторы в мировом масштабе стали причиной глобальной деградации земельных ресурсов.

В настоящее время Земля переживает в своей геологической, биологической, экологической истории один из самых сложных периодов. Сейчас, современный мир так взаимосвязан, что любое предпринимаемое действие, особенно если это касается воздействия на природу, обязательно отразится в любой другой точке Земли. Интенсивная хозяйственная деятельность человека без учета возможностей природы и закономерностей её развития привела к возникновению всех коллизий на Земле. Среди них - эрозия почв, опустынивание, обезлесение, резкое сокращение биоразнообразия и др. Следует отметить, что постоянно возрастает угроза ограниченности земли и ухудшение её качества.

Действительно, за последние несколько лет изменился облик Земли. География климата стала другой. Последствия изменения климата стали явно проявляться на полюсах, где за последние 40 лет толщина полярной шапки Земли уменьшилась на 30 процентов.

Пагубные последствия изменения климата уже очевидны, продолжается потеря биоразнообразия, истощение рыбных запасов, опустынивание поглощает все больше плодородных земель, стихийные бедствия становятся все более частыми и все более разрушительными, развивающиеся страны становятся все более

уязвимыми, а загрязнение воздуха, воды и морской среды продолжает лишать миллионы людей достойной жизни.

Это показывает, что природа - это не богатство человечества, а его естественное окружение, где человек лишь один из множества ее элементов. Следовательно, пределы развития человечества определяются не простым потреблением природных ресурсов. Вся же природная система поддерживает стабильные условия окружающей среды, благоприятные для жизни в целом и жизни человека в частности. Стало очевидным, что вмешательство человека в естественные природные процессы зашло уже так далеко, что связанные с этим изменения окружающей среды могут оказаться необратимыми, а разрушительные последствия не могут быть преодолены лишь природоохранными мероприятиями.

В период стремительной глобализации и изменения геополитической структуры мира все большую актуальность приобретают проблемы регулирования воздействия, оказываемого человеком на экосистему, гармонизации общественного развития и сохранения благоприятной окружающей среды, достижения равновесия во взаимоотношениях "человек-природа". Прежде всего, в современном мире для преодоления экологического кризиса и последовательного решения проблем окружающей среды необходимо совершенно новое и целостное юридическое мировоззрение.

В связи с чем, сегодня, как никогда ранее, особенно важны не только знание, но и соблюдение законов природы, осознанный и ответственный подход к природопользованию, экологические и правовые знания, понимание роли человека в судьбе окружающего мира и Земли в целом. Знание и соблюдение законов развития природы в деятельности человека и общества имеет решающее значение и оценивается как императив. Учет Законов природы при планировании и осуществлении хозяйственной деятельности и их соблюдение должно служить основным критерием экологической обоснованности и недопустимости экологически вредной деятельности.

Все это требует понимания механизма происходящих в окружающей среде изменений и выделения тех главных его составляющих, которые управляют глобальными законами, определяющими состояние окружающей среды и его изменения со временем.

Многие страны, в том числе, Узбекистан отмечает этот праздник. Всемирное движение гражданских инициатив в защиту планеты Земля ежегодно, 22 апреля проводит различные мероприятия и акции, направленные на то, чтобы обратить внимание человечества на проблемы Земли.

Впервые принципы международного экологического сотрудничества были обобщены в Декларации Стокгольмской конференции ООН по проблемам окружающей среды в 1972 году. В этом документе были приведены рассуждения о сущности и причинах глобальной экологической проблемы, которые объясняют необходимость нового направления международного сотрудничества - сотрудничества в области охраны окружающей среды, сформулированы принципы, начиная с провозглашения основополагающего - права человека на жизнь в окружающей среде.

В июне 1992 г. в Рио-де-Жанейро состоялась Конференция ООН по окружающей среде и развитию с участием 179 государств, в общей сложности 8 тыс. делегатов. В её работе приняли участие также 3 тысячи представителей неправительственных международных организаций. Знаменательно то, что параллельно с межправительственной конференцией в пригороде Рио-де-Жанейро прошел Глобальный форум, который посетили более 20 тыс. частных лиц.

Одним из результатов работы конференции явилось принятие Декларации по окружающей среде и развитию, а также программы действий под названием "Повестка дня на XXI век". Декларация представляет собой свод принципов, которые во многом перекликаются с положениями Стокгольмской конференции. На конференции в Рио-де-Жанейро были также открыты для подписания два важнейших глобальных соглашения: Рамочная конвенция об изменении климата и Конвенция о биологическом разнообразии.

Цели конвенции были направлены соответственно, на сохранение окружающей среды, биоразнообразие, рациональное использование природных ресурсов, экологически безопасное применение высоких технологий, химических веществ с учетом решения социально-экономических проблем.

Главной целью охраны окружающей среды является, в конечном счете, установление гармонии между развитием человечества и благоприятным состоянием окружающей среды. Природа не признает государственных и административных границ, и усилия одного или нескольких государств не могут предотвратить экологического кризиса и дать ощутимых результатов в данной области. Понимание этих процессов диктует тенденции и принципы охраны окружающей среды.

Проблемы повышения эффективности землепользования стоит и перед Узбекистаном. В силу природно-климатических условий, территория страны в значительной степени подвержена засухам и, как следствие, процессам опустынивания и деградации земель, которые обостряются в связи с глобальным потеплением климата и аридизацией региона.

Засоления почв, охватывающих около 50% площади орошаемых земель, приводит к снижению производительных функций земли, к снижению урожайности практически всех сельскохозяйственных культур, что сказывается на экономическом положении фермерских хозяйств и землепользователей, которые не имеют альтернативных источников существования.

Наиболее уязвимы являются регионы экологического риска, где происходит наложение природных антропогенных факторов, которые расположены в среднем и нижнем течении рек Амударья, Сырдарья, включая зону Приаралья: Республику Каракалпакстан, Хорезмскую, Бухарскую, Навоийскую области, а также Кашкадарьинскую область.

Мировое сообщество является свидетелями тяжелых последствий экологической катастрофы Аральского моря, обозначающих потерю конкретных видов флоры и фауны, деградацию водных и земельных ресурсов, разрастающуюся угрозу опустынивания. В истории цивилизации не было такого случая, чтобы на глазах одного поколения исчезало целое море. Сегодня эта катастрофа Арала переросла границы региона, превратившись в глобальную проблему, и требует пристального внимания международных организаций, политиков, ученых и экспертов со всего мира.

В качестве страны, подписавшей Декларацию Тысячелетия, Узбекистан выполняет свои обязательства по достижению Целей развития тысячелетия, признавая их важность и актуальность в контексте национального устойчивого развития.

Для решения экологических проблем Правительством Республики Узбекистан приняты ряд стратегических документов таких, как: "Национальный план действий по охране окружающей среды"; "Национальный план действий по гигиене окружающей среды"; "Национальная стратегия и План действий по сохранению биологического разнообразия"; "Национальная программа действий по борьбе с

засухой и опустыниванием"; "Национальная стратегия по возобновляемой энергии". В целях обеспечения их реализации разрабатываются и осуществляются Национальная программа действий по охране окружающей среды, Государственная программы мелиоративного улучшения орошаемых земель и др.

Для преодоления негативных последствий процессов, связанных с деградацией земель, приняты ряд важных государственных программ и решений, которые нацелены на восстановление и поддержание качества сельскохозяйственных угодий и предусматривают строительство и реконструкцию ирригационных объектов, ремонт и восстановление инфраструктуры орошаемых земель.

Так, улучшено мелиоративное состояние более 1,7 миллиона гектаров орошаемых земель, почти на 10 процентов сократилась площадь земель с критическим уровнем залегания грунтовых вод в результате качественных изменений в аграрном секторе - интенсификации сельскохозяйственного производства, улучшения селекции и внедрения районированных сортов хлопчатника и зерновых колосовых культур, освоения современных агротехнологий.

В целом, в Узбекистане создана современная, фундаментальная нормативно-правовая база по обеспечению охраны окружающей среды и рациональному использованию природных ресурсов. В сельскохозяйственной политике, в аграрном секторе произошли глубокие качественные изменения. Огромные средства направлены на реализацию практических мер по оптимизации и диверсификации сельского хозяйства, улучшению мелиоративного состояния земель и др.

Реализация этих мер позволит обеспечить устойчивое развитие социальной, экономической и экологической сфер, суть которых заключается в утверждении принципов права каждого гражданина на благоприятную окружающую среду, удовлетворении нужд современного поколения без нанесения ущерба будущим поколениям, разумном пользовании богатствами Земли.

В свою очередь, Всемирный день Земли будет служить своего рода импульсом к дальнейшей консолидации усилий не только государственных органов, но и общественности, каждого гражданина страны, по охране и бережному отношению к планете. Сейчас, как никогда ранее, важен осознанный и ответственный подход к пользованию природными ресурсами, важны знание законов природы и понимание роли человека в судьбе окружающего мира и Земли в целом.

Таким образом, Всемирный день Земли будет служить для всех нас мощным импульсом к дальнейшей консолидации усилий государственных органов и общественных объединений в реализации практических мер, направленных на охрану, рациональное использование природных ресурсов и бережное отношение к нашей неповторимой планете Земля.

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## SYNTHESIS AND STUDY OF COMPLEX-FORMING ION EXCHANGE RESINS CONTAINING CARBOXYL GROUPS IN FRESH FORM LOCAL RAW MATERIALS

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*Annotation.* This article deals with the synthesis and study of complex-forming ion exchange resins containing carboxyl groups in fresh form local raw materials.

*Key words.* Carbonate, usage, formation, long, before.

Currently, vapor-phase methyl nitrite (MN) carbonylation to DMC, a route developed by the UBE Company, can be the most promising new-generation industrial route. This route exhibits many advantages, including environmental friendliness, low cost, and high efficiency. The key to industrialization is the development of an efficient and stable catalyst. Heterogeneous supported Pd-based catalysts have been widely investigated in this system. In this review, we provide detailed introduction regarding the existing DMC synthesis methods and the vapor-phase MN carbonylation to DMC route with related catalyst research progress. Dimethyl carbonate (DMC,  $(\text{CH}_3\text{O})_2\text{CO}$ ), as an important and environmentally friendly chemical intermediate, has been widely used in industrial fields. Several large-scale industrial routes of DMC production, e.g., phosgene route, transesterification route, and the liquid-phase oxidative carbonylation of methanol, have been developed to date. Nevertheless, these industrial routes suffer from different drawbacks, such as the use of hypertoxic phosgene as raw material, high production cost, and explosion risk. Opportunities and challenges for synthesizing DMC are also presented. For environmental protection and efficient utilization of oil resources, higher requirements for the selectivity, activity and stability of hydrotreating catalysts are proposed. To effectively solve this issue, the influence of structure and stability of active phase on catalytic performance of hydrotreating catalysts was reviewed. It was realized that the active phase structure essentially depends on the extent of metal-support interaction, and can be properly designed by adjusting catalyst preparation parameters (e.g. support properties and metal precursors in the impregnating solution) and sulfidation conditions (e.g. pressure, temperature and gas composition). As the hydrotreating conditions for gasoline, diesel and residue become severer, the active phase structures need much higher stability. The selectivity of gasoline hydrodesulfurization can be notably increased by selective post-treatment of the active phase structure. Well-dispersed active phase slabs with moderate metal-support interaction are needed for highly active and stable CoMo and NiMo diesel catalysts. New generation NiMo catalyst by strengthening metal-support interaction exhibits better residue hydrodesulfurization activity and stability. The CoMo type and NiMo type catalysts with high amounts of Bronsted (B) acid sites, referred to as FHUDES-5 and FHUDES-6 respectively, were investigated for their hydrogenation performances including alkylation, hydrodesulfurization (HDS), and hydrodenitrogenation (HDN). The results demonstrated that, as hydroprocessing different diesel feedstocks, appropriate types of catalyst or their stacking system should be considered to achieve optimal HDS performance. As processing the feedstock with high sulfur content but low contents of nitrogen and aromatics, the CoMo type FHUDES-5 exhibited the highest HDS efficiency. On the other hand, the NiMo type catalyst FHUDES-6 presented the highest HDS and HDN efficiency as processing the feedstock with high amounts of nitrogen and aromatics. As processing the feedstock with medium contents of nitrogen and aromatics, the catalysts stacking system of FHUDES-6/FHUDES-

5 presented the highest HDS efficiency due to their synergistic effects. The commercial applications for these hydroprocessing catalysts for the ultra-deep HDS on diesel at different refinery plants were also reported. Catalysis Today Considerably improved catalytic performance for the conversion of bulky molecules. This paper reports a straightforward approach to synthesizing hierarchical beta zeolites by exposing microporous zeolites to hydrothermal conditions amenable for beta crystallization, which simultaneously creates hierarchical pore structure while maintaining crystallinity and framework integrity without the use of organic structure-directing agents, pore-directing agents, or mesoporous templates. The obtained hierarchical beta zeolites possess enlarged mesopores and exhibit improved catalytic performance for the conversion of bulky molecules in the liquid-phase conversion of benzyl alcohol with mesitylene. A sequential hierarchical structure formation and recrystallization mechanism is proposed to elucidate the creation of mesopores in beta zeolites with excellent preservation of acidity and microporosity. A series Pt/SAPO-11 were prepared by using incipient wetness impregnation (IWI) and colloidal impregnation (CI) methods. TEM, STEM, CO-FTIR and H<sub>2</sub> chemisorption were employed to study the effects of preparation method on the distributions of Pt sites. The catalytic performance of Pt/SAPO-11 was evaluated by using n-dodecane as the model reactant in a fixed-bed reactor. The characterization results suggested that the Pt sites on IWI catalyst could be mainly distributed near the micropore mouth of SAPO-11, while the Pt sites on CI catalyst could be mainly distributed on the external surface. In n-dodecane hydroisomerization, IWI catalyst showed higher activity and isomerization selectivity than CI catalyst. Possible relationships between the distributions of Pt sites and the catalytic performance of Pt/SAPO-11 were discussed.



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## **SOCIO-ECONOMIC BASES OF TOURISM DEVELOPMENT IN UZBEKISTAN (in the example of Surkhandarya region)**

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*Annotation. The article deals with the development of tourism in Surkhandarya region. We are living in developed century. Today we have all we want. Tourism is the best way to look round.*

*Key words: tourism, lot of, development, useful, beautiful.*

Today the theory and practice of language and culture, economics attracts more and more scholars, it has become evident that the investigation of its problems requires expertise from the different points of view of various areas of linguistics. There are reasonable grounds for supposing that only studying a foreign language, without supplying some cultural awareness is not enough to provide for mutual benefit in the international relationships. This foundation serves as a starting point for the origin of a new science. The primary aim of the investigation is to prove that the language stands into the close contact with culture and history. Consequently their synchronic research would be very useful for language education. With information gap and jigsaw activities, instructors need to be conscious of the language demands they place on their students. If an activity calls for language your students have not already practiced, you can brainstorm with them when setting up the activity to preview the language they will need, eliciting what they already know and supplementing what they are able to produce themselves. Structured output activities can form an effective bridge between instructor modeling and communicative output because they are partly authentic and partly artificial. Like authentic communication, they feature information gaps that must be bridged for successful completion of the task. However, where authentic communication allows speakers to use all of the language they know, structured output activities lead students to practice specific features of language and to practice only in brief sentences, not in extended discourse. Also, structured output situations are contrived and more like games than real communication, and the participants' social roles are irrelevant to the performance of the activity. This structure controls the number of variables that students must deal with when they are first exposed to new material. As they become comfortable, they can move on to true communicative output activities.

### **Communicative Output Activities**

Communicative output activities allow students to practice using all of the language they know in situations that resemble real settings. In these activities, students must work together to develop a plan, resolve a problem, or complete a task. The most common types of communicative output activity are role plays and discussions. In role plays, students are assigned roles and put into situations that they may eventually encounter outside the classroom. Because role plays imitate life, the range of language functions that may be used expands considerably. Also, the role relationships among the students as they play their parts call for them to practice and develop their sociolinguistic competence. They have to use language that is appropriate to the situation and to the characters. Students usually find role playing enjoyable, but students who lack self-confidence or have lower proficiency levels may find them intimidating at first. To succeed with role plays:

" Prepare carefully: Introduce the activity by describing the situation and making sure that all of the students understand it

" Set a goal or outcome: Be sure the students understand what the product of the role play should be, whether a plan, a schedule, a group opinion, or some other product

" Use role cards: Give each student a card that describes the person or role to be played. For lower-level students, the cards can include words or expressions that that person might use.

" Brainstorm: Before you start the role play, have students brainstorm as a class to predict what vocabulary, grammar, and idiomatic expressions they might use.

" Keep groups small: Less-confident students will feel more able to participate if they do not have to compete with many voices.

" Give students time to prepare: Let them work individually to outline their ideas and the language they will need to express them.

" Be present as a resource, not a monitor: Stay in communicative mode to answer students' questions. Do not correct their pronunciation or grammar unless they specifically ask you about it.

" Allow students to work at their own levels: Each student has individual language skills, an individual approach to working in groups, and a specific role to play in the activity. Do not expect all students to contribute equally to the discussion, or to use every grammar point you have taught.

Do topical follow-up: Have students report to the class on the outcome of their role plays.

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## IMPROVEMENT OF PRODUCTIVITY OF NATURAL PASTURES IN KARAKALPAKSTAN

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### *Abstract*

*Currently, the condition of natural pastures in the Republic of Karakalpakstan is not in demand. The increase in the number of livestock due to changes in the management system of the farm and the lack of monitoring of the protection of natural pastures have a negative impact on the condition of natural pastures. This issue requires additional new and promising reserves for the efficient use of natural pastures.*

*Key words: Karakalpakstan; natural pastures; animal husbandry; farming; monitoring; system; reserve; saline soil; perennial; improvement; promising; profitability;*

Introduction. The living standards and well-being of the majority of the population living in the territory of the Amu Darya River Delta are closely related to the state of natural pastures for livestock breeding. Whereas earlier, rural residents mainly worked in state-owned livestock or other farms and received wages that to some extent satisfied their needs, in recent years, due to the privatization of livestock farms, they have lost their jobs and, accordingly, the source income, which led to a sharp increase in the number of animals, kept in personal farmsteads. If earlier in one yard 5-6 sheep and goats, 1-2 cows were kept, today their number has become 15-20 times more. All this led to unsystematic use, degradation of pastures and tugai forests and created a threat to the biodiversity of the territory. This is due to the lack of effective management of existing grazing areas.

Relevance, purpose and task of the topic. This work was carried out during geobotanical studies in selected areas of the Republic of Karakalpakstan. The relevance of the topic is reflected in the conclusions and proposals made to improve the state of natural pastures of the Republic of Karakalpakstan.

The aim of this work is to conduct a detailed study followed by an analysis of its results and develop recommendations on practical steps to improve the management of natural grazing areas that will help preserve tugai massifs. Based on the foregoing, the task was set:

- conduct a quantitative analysis of livestock (by type) within the project territory and adjacent areas, as well as land areas where grazing is carried out;

- assess the real threat of grazing on the tugai ecosystem;
- offer practical and proven reduction methods

**Pic 1 Natural pasture for livestock**



**Pic 2 New pasture in the Aral Sea**

grazing pressure;

-to propose a specific action plan and distribution channels to raise awareness among livestock owners and government agencies regarding new approaches to animal husbandry;

-develop specific activities for sustainable livestock in the Republic;

-prepare a timetable for testing sustainable livestock production in Karakalpakstan.

Research results. The livestock production in Karakalpakstan is to some extent determined by the level of animal feed. A confident and continuous increase in livestock production can only be when creating normalized feeding. Feeding and productivity of farm animals are factors that determine the profitability of livestock farms, and their manifestation largely depends on the composition and usefulness of diets, the good quality of the feed used, as well as on the conditions created for the animals throughout the year.

Across the entire territory of the Republic of Karakalpakstan, all animal species are grazed almost on pastures and reed massifs with an area of 5,257,353 hectares, with top dressing in autumn-winter non-grazing days.

The success of animal husbandry largely depends on the provision of animals with normalized feeding during the year. So, the content of one sheep or goat with an average live weight of 40-45 kg requires about 400 k.e. For the maintenance of one cow with an average live weight of 280-320 kg, with a milk yield of up to 2000 liters of milk, 2000 k.e is required per year. For the maintenance of one head of a horse or a camel, about 2500 k.e is required.

In the irrigation zone, i.e. on the territories of the Bozotag district there are pastures in the amount of 101309 ha, which are used as pastures by the edges of fields, canals and irrigation ditches, and in some cases tugai, forest belts. A common drawback is that almost all of them are used in feeding without preliminary preparation (grinding, steaming, preparation of feed mixtures, canning, etc.), which leads to a large loss of them. In many cases, farmers and other landowners do not have knowledge about systematic grazing, the effectiveness of using community grazing institutions, or drawing up a pasture use plan.

In the studied territories, different types of pastures were found: sandy (with an average yield of 1.5-2.0 c/ha), desert (with an average yield of 3.0-4.0 c/ha) and floodplain (with an average yield 7.0-8.0 c/ha).

Conclusions and offers. The standard of living and well-being of the population living on the territory of the created biosphere reserve largely depends on the state of livestock breeding and pastures. If in the past, villagers worked in state-owned livestock farms or organizations serving livestock and received a steady salary that met their needs, in recent years, due to the privatization of livestock farms, they have lost their jobs and, accordingly, a source of income. This has led to a sharp increase in the number of animals kept in private farmsteads and of course, increased pressure on the natural pasture ecosystem. All this led to unsystematic use of pasture degradation and posed a threat to the biodiversity of the territory.

The analysis showed that in recent years, all large specialized livestock farms have been restructured, but the methods and principles of managing natural resources and livestock are similar to the methods used in the former structures. This is due to the low agricultural productivity, animal productivity, limited grazing land, and lack of feed.

Over the years of independence, legislative acts have been adopted on the targeted distribution and use of natural resources.

Due to the lack of any activities or programs, the practical assistance provided to improve pastures remains in vain. Often, many activities are not fully implemented due to lack of financial resources. Specific measures to improve the condition of pastures are

entrusted to the farms themselves.

The entire livestock management system is based on the fact that animals are on pasture almost all year round. Stall keeping is practiced only when fattening animals intended for slaughter or for sale, and in winter keeping cows and young animals. Thus, livestock breeders seek to minimize the cost of funds, feed and labor for the maintenance of animals, while using pastures for free, trying to maximize the number of animals, regardless of their breeding value and economic need.

Free and unsystematic use of pastures by private individuals leads to their overgrazing, degradation, deterioration of their condition and reduction of biodiversity. At the same time, individual business entities (for example, shirkats, etc.), having paid all taxes for land, do not have economic or other levers for managing grazing lands. The condition of grazing lands should be monitored annually by the departments of land resources and the state cadaster and the department of nature protection at the district authority, etc. The use of grazing lands by all business entities should be carried out only on a contractual basis, with the mandatory observance of environmental measures, that is, their animal consumption, based on their productivity. However, in the field this work is not carried out or carried out superficially.

Effective engagement mechanisms can be, on the one hand, the interest and trust of stakeholders, and, on the other, top-down process management.

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## ABOUT SOME ASPECTS OF IMPLEMENTATION OF UZBEKISTAN'S ENVIRONMENTAL POLICY

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*Abstract: As part of the third priority area of the Strategy of Action in the five priority areas of development of the Republic of Uzbekistan, it is envisaged to implement measures for the modernization and intensive development of agriculture, within the framework of which a set of environmental issues will be touched.*

*Achieving sustainable agricultural production will be ensured through the rational and careful use of water resources, improving the reclamation status of irrigated lands, developing reclamation and irrigation facilities, ensuring their safe and stable operation. Particular importance is given to ensuring food security, etc.*

*The main emphasis here should be on consolidating the efforts of state and public organizations aimed at improving the efficiency of natural resource use, reducing negative anthropogenic impact on soil conditions, improving the qualifications and level of training and retraining of personnel for agriculture, improving public awareness of modern agricultural technologies and others important issues of rational land use. The importance of this mission of public environmental organizations cannot be overestimated.*

*One of the practical examples of the ongoing environmental policy is the activity of the Ecological Party of Uzbekistan. Its main goals are to ensure the implementation of state policy aimed at achieving sustainable development, environmental safety, creating a favorable environment, preserving natural resources for present and future generations, and helping to ensure that environmental protection and conservation of natural resources become the business of the state, and society, and every citizen of the country.*

*Key words: ecology, modernization, intensive development, rational use, water resources, development of irrigation, consolidation of efforts, efficiency, natural resources, Ecological party.*

Проводимые последовательные широкомасштабные реформы во всех сферах жизнедеятельности нашей страны, особенно в сельскохозяйственном секторе, заложили прочный фундамент обеспечения продовольственной и в целом национальной безопасности, защиты прав, свобод и интересов человека, создали достойные условия жизни для населения и реализации созидательного потенциала граждан.

Значимым шагом коренного повышения эффективности проводимых реформ, обеспечения всестороннего развития страны, реализации приоритетных направлений по ее модернизации стала, предложенная Президентом Узбекистана Ш.М.Мирзиёевым и принятая после широкого обсуждения с общественностью, Стратегия действий по пяти приоритетным направлениям развития Республики Узбекистан в 2017-2021 годах.

В рамках третьего приоритетного направления данной Стратегии предусматривается осуществление мер по модернизации и интенсивному развитию сельского хозяйства. В частности:

первое, углубление структурных реформ и динамичное развитие сельскохозяйственного производства, дальнейшее укрепление

продовольственной безопасности страны, расширение производства экологически чистой продукции, значительное повышение экспортного потенциала аграрного сектора;

второе, дальнейшая оптимизация посевных площадей, направленная на сокращение посевных площадей под хлопчатник и зерновые колосовые культуры, с размещением на высвобождаемых землях картофеля, овощей, кормовых и масличных культур, а также новых интенсивных садов и виноградников;

третье, стимулирование и создание благоприятных условий для развития фермерских хозяйств, прежде всего многопрофильных, занимающихся как производством сельскохозяйственной продукции, так и переработкой, заготовкой, хранением, сбытом, строительными работами и оказанием услуг;

четвертое, реализация инвестиционных проектов по строительству новых, реконструкции и модернизации действующих перерабатывающих предприятий, оснащенных самым современным высокотехнологичным оборудованием по более глубокой переработке сельхозпродукции, производству полуфабрикатов и готовой пищевой продукции, а также тароупаковочных изделий;

пятое, дальнейшее расширение инфраструктуры по хранению, транспортировке и сбыту сельскохозяйственной продукции, оказанию агрохимических, финансовых и других современных рыночных услуг;

шестое, дальнейшее улучшение мелиоративного состояния орошаемых земель, развитие сети мелиоративных и ирригационных объектов, широкое внедрение в сельскохозяйственное производство интенсивных методов, прежде всего современных водо- и ресурсосберегающих агротехнологий, использование высокопроизводительной сельскохозяйственной техники;

седьмое, расширение научно-исследовательских работ по созданию и внедрению в производство новых селекционных сортов сельскохозяйственных культур, устойчивых к болезням и вредителям, адаптированных к местным почвенноклиматическим и экологическим условиям, и пород животных, обладающих высокой продуктивностью;

восьмое, принятие системных мер по смягчению негативного воздействия глобального изменения климата и высыхания Аральского моря на развитие сельского хозяйства и жизнедеятельности населения.

Стратегия действий по пяти приоритетным направлениям развития Узбекистана направлена на дальнейшее поэтапное и последовательное углубление демократических реформ и формирование сильного гражданского общества. Важной ее задачей является развитие открытого прямого диалога государственных органов с населением и достижение поставленной цели по обеспечению надежной защиты прав и свобод человека, благополучия людей, удовлетворению насущных потребностей и интересов граждан, утверждению верховенства закона, законности и справедливости в обществе, мира, межнационального и гражданского согласия.

Гарантом выполнения поставленных задач и достижения намеченной цели стали ежегодно принимаемые Государственные программы по реализации Стратегии действий по пяти приоритетным направлениям развития Республики Узбекистан в 2017-2021 годах в 2017 году - "Год диалога с народом и интересов человека", в 2018 году - "Год поддержки активного предпринимательства, инновационных идей и технологий", в 2019 году - "Год активных инвестиций и социального развития", в 2020 году - "Годом развития

науки, просвещения и цифровой экономики".

В них включен ряд мероприятий по модернизации и интенсивному развитию сельского хозяйства. В целях обеспечения рационального использования земельных и водных ресурсов планируется оптимизация и сокращение посевных площадей хлопчатника и зерновых колосовых культур. На высвобождаемых из-под зерновых колосовых и хлопчатника площадях предусматривается размещение овощных, кормовых, масличных культур, а также картофеля, интенсивных садов и виноградников, путем посева на основе современных агротехнологий высокоурожайных, ранних и сладких сортов карликовых деревьев, что позволит увеличить объемы производства экспорт-ориентированных плодоовощных продукций, имеющих высокий спрос на внешних рынках.

Достижение устойчивого производства сельскохозяйственной продукции будет обеспечиваться посредством рационального и бережного использования водных ресурсов, улучшения мелиоративного состояния орошаемых земель, развития мелиоративных и ирригационных объектов, обеспечения их безопасной и устойчивой работы. Особое значение уделяется вопросам обеспечения продовольственной безопасности и др.

Требование времени определяет необходимость повышения активности общественных экологических организаций, продолжения и совершенствования подходов, учитывающих все аспекты управления природными ресурсами. Главные акценты здесь должны быть сделаны на консолидацию усилий государственных и общественных организаций, направленных на повышение эффективности использования природного ресурса, снижения негативного антропогенного влияния на состояние почв, повышение квалификации и уровня подготовки и переподготовки кадров для сельского хозяйства, улучшение информированности населения о современных агротехнологиях и другие важные вопросы рационального землепользования. Важность этой миссии общественных экологических организаций нельзя переоценить.

К этому подключается и международная общественность. Программой развития ООН оказывается поддержка, направленная на усиление институционального потенциала в сфере охраны окружающей среды и эффективного использования природных ресурсов нашей страны. В рамках Механизма чистого развития Киотского протокола Рамочной Конвенции ООН об изменении климата, при технической поддержке проекта ПРООН "Создание потенциала по МЧР в Узбекистане", подготовлены и реализуются проекты по сокращению выбросов парниковых газов.

Совместно с Программой Развития ООН проводятся работы в области сохранения биоразнообразия, защиты окружающей среды и внедрения возобновляемых источников энергии и энерго-сберегаемых технологий, а также эффективного управления земельными ресурсами.

Одним из практических примеров проводимой экологической политики в стране стало образование 8 января 2019 года Экологической партии Узбекистан основными целями которой являются обеспечение реализации государственной политики, направленной на достижение устойчивого развития, экологической безопасности, создание благоприятной окружающей среды, сохранение природных ресурсов для настоящего и будущих поколений, содействие тому, чтобы дело охраны окружающей среды и сохранения природных ресурсов стало делом и государства, и общества, и

каждого гражданина страны.

Для достижения этих целей предусматривается решение таких конкретных задачи, как: формирование и продвижение программ и стратегий действий, направленных на комплексное решение экологических проблем; мобилизация всех сил общества для реализации экологической политики страны; повышение ответственности государственных органов, бизнеса и общественных структур за исполнение законодательства в сфере экологии и здравоохранения; поддержка инновационных идей и технологий, программ и проектов, направленных на преодоление последствий Аральской катастрофы и улучшение социально-экономической и экологической ситуации в Приаралье; активизация процесса перехода страны к "зеленой экономике", внедрения возобновляемых и других альтернативных источников энергии, экологически чистых, без(мало)отходных технологий и инновационных решений; принятие мер по прекращению процесса истощения и загрязнения водных ресурсов, опустынивания и деградации земель, загрязнения атмосферного воздуха, утраты биоразнообразия, а также по адаптации к изменению климата; продвижение инициатив и поддержка действий, направленных на справедливое использование водных ресурсов трансграничных водотоков с учетом интересов страны; реализация комплексных мер по улучшению доступа населения к качественной питьевой воде, особенно в сельской местности, модернизация существующих водозаборных, канализационных сооружений, развитие водопроводных сетей и систем канализации; принятие действенных мер по сохранению экосистем, развитию охраняемых природных территорий и экологического туризма в стране; совершенствование системы непрерывного экологического воспитания и образования, повышение уровня экологической культуры, формирование здорового образа жизни населения; содействие реализации молодежной политики и воспитанию молодежи в духе бережного отношения к природе и ее ресурсам и др.

Наряду с широкомасштабными реформами в сфере охраны окружающей среды, проводимых в нашей стране, основное внимание уделяется вопросам рационального использования земельных ресурсов, повышения эффективности мер, принимаемых для предотвращения деградации земель, а также учёту принципа экологического равновесия при развитии промышленности, расширению спектра международных проектов по управлению земельными ресурсами, повышению плодородия земель, подготовке кадров по направлению почвоведения и другим вопросам.

Дискуссионной площадкой для ряда новых экологически значимых направлений в данной сфере стали регулярно проводимые в регионах страны полевые научно-практические мероприятия по вопросам применения современных агротехнологий в развитии приусадебных участков. В этих мероприятиях принимают участие депутаты Законодательной палаты Олий Мажлиса Республики Узбекистан, представители Хокимията Ташкентской области, Комитета женщин Ташкентской области, Хокимията Бекабадского района Ташкентской области, Комитета женщин Бекабадского района Ташкентской области, Фонда улучшения мелиоративного состояния орошаемых земель, ученые, специалисты и эксперты международных организаций, Национального университета Узбекистана имени Мирзо Улутбека, Института овощеводства, огородничества и картофелеводства, Ташкентского государственного аграрного университета, институтов микробиологии, биорганической химии, общей и неорганической химии

Академии наук Республики Узбекистан, Института растениеводства, Института защиты растений, преподаватели и студенты других научных учреждений, активисты Экологического движения Узбекистана и других ННО.

На этих площадках обсуждаются и рассматриваются достижения практических результатов законодательного регулирования, итоги инновационных исследований, посвященных вопросам развития приусадебных участков, их роли и значения в обеспечении продовольственной безопасности, выращивания экологически чистых сельскохозяйственных продуктов и новых сортов овощей, бахчевых и картофеля, выращивания кормовых в условиях повышенного засоления почв на приусадебных участках, разнообразия овощей и их широком применении в питании, применения биологических средств защиты растений для выращивания экологически чистых овощей, бахчевых и картофеля, повышения эффективности мер, принимаемых по предотвращению случаев деградации земель, а также внедрения инновационных агроэкобиотехнологий, ресурсосберегающих технологий, рационального использования земельных ресурсов и повышения продуктивности земель.

Данные научно-практические мероприятия стали прочным мостиком и послужит дальнейшему осуществлению принципа "Образование - наука и основа практических опытов" при поиске решений в сфере рационального использования земельных ресурсов и развития институциональных вопросов их охраны, сохранения и улучшения плодородия почв, а также широкой пропаганде достижений науки и созданию эффективных связей между наукой и практикой в развитии приусадебных участков.

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## ECONOMIC EFFICIENCY OF USING ULV BY THE BARRIER METHOD AGAINST LOCUSTS IN UZBEKISTAN

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*Аннотация: В статье представлено результаты эксперимента по определению экономического эффективности использования барьерного метода с УМО опрыскивателем. Проведен сравнительный анализ сплошного опрыскивания и барьерной обработки.*

*Ключевые слова: борьба с саранчой, барьерный метод, УМО, инсектицид*

*Annotation: The article presents the results of an experiment to define economic efficiency of using of the barrier method with ULV sprayer. Provided comparative analysis of continuous spraying and barrier treatment.*

*Keywords: locust control, barrier method, ULV, insecticide*

In Uzbekistan situated one of the largest places for spreading of harmful locusts in central Asia. Every year, in the country treats around 500 000 hectares of pastures with insecticides against locusts. These places are far from agricultural area, and settlements. In order to ensure timely processing of common places in the developed countries uses ULV and the barrier method as a more mobile and less voluminous way of control. FAO also supports the use of ULV against locusts. We conducted an experiment to define how cost-effective the ULV for use in Uzbekistan.

In pasture, when using traditional method of locust treatment using a manual (K-45) or a tractor-mounted tractor sprayer (OVX-28) required a lot of water, fuel and vehicles for their transportation.

In addition, it requires 8-10 employees and increases costs. The treatment area of the sprayer OBX-28 is 20 meters, the daily productivity of equipment is 15-20 hectares, and the productivity of a manual hand sprayer is 3 hectares per day.

Consumption of up to 4000 liters of water, which leads to a more increased cost. From other side, the performance of the OVX-28 tractor sprayer is 15-20 hectares, which costs 40800 soums.

When applying the barrier method of locust treatment, a vehicle is required for the equipment of an ultra-low-volume (ULV) sprayer, and the total number of staff is 2 people. Depending on the wind direction, the width of the treated strip with ULV spraying is up to 100 m, daily productivity is 350-450 ha. The total costs for treatment are 12,000 soums per hectare. When treating according to the scheme 100:100 meters, the daily productivity is not less than 400 hectares, which makes it possible to save 28800 soums per hectare (table 1).

**Table 1.**  
**Comparative analysis of the economic efficiency of classical and barrier methods**  
**(at the cost of 2017)**

Classical method	barrier method
Equipment	
Tractor OBX-28 water carrier (ГАЗ-53) fuel carrier (ГАЗ-52)	Micronair AU 8115 ULV sprayer Car (YAZ-469)
Employee	
6-8	2
Spraying area, m	
20	100x100
Performance spraying against locusts, hectares per day	
20	400
Water consumption, liters per day	
4000	800
Fuel consumption, milliliters per hectare	
1 500	350-450
Insecticide consumption, liters/ha	
Atila super, 10% e.c.-0,125	Diffuz, 48% s.c.-0,03
Cost of treatment for hectare, soums per hectare	
40800	12000
The duration of the insecticide, days	
Valid 3-5 days (required second treatment)	Preserves toxicity for 30 days

In a comparative researching of the economic effectiveness of the using insecticides against harmful locusts with ultra-low-volume (ULV) spraying in barrier method and continuous processing, we can get the following conclusions.

If long-acting insecticides used in the barrier method, their effect will remain for at least 30 days and will greatly reduce costs and increase labor productivity, it will also provide support for locust control. It increases profitability, a decrease in working fluid.

Thus, it was found that the barrier method not only drastically reduces costs, but also provides the ability to control the number of locusts, ensure low toxicity of funds for vertebrate and invertebrate organisms, and most importantly, to preserve the purity of the environment and nature.

Using pyrethroid insecticides lose their toxicity after 3-5 days, which leads to the requirement for repeated treatment and, as a result, costs are increased.

## THE PURPOSE OF THE CORRECT AND RATIONAL USE OF WATER RESOURCES OF THE REPUBLIC OF UZBEKISTAN

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*Annotaton. This article describes in detail the measures taken in our country to prevent the shortage of drinking water, the supply of clean drinking water. In this regard, Resolution of the President of the Republic of Uzbekistan "On measures to regulate the control and accounting of rational use of groundwater resources in 2017-2021" was taken as a basis.*

*Key words: water resources, fresh groundwater, regional hydrogeological stations, application "drop", innovative water-saving technologies.*

As you know, water is life. Life is hidden in every drop of it. There is water, humanity seeks to do great things. With the power of water, unprecedented luxuries and large structures can be erected. It should be noted that the provision of drinking water to the population is one of the most pressing issues facing each country. In our country, too, the population is supplied with groundwater and surface water. Groundwater is one of the most reliable sources of drinking water due to its natural protection.

There are currently 119 cities, more than a thousand urban-type settlements and more than 11,000 rural settlements in the country. Of these, 69 cities, 335 urban-type settlements and about 3,000 rural settlements use drinking water from groundwater resources. The rest of the population is supplied by surface water, springs and other sources of water.

In accordance with the Resolution of the President of the Republic of Uzbekistan "On measures to regulate the control and accounting of rational use of groundwater resources in 2017-2021", a complex for the development and modernization of drinking water supply in the long run providing the population with quality drinking water through the implementation of measures and targeted programs is one of the priorities of social policy in our country. So far, large-scale measures are being taken in most regions of the country to provide the population with centralized drinking water.

In particular, the Resolution of the President of the Republic of Uzbekistan "On the program of integrated development and modernization of drinking water supply and sewerage systems for 2017-2021" adopted on April 20 this year is important in this regard.

It is known that the rapid development of industry and agriculture in the last decades has had a negative impact on the state of fresh groundwater. This, in turn, has led to a significant reduction in water resources and the unauthorized construction of water intake facilities, and a sharp decline and depletion of water resources in some sources as a result of uncontrolled water intake.

In some parts of the country, unsatisfactory condition of surface drainage and drainage systems, intensive groundwater level rise, as well as the lack of systematic hydrogeological monitoring, in some cities and towns, the groundwater level is approaching the surface. At the same time, the current system of groundwater monitoring does not allow timely and complete assessment of the negative factors that lead to water pollution, depletion of groundwater reserves and rising groundwater levels in some settlements. In this regard, it should be noted that in some areas where there is a shortage of drinking water, modern desalination plants

are not sufficiently introduced, the existing opportunities for the production of equipment and devices for desalination are not fully used. corresponds to. Importantly, the results of a survey of more than 10,000 water wells in February-March this year show that the above-mentioned negative factors continue to affect the state of groundwater.

Survey results:

uncontrolled groundwater abstraction from more than 60% of wells and their pollution and depletion of reserves;

59% of groundwater is taken from unconfirmed reserves;

has clearly shown that there is a real risk of irreparable loss of more than half of the available fresh groundwater resources over the next decade.

The document also stipulates the rational use of water resources by the competent state bodies and water users and consumers to ensure control and accounting for the accounting and use of groundwater, full accounting of the volume of water received, and this at the same time, their responsibilities to prevent pollution and depletion are defined.

The main objectives of this program are:

a set of measures to control the rational use of groundwater resources and regulate their accounting;

Target parameters for increasing the proven reserves of fresh groundwater;

parameters for expanding the network of groundwater monitoring points;

construction and overhaul of drainage and observation wells and collectors in cities and district centers.

Therefore, it is planned to allocate 396 billion soums from the state budget, international financial institutions and local budgets to finance the program. It should be noted that the most effective types of groundwater use - justification of the well and gallery part, as well as the identification of sources of adverse effects on groundwater deposits, the study of their origin and their elimination.

In conclusion, the situation with water shortages in our country, unfortunately, does not disappear. But if we use water sparingly, if we are a little bit responsible, and if we promote it as much as we can, I think the negative aspects of water will be greatly reduced.

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## INVESTIGATION OF THE STRUCTURE AND PROPERTIES OF THIN SILICATE FILMS

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*ANNOTATION.* The article deals with the investigation of the structure and properties of thin silicate films.

*KEY WORDS:* development, property, thin, silicate

Thermal conductivity (denoted as  $k$ ,  $j$ , or  $k$ ) measures the heat conducting capability of a material. As shown in Fig. 1(a), it can be defined as the thermal energy (heat)  $Q$  transmitted through a length or thickness  $L$  in the direction normal to a surface area  $A$ , under a steady-state temperature difference  $T_h - T_c$ . Thermal conductivity of a solid-phase material can span for several orders of magnitude, with a value of  $\sim 0.015 \text{ W/mK}$  for aerogels at the low end to  $\sim 2000 \text{ W/mK}$  for diamond and  $\sim 3000 \text{ W/mK}$  for singlelayer graphene at the high-end, at room temperature. Thermal conductivity of a material is also temperature-dependent and can be directional-dependent (anisotropic). Interfacial thermal conductance

(denoted as  $K$  or  $G$ ) is defined as the ratio of heat flux to temperature drop across the interface of two components. For bulk materials, the temperature drop across an interface is primarily due to the roughness of the surfaces because it is generally

impossible to have "atomically smooth contact" at the interface as shown in Fig. 1(b). Interfacial thermal conductance of bulk materials is affected by several factors, such as surface roughness, surface hardness, impurities and cleanness, the thermal conductivity of the mating solids, and the contact pressure [1]. For thin films, the temperature drop across an interface can be attributed to the bonding strength and material difference. Note that thermal contact resistance and thermal boundary resistance (or Kapitza resistance [2]) are usually used to describe heat conduction capability of an interface in bulk materials and thin films, respectively. Interfacial thermal conductance is simply the inverse of thermal contact/boundary resistance. Knowledge of thermal conductivity and interfacial thermal conductance and their variation with temperature are critical for the design of thermal systems. In this paper, we review measurement techniques for characterizing thermal

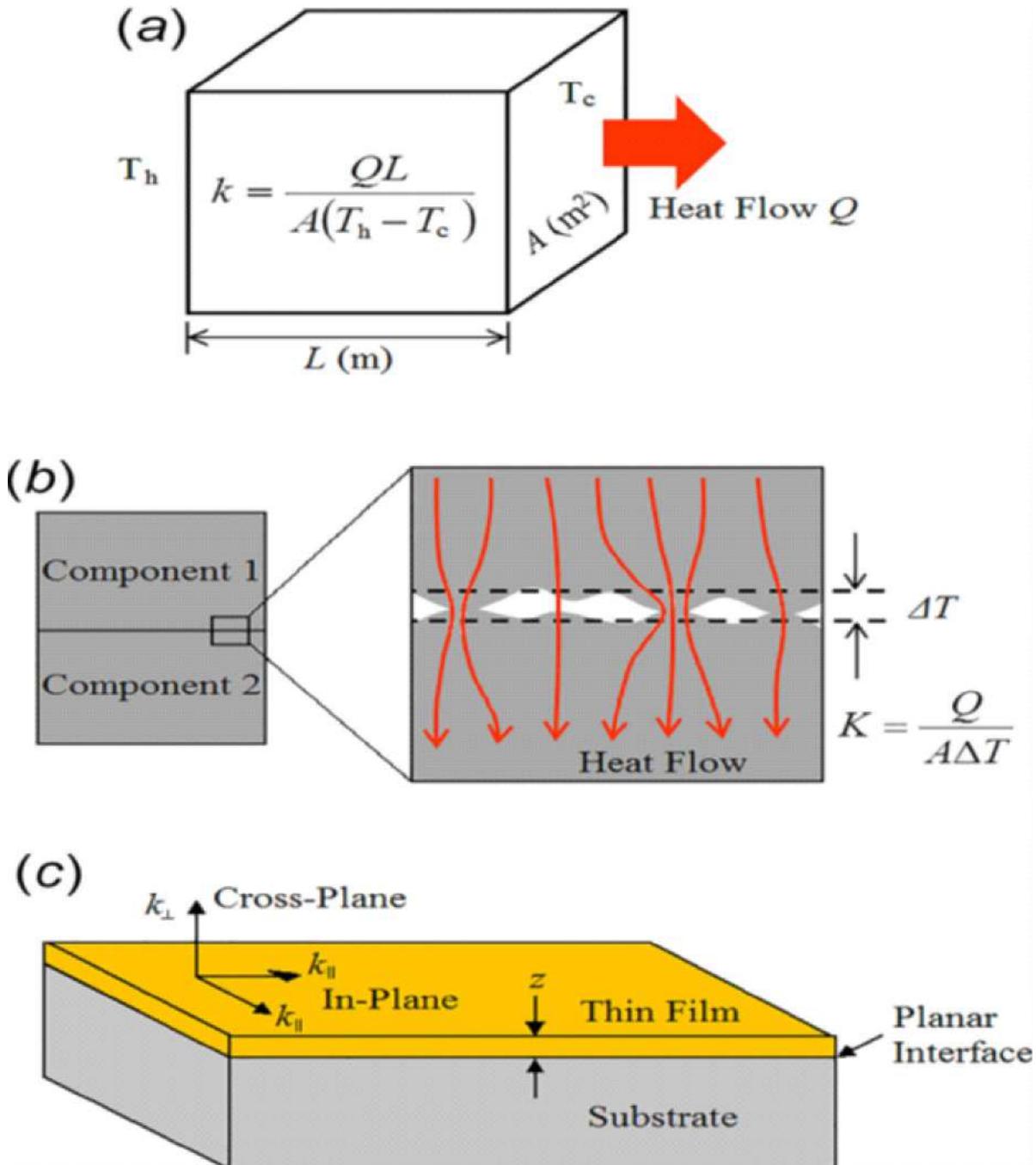
conductivity and interfacial thermal conductance of solidstate in both bulk and thin film forms. Extensive efforts have been made since the 1950s for the characterization of thermal conductivity and thermal contact resistance

in bulk materials [3-8]. Table 1 summarizes some of the most commonly used measurement techniques, which in general can be divided into two categories: steady-state methods and transient methods. The steady-state methods measure thermal properties by establishing a temperature difference that does not change

with time. Transient techniques usually measure time-dependent energy dissipation process of a sample. Each of these techniques has its own advantages and limitations and is suitable for only a limited range of materials, depending on the thermal properties, sample configuration, and measurement temperature. Section 2 is devoted to comparing some of these measurement techniques when applied for bulk materials. Thin film form of many solid materials with a thickness ranging

from several nanometers to hundreds of microns has been extensively used in engineering systems to improve mechanical, optical, electrical, and thermal functionality, including microelectronics [9], photonics [10], optical coating [11], solar cells, and thermoelectrics

[12]. Thin film materials can be bonded on a substrate (Fig. 1(c)), free-standing, or in a multilayer stack. When the thickness of a thin film is smaller than the mean free path of its heat carriers, which are electrons and phonons depending on whether the material is electrically conducting or not, the thermal conductivity of thin films is reduced compared to its bulk counterparts because of the geometric constraints. Thermal conductivity of thin films is usually thickness-dependent and anisotropic, where the heat conducting capability in the direction perpendicular to the film plane (cross-plane) is very different from that parallel to the film plane (in-plane), as shown in Fig. 1(c). The thermal conductivity of thin films also depends strongly on the materials.



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## ОСОБЕННОСТИ ВЫРАЩИВАНИЯ ЗЕРНОВЫЕ КУЛЬТУРЫ В СИСТЕМЕ КОРОТКО РОТАЦИОННЫХ СЕВООБОРОТАХ В ЮЖНЫХ РЕГИОНАХ УЗБЕКИСТАНА

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Климатическая условия южных регионов Республики Узбекистан неблагоприятный для выращивание колосовые зерновые, так как данные регионы окружены Гиссарскими горными теребами только с восточной стороны.

С северной стороны-Кизил-Кумские и с юге-западной стороны-Кара-Кумский сухие ветры в любое время года свободно протекают и отрицательно воздействует на урожайность и качества зерна зерновые культуры.

В связи с этим возникают проблемы редко зерности и щуплости зерна в колосьях, неэффективности применяемых минеральных удобрений и низкого содержания белков зерне зерновых культур.

Данная проблема требовала проведения исследования по разработке способов преодоления отрицательного воздействия неблагоприятных погодных условиях в зерноводстве на юге Узбекистана.

Исследовательскими объектами были районированной сорт ячменя Кизилкурбан и сорт проса саратовская-853.

Основными предметами исследования были интенсификации севооборота путем. Применения коротко ротационного севооборота зерновые культуры при получения два урожая зерна зерновых культур в течение одного года.

Опыты проводились по "Методике полевого опыта" Б.А.Доспехов [], в одном ярусе четырёх краткой повторности. Размер делянки 180м<sup>2</sup>, учетные делянки 100м<sup>2</sup>.

Опыты проводилась в 2017-2019 годах в фермерских хозяйствах "Хазраткулов Ташмурод" Каршинского района.

Опытные поля располагаются на светло серозёмной-луговой почве. Среднегодовая температура региона +15,8оС. Относительная влажность воздухе в апрел-октябре 173 мм. Безморозные периоды составляют 2-3 дней. Сумма эффективных температур выше +10оС в год составляют +2804оС.

Годовые нормы фосфорные, калийные удобрения и половина годовые нормы сезонных удобрений вносились с посевам ячменя. Вторая половина годовая норма азотных удобрений вносились с первым поливом ячменя.

1

При оптимизация применения минеральных удобрений в коротко ротационных севооборотах в неблагоприятных для земледелие степной светло сероземных почвах Кашкадарьинской области полевая всхожести семян основного культура ячменя повышаются до 10 штука.

В системе коротко ротационных севооборотах под влиянием последствие остатки минеральных удобрений в почве принятой на основной культуре ячменя полевая всхожесть проса посеяной на стерне ячменя как повторная культура повышаются до 8 штука засчет косвенной влияние улучшенной с помощью минеральных удобрений физическая свойства почвы.

2

При коротко-ротационных севооборотах в системе выращивания два урожая зерна в год действием оптимизация применения нормы и соотношения минеральных удобрений кушение ячменя увеличиваются на 0,1-0,5 штука по

сравнению с контрольными вариантами опыта где минеральные удобрения не принимались.

При выращивании проса на стерня ячменя без применения минеральных удобрений засчет остатки минеральных удобрений в почве кушение увеличиваются на 0,2-0,4 штука по сравнению с контрольными вариантами опыта.

3

Организация коротко ротационного севооборота при выращивание два урожая зерна в год в условиях неблагоприятных для земледелие светло сероземной-луговой почве Кашкадарьинской области являются перспективными агротехнологическими мероприятиями.

При выращивание два урожая зерна в год где ячмень высевается в ранний весной как основная культура, на стерке которого проса высевается как повторная культура в система коротко ротационного севооборота урожай зерна повышаются в 1,5 раза с помощи действие и после действие остатков минеральных удобрений в почве, при этом экологические состояние почвы сохраняются на должном уровне.

В результате данного агро мероприятия формируются дополнительно 15,3 ц/га зерна ячменя, у проса выращенного на стерки ячменя во второй половине лето засчет остатки минеральных удобрений в почве урожай зерна проса составляют 13,5 ц/га.

4

Применения коротко ротационной севооборот в условиях светло сероземной-луговой почве в Кашкадаринской области где погодная условия неблагоприятный для земледелия позволяют получения два урожая зерна в год, что являются экономически выгодными и научно-практическими агротехнологическими мероприятиями.

При неприродное использования орошаемое земель с весной до осени путем выращивание зерновых культур в два раза в год, где ячмень высевается в рано весной как основная культура, проса высевается на стерне ячменя как повторная культура действие и последствие минеральных удобрений урожай зерна повышаются до 1,5 разам и не ухудшаются экологическая положение почвы.

Коротко ротационном севообороте в системе выращивание два урожая зерна и оптимизация применения минеральных удобрений урожай зерна повышаются до 58,6 ц/га, чистый доход до 90316457 сўм/га, рентабельность до 10,7 %.

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## ПРОБЛЕМЫ ВОЗДЕЙСТВИЕ СЕЛЬСКОГО ХОЗЯЙСТВА НА ОКРУЖАЮЩУЮ СРЕДУ

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### *Аннотация*

*В этой статье обсуждается, как все человеческие усилия по развитию сельскохозяйственного сектора, дальнейшему повышению его потенциала, а также обеспечению продовольственной безопасности, будут иметь негативное влияние на экосистему или окружающую среду.*

### *Annotation*

*This article discusses how all human efforts to develop the agricultural sector, further increase its potential, as well as ensure food security, will have a negative impact on the ecosystem or environment.*

*Ключевые слова: Экосистема, агроэкосистемы, автотрофы, биоценоз, агроценоз, земледелия, животноводства, сельское хозяйства, видовое разнообразие, агротехника.*

*Key words: Ecosystem, agroecosystems, autotrophs, biocenosis, agroecenosis, agriculture, animal husbandry, agriculture, species diversity, agricultural technology.*

Известно, что Агроэкосистемы создаются человеком для получения высокого урожая чистой продукции автотрофов. Их основные отличия от природных являются то что, в них резко снижено разнообразие видов; снижение видов культивируемых растений снижает и видовое разнообразие животного населения биоценоза; видовое разнообразие разводимых человеком животных ничтожно мало по сравнению с природным и т.д.

Виды растений и животных, культивируемых человеком, "эволюционируют" за счет искусственного отбора и неконкурентоспособны в борьбе с дикими видами без поддержки человека. Агроэкосистемы получают дополнительную энергию, субсидируемую человеком, кроме солнечной энергии. Чистая продукция (урожай) удаляется из экосистемы и не поступает в цепи питания биоценоза, а частичное ее использование вредителями, потери при уборке, которые тоже могут попасть в естественные трофические цепи, всячески пресекаются человеком.

Экосистемы полей, садов, пастбищ, огородов и других агроценозов это упрощенные системы, поддерживаемые человеком на ранних стадиях сукцессии, и они столь же неустойчивы и неспособны к саморегуляции, как и природные пионерные сообщества, а потому не могут существовать без поддержки человека.

По статистике, сельскохозяйственные системы, как земледельческие, так и животноводческие, занимают в мире около 50 млн. км<sup>2</sup>, или 38% свободной от льда суши. Из них пашня занимает около 30%, и пастбища - 70%. Разнообразие типов сельскохозяйственных систем огромно. Оно зависит как от природных условий, так и особенностей применяемых технологий. Поэтому сельскохозяйственные системы называют также агроэкосистемами.

В простейших системах земледелия агротехнические операции сводятся, последовательно, к несложной подготовке почвы к посеву, заделыванию зерна

во влажную почву, борьбе с сорняками и вредителями, сбору того, что выросло, переработке урожая и сохранению части его в качестве семян для следующего сельскохозяйственного года. С другой стороны, в сложных системах уровень технологии чрезвычайно высок. Соответственно, и урожаи, получаемые в различных агроэкосистемах, разнятся в десятки раз. Не менее велико разнообразие животноводческих систем, в зависимости от природных и хозяйственных факторов. Наконец, существует большое количество комбинаций типов земледелия и животноводства.

Несмотря на свое разнообразие, сельскохозяйственные системы отличаются одной общей особенностью: все они оказали и продолжают оказывать глубокое воздействие на экосистемы и ландшафты. В процессе развития агроэкосистем преобразуется растительность: от естественного покрова - к пашне или пастбищу. В земледельческих системах естественный, флористически богатый растительный покров, часто многоярусный, замещается на единственную для данного сезона или года культуру. Система коренным образом трансформируется и упрощается. При введении орошения изменяется и тип водного режима: от обычно непромывного к промывному.

Как и земледелие, животноводство имеет много разнообразных форм в связи с различиями природных условий и уровней развития общества. В животноводческих агроэкосистемах геоэкологические изменения более постепенны, но не менее глубоки. Не случайно, одна из проблем геоэкологии заключается в определении того, каким было исходное, доантропогенное состояние африканской саванны, поскольку она постепенно трансформировалась под влиянием многотысячелетнего и весьма интенсивного выпаса скота.

В засушливых районах мира основная геоэкологическая проблема пастбищного скотоводства - постепенное истощение пастбищ, то есть прогрессирующее антропогенное опустынивание вплоть до уничтожения растительного и почвенного покрова.

Естественные системы отличаются высокой степенью замкнутости баланса органического вещества и других компонентов. Разность между приходной и расходной частями баланса вещества в природной системе за год не превышает 1%, а обычно меньше. За счет этой малой доли и происходит направленная эволюция естественных систем.

В сельскохозяйственных же системах цикл вещества разомкнут: вещество забирается человеком из системы в виде урожая, а семена, органические и минеральные удобрения, а также и пестициды, в нее вносятся. Вынос вещества составляет десятки процентов (обычно 40-80%) от годовой продукции биомассы. При этом, чем продуктивнее агроэкосистема, тем больше отчуждение продукции, и тем система более неустойчива. Антропогенный привнос веществ в агроэкосистему оказывается на один-два порядка больше их естественного поступления. Таким образом, система коренным образом трансформируется.

Изменяются и физические процессы. Водная и ветровая эрозия почв усиливаются на один-три порядка. Почва уплотняется под воздействием сельскохозяйственных машин и орудий. Структура теплового баланса изменяется вследствие изменения как величины альбедо, так и затрат на эвапотранспирацию. Соответственно изменяется и водный баланс, и режим влаги в почве. Биологические особенности, такие как биомасса, ее прирост, трофические соотношения, видовой состав, включая микроорганизмов и беспозвоночных и пр., коренным образом меняются.

Вследствие эволюции земледелия и животноводства сокращается сложность структуры ландшафтов, их устойчивость снижается и может поддерживаться только

благодаря действиям человека.

Экологические проблемы сельского хозяйства относятся к категории универсальных, то есть встречающихся в мире повсеместно. Они - продукт некоординированных действий миллионов дежкан.

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## ЭФФЕКТИВНОСТЬ И ПРОБЛЕМЫ ПРИМЕНЕНИЯ ПЕСТИЦИДОВ В СЕЛЬСКОМ ХОЗЯЙСТВЕ.

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### *Аннотация*

*В данной статье рассматриваются положительные аспекты использования пестицидов в сельском хозяйстве, а также негативные воздействия на окружающую среду и их последствия.*

### *Annotation*

*This article discusses the positive aspects of the use of pesticides in agriculture, as well as negative environmental impacts and their consequences.*

*Ключевые слова: Биогены, почва, бактерия, атмосфера, эрозия почвы, урожайность, интенсивность, агроэкосистема, питательные вещества, химические вещества, плодородие.*

*Key words: biogenes, soil, bacteria, atmosphere, soil erosion, productivity, intensity, agroecosystem, nutrients, chemicals, fertility.*

К сожалению значительная часть урожая уничтожается вредителями и погибает вследствие болезней как на поле, так и, позднее, в хранилищах. Иногда потери достигают половины урожая. Одно из основных направлений борьбы с вредителями сельского хозяйства (насекомыми, грызунами, грибами, сорняками и пр.) - это применение химических веществ, называемых пестицидами.

Пестициды - общее название для всех химических веществ, применяемых для борьбы с вредителями, а также и более узкое название для части веществ, применяемых против насекомых. Гербициды применяются для контроля сорняков, фунгициды - против грибов, родентициды - против грызунов. Основной потребитель пестицидов - сельское хозяйство.

Всего в мире используется не менее 180 пестицидов в виде нескольких тысяч препаративных форм. За десятилетия 1960-1980 гг. объем пестицидов, применяемых в сельском хозяйстве мира, увеличился на порядок. Однако затем употребление пестицидов стало замедляться вследствие обнаруженных серьезных проблем. Большинство проблем применения пестицидов, возникает потому, что практически все пестициды являются ксенобиотиками -чуждыми для природы химическими соединениями.

Известно, что большую роль в плодородии почв играет - почвенная биота. Подавляя вредителей пестицидами, человек снижает также численность почвенных организмов. В пойменных почвах насчитывалось до 300 дождевых червей на 1 кв. м, пропускавших сквозь свой кишечник ежегодно до 10 кг почвы. В настоящее время их численность сократилась в десятки и сотни раз.

Многообразные пестициды различным неблагоприятным образом воздействуют на ландшафты и их компоненты. Группы животных, наиболее страдающих от пестицидов (в порядке увеличения степени поражения): беспозвоночные (пчелы), рыбы, птицы, млекопитающие, микроорганизмы.

Внутренние водоемы загрязняются пестицидами и продуктами их распада.

Пестициды сыграли, например, немалую роль в ухудшении состояния Аральского моря, его притоков и бассейна. Исследование поведения пестицидов в ландшафте в зависимости от географических условий - важная и пока недостаточно изученная проблема.

Попавший в окружающую среду пестицид включается в процессы биоаккумуляции, когда может происходить многократное (до сотен тысяч раз) повышение его концентрации по мере продвижения пестицидов по пищевым цепям. В результате отдельные, иногда отдаленные от пестицидной мишени звенья пищевых цепей могут оказаться крайне токсичными. Широко известен пестицид ДДТ (дихлордифенилтрихлорэтан), почти везде запрещенный к использованию. Период полного распада ДДТ составляет многие десятки лет, и около половины произведенного промышленностью препарата еще находится в окружающей среде. Проведенные исследования показали, что биоаккумуляция ДДТ в экосистеме озер приводит к его накоплению в рыбах и птицах в 180 тыс. раз большему, чем его концентрация в озерной воде:

ДДТ в воде - 0,014 мг/л

ДДТ в зоопланктоне - до 5 мг/л

ДДТ в мелкой рыбе - до 10 мг/кг

ДДТ в крупной рыбе - до 200 мг/кг

ДДТ в рыбах и птицах - до 2500 мг/кг

Другая серьезная проблема применения пестицидов в том, что вредители привыкают к пестицидам, это привыкание передается по наследству, снижая эффективность пестицидов и заставляя вводить в использование все новые и новые химические вещества. Это явление, так называемая резистентность, привело к тому, что более десятка массовых видов насекомых развили нечувствительность ко всем основным классам применяемых соединений. К ним относятся домовая муха, таракан, колорадский картофельный жук, капустная моль и др. Резистентность к применяемым пестицидам вырабатывается через 10-30 поколений, поэтому при современной стратегии применения пестицидов, все основные вредители могут стать резистентными.

Применение пестицидов приводит к увеличению их нагрузки не только на профессиональные контингенты (сельскохозяйственные работники), но и на все население в целом, что создает реальную угрозу их здоровью. При этом прежде всего страдает детское население. Наибольшее влияние на заболеваемость населения оказывают хлорорганические и фосфорорганические пестициды, доля которых в суммарной территориальной антропогенной нагрузке составляет около 15% .

Ряд пестицидов, поступающих в организм человека из почвы по миграционным и транслокационным цепочкам, оказывает мутагенное действие, проявляющееся увеличением точечных мутаций и хромосомных aberrаций в соматических и половых клетках, приводящих к образованию новообразований, спонтанным абортam и перинатальной гибели плода, врожденным аномалиям развития, бесплодию.

По данным Н. Г. Проданчука и соавт., к концу второй половины прошлого столетия в Украине при возделывании зернопропашных культур по интенсивной технологии наиболее широко применялись пестициды, относящиеся к хлорсодержащим соединениям (ХОС): гербициды на основе 2,4-дихлорфеноксиуксусной кислоты (2,4-Д) и трихлорацетата натрия (ТХАН), инсектицид линдан (j - изомер гексахлорциклогексана - ГХЦГ).

Продолжительное воздействие целого комплекса ХОС на организм человека приводило к снижению его самоочищающей способности и увеличению

содержания токсичных веществ в крови взрослого населения до уровней, в 2 - 10 и более раз превышающих допустимую суточную дозу для ДДТ, ГХЦГ. По мнению авторов, особую тревогу вызывают данные о накоплении ХОС в биосредах беременных женщин и кормящих матерей. Анализ образцов биологических жидкостей, отобранных у рожениц и кормящих матерей, показал, что из организма матери 2,4-Д, ТХАН (сумма хлоруксусных кислот), ГХЦГ выводятся с грудным молоком в больших количествах, чем с мочой.

Эпидемиологические исследования выявили для детей неонатального (от рождения до 2х месяцев) периода развития прямую зависимость между общей нагрузкой пестицидами и первичной заболеваемостью. Такие же исследования выявили зависимость между заболеваниями у детей до 14 лет и хронической экспозиции нагрузок пестицидами. При этом у детей учащаются такие заболевания, как хронический отит, фарингит, хронические болезни миндалин и аденоидов, бронхиальная астма, нефрит, нефроз, врожденные аномалии сердца и системы кровообращения.

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## BIOLOGY

### GROWING AND CULTIVATING SOYA BEANS IN THE SPECIFIC CONDITIONS WITHIN SAMARKAND REGION'S ENVIRONMENT

Мухаммадий Мадина, Ўроқов Сирожиддин

**Abstract:** This article describes the length of time it takes to grow and cultivate soybean varieties "Nafis" and "Selekta-302", especially the growth of soybean varieties in the Zerafshan Valley.

*Key words:* Variety, soybeans, "Nafis", "Selekta-302", Zerafshan valley, vegetation, growth, development, productivity.

The growing number of the world's population is the reason for the day by day growing demand for food production. In order to meet the demand of the population for food, the agriculture of grains and beans focuses on the direction of selection and seed production, cultivation and the study of their physiological properties. Among these crops, soya beans are widely distributed around the world. The amount and quality of protein in these grains, and proportion of oil and other important organic and mineral substances allow it to be used in various industries [1]. Owing to the wide use of its high-quality protein and oil in food produce, in farming, in technical and medical fields, soya beans play an important role in the national food programs of many countries. In the United States, Brazil, Argentina, China, India, and Russia, a lot of attention is given to soya beans. In recent years, world soybean production has increased from 60 million tons to 130 million tons, and the area of farming soya increased by 1.6 times and the harvest by 1.35 times [2]. Depending on the variety and growing conditions, soya beans contain 40-45% protein, 20-26% fat, 25-30% carbohydrates, up to 6% minerals and 12 different vitamins. Soya beans contain all the essential amino acids. More than a thousand dietary foods are made from soya beans. Soybean meal is a nutritious animal feed. Soybean oil accounts for 40% of the world's vegetable oil production.

Currently, one of the most pressing issues is the selection of varieties of this valuable crop suitable for the conditions of the Zerafshan valley, the study of cultivation technology and its physiological properties.

"Nafis" and "Selekta-302" types of medium-ripening varieties of soyawere chosen as the object for the experiment. The experiment was conducted in 2019 in the soil of the Samarkand region of the Zerafshan valley. All the tests, phenological observations and calculations were carried out on the basis of methodologies [5].

The studies of growing and development of soya beans during its ontogeny is important when cultivating it in certain soil and climate conditions. Soya is a light-loving, heat-loving short-day plant. In the soil and climate conditions of our country, they grow well and give high quality yields.

During the growing and developing experiments of soya, the morphological and biological properties of each variety are taken into account, as well as soil and climate conditions, the quality of the beans, the type and size of the cultivating area, and also the types of early, mid and the late ripening varieties are taken into account; it has to be noted that the introduction of alternative sowing rates will increase the crop yields and prevent losses in the harvest [3].

The first stage of development of a soybean plant can last from 5-6 days to 15-20 days or more, depending on temperature, soil moisture, depth of seed germination and varietal characteristics. At the same time, the lawn should be protected from weeds. If the plant has strong roots in this phase, it will grow rapidly in the later stages of development [6].

In our study, we paid special attention to the duration of the growth of medium-ripening varieties of local soya. During the experiment, the height of the plants was measured a total of 10 times every 15 days.

The height of the soybean varieties was initially measured on the 15.05, the height of the "Nafis" soybean variety plant was 3.2 cm and the average height of the "Selekta-302" soybean plant was 2.6 cm. When we measured the height of the plants on 30.05, the average height of the "Nafis" soybean variety was 6.7 cm and the average height of the "Selekta-302" variety was 6.5 cm. Subsequent observations revealed that the growth duration of both soya varieties has increased. The average height of the "Nafis" variety was 17.8 cm, and the average height of the "Selekta-302" variety was 17.3 cm. At this stage, the heights of the both varieties were practically the same. On the 30.06, the average height of the "Nafis" variety was 40.8 cm and the average height of "Selekta-302" was 32.1 cm. During this stage, the height of the "Nafis" variety increased by 8.7 cm compared to the "Selekta-302" variety. On the 15.07, the average height of "Nafis" was 68.2 cm, the height of "Selekta-302" was 61.4 cm, and the difference between the varieties was 6.8 cm. Subsequent measurements show the growth rate of the plants. This correlates with the time that soya blossoms. In 15 days, the height of the "Nafis" variety increased on an average from 24.7 cm to 92.9 cm. The "Selekta-302" variety of soya had grown by 18.8 cm and the height of the plant in total was 80.2 cm. On the 15.08, when we measured the height of soybean varieties, the height of "Nafis" variety was 112.5 cm and the height of "Selekta-302" variety was 96.9 cm. The difference between the heights of those varieties came to 15.6 cm. The subsequent observations revealed that the average height of our local variety was 131.2 cm. The "Selekta-302" varieties grew to 112.4 cm. From this stage it became apparent that the growth of the plant slows down to an extent. In our recent observations, the average height of the "Nafis" plant was 139.7 cm. The height of the "Selekta-302" varieties was 123.7 cm. At the end of the vegetation season, the average height of "Nafis" was 144.8 cm and the average height of "Selekta-302" was 128.9 cm. In the conditions of the Zarafshan valley, the height of "Nafis" soy variety was found to be slightly higher than that of "Selekta-302" variety.

It is well known that it is important to be aware of the stages of development of plants. Because the proper handling, the timely watering, feeding, and harvesting depend on when the stages of development start and end. According to the methodology of TA Rabotnov [81], the growth and development of soya is divided into the following stages: germination, leaf formation, budding, formation of pods, ripening of pods. In our study, the developmental phases of the soya varieties "Nafis" and "Selekta-302" were with a view to experiment starting from germination to the point of the ripening of the beans.

It took an average of 6 days for the "Nafis" soya variety from the moment of planting to germination, and 7 days for the "Selekta-302" variety. Depending on the variety, it took an average of 4-5 days from the moment of germination until the forming of leaves. The sprouting phase averaged 14 days for the "Nafis" variety and an average of 15 days for the "Selekta-302" variety. It took 47 days for "Nafis" variety, and 45 days for the "Selekta-302" variety to fully bloom, it became apparent that for the formation of pods for the local variety it took an average of 15 days, and 14 days for the "Selekta-302" variety. The full ripening of the "Nafis" soya variety took 28 days and the vegetation

period was 115 days. The ripening of the "Selekta-302" variety took 32 days. The length of the vegetation was determined to be 117 days. Therefore, in the Samarkand region, the height of the soya depends on the characteristics of the given varieties. The phenological observations show that the growing period lasts 115 days from the moment of sprouting to the ripening in the "Nafis" variety and 117 days in the "Selekta-302" variety. The average height of the "Nafis" soya variety was 144.8 cm and the average height of the "Selekta-302" variety was 128.9 cm. Along with the growth and development of the studied soybean varieties, we also found that the average crop yield of the "Nafis" soybean variety was 25 centners per ha and the average crop yield of the "Selekta-302" soybean variety was 27 centners per ha.

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## ГЕМОГЛОБИНЫ ЧЕЛОВЕКА: ИММУНОБИОХИМИЧЕСКАЯ ХАРАКТЕРИСТИКА И МЕДИКО-БИОЛОГИЧЕСКОЕ ЗНАЧЕНИЕ.

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*Abstract. In recent years, interest in certain types of hemoglobin has increased. The purpose of our study is study various pathological conditions of red blood, in which it is important not only to change the amount of total hemoglobin of the blood, but also its individual types.*

*Keywords: hemoglobinopathy, thalassemia, hemolytic anemia, tetramer.*

**Введение.** В настоящее время повышен интерес к отдельным типам гемоглобина. Существуют различные патологические состояния красной крови (талассемия, онкопатология, гипоксия и др.), при которых важное значение имеет не только изменение количества общего гемоглобина крови, но и отдельных его типов. К наиболее значимым типам гемоглобина человека относятся гемоглобины взрослого HbA<sub>1</sub>, HbA<sub>2</sub>, фетальный гемоглобин HbF и эмбриональный гемоглобин HbP.

**Цель исследования:** изучение клинической оценки состояния красной крови путём пополнения сведений по основным типам гемоглобина и их иммунобиохимической характеристике.

### **Результаты исследования и обсуждение.**

Различные патологические состояния красной крови, связанные с изменением количества общего гемоглобина и его отдельных типов называются гемоглобинопатиями (гемоглобинозами). Перед описанием проблемы гемоглобинопатии необходимо вспомнить структуру гемоглобина. Гемоглобин - сложный железосодержащий белок, обладающий кровообращением, способный обратимо связываться с кислородом, обеспечивая его перенос в ткани. Гемоглобин содержится в эритроцитах, у большинства беспозвоночных растворён в плазме крови. Молекулярная масса гемоглобина человека – около 66,8 кДа. Нормальным содержанием гемоглобина в крови человека является: у мужчин—130-160 г/л ; у женщин—120-160 г/л.

Гемоглобин входит в состав группы белков гемопротеины, которые сами являются подвидом хромопротеинов. Гемоглобин состоит из гема и глобина. Небелковой частью является гем -структура, включающая в себя порфириновое кольцо ( состоящее из 4 пиррольных колец) и иона Fe<sup>2+</sup>. Железо связывается с порфириновым кольцом двумя координационными и двумя ковалентными связями. Гемоглобин человека является тетрамером, состоит из 4 протомеров. У взрослого человека они представлены полипептидными цепями α1, α2, β1 и β2.

Существует несколько нормальных вариантов гемоглобина:

• **HbA** (adult) - гемоглобин взрослых, доля составляет 98%, содержит 2α- и 2β-цепи, у плода появляется через 3 месяца жизни.

• **HbA<sub>2</sub>** - гемоглобин взрослых, доля составляет 2%, содержит 2α- и 2δ-цепи.

• **HbF** (foetal) - фетальный гемоглобин, содержит 2α- и 2γ-цепи, появляется через 12 недель внутриутробного развития и является основным после 3 месяцев.

• **HbP** (primitive) - примитивный гемоглобин, содержит 2ε- и 2ξ-цепи, встречается в эмбрионе между 7-12 неделями жизни.

• **HbO<sub>2</sub>** - оксигемоглобин, образуется при связывании кислорода в лёгких, в лёгочных венах его 94-98% от всего количества гемоглобина.

• **HbCO<sub>2</sub>** - карбогемоглобин, образуется при связывании углекислого газа в тканях, в венозной крови составляет 15-20% от всего количества гемоглобина.

**Патологические формы гемоглобина:**

• **HbS** - это гемоглобин серповидно-клеточной анемии.

• **MetHb** - метгемоглобин, форма гемоглобина, состоит из трёхвалентного иона железа вместо двухвалентного. Такой переход  $Fe^{2+}$  в  $Fe^{3+}$  ускоряется при использовании сульфаниламидов, употреблении нитрита натрия и нитратов пищевых продуктов, а также при недостаточности аскорбиновой кислоты. Образующийся метгемоглобин не способен связывать кислород и возникает гипоксия тканей.

• **HbCO** - карбоксигемоглобин, образуется при наличии CO во вдыхаемом воздухе. В норме он присутствует в крови в количестве 0,5-1,5%.

• **HbA<sub>1c</sub>** - гликозилированный гемоглобин, его концентрация нарастает при хронической гипергликемии.

Существуют четыре основных типа гемоглобинопатологии:

- *гемолитические анемии*, вызванные нестабильностью гемоглобина;

- *метгемоглобинемии*, обусловленные ускоренным окислением гемоглобина;

- *эритроцитоз*, вызванный нарушением сродства гемоглобина к кислороду;

- *серповидноклеточные нарушения*, это следствия повреждений клеточных мембран эритроцитов HbS.

Важную группу нарушений, связанных с аномалиями гемоглобина, представляют талассемии.

Талассемия - генетическое заболевание, наследуемое по рецессивному типу, развивается в результате нарушения соотношения альфа и бета-цепей специального белка глобина. Талассемия проявляется гемолитической анемией различной степени выраженности. В зависимости от того, синтез какого из мономеров нарушен, различают альфа - и бета-талассемию.

$\beta$ -талассемия — при этом нарушен синтез  $\beta$ -цепей глобина. Тип наследования этой болезни аутосомно-рецессивный. Существует два вида бета-талассемии — большая талассемия и малая талассемия. Большая талассемия - наиболее тяжёлая форма заболевания. Возникает при наличии мутаций в обоих аллелях гена бета-глобина. В отсутствие или при уменьшении бета-цепей гемоглобин А вытесняется гемоглобином F, в норме вырабатываемым у плода и сменяющимся на гемоглобин А после родов. Малая талассемия связана с наличием мутации в одном из аллелей гена бета-глобина. Она протекает легко и не требует лечения. При гомозиготной талассемии у больных возникает тяжёлая анемия, и чаще всего они погибают в детстве (10-12 лет).

$\alpha$ -талассемия — связана с мутациями в генах HbA<sub>1</sub> и HbA<sub>2</sub>. Есть 4 локуса, кодирующего  $\alpha$ -цепи. Наличие мутации в одном из локусов приводит к минимальным клиническим проявлениям. Нарушения в двух локусах выражаются лёгкой формой анемии. При мутациях в трёх локусах возникает уменьшение  $\alpha$ -глобина. При этом избыточные цепи  $\beta$ -глобина образуют тетрамеры - гемоглобин H (гипохромная микроцитарная анемия). Присутствие мутаций во всех четырёх аллелях не совместимо с жизнью. Ребёнок с такой патологией погибает внутриутробно или вскоре после рождения.

У гомозигот заболевание протекает тяжело. При этом у детей отмечается замедленный рост, отставание в физическом и умственном развитии, спленомегалия. Их отличительной чертой являются аномалии черепа с деформацией его лицевой части. Эти деформации связаны с увеличением массы кроветворной ткани, заполняющей свободные полости костей.

Диагноз талассемии ставится на основе результатов исследования биохимической структуры гемоглобина методом белкового электрофореза.

#### **Выводы.**

Фундаментальные сведения по свойствам гемоглобина и его отдельных типов помогают изучению различных патологических состояний красной крови.

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# CHEMICAL

## AGROCHEMICAL PROPERTIES AND THEIR DYNAMICS OF THE SOILS OF JIZZAKH REGION

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*Annotation. Changes in the agrochemical properties of irrigated soils of Jizzakh region are given in the article. The dynamics of agrochemical indicators of regional soils is analyzed.*

*Keywords: soil, gusus, nitrogen, phosphorus, potassium, mechanical content.*

The agrochemical properties of the soils of Jizzakh region are different and have changed over the years, there is no pattern or trend, that is, no increase or decrease in one system and other processes were observed. Each district has different characteristics, and the annual farming and reclamation activities have led to their different variations. For example, the table shows the amount of humus and nutrients in the irrigated lands of Zafarabad district on the example of grasslands of the Chimkurgan and Y.Okhunboboev estates. The amount of humus in the upper plowed layer of irrigated meadow-sierozem soils of the Chimkurgan area fluctuates over a wide range, its highest values are observed at 1.11-1.34%, the minimum (small) amounts are 0.43-0.62%. Soils of these estates belong to the group of low (0.5-1.0%) and moderate (1-2%) soils, depending on the amount of humus. While the amount of mobile phosphorus ranges from 4-6 mg / kg to 16-19 mg / kg, they can be divided into very low (0-15 mg / kg) and low (15-30 mg / kg) groups. Depending on the amount of exchangeable potassium, very low (0-100 mg / kg), low (101-200 mg / kg) and moderate (201-300 mg / kg) groups are observed. The amount of humus in the topsoil of the irrigated areas sierozem-meadow soils named after Y.Okhunboboev is better than the previously described association soils, the minimum humus content is observed here at 0.46-0.79%, very low humus-rich soils are large areas (64.7%). It forms very low, moderate, and high-supply soil groups in terms of mobile phosphorus, very low in mobile phosphorus. The mechanical composition of the irrigated soils of the described areas, as mentioned above, consists mainly of light sand, sandy, medium, heavy sandy loam and sand, and the data based on the indicators of abbreviated analysis (analysis) of the mechanical composition of soils are reflected in Table 4. According to the table, the amount of physical clay (<0.01 mm) particles is 8.3-9.3 in sands, 10.8-14.5 in sands, 20.2-27.2 in soils with light sandy mechanical composition, 33 in medium sandy loams, 9-44.1%. Among the mechanical elements, coarse dust (0.05-0.01 mm) and fine sand (0.1-0.05 mm) particles occupy a leading position.

The soils in Arnasay district are humus with very low (1%, 29323.4 hectares) and low (1.1-2.0%, 2642.6 hectares) levels. It was observed that the area covered with humus up to 1% in the soils of the district is 91.7%, and the area above 2% is 8.3%. This requires the judicious use of local and non-traditional fertilizers. For example, in the estate named after M.Ulugbek there is a total area of 2010,0 hectares of irrigated agricultural land, and it was observed that these irrigated sierozem-meadow soils contain humus in the amount of up to 1%. However, 1343.3 ha were provided with mobile

phosphorus at very low (0-15 mg / kg) and 666.7 ha were provided at low (16-30 mg / kg) levels. It was noted that 414.8 ha were low (101-200 mg / kg), 590.4 ha were average (201-300 mg / kg), and 1,004.8 ha were above average (301-400 mg / kg) with exchangeable potassium. In general, 5.6% of the soils distributed in the district belong to the group with very low, 31.4% low, 41.8% medium, 20.5% high and 0.7% very high supply with exchangeable potassium. The content of exchangeable potassium in irrigated soils of Arnasay district of Jizzakh region, as a percentage, according to the 45th section of irrigated grasslands of Samarkand, Arnasay district, the content of humus in the drive layers is 0.97%, mobile phosphorus 24.4 mg / kg, and the exchangeable potassium was 297 mg / kg, and they are observed to decrease steadily towards the lower layers. According to the analysis of the 130th soil section of the area, humus was relatively low, and the amount of mobile phosphorus and exchangeable potassium was low. For example, while 45 sections of the estate provided low levels of mobile phosphorus (very low in gradation 16-30 mg / kg), 130 sections of soil provided very low levels (0-15 mg / kg), correspondingly exchanging average potassium (201- 300 mg / kg).

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## CULTUROLOGY

### IMPROVEMENT OF MOTIVATION OF YOUTH TO PERFORMANCE IN PHYSICAL CULTURE AND SPORTS

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*Annotation. This article reveals the importance of physical culture and sports in the upbringing of a harmoniously developed personality, emphasizes the attention paid by the head of state and the government of the republic to the education of a healthy generation, notes the connection of physical development with the development of the spiritual, mental, social spheres of human life and activity.*

*Keywords: highly qualified athletes, sports activities, healthy lifestyle, motivational constructs, target orientations,*

The healthy lifestyle of the future generation is one of the most pressing problems of today. Each country expects the future from its new generation, which will be healthy, able to work, defend their homeland, live in accordance with the requirements of society and their individuality. And this means that the main attention should be directed to children, adolescents, youth, that is, precisely at the age when a person begins to make choices that are interesting and more accessible, which means that physical education and sports should become accessible and interesting to each. The problem is that at present the youth shows insufficient interest in playing sports and does not strive for a healthy lifestyle, and the formation of a healthy lifestyle for the personality of a modern young person becomes especially relevant in the present conditions of social development. At the moment, the sphere of physical education is of considerable interest, since youth is the foundation on which the sport rests. It is the youth that is famous for their sporting achievements and successes. On the other hand, physical education and sport are an area that largely ensures the physical health of the entire population. In this regard, in order to solve the problem of involving young people in physical education and sports, it is necessary to organize effective physical culture and health-improving work. Physical culture is a massive phenomenon in its essence, involving the majority of members of society in its sphere of influence, albeit with varying degrees of activity. Sport is a part of physical culture, but only a part directly related to motor actions. Thus, physical culture and sport is one of the types of human activity aimed at the physical improvement of both the human population as a whole and each individual person, which has a healing, educational, political and socio-economic impact on the social development of mankind. Unfortunately, it can be stated that today the opportunities of physical culture and sports are inefficiently used to preserve and strengthen people's health, in preventive work, in the fight against drug addiction, drunkenness, smoking, especially among children, adolescents and youth. Therefore, today it is important to

ensure that sports activities in the country become truly massive. For this, it is necessary that the interest in physical education and sports be instilled in the family and at school, at the institute, courtyards become sports, and in each educational institution, priority should be given to the physical education of children and adolescents. In order for society to recognize the importance of preventive measures to strengthen and maintain their health, it is necessary to increase the social significance of physical education and sports, the importance of physical activity; to form a view on physical culture and sport, as on the factors of a healthy lifestyle.

Based on the fact that a person's involvement in active physical education and sports throughout his life is largely determined by his attitude to them, as well as by the conscious need for a healthy lifestyle, from the whole range of proposed measures, it is necessary to single out targeted propaganda of physical education as a priority and the formation of a healthy lifestyle. It is about creating a massive advocacy campaign that uses a wide range of various means and is carried out with the aim of creating a prestigious image of a sporting lifestyle, the value of one's own health and the health of others. Trends in recent years show, on the one hand, an increase in the number of sports-related publications and publications in the print media, and on the other hand, a decrease in the number of sports programs and broadcasts in television and radio programs, since they require large financial resources. There is an urgent need to increase the number of sports programs, the need to create a sports channel in the TV and radio broadcasting system, accessible to a wide audience, production of videos, films, television programs and television programs, print and Internet materials of an informational and educational nature, aimed at creating the need for children, adolescents and youth in sports and a healthy lifestyle. In accordance with the federal law "On Advertising", a system of measures to encourage the production and broadcast of social advertising should be developed and implemented. State support is needed for the targeted provision of sports publications in physical education and sports and literature in mass, school and university libraries, which, due to lack of financial resources, are practically unable to purchase these publications. Advocacy should be addressed directly to the person, convincingly show the priority importance of physical culture and sports in educating the population, preventing disease, prolonging active longevity, in combating drug addiction, smoking, drinking, and other negative phenomena. Physical education advocacy should help:

- increasing people's interest in physical improvement, disclosing the value of physical culture;
- popularization of independent studies with a wide use of natural factors;
- the formation in the mass consciousness of the understanding of the vital necessity of physical education and sports.

Thus, to enhance the role of physical culture and sports in the formation of a healthy lifestyle, students need the whole complex of organizational, structural, legal, financial and scientific-methodological measures. At the same time, they must correspond with the economic, social and political realities of the day and the capabilities of the state and society.

However, the foundation of health and a positive attitude towards physical education is laid in childhood. The deteriorating health of the younger generation dictates the need to tackle this problem immediately. The main efforts should be aimed at:

- increasing parental responsibility for children's health;
- search and rational use of targeted and sponsorship financial opportunities in the interests of the development of children's and youth sports;
- improving the program-methodological and organizational support of physical

education in educational institutions;

- introduction of new effective forms of organization of classes;
- the creation of an industry of inexpensive, but practical and hygienic goods and simulators for physical education;
- mass publication of popular literature, video and computer programs;
- development of social programs and projects aimed at involving young people in sports;
- Creation of comprehensive physical education and sports centers at educational institutions, including a sports hall, a swimming pool, and flat structures.

Based on the foregoing, we can conclude that the main method of involving young people in physical education and sports, nevertheless, is the promotion of a healthy lifestyle. This topic should be given more attention on the pages of magazines and newspapers, in television broadcasts. Mass communication, especially newspapers and magazines, the Internet, and television play a variety of roles in the development of physical culture and sports related to their ability to accumulate, process, and transmit information to a wide audience. As a type of governance, the media primarily affects public opinion and, through it, the worldview of the masses. They contribute to special orientation in the surrounding world in general and in the field of physical education and sports in particular. Through social means of communication, knowledge is disseminated, and physical education is increasing. With their help, there is an understanding of the population as a whole and young people in particular of the social significance of physical culture and sports both for society and for an individual. They can serve as an initial impetus, an incentive for physical education and sports, act as a factor that reinforces and activates the need to continue active physical education and sports, improve one's skills, physical fitness, and contribute to the development of cognitive interests in physical culture and sports as a spectacle. In recent years, there has been a slight decrease in youth interest in physical education, including its sports. Young people passively relate to their state of health, preferring to devote time to gambling, the use of alcohol and drugs, and a hectic lifestyle, not realizing that such a lifestyle can lead to negative consequences. In order to study the problems of insufficient involvement of youth in sports, a study was conducted to clarify the attitude of modern youth to physical education and sports.

Thus, we can conclude that the current alarming situation with the physical and spiritual health of the nation is largely due to social reasons, including the underestimation of the health, educational and socio-economic role of physical culture and sports, both from the state and on the part of the population. For young people, as the most vulnerable layer of the population, it is necessary to ensure that a person makes a conscious choice of social values of a healthy lifestyle and form on their basis a stable, individual system of value orientations that can provide for the regulation of personality, motivation of its behavior and activity. The phenomenon of a healthy lifestyle should be formed initially from the institution of the family, then from many other factors: state support in the field of sports, tourism, the media, education, and leisure activities is important. If it were possible to achieve a clear understanding by most people that physical activity and sports for children and youth are a necessary and most important condition for the normal development of the mind and body, that the vast majority of mental and physical diseases are somehow related to immobility and obesity, that physical activity and sports activities improve the quality of life, relieve stressful conditions, increase working capacity, etc., then it would be possible not only to stop the physical degradation of the nation, but also significantly increase the level of its health and working capacity.

## CULTURE IS A UNIVERSAL HUMAN VIRTUE

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*Key words: Culture, art, cinematography, theater, music, literature, architecture, ancient culture, Buddhism, Socrates, Abu Ali ibn Sino, Biruni, Farabi, "paydey", Hellenes, democratic enlightenment, "local civilization".*

*Abstract: This article gives a special definition and description of the concept of culture. Information is given on how each nation understood the term according to its ethnic origin and stage of development, and what was done to promote it. The importance of the concept of culture in a narrow and broad sense, its importance to human beings and the whole world, the fact that culture is inextricably linked with other forms of art, and this inseparability is inseparable. The subconscious mind of man and the importance of its concept of culture and art in its application to the world are mentioned.*

Culture is a set of symbolic devices and works that define human activity and the importance of this activity. Culture: music, literature, art, architecture, theater, cinema, lifestyle.

In anthropology, the term "culture" refers to products and their production, their aesthetic meaning, and the social relations associated with these processes. In this sense, culture includes art, science, and spiritual systems.

Culture is a society, a certain level of historical development of human creativity and abilities. The people's lives and activities can be reflected in different forms including the materialistic and spiritual treasures. The concept of culture is used to describe a specific historical period (ancient culture), a particular society, people and nation (Uzbek culture), as well as specific areas of human activity or life (for example, labor culture, art culture, culture of life). In the narrow sense, the term culture refers only to the sphere of people's spiritual life. "Culture" comes from the Arabic word Madina (city). Arabians named the life of people two types: existence like bedouins and deserty; the second is cultural entity. Bedouins was applied to the nomadic peoples of the steppes and deserts, and to the peoples who settled in the cities and had their own way of life.

The great figures of medieval culture, for example Abu Ali ibn Sina, Beruni and others interpreted the urban way of life as the maturity of the society. For example, according to Farabi, everybody goes to get the highest level of maturity by their nature strives. It is achieved to this perfection only by city community. He noted that "The cultural society and the cultural city (or country) has become such that in this country everyone can choose their professions independently. In the true sense of the word people live freely. "1. [" Farabi, "Fozilodamlarshahri"]

AlisherNavoi noted that the idea of humanity is in mature morality and educated nation, for achieving spiritual heights, while noting the issue of community, is a key criterion. Representatives of the democratic enlightenment movement which is emerged in the second half of the 19th century believed that the most effective way to educate the people was through science.

They promoted with full of passion the science and culture among the people who are against to medieval ignorance.

For example, according to Furkat, science should be a light to illuminate the path to human happiness.<sup>2</sup> [ Adabiyotqo'llanma.Sh.Sariev] They published various newspapers

and magazines, established new publishing houses and printing houses, they opened libraries, theaters, new schools. They promoted our culture, our history and encouraged the deep acquisition of secular knowledge. As a result of the spread of enlightenment, the generality of the people rose.<sup>3</sup> In Europe, "culture" means, firstly the influence of man on nature and to educate them. (Lat. Cultura - to find a place, care; the Russian word "kultura" is also taken from this). Culture is not only conforming ability to existent measure and costumes and traditions, but it consists of encouraging confirmed desire, it is not corresponding to any society such double sided approaches. For example, in Ancient China is jen, in India is dharma). Elleniens is "culture les", varvariens knows that their own main variety of "paydey". Such a two-sided approach to culture is not unique to any society, as culture involves not only developing the ability to adhere to existing norms and traditions, but also encouraging the desire to follow them. (e.g. jen in ancient China, dharma in India). The Hellenes were "uncivilized," and the barbarians saw their main difference as "paydei," or "education." In the last period of ancient Rome, the concept of culture was also enriched with content that reflected the urban way of social life and by the Middle Ages it became widespread This concept is close to the concept of civilization.<sup>4</sup> In Europe, during the period of Enlightenment, there was a "critique" of culture and civilization. German philosophers sought a way out of this contradiction within the realm of the "spirit," the realm of moral, aesthetic, or philosophical consciousness. They consider that these parts of consciousness can be factors of true culture and human development. From the end of the 19th century, the idea of "local civilization" was faced to the world. The idea is the last stage of development in civilization of a particular society. Culture is not material result of human actives, but also it includes the subjective strengths and abilities of people that occur in the process of labor. Every society has its own type of culture. Because of development of society, the type of culture also changes, but this does not mean that the development of culture is interrupted, but the old culture disappears, the cultural heritage and the values of the past are abandoned. After all, each new society necessarily inherits the cultural achievements of the previous society and transforms them into their new system of society.

In general, culture is a universal phenomenon that belongs not to one nation, and it cannot be. Without doubt, each nation's the main part of their culture is sharing the universal culture that created by their own nation. Culture can never be a phenomenon. It equally serves for everyone. For example, samples of art and literature, architectural monuments, statues, scientific achievements belong to everyone else. In general, the concept of culture and art is not divided into specific nations. Both of them are because of universal education and each nation interprets in different way. However, the most important thing is that they serve to make human life beautiful and meaningful. Therefore, it is wrong to separate them or classify them according to their ethnic origin. It is also a sign of relativity to divide the development of a culture according to the level of antiquity of a nation. This thought has been proven over the centuries. All nations and states shape culture and art as a result of their way of life and ethnic origin, and pave the way for their development. In one word, this concept will never turn away from the development and as long as nations live its way of life will change over the time, and the traditions and national values, culture and art of that nation will follow changes regularly. This process began from the beginning of human life.

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## STYLISTIC MODIFICATIONS OF SPEECH SOUNDS

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*Annotation: The primary concern of linguistics is the study of language in use. It's particularly relevant for phonetic studies. We're interested in how the phonetic units are used in various social situation. It's the extra linguistic situation that influences our choice of language means. There's a special branch of linguistics that studies the way language means function in different situation. It's called functional stylistics. It's primary concern is functional style - a set of language means used in a particular situation. It's called functional stylistics. Its primary concern is functional style - a set of language means used in a particular situation. This article has been research only English language*

*Keywords: phonetic, stylistic modifications, colloquial speech, speech,*

On December 10, 2012 fist President of the Republic of Uzbekistan Islam

Karimov signed a decree "On measures to further improve foreign language learning system". It is noted that in the framework of the Law of the Republic of Uzbekistan "On education" and the National Programme for Training in the country, a comprehensive foreign languages' teaching system, aimed at creating harmoniously developed, highly educated, modern-thinking young generation, further integration of the country to the world community, has been created. During the years of independence, over 51.7 thousand teachers of foreign languages graduated from universities, English, German and French multimedia tutorials and textbooks for 5-9 grades of secondary schools, electronic resources for learning English in primary schools were created, more than 5000 secondary schools, professional colleges and academic lyceums were equipped with language laboratories

However, analysis of the current system of organizing language learning shows that learning standards, curricula and textbooks do not fully meet the current requirements, particularly in the use of advanced information and media technologies. Education is mainly conducted in traditional methods. Further development of a continuum of foreign languages learning at all levels of education; improving skills of teachers and provision of modern teaching materials are required. The phonetic units are used in various social situation. It's the extra linguistic situation that influences our choice of language means. The first thing that counts in the stylistic modifications of sounds is the character of relationship between the participants of discourse, which is manifested in the degree of formality. In formal situations the participants tend to monitor their linguistic behavior, their pronunciation tends to be careful. In informal situations where speakers are more relaxed speech is generally faster and less careful. Informal speech used in everyday conversation is often referred to as fast (rapid) colloquial speech.

The most frequent modification of consonants in fast colloquial speech is assimilation, both complete and incomplete.

- alveolar stops [t], [d] and in some cases [n] are modified under the influence of the following velar or labial consonant, e.g.

that place ['thʔp'pleis]

In fast colloquial speech we can also observe elision of consonants. It is a complete loss of a speech sound, usually due to the increased rate of speech.

What has he done; always, alright; next day; mashed potatoes, second term; and the reason for this.

In fast colloquial speech reduction may also result in vowel elision, the complete loss of the unstressed vowel within one word or at word boundaries:

History [ˈhɪstɒrɪk], phonetics [fəˈnætɪks], correct [kɹekt], get another, come along, after all. The number and degree of sound modifications depend not only on linguistic factors (such as the neighboring sounds and distribution of sounds in connected speech) but on extra linguistic ones as well.

Conclusion: Stylistic oppositions are usually observed in the two large marginal types of pronunciation - formal and informal. Formal speech suggests unemotional information on the part of the speaker. It is characterized by careful articulation and relatively slow speed. Informal speech implies everyday conversation; it is relaxed and rather rapid and is characterized by the use of simplified sound forms. The character of sound modifications in relation to situational factors of speech communication is only beginning to be the object of thorough instrumental analysis.

One of the most important factors that results in the increased number of sound modifications is the character of relationship between the speaker and the listener and the degree of formality in their discourse. The other extra linguistic factors that determine the degree of sound modifications are the degree of preparedness, the form of communication (a monologue or a dialogue), the number of participants, etc. Native speakers usually don't have any difficulties in understanding rapid casual speech though sound simplifications are not registered in the listener's mind and he/she is not usually aware of the changes since they do not affect the meaning.

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## ETHNOCULTURAL PROCESSES IN CENTRAL ASIA

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*Annotation:.* This article examines the ethnic processes in Central Asia and their impact on interethnic relations, as well as the emerging socio-political problems. It examines the ethnic processes that influenced the formation of the Uzbek people.

*Keywords:* etno-culture, nation, Central Asia, politic, ethnic

Each ethnic group was formed in a certain historical period . At the same time , living in groups , or some groups closer to each other with the continuous economic and cultural . Their approach is often a language -speaking people - relatives , fellow bar . Ethnic lived in this area since ancient times to the process or to move to other countries of the region ( migrants ) or certain ethnic groups, ethnicities can actively participate . Between the ethnic groups closer to a certain ethnic group or component plays a leading role in the process ; Other ethnic groups are leading the group around him in terms of language and culture, drawn in ranks . But the approach of the ethnic groups, their integration is not always successful . The political situation in the country, internal conflicts, the struggle between the ethnic groups closer together, with one another before the end of the process ( consolidation ) scattered out of date, not less . Maveraunnakhr moved a few years ethnicities (traditional semi- nomadic and semi-settled lives) continue to remain the order of the division of tribes and clans. Seed , in turn, a number of families in 53 large and small external component . - Family groups of one or more aoul cases of people. The order of the tribe seed always the same , in order to survive . From time to time there are some ethnic groups, tribes, and to let the seeds out of the context of other tribes and clans, and few cases. This process, in turn , the people - not on the basis of kinship relations in the life of the community , neighbors on the increased attendance . Moving from the tribes of Movarounnakhr was a significant difference between the population remained stable. Material life, the economy and lifestyle of the tribes in the past, nomadic complications significantly. They have accepted Islam , but Islamic religious traces still remain significantly . According to the scientist , the only oasis in the desert , far away from livestock tribes living in other words ( Sogdian - Tajik , Arabic , etc. ) may be involved . The valley and all the ethnic groups living in the villages of great change . According to this study , Maveraunnakhr and Khorezm civilized culture of nomadic and semi- nomadic population , to determine the scope of their cultural impact , the development of the settled population growth rate close to the culture and , finally, both ethnic components and a stable population of Turkic nomadic , semi- nomadic , semi- nomadic livestock accelerate the process of formation of the combination of ethnic and other topics covered . It is known that the early end of the century Khorezm Maveraunnakhr and urban and rural development of the whole culture compared to previous centuries. In the desert around the oasis of nomadic and semi- nomadic tribes living in a stable population, strong cultural influence. As a result of the stable population of the IX-X centuries breeder significant part of the tribes had settled. 54 with the effects of the city 's population of nomadic and semi-nomadic population science knowledge, the desire arises ; in upper- class families , the sense of educating boys , of making them literate , had intensified . EC and a stable population of Khorezm Syrdarya , Yettisuvda and the coast of the cultural influence of the Turkish population living in East Turkestan significantly . As a result, a significant

part of the population living on the banks of the Syrdarya in Yettisuv, East Turkestan , settled . Who converted to Islam, and cultural progress .

Conclusion, instead of living in the regions of Central Asia, settled with a population of nomadic tribes, ethnic, cultural and social ties between the processes a little faster remaining. As a result, in the IX-XII centuries there were significant changes in the tribal system and way of life of nomadic herders. In nomadic ethnics, the desire to live a stable life increases . This process in turn accelerates the stratification of migrants; Like the previous unions and tribal unions is broken. Ethno cultural acceleration of the process led to the formation of the Uzbek ethnic groups , as a nation , and the next time it is reconciled .

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## ARTISTIC AND CREATIVE HERITAGE OF THE PAINTER OF ZINAIDA KOVALEVSKAYA

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### *ANNOTATION*

*This article briefly reviews the creative pursuits and compositions of an outstanding painter and teacher who has devoted his entire significant life to singing Samarkand.*

*Key words: Samarkand, painting, composition, portrait, canvas, still life.*

A student and colleague of Pavel Benkov - Zinaida Kovalevskaya (1902 -1979) followed her teacher to Samarkand, where she lived permanently since 1930. She worked as an artist in the department of ethnography of the Uzbek State Research Institute, which provided an invaluable opportunity to travel on business trips in Uzbekistan, to study and sketch colorful, vibrant and at the same time exquisite folk embroideries and traditional ornaments. Going on business trips, Z. Kovalevskaya studies the Uzbek national ornament, performs sketches of embroideries. From trips brings watercolor sketches, sketches of women and children. He paints the paintings "The Handicraft Man" (1932), "The Dervishes Cheat the People" (1935), "In the Youth Brigade".

The artist worked in the genres of portraiture, landscape, and created still life's. Her work gained fame thanks to thematic compositions about the life of a modern Uzbek woman, which published in then popular magazines. The artist's picturesque manner developed under the great influence of her Kazan art schoolteachers - P. Benkova and N. Feshin. The influence of the style of Pavel Benkov is especially evident. The freshness of the palette, the radiance of colors - all that the Master taught her, could be in the works of Zinaida Kovalevskaya.

The first significant success of the artist and "one of the best paintings of Uzbekistan in the second half of the thirties" was the painting "In the Box" (1937). Then Z. Kovalevskaya writes the paintings "The winner of the bike ride" (1939) and others. During the Second World War, the artist writes the paintings "Young Badges" (1941), "Come Back with Victory" (1942), "In a New Family" (1942). The last two paintings exhibited at the All-Union Traveling Exhibition "Patriotic War" in Moscow in December 1942. Then Kovalevskaya writes the paintings "Seeing Off" and "Children Visiting the Wounded" (1943).

In the painting "Uzbek Yard" written in 1940, the master shows with confidence and sincerity the weekday of an ordinary family. In the courtyard of a small but comfortable house, there is silence. It's afternoon. Around reigns calmness and carelessness. In the right corner of the composition is a middle-aged woman sitting on a trestle bed. A little girl sits next to her. A caring mother feeds her daughter. By the color of the canvas, you can understand that this is lunchtime. Sunbeams fall through the vine of a vineyard. In the background is a kitchen with a traditional stove- tandeer. The yellow-ocher gamma of the composition attracts the viewer and gives a serene impression.

Such is the soothing sketch "Mosque at the House" written in the spring of 1945. Figures of children at the pond - house, green greens of not yet dusted leaves of trees, color reflections on the surface of the water from the pink-ocher building create a joyful expectation of an imminent holiday.

In 1941, Kovalevskaya entered the painting department of the Leningrad Institute of Painting, Sculpture and Architecture, evacuated to Samarkand. In 1943, Kovalevskaya

received an external diploma of graduation from the institute. The rating is "excellent" in terms of the totality of the submitted works. Awarded the title of artist of painting.

In 1946, at the All-Union Art Exhibition, Kovalevskaya's works "autumn in the Vineyard", "At the Window", "Uzbek Family" are exhibited. In the post-war years, Kovalevskaya painted the painting "Masters of Folk Art" (1947), which was exhibited at the exhibition in 1948 "Soviet woman in art" in Paris. Then Kovalevskaya wrote the paintings "The Yard" (1948), "Harvesting Tomatoes", "Bonuses of the Cotton Growers" (1949), "At the Congress of Noble Cotton Growers" (1951), "First Elections to the Supreme Council in Samarkand" (1951).

Among the gallery of portraits of Z. Kovalevskaya you can see portraits of father (1939), mother (1945), artists Pavel Benkov (1945), Mikhail Ivanovich Teplov (1952), "Portrait of a decorative sculptor S. Rakova" (1961). The result of trips to Urgut was the painting "Urgut" (1957) and "At the canal" (1957). In the years 1932-1949. Kovalevskaya taught painting at the Samarkand art school. The students of Z. Kovalevskaya are the national artists of the Uzbek SSR Abdulkhak Abdullaev and Lutfulla Abdullaevich Abdullaev (1912-2002), as well as the honored artist of the Uzbek Rashid Temurov (1912-1991) and Evgeny Nikolsky (1917-1978).

In 1953, in Tashkent, in connection with the 50th anniversary of the birth and 25th anniversary of Kovalevskaya's creative activity, her personal exhibition was held. In the same year, she awarded the title of Honored Art Worker of the Uzbek SSR. In 1964, the second personal exhibition was held in Tashkent. In 1964, Kovalevskaya awarded the title of People's Artist of the Uzbek SSR. In 1965, a personal exhibition in Moscow and Kazan, in 1972 - in Volsk and Saratov. In addition, she constantly participated in republican and union exhibitions.

Kovalevskaya died on November 25, 1979 in Samarkand. Kovalevskaya's works are in the State Museum of Fine Arts of the Republic of Tatarstan and the Saratov Art Museum named after A. N. Radishchev, in the Museum of Russian Art, in the State Museum of Art of Uzbekistan, in the State Museum of the History of Culture of Uzbekistan and in other museums of our country.

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## ECONOMY

### THE ROLE OF MARKETING IN FORMULATING AND IMPLEMENTING STRATEGIES

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*Annotation: The article deals with the role of marketers in determining broad trends in the economic and social environment. The main factors influencing the firm's strategies are given.*

*Keywords: marketing, leadership, social environment, human resources*

Marketing managers bear the primary responsibility for formulating and implementing strategic marketing plans for individual product-market entries. Market-oriented organizations tend to operate according to the business philosophy known as the marketing concept. Thus, market-oriented firms are characterized by a consistent focus by personnel in all departments and at all levels on customers' needs and competitive circumstances in the market environment. They are also willing and able to quickly adapt products and functional programs to fit changes in that environment. Such firms pay a great deal of attention to customer research before products are designed and produced.

They embrace the concept of market segmentation by adapting product offerings and marketing programs to the special needs of different target markets.

#### The role of marketing in formulating marketing program

The elements of marketing program	The role of marketing
• product-market development	• leadership role
• product quality	• leading responsibility for quality
• distribution	• primary responsibility
• technology	• varies according to the importance of technology to the product or service
• human resources	• responsible for functional area
• business development	• key supporting role with strategic planning and manufacturing responsible for implementation
• manufacturing facilities	• typically, only limited involvement

A major factor in the success or failure of strategy at any level is whether it fits the realities of the firm's external environment. Thus, in developing a marketing strategy for a product, a marketing manager must first monitor and analyze the opportunities and threats posed by factors outside the organization. Marketers must first attempt to identify and predict the impact of broad trends in the economic and social environment. In some situations, a firm might even try to influence the direction of such trends. Of course, the competitive environment of an industry is not static but can change dramatically over time.

The primary purpose of any marketing strategy is to facilitate and encourage exchange transactions with potential customers. One of a marketing manager's major responsibilities, then, is to analyze the motivations and behaviors of present and potential customers. Thus, marketing managers must also determine whether there are multiple market segments that will respond differently to their products and marketing programs and how to best define, identify, and appeal to those segments. But not every segment of a market is likely to be equally attractive to a firm. Some may be too small to be profitable, and others may desire benefits the firm cannot provide as efficiently or effectively as some competitors. Therefore, after examining customer needs and competitive strengths and weaknesses, a marketing manager must decide which market segment or segments to target and how to position the product in the target segment relative to competitive offerings.

A strategy is a fundamental pattern of present and planned objectives, resource deployments and interactions of an organization with markets, competitors and other environmental factors. The primary purpose of a marketing strategy is to effectively allocate and coordinate marketing resources and activities to accomplish the objectives of a firm within a specific product-market. The strategic marketing program for a particular product-market entry should reflect market demand and the competitive situation within the target market. As demand and competitive conditions change over time, the marketing strategy should also be adjusted. In other words, marketers must design a strategy that fits existing company resources, competencies, and procedures or try to construct new structures and systems to fit the chosen strategy. Consequently, a well-developed strategy contains five components:

- scope or the desired breadth of the strategic domain of an organization;
- goals and objectives;
- resource deployments, indicating how financial and human resources are to be distributed across product-markets or functional departments;
- identification of a source of sustainable competitive advantage;
- specification of potential sources of synergy across functional departments.

On the other hand, marketing managers often play a crucial role in providing necessary information. The extent of the marketer's role in strategic planning is mediated by the type of planning system. The marketer's role in formulating and implementing strategy is also influenced by the market orientation of the firm and its top managers. Some firms are not very market-oriented, because competitive conditions may enable the firm to be successful without being particularly sensitive to customer desires. The firm may be committed to past policies that are no longer appropriate in view of changing conditions in the market.

It is important to note, however, that such marketing activities may not always be carried out by marketing managers located in separate functional departments. Finally, effective planning systems strike a balance between creativity and control.

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## INVESTING IN HUMAN CAPITAL AS INVESTMENT IN THE FUTURE

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*Abstract: This article discusses investment in human capital as an important factor in development. Analyzes the problems associated with the index in the human capital of the world.*

*Keywords: investment, human capital, countries, education, economic growth, government, human capital index, labour-surplus countries, human resource*

Investments in education should be viewed as occurring within a dynamic life-cycle perspective in the presence of unobserved heterogeneities, state variables that reflect the education to any particular point in the life cycle, and expectations regarding further developments, including future returns to education.

The Sustainable Development Goals created and adopted by United Nations member states provide a clear blueprint on what countries need to do to ensure prosperity now, and in the future. Some of the key goals identified include quality education, decent work and economic growth, zero poverty and hunger, and reduced inequalities just to mention a few, many of which showcase the dire need to direct more investment into the development of individuals who then bring about social and economic development.

With the burgeoning youth population who globally take the largest share of the workforce, there is no better time to call on local and international governments as well as the private sector to direct more investment into the long term and sustainable development of individuals, which looks at both their capabilities (skills, knowledge and behaviours) and their capacities (self-leadership, confidence, motivation, resilience and mindset).

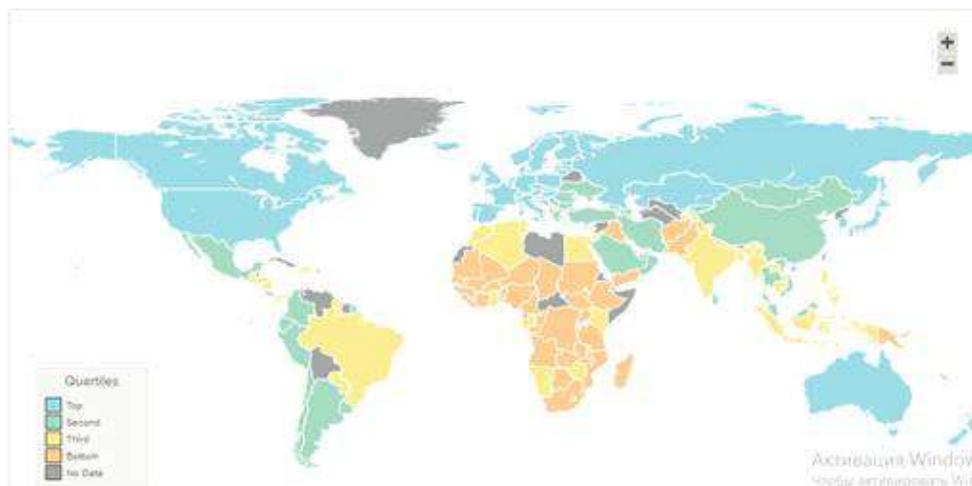
However, various studies have shown that human capital is one of the most neglected yet key components of the ecosystem. As is the case with any support environment, for it to adequately sustain the individuals or sector that need support, it must be well balanced.

Governments have long invested in economic growth by focusing on physical capital - roads, bridges, airports, and other infrastructure . But they have often under-invested in their people, in part because the benefits have been much slower and harder to measure. Hence, the world today faces a "human capital gap." In many countries, the workforce is unprepared for the future that is fast unfolding.

This is a key insight from the World Bank's forthcoming World Development Report 2019: The Changing Nature of Work. The frontier for skills is moving faster than ever before. Countries need to gear up now to prepare their workforces for the tremendous challenges and opportunities that are being driven by technological change.

But without an urgent and concerted global effort to build human capital, vast numbers of people and entire countries are in danger of being excluded from future prosperity. Governments have a critical role to play in transforming human capital, because poverty, inequality, and other disadvantages hinder many families from investing in their children's health and education.

How we can see invest in human capital? We can see from The Index measures which countries are best in mobilizing the economic and professional potential of its citizens. The index measures how much capital each country loses through lack of education and health. The Index was first published in October 2018 and ranked 157 countries. The Human Capital Index ranges between 0 and 1 with 1 meaning maximum potential is reached.



1-figure. Human capital index in the world

Human capital index, a tool that quantifies the contribution of health and education to the productivity of a country's next generation of workers. The Human Capital Index shines a spotlight on the right priorities. Education and health investments are crucial not just for economic growth, but for fighting inequality and securing basic rights. But, globally, 56 percent of children born today will lose more than half their potential lifetime earnings because governments and other stakeholders are not currently making effective investments to ensure a healthy, educated, and resilient population ready for the workplace of the future.

The concept of human capital has relatively more importance in labour-surplus countries. These countries are naturally endowed with more of labour due to high birth rate under the given climatic conditions. The surplus labour in these countries is the human resource available in more abundance than the tangible capital resource. This human resource can be transformed into human capital with effective inputs of education, health and moral values. The transformation of raw human resource into highly productive human resource with these inputs is the process of human capital formation. The problem of scarcity of tangible capital in the labour surplus countries can be resolved by accelerating the rate of human capital formation with both private and public investment in education and health sectors of their national economies. The tangible financial capital is an effective instrument of promoting economic growth of the nation. The intangible human capital, on the other hand, is an instrument of promoting comprehensive development of the nation because human capital is directly related to human development, and when there is human development, the qualitative and quantitative progress of the nation is inevitable.

All types of savings and investments (including cash accounts) have different risks attached. Risk means different things to different people. With investments, it is the possibility that you could lose money or that your investment may not fulfil all your expectations. But, we can say that investing in human capital provides a high opportunity to acquire reliable capital in the future.

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## **RISK - AS AN ECONOMIC STAGE IN THE CONDITIONS OF MARKET REFORMS**

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### *Annotation*

*This thesis reveals the concept of risk, its essence and classification of elements and types in the conditions of market reforms.*

### *Keyword*

*Risk, market reform, business risks, organizational risks, non-market risks, credit risks, environmental risks.*

In the conditions of market reforms, special attention was paid to the study of economic risks. Clearly, in the conditions of re-education in market conditions, the risk theory began to develop many times.

It should be noted that risk-taking circumstances can be said to be characteristic of all aspects of economic life of economic entities. This is why a special quality of risk appears as an alternative, which means that it is difficult to choose from many available options for decisions, directions, and economic actions. And the lack of the possibility of choosing options suggests that there is no risk at all. Because where there are no options, there is no risk. In fact, the nature of risk is explained because risk is mainly generated by processes of different characteristics: subjective and objective. Objective characters can be said to depend on the actions of the economic entity and the voyschee consciousness of the person. In reality, the financial and economic functioning of any economic entity is conducted mainly in conditions of complete or partial uncertainty. It should be noted that the choice of one or another direction of management can lead to an increase in the number of invested financial resources, as well as to a loss of invested financial resources. In turn, in market conditions of uncertainty, we can say that there are always different alternative options for making economic decisions. We can say that the risk of successful management of any of these decisions depends mainly on the number of internal and external factors affecting the business entity. The essence and concept of risk to a specific extent are manifested by these realities. Based on the above, we can say that the risk, in turn, is a two-dimensional level and is characterized by the danger and volume of losses that are caused by General uncertainty, which co-regulates the functioning of the economic entity. In reality, all types of economic entities' horses are subject to varying degrees of risk. This is what makes it possible to talk about the differences in economic risks that accompany the entire functioning of an economic entity. We can say that the scientific classification of many risks combines a rather complex problem.

Naturally, this situation is explained by the fact that the risk is based on the probabilistic nature of the market fraud and we can say the complete uncertainty of different provisions. Since the forecasting of production processes, planning the value of sales, the volume of financial resources, the development of construction works and business plans are based only on approximate calculations of expected, rather than real values, and often the business can bring losses instead of the expected profitability. And in turn, the level of these losses can increase not only the invested financial resources, but at the same time the entire cost of financial and property investments of an economic entity.

It should be noted that the study of economic publications in the field of risk theory and the research of our realities and funkcionirovanie business entity real sectors of the economy also allows us to identify the following classification of economic risks:

- risks associated with the possibility of deterioration of the overall financial condition of the company, reducing its capital - business risks;
- caused by faulty errors of the management Department of an economic entity to solve various problems of economic life, problems of the internal control system, unsatisfactorily developed procedures of the work regime, and so on, that is, risks that are associated with the internal organization of the task of economic entities - that is, organizational risks;
- risks that are associated with insufficient stability of the financial environment: the risk of financial losses due to changes in the price of goods, translational currency risk, liquidity risk, and other, which are also called market risks;
- the risk that the counterparty will not meet its obligations on time, these risks are called credit risks;
- legal risks are risks of losses that are associated with the fact that this legislation was not taken into account at all, or changed during the transaction. Here we can also talk about the risk of non-compliance with the laws of individual countries, risks that are associated with incorrectly compiled documentation, in the end, the counterparty is not able to fulfill the contractual terms, and so on;
- risks of damage to the environment, i.e. environmental risk;
- the risk that is associated with the occurrence of emergencies, fires, breakdowns;
- risk of malfunction of the facility due to design and installation errors, non-compliance with production technologies and processes;
- a number of construction risks, i.e. production and technical risks;

The above classification not only clearly interprets the belonging of risks to a specific group, allowing to unify the risk assessment, but also more fully covers a variety of risks, and this allows us to scientifically study the problems of identifying the main risk-forming criteria.

The main issue is that not enough attention is paid to the fact that there is a main set of risk-forming criteria that have a strong impact, and sometimes quite exclusive, on the overall dynamics of both types of risks. Another problem is that in the point of view of risk-forming factors only list as factors of direct impact on specific types of risks.

It should be noted that the multidimensional nature of the concept of "risk" is explained by a variety of factors that characterize both the features of a particular sphere of functioning, but also the characteristic features of uncertainty in which the functioning of an economic entity is carried out. It is quite a difficult process to identify all the risk factors. Since most risks have both generalized factors and special ones. And yet, a single risk may have different reasons for occurrence, depending on the type of activity of the economic entity.

In the conditions of economic reformation, the purpose of business functions is to obtain substantial income with minimal resource expenditure. The implementation of this model requires a comparison of the size of the investment invested in the economic operation with the financial ends of the same function. In fact, risk is an action performed in the hope of a successful outcome on the principle of "lucky or unlucky".

It should be noted that in the implementation of any type of production activity, there is a particular risk of losses. It should be noted that the volume of these losses is determined by the characteristics of a particular type of business. Based on the above, we can say that the risk is the risk of losses, losses, shortfalls in projected income, income.

We can say that often the risk can be managed, that is, use different measures that allow you to feel the possibility of a risk event to some extent and act to reduce the risk.

## MEASURES TO MITIGATE THE NEGATIVE IMPACT OF THE CORONAVIRUS PANDEMIC ON THE ACTIVITIES OF FREE ECONOMIC ZONES IN UZBEKISTAN

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*Abstract: The thesis analyzes the negative impact of the Coronavirus pandemic on the activities of free economic zones in Uzbekistan and the measures taken by the government to eliminate its consequences, and the additional measures are suggested to be taken on the basis of these analyzes, conclusions and scientific proposals are given.*

*Key words: free economic zones, techno park, small industrial zones, investment project, transport and logistics systems*

Currently, the world economy is in a state of another crisis due to the infectious disease coronavirus (COVID-19), which is spreading around the world. Currently, countries are closing borders to prevent the spread of the virus, declaring emergency quarantines, and suspending production processes, which in turn increases the likelihood of a subsequent global economic crisis.

Coronavirus a pandemic in turn has a negative impact on the economy of Uzbekistan, in the country staying in many sectors including tourism, manufacturing processes, and also a time limit for international logistics because of the quarantine status in countries has a direct negative effect on the activity of free economic zones of Uzbekistan, that is, the volume of production in the region and their delivery. But now the government is taking a number of measures to mitigate the negative consequences of the coronavirus pandemic in our country.

In particular, on March 19, 2020, the President of the Republic of Uzbekistan Sh.M.Mirziyoyev decrees no. PF-5969 "On priority measures to mitigate the negative impact of the coronavirus pandemic and global crisis situations on economic sectors" and no. PF-5978 "on additional measures to support the population, economic sectors and business entities during the coronavirus pandemic" were signed on April 3, 2020. In accordance with the decree, the following measures are envisaged to mitigate the negative impact of the coronavirus pandemic on FEZ activities:

- Compensation of part of transport expenses of business entities engaged in foreign trade activities;
- Allocation of additional funds for infrastructure of small industrial zones in the amount of 400 billion sum in year of 2020;
- Implementation of additional infrastructure projects aimed at expanding economic activity and employment in the regions of the Republic, as well as the construction of utilities, especially in small industrial zones;
- The Ministry of investment and foreign trade of the Republic of Uzbekistan within two weeks to make proposals on additional measures to support the initiators of investment projects that affect global production chains, transport and logistics systems and trade breaks;
- Expanding the provision of guarantees and compensations by the state Fund for support of entrepreneurship development under the Agency for the development of small business and entrepreneurship to cover interest expenses on loans provided primarily for the production, purchase and sale of socially important consumer goods;

- Suspension until October 1, 2020 of the application of fines to economic entities for overdue accounts receivable on foreign trade operations;
- As well as business entities:
  - If there are overdue accounts receivable that do not exceed 10 percent in relation to the total export of goods carried out in the reporting year, it is allowed to export goods without securing a guaranteed payment;
  - Permission to carry out one-time operations for the import of technological equipment and raw materials in exchange for the repayment of overdue accounts receivable for foreign trade operations during 2020.

The implementation of the above measures will certainly help to get out of the crisis faster and, above all, accelerate economic development.

**Figure 1**



Source: [www.uza.uz /oz/business/Convenient location of Uzbekistan](http://www.uza.uz/oz/business/Convenient%20location%20of%20Uzbekistan)

As can be seen from the above, the Republic of Uzbekistan has a favorable geographical location, which is an economically important factor. That is, by opening new transport corridors, it will ensure further development of the service sector in the country, as well as rapid access to world markets for products produced in the World market.

Taking into account the above measures in the current situation, we consider it appropriate to take the following additional measures:

- Given that until October 1, 2020, exporters cover part of their transport costs by the state, in order to further reduce these costs, it is necessary to solve the problem of cheap transport as soon as possible, such as sea transport, in particular, to use Caspian Bay;
- To accelerate out of the crisis it is necessary to establish closer cooperation with foreign media for the speedy bringing in the world of additional privileges created for foreign investors in Uzbekistan in connection with the pandemic Coronavirus, and create a website showing the specific benefits that are created in each network;
- Given the favorable geographical position of Uzbekistan, it is necessary to increase

the number of logistics terminals and increase transport customers connecting the Asian and European continents. This factor will help to mitigate the negative consequences of the coronavirus pandemic by providing services in the short term and will serve as an important basis for further implementation of the process of Uzbekistan's integration into the world economy in the long term.

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## MANAGING PROFITS AS A SOURCE OF DIVIDEND PAYMENTS

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*Abstract: This article is devoted to the study of such issues as the role of profit in the activity and development of enterprises, the main goal of the policy of effective profit management, as well as one of the difficult tasks of profit distribution such as dividend policy.*

*Keywords: profit, capital, enterprise, dividends, dividend policy.*

"Profit is the monetary net income of the entrepreneur on the invested capital, characterizing his remuneration for the risk of doing business, representing the difference between total income and total costs in the course of carrying out this activity" [1].

The profits of the enterprise play a huge role in the conditions of the market economy. First, profit is a form of income of an entrepreneur carrying out a certain type of activity. The main motivation for any business, its main ultimate goal is to improve the well-being of the owners of the enterprise. The characteristic of this improvement is the amount of their current and deferred income on the invested capital, the source of which is the profit received.

Second, profits do not represent all income earned in the course of business, but only the part of the income from which the costs incurred in carrying out these activities are deducted. In other words, in quantitative terms, profits are a residual indicator representing the difference between total income and total costs in the business process.

Third, profit is not a guaranteed income of an entrepreneur who has invested his capital in a particular type of business. Profit results only from skilful and successful business. But in the process of doing business, the entrepreneur, due to his unsuccessful actions or objective reasons of external nature, may not only lose the expected profit but also completely lose the invested capital. Profit is therefore to a certain extent also a charge for the risk of doing business.

Fourth, the profit of the enterprise creates the basis for the economic development of the state as a whole. At the same time, loss-making enterprises not only reduce the economic and financial potential of the economy, but, they are deprived of the possibility to implement any dividend policy, but together with their financial negativity have a negative impact on optimization of dividend policy of profitable joint-stock companies.

Fifth, the profit of the enterprise is a criterion of efficiency of a specific production/operational activity. The individual level of profit of the enterprise in comparison with the industry level characterizes the degree of ability of managers to successfully carry out economic activity in the conditions of the market economy.

Sixth, profit is a monetary value. This form of profit estimation is related to the practice of generalized value accounting of all related main indicators - invested capital, income received, costs incurred, etc., as well as to the current procedure of its tax regulation.

Seventh, profit is the main domestic source of the formation of financial resources of the enterprise, ensuring its development. In the system of internal sources of generation of these resources, profit has a dominant role. The higher the level of profit generation of the enterprise in the process of economic activity, the less its need to attract financial resources from external sources and, all other things being equal, the higher the level of self-financing of its development and competitive position in the market.

Eighth, profit is the main factor in the increase in the market value of the enterprise

and others.

The high role of profits in the development of the enterprise and in ensuring the interests of its owners and staff determine the need for continuous and effective management of it. The profit management system achieves its main objective and main tasks by carrying out certain functions, the composition of which is determined by the specific object of the respective control system. The main functions in the profit management system are profit generation management and profit distribution and utilization management.

Amount of net profit	
The capitalized part of profit	The consumed part of the profit
Funds, investment in development-oriented production.	Funds used to pay income to property owners
Funds allocated for the formation of reserve and other insurance funds	Funds for material incentives and staff development
Other forms of profit capitalization	Other forms of profit consumption

**Figure 1. Main areas of distribution of net profit of the enterprise.**

It should be noted that the effectiveness of the profit management policy of the enterprise is determined not only by the results of its formation but also by the nature of its distribution. Profit-sharing is the process of forming the directions of its forthcoming use following the goals and objectives of the enterprise development.

Profit distribution is carried out following a specially designed policy, such as a dividend policy, the formation of which is one of the most difficult tasks of managing the profit of an enterprise. The profit allocation policy is intended to reflect the requirements of the overall strategy of development of the enterprise, to ensure an increase of its market value, to form the necessary amount of investment resources, to ensure the material interests of owners and personnel. At the same time, in the process of formation of the profit distribution policy, it is necessary to take into account the opposite motivations of the owners of the enterprise (shareholders, investors) - obtaining high current revenues of the company significantly increase their size in the perspective period.

Based on the above, we will define the dividend policy of the joint-stock company.

"Dividend policy is an integral part of the overall profit management policy and is to optimize the proportion between the parts consumed and capitalized of profit to maximize the market value of the enterprise". It follows from the definition that the main purpose of the dividend policy is to determine the proportion between the consumption of profits

by shareholders and the capitalization of profits for the strategic development of the enterprise, which is not always to minimize or not pay dividends.

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# HISTORY

## CURRENT PROBLEM OF RELIGIOUS STUDIES " RADICALISM"

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*Annotation: The main reasons for the spread of radicalism in the youth environment of modern society are revealed. Some aspects of countering the spread of radicalism are highlighted.*

*Keywords: youth, radicalism, radicalization, causes of radicalism, counteraction to radicalism.*

The desire of man to know the Universe, society, himself, individual phenomena and processes in the surrounding world is inexhaustible and forever. The mass of accumulated scientific information is huge, the number of branches of natural Sciences and Humanities, and the process of knowledge continues. It is not possible to cover the entire amount of accumulated datahumanity of knowledge. But, mastering the basic principles, provisions, concepts and facts of the corresponding science, the person enters its world, finds landmarks in it to use later acquired in their practical life, in their own spiritual searches. There is knowledge that is necessary for a specialist to be successful in their field. But there are also such concepts, ideas, theories, facts, the development of which is important for the formation of each person as a person, for the formation of his spiritual culture. The branches containing this kind of knowledge include religious studies.

The study of such a science as religious studies - a whole baggage on the one hand and a thorny forest on the other. To get out of this forest you need to illuminate yourself with knowledge, and to get a treasure you need to find it. Religious studies is based on knowledge not only about religions and customs, but also psychology, philosophy, history - everything related to a person.

Academic interpretation as we all know what religious Studies is, which by the way many people do not even guess.

Known as the study of religion, it is an academic field dedicated to the study of religious beliefs, behaviors, and institutions. This science describes, compares, interprets, and explains religion, emphasizing systematic, historically informed, and cross-cultural perspectives.

One of the main problems of "religious Studies" is religious radicalism. It has basically been present throughout history from the earliest times to the present. But not on the same scale or in the same strength as now. Terrorism and radicalism are just one of the global problems of the 21st century. If all people were more familiar with religion, there would be no extremists, no radicals. Knowledge not only about one's own religion, but also about other faiths gives a person extra knowledge and removes the border between him and those around him.

The causes of radicalism

1. Ignorance Of The Koran.
2. Ignorance Of The Sunnah.
3. Ignorance of the goals of Sharia.

4. Ignorance of methods for inferring arguments and conclusions.
  5. Ignorance of statements and works of scientists.
  6. Ignorance of the Arabic language and its features.
  7. Ignorance of history.
  8. Ignorance of reality.
  9. Ignorance of people and the order of things.
- For those who fall into excess in religion, so-  
there are errors in the methodology:
10. Attachment to literal meanings in understanding texts.
  11. Lack of a universal approach.
  12. Errors in interpretation.
  13. Deducing the conclusion directly from the  
the text itself.
  14. The passion for the wrong things.
  15. The study of arguments is not combined.
  16. Lack of sincerity.
  17. Claiming the right to be a mujtahid.

Religious studies solves the problem of harmonizing humanitarian knowledge and personality formation. If theology and atheism as two extremes in the study of religion suffer from one-sidedness in assessing its content and essence, place and role in the life of mankind, thus creating disharmony in knowledge, then the neutrality and impartiality of religious studies contributes to the harmonization of this knowledge both within the subject and in the context of culture. Religious studies not only scientific knowledge, but academic discipline of Humanities education, whose main goal is to give the amount and depth of knowledge about religion, in the form and amount that would make the student an adequate way of religion and an objective attitude. The process of implementing this goal will help to solve a number of educational, spiritual, moral, legal and other tasks that are important for the formation of the worldview of young people and their civic position. An important task of religious studies is to actively influence the formation of spirituality and morality of young people.

Thus, based on the above, we can draw the following conclusions:

- the development of radical attitudes and recipes for the transformation of reality is largely due to the lack of flexibility, the ability to self-development and self-reform of socio-political structures, the delay in an adequate response to the dynamically developing economic, socio-political and spiritual processes of public life.

- the source of radicalism in society is also a very low level of political and legal culture, the absence of deep-rooted traditions of civil life and democracy in the conditions of the rule of law in the social consciousness and psychology. In their concepts, attitudes and programs, radicals usually demonstrate a total denial of all the existing achievements of their predecessors, strive to solve all the accumulated social problems at once, advocate the complete destruction of a public building, forgetting that future generations will have to live for a long time on its ruins and ashes. The set of the main program statements of the radicals sins with the same vices of subjectivism and strong-willed pushing of the natural-historical process of development, which they vociferously incriminate to their historical and current political opponents. In conclusion, I would like to emphasize once again the urgent need and timeliness of increasing attention to the lives of young people. It is in this breeding ground that various revolutionary tendencies with very pronounced radical and extremist manifestations tend to be born. Uzbek youth need a new state ideology, a program of strategic development of the country that meets the interests of the majority. It can become a kind of consolidating tool for young people.

Every system of goals, norms, and values of social life formulated in terms of concepts is actually an ideological system. Without this ideological component, no value-oriented human activity is possible, which provides society with solidarity and harmony, a certain integrity, stability and stability.

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## ASSESSMENT OF CONQUEST CONSEQUENCES OF CENTRAL ASIA IN THE PERIODICAL PRESS OF THE RUSSIAN EMPIRE

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*This article analyzes periodicals of the Russian Empire such as "Golos" and "Birzhevye Vedomosti" based on Turkestan collection. The articles under study raise the question of the expediency of the conquest of Central Asia. As you can see from the articles, not everyone was happy to conquer the region. There were different views on the events of that period.*

*Keywords: Central Asia, Russian empire, K.P von Kaufman, M.G. Chernyayev, Bukhara emirate, the Khiva and Kokand khanates.*

In the XIX century in Central Asia there were three independent states: the Bukhara emirate, the Khiva and Kokand khanates. Although socio-economic relations developed in this period: production, trade and other industries, nevertheless, in terms of the overall level of development, they lagged an order of magnitude behind European countries. As a result of this, from the north, the Russian Empire, pursuing, in foreign policy, the goal of expanding its borders in the East due to the fact that the state industry began to feel the need for industrial raw materials, additional markets for manufactured products, the need to own its own territory, producing cotton fiber for the textile industry and a number of other economic, political reasons began the conquest of Central Asia.

The conquerors understood that in Turkestan muslims constitute the vast majority, and a compromise must be sought with them. After taking possession of the storm in 1865, the largest city in Central Asia - Tashkent, the head of the newly formed Turkestan region [1], General M.G. Chernyaev took a rather tolerant position on this issue and considered it useful to build "tolerant" relations with local muslim circles, subject to control over them. Although a separate Turkestan governor-general was formed in 1867, formally 1865 can be considered the beginning of the administrative entry of Central Asia into the Russian Empire.

It should be noted that the relations of the Russian state with the world of Islam had a long and far from simple history. From the very beginning, the state was formed as an imperial-type association - a huge conglomerate of multiethnic and multi-confessional peoples. The state policy of the Russian Empire regarding Islam in Turkestan was built gradually.

The periodical press of the Russian Empire evaluated the event of this period in different ways: We, the Birzhevye Vedomosti newspaper wrote, "without establishing our relations with our neighbors, we immediately began to break the social structure of our muslims: they introduced a mekhkama, rebelled against the clergy and aroused extreme discontent in the natives for our interference with their customs and laws. This discontent was vividly transferred to Bukhara and Kokand, and at once we armed ourselves against all the muslim clergy of Central Asia [2].

It seems that they first put forward the idea of "non-interference" in the affairs of the clergy, in the customs and laws of the natives. It is possible that as a result of such ideas, the main thing in the muslim politics of the first governor-general of Turkestan, Lieutenant-General K.P. von Kaufman, was a consistent "ignoring" of Islam, that is, "neither persecution nor patronage." In practice, this in no way meant that the "Muslim question" in Turkestan was left to chance and fell out of sight of the Russian authorities.

The Golos newspaper in another article cites the facts of attacks on caravans and clerks, etc. incidents and clashes (for example, in Yangi-Kurgan), which to a certain extent confirms that the population is hostile to Russians [3].

The newspaper Golos wrote that "military operations in remote countries are expensive and fraught with the greatest dangers, and extends to us as to other nations - to us even more than to others, since we cannot boast of our prosperity finance". Without touching the sensitive issue, the Golos raises the question that "were they worth it to get so deep into Central Asia and that with this penetration they set Bukhara and Kokand against themselves". The "Golos" suggests that we will have to reap many more laurels and "despite repeated and sincere assurances that we are not looking for new conquests in those parts, the very course of events will force us to move more and more forward. "Golos" speaks of "the usefulness of Central Asian possessions and the convenience of managing them", but suggests that the management of the conquered territories of Tashkent and the Chirchik territory be "as less burdensome for the empire" [4].

In the newspaper "Golos" it is proposed to leave "vain creeps to military distinctions" and do management. The field in which our administration operates is so vast, and the number of capable people is so limited that the administration should avoid interfering in muslim affairs. Since only with the complete elimination of interference in the affairs of the natives a handful of the British can successfully manage the 140 million population of India [5]. Further, "Golos" writes that "Some of our administrators in Central Asia followed a completely different system. The Asian system of government, to which the natives there have long been accustomed, did not like them much. They have no doubt that this presiding officer behaves more honestly than the local ones, but ignorance of customs and language "can introduce him into mistakes". "But one must not forget that the Asians notions of justice are at odds with European notions." Therefore, the Tashkent residents, instead of gratitude for the justice introduced in them, rebelled and loudly protested against the justice imposed on them [6].

The author, in connection with the problem - what are we looking for in Central Asia - poses two tasks: "how does it relate to the khanates and how to relate to the natives"? The author says that the new government will be set up "among a people completely alien to us, living in isolation, not seeing and not knowing anyone but muslim neighbours, and therefore not familiar with other views on life and other orders of government. Therefore, we cannot but look at the Turkestan region as a compound, inalienable part of the empire; therefore, we must pay all efforts to fasten it with the empire and tie it with continuous ties [7].

In another article, "Golos" writes that they did not occupy Tashkent in order to selflessly benefit its inhabitants, but solely out of necessity, for the sake of Russian interests. If, while satisfying these interests, the natives can be blessed, all the better; but when their interests clash with ours, the administration is obliged to sacrifice strangers in our favor. They were once promised that with the occupation of the populated Tashkent region, the state treasury would get rid of the costs of local government and military occupation of the region. But this can only be achieved by increasing taxes, the cessation of hostilities and the development of local trade.

As you can see from the articles of that period, not everyone was happy about the conquest of Central Asia. There were different views on the events of that period. Perhaps the situation was really extremely difficult not only for the population, but also for the conquerors. Since there was a new territory and population. No wonder the first Turkestan governor-general K.P. von Kaufman noted the frightening scale of ignorance of the region by the first Russian settlers. But as history has shown, the unexplored region of faraway Central Asia gradually turned into the mastered and studied Russian Turkestan.

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# JOURNALISM

## THE PLACE OF THE WRITER ATAJAN KHALMURATOV IN THE KARAKALPAK JOURNALISM

**Azizbek Dabylov first-year student of the faculty of Philology and Journalism of the Karakalpak State University Named after Berdakh**

*The article tells about the life and work of karakalpak journalist and writer A.Khalmuratov. His works are interpreted. Creating a Karakalpak School of Journalism will be highlighted.*

*Journalism, fiction, publicism, essay, feleton, story, novella, newspaper.*

Due to Independence our country has chosen the way of democratic progress recently has gained positive changes in all the branches of its developing including the artistic literature. In their turn all these changes have formed favourable basis for our country to become one of the leading countries of the world in the nearest future.

As the President of the Republic of Uzbekistan Sh.M.Mirziyoev particularly pointed out "It's really that the attention for the literature and fine arts and culture it is, above all the attention for people, for our future, as our great poet Sholpan once noticed. If there lives our literature and culture, our nation will also live long" . So, we must remember this speech for ever we should never forget these words. And our President's above mentioned words encourage us, the youth of our independent Motherland, to truly appreciate the past and the literature of our people and of course to make a valuable contribution to the future blossoming of our nation's literature, fine arts and culture. We agree, that this is our holy duty for the sake of our Mother land.

We can believably add it is our holy duty to point out that among such creators who made their considerable contribution to the formation and development of the Karakalpak national literature and journalism was Atajan Khalmuratov, a just man and a tutor of numerous young talented journalists in Karakalpakstan, a famous essayist and public figure "Distinguished Journalist of the Republic of Karakalpakstan".

From the first point of view Atajan Khalmuratov is a popular writer, who is the author of numerous favourite artistic literary works. He has left his enormous spiritual heritage for young generation.

From the second A.Khalmuratov is one of the well. Known journalist's in Karakalpakstan, who made positive changes in the improving the old branch to rescue from stagnation, making an active contribution to its further progress and forming his own peculiar school with numerous followers.

So in this article we took as an object A.Khalmuratov's creative activity as a journalist.

Atajan Khalmuratov was born on the 2nd of February 1948 in the Shymbay district, Karakalpakstan yet as a schoolboy his young talent was displayed as articles, short stories on the pages of the newspapers for youth - "Jetkinshek" (Young followers) and other Republican press organs.

After leaving school A.Atajanov actively wrote for young readers in the newspapers. He began his writers career at the publishing house of the Karakalpakstan schoolchildren's newspaper "Jetkinshek". At his period he wrote his short stories "The rhythm of Music", "Father is coming", "The lady with a kid" and published them one after the other in the "Amudariya", the chief Karakalpakstan writers and poets journal. In September 1974 he

was appointed as a senior editor of the "Karakalpakstan" Publishing House. While working as the editor he wrote his book "My mother's white milk", a collection of Aories. A year later he according to the recommendation of the editor on chief of the newspaper "Jas Leninshi" ("The Youth of Karakalpakstan") Sharap Usnatdiyev he came to this newspaper as a department editor and became a special correspondent there. The period was the period of establishing and developing of his career as a journalist. At this period with his suggestion some clubs began their activities, for instance, the clubs "Contemporary trip", "History", "Archeology", "Country-study" were very popular among readers.

On the 16th of April A.Khalmuratov began his journalist career in the central newspaper "Independent Karakalpakstan" and worked as a special correspondent from districts Bozataw, Kegeyli and Nukus, head of the letters department, responsible secretary. At these posts he wrote more and more essays, publicistic articles, feletons and stories. As a respected member of the Karakalpak Journalists Union he was awarded with the highest title "Distinguished Journalist of the Republic of Karakalpakstan".

His essays describe and appreciate people of different professions - peasants, cattle-breeders workers of transport, medicine, teachers, engineers, constructor, builders etc. Such his writings as "Sights wait", "Land, I am your native son!", "Four seasons of Qyzyl-Uziyak", "Clatter of the Year of Horse". "The bright dawns of Darsan" which fill books describe the people of free labour of our sunny Motherland. For instance his book "The heat of a Far Star" dedicated to a Distinguished Teacher of the Republic of Karakalpakstan Reyimbay Saparov, "Seven Phases of on Life" depicts the life and leadership activities of Pirjan Seyitov, a distinguished Karakalpak Public Figure, "If all were as you!" - read the whole leadership activity of "Distinguished enlightener of the Republic of Karakalpakstan" who was the Minister of Peoples Education in 1960-80 s.

In conclusion, the study of the life and activities of the distinguished Karakalpak journalist and writer of the end of the XX and beginning of XXI century yet will remain one of the "Should-be-researched" pages in the history of our literature and journalism.

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## LITERATURE

### THE BREATH OF THE PERIOD IN LITERATURE

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*Annotation: This article describes Uzbek artists who live in Karakalpakstan and contribute to the development of Uzbek literature. It is worth mentioning the creativity of creators during the years of independence. The works of this period speak of the peculiarities and peculiarities of the subject matter.*

*Key words: independence, theme, freedom, motherland, skill, literature process.*

Many literary scholars, writers and poets have contributed to the strengthening of our people's hopes and aspirations for independence by expressing the peculiarities of the literature of the independence period. The creative activity of the literary scholar K.Kurambaev, who made a great contribution to the development of Uzbek literature and literary environment in Karakalpakstan, his scientific and analytical articles contributing to the study of literature are unique in the field of literature with their unique and sharp ideas. takes place.

The scholar's article "Famous writer of Turkish literature" refers to the famous writer of the Karakalpak people, one of the great figures of Karakalpak literature T.Kayipbergenov. Speaking about this man, the scientist writes: Only a writer who has a common future, who can see his destiny in harmony with the peoples of the world, and who is able to express it in the art of speech, will achieve such a position. "

Any writer or poet, literary scholar is required to create not with a single work, but with a noble desire to introduce the literature of this people to the world, in order to gain fame among other nations. Such selfless people have a special place not only in this country, but also in the literature of other nations. One of such writers of our time is T.Kayipbergenov, whose works are examples of literature that give pride and pride to every Karakalpak child.

K.Kurambaev, a scholar, said: "No matter what topic he writes about, whether he writes an essay or a journalistic article, whether he speaks in an official circle or a large meeting, whether he engages in debate, first of all, the common historical roots of all Turkic peoples. , speaks and writes with inspiration about the commonality of our language, our spiritual unity, our spiritual integrity, urging everyone not to deviate from this path. " he said. It is this courage of the author and his public opinion aimed at preserving our national values that play a significant role in the formation of a sense of homeland in the heart of every reader. Because the themes put forward in his works call to unite the people, not to forget that we are the children of the Turkic ancestors, imbued with the blood of humanity in our veins, regardless of nationality. The election of the literary scholar K. Kurambaev as the chairman of the Development Fund of the Assembly of Cultures of the Peoples of Central Asia is also the result of his creative work, which promotes interethnic harmony. During the years of independence, the writer has kept pace with the times and has been respected by our people as a creator committed to common Turkish values.

Tolebergen Kayipbergenov has a unique, innovative approach to the interpretation of the historical realities of the XVIII-XIX centuries, especially in the coverage of the

lives and struggles of people of complex destiny, who are the leaders of the people. Chingiz Aitmatov considers his departure to be a success of the Karakalpak epic. This is because the play appreciates the philosophical interpretation of the tragedy of folk leaders such as Mamanbiy, Aydosbiy, Ernazar alakoz, who do not want to understand each other, but traditional events.

In the last years of his life, T.Kayıpbergenov wrote the first report-essay in Karakalpak literature entitled "The Encyclopedia of My Heart". To create such a work requires not only the experience of writing, great knowledge and knowledge, vast life experience, and, most importantly, creative courage. Everyone who reads the work will agree with Tolepbergen Kayıpbergenov's deep and comprehensive study of world literature, philosophy, history, and mysticism, as well as his creative principles.

The most important thing is that this work was written in the spirit of our national independence. The author's works are very impressive, close to the hearts of readers and valuable because they clearly describe the realities of life. We can see that all his works have been translated into Uzbek, and even several times. That is why he is one of the well-known writers for Uzbek readers. Well-known poets and writers such as A. Qahhor, P.Kadyrov, A.Aripov, E.Vahidov praised the creative activity of this man and contributed not only to the development of Uzbek and Karakalpak literature, but also to the development of all-Turkish literature master bob called. People's Writer of Uzbekistan Odil Yakubov: "As a fellow writer who is well acquainted with the personality and work of Kaipbergenov, I can say with confidence that Tolepbergen is a wise man, a kind talker, a thoughtful writer.

One of the peculiarities of this work is its richness of philosophical observations, in which the writer sometimes tells the events of his life in the form of conversations, sometimes in the form of letters, sometimes in the form of narrations, and draws attention to its conclusions. output describes philosophical ideas, conclusions based on the study of something necessary for life. All of these philosophical ideas can be a great source of spiritual nourishment for young people. The most important thing is that young people read and read books. If you read and understand the work, you can learn a lot about life, national life, national spirituality, philosophy of life.

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## MAJOR THEMES IN "THE KITE RUNNER"

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The main theme of "The Kite Runner" is "children and childhood" and the book has a number of secondary themes. The author Khaled Hosseini addresses the eternal themes such as "guilt, friendship, childhood, love" and in a parallel way with a vital-historical theme of "the consequences of Afghanistan and its destabilization".

The theme of guilt appears in the images of Amir and Baba from the first pages of the work. Amir felt guilty for several reasons: he felt guilty for his mother who died prematurely at the time of his birth; he was not been physically as strong as his father expected; most of all, he accused Hassan for an unfair theft.

Amir's brutality and cruelty towards Hassan caused him to slander him. Not only Amir, but his father Baba is another sufferer due to his mistakes. His biggest fault was his unfaithfulness to his wife, betraying her having affair with his servant's wife. What is more tragic - he had an illegitimate son with her and he had to endure being a witness of the humiliation of his son as Hazara by other high ranked Pashtun children. But the success of the novel is that because of this sense of guilt, Amir and Baba try to be good people and correct their mistakes.

The theme of friendship is echoed by the writer based on antithesis. The existence of not only friendship, even positive relationship between Pashtun and Hazara was a revolution of that historical period. The personages of the novel, the Pashtuns Baba and Amir, are deeply connected to the lower class Hazara Hassan and they always felt necessity to him. However, Amir was also unlikely to show his condolences towards Hassan among others since the society has "nurtured" him as a "high-ranked" representative.

Amir mentioned that they were kids who had learned to crawl together, and no history, ethnicity, society, or religion was going to change that either. He spent most of the first twelve years of my life playing with Hassan. Sometimes, his entire childhood seems like one long lazy summer day with Hassan, chasing each other between tangles of trees in my father's yard, playing hide-and-seek, cops and robbers, cowboys and Indians, insect torture - with their crowning achievement undeniably the time we plucked the stinger off a bee and tied a string around the poor thing to yank it back every time it took flight [Hosseini, 2003].

The theme of love is the invention of the writer; He prefers Soraya, who cannot be accepted as a woman by Afghan nation, to be loved and respected unconditionally by the main character Amir. At this point Hosseini was able to express his American thinking and influence of the region's culture on the Afghan diaspora in America. Soraya escaped with her boyfriend and lived in a remote place, despite her parents' reaction and decided to live independently as an American girl before meeting Amir. However, the young man was addicted to drugs and kept torturing her thoroughly. Although his parents could not bear this shame, they forgave their daughter and forgave her. The work is regarded as a collection of portrayals of male characters, reveals the true love between Soraya and Amir, which ignores stereotypes, and shows its resilience to live peacefully without a child. Because of that eternal bond, they were given Sukhrob as a son at the end of the novel.

The theme of childhood is one of the most striking scarce proving the writer's skills and the heroes' childhood stories make up the bulk of the plot. The author wants to see the world, its peace and harmony in the eyes of children. While characters such as Amir,

Hassan and Assef demonstrated the pre-war prosperity of children in Afghanistan, Sukhrob and other orphan kids summarized the image of Afghan children who were left as a result of war destitute. Amir and Sukhrob dialogue - conversation between the grown up son protected by his father moved to America and an orphan boy tortured by the Taliban in Afghanistan could open all the truth belonged to Afghan children and unlucky destiny.

Amir concerned "I thought of a line I'd read somewhere, or maybe I'd heard someone say it: There are a lot of children in Afghanistan but little childhood" [Hosseini, 2003].

Afghanistan is a complicated theme including a wide range of themes inside. It is Hosseini's confession about his country and his nation to the world- wide. The theme of Afghanistan is based on a series of dualities such as war and peace, sin and forgiveness, finding and losing, understanding and being understood. The sad depiction of Afghans moving from pre-war prosperity to post-war ignorance was depicted masterfully. Female studying and teaching at an educational establishment is revealed in the character of Amir's mother Sofia Akrami who worked as a teacher of Persian literature and language at Girls High School. Bringing children to school in Ford-Mustang, Opel cars, and over-the-top European banquets are also extravagant. Amir's memories are illustrated focusing on Afghanistan contrast between pre- and post-war: (Amir's thirteenth birthday was planned and organized in a luxury way) "I guess in most ways, or at least in the ways in which parties are judged, my birthday bash was a huge success. I'd never seen the house so packed. Guests with drinks in hand were chatting in the hallways, smoking on the stairs, leaning against doorways... Ahmad Zahir was playing an accordion and singing on the stage over masses of dancing bodies" [Hosseini, 2003].

When Amir came from America to Afghanistan in search of Sukhrob, he said: Everywhere I looked, that was what I saw. I remembered beggars in the old days too- Baba always carried an extra handful of Afghani bills in his pocket just for them; I'd never seen him deny a peddler. Now, though, they squatted at every street corner, dressed in shredded burlap rags, mud-caked hands held out for a coin. And the beggars were mostly children now, thin and grim-faced, some no older than five or six. They sat in the laps of their burqa-clad mothers alongside gutters at busy street corners and chanted "Bakhshesh, bakhshesh!" And something else, something I hadn't noticed right away: Hardly any of them sat with an adult male-the wars had made fathers a rare commodity in Afghanistan. [Hosseini, 2003].

Though being Hosseini's debut novel, "The Kite Runner" won the recognition of readers and literary writers from around the world. The subject matter of the writer is one of the main factors that demonstrates the artistic originality of the work.

Used literature

Khaled Hosseini. The Kite Runner. - New York: Riverhead Books, 2003. -371 P.

## ТЕМА ДЕТСТВА И МИР ГЕРОЕВ В ТВОРЧЕСТВЕ МАРКАТВЕНА

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Марк Твен - великий американский писатель, внесший огромный вклад в развитие американской и мировой литератур, одна из важнейших фигур американской жизни и американской культуры вообще. Многими нитями связан он с ходом развития своей страны, её национальными особенностями и социальными противоречиями, и эта глубокая связь ощутимо проходит и во всём его творчестве, и в личной судьбе .

Значение и роль Твена как могучей формирующей силы в американской прогрессивной литературе не только не ослабевает с годами, но утверждается вновь и вновь со всё возрастающей мощью. Эрнесту Хемингуэю - писал: "Вся современная американская литература вышла из одной книги Марка Твена, которая называется Гекльберри Финн. Это лучшая наша книга□ Ничего подобного до неё не было. Ничего равного не написано до сих пор".

Тема детства, одна из ключевых тем творчества Марка Твена, рождается из глубины его ностальгических переживаний. На втором этапе своего творчества Марк Твен начинает переосмысливать теоретические принципы американской демократии. Он уже испытывает настроения смутной тревоги и потребность в известной переоценке ценностей. Он всё чаще оглядывается назад, стремясь найти свой жизненный идеал уже не в будущем, а в прошедшем. В его произведениях поселяется смутная грусть о чём-то навсегда утраченном, о молодости своей и целой страны, о её наивных юношеских иллюзиях, беспощадно развеянных жизнью. Обратившись к теме детства, Твен в то же время дал выражение настроениям своей эпохи. Тоска по детству была характерна для послевоенной Америки, только что перешагнувшей из "золотого" в "позолоченный" век. Склонность к идеализации "патриархальной" Америки довоенного времени рождалась из сравнений настоящего с прошлым, представавшим перед взором американцев 70-х годов в дымке ещё не изжитых иллюзий

Но для Твена это возвращение к детству было чем-то неизмеримо более значимым, нежели уступка духу времени. Его книги о детях давали органическое выражение глубинным тенденциям его творчества, проявившимся уже на самом раннем его этапе. Лет 20 - 30 назад к теме детства в творчестве Марка Твена обращались достаточно часто. Её изучением занимались такие известные российские исследователи, как М.О. Мендельсон, М.Н. Боброва, А.И Старцев. Они широко рассматривали образы детей, их внутренний мир, взаимоотношения со взрослыми. Однако в современном литературоведении эта тема представлена не достаточно широко, на сегодняшний день к ней обращаются гораздо меньше, чем раньше, что и определяет актуальность данной работы. Проблематика и тематика, раскрытая Твеном в детских книгах, являются основополагающими для изучения детской литературы в современном мире. Нельзя изучать творчество других американских авторов в отрыве от творчества Марка Твена.

До появления "Тома Сойера" американская литература изобиловала книгами о детях. Детская литература явилась своего рода кривым зеркалом, в котором в преувеличенном виде отразились все недостатки и пороки господствующего литературного направления, а одновременно и господствующей морали. Образ ребёнка издавна являлся камнем преткновения, как для большой литературы США, так и для её разнообразных ответвлений .

К моменту появления "Приключений Тома Сойера" одним из характернейших жанров детской литературы были так называемые книги для воскресной школы, представлявшие собою концентрат ханжеской морали американского обывателя. Традиционным героем книг для воскресной школы обычно бывает добродетельный и благочестивый, но хилый и немощный "хороший мальчик". Медленно угасая на одре болезни, он перед смертью успевает обратить на путь истинный "плохого мальчика" - маленького негодяя, не желающего посещать воскресную школу. Совершив этот подвиг благочестия, добродетельный отрок умирает, горько оплакиваемый всеми окружающими.

В 50-х годах возникает известная оппозиция дидактически-благочестивому направлению детской литературы. Книжки, изображающие "хороших" и "дурных" мальчиков, нередко становятся объектом пародий. Уже в это время многие писатели не шутя начинали считать, что герои детских книг "столь же похожи на живых настоящих детей, как цыплёнок, зажаренный на вертеле, похож на живых цыплят, свободно разгуливающих по лугам и полям". Эта точка зрения, высказанная Генри Бичером, нашла поддержку у ряда писателей второй половины XIX века.

Сентиментальные книги о добродетельных детях продолжали оставаться господствующим жанром американской детской литературы вплоть до последних десятилетий XIX в. Однако оппозиционные настроения, возникавшие ещё в предвоенные годы, на этом этапе приобретают более определённое выражение. Наряду с книгами о "хороших мальчиках" появляются книги о "плохих мальчиках".

"Приключения Тома Сойера" рассматривались американской критикой как произведение, возникшее в русле этой традиции. Но современные Твену буржуазные писатели, увидевшие в "Приключениях Тома Сойера" лишь обаятельную и весёлую книгу о проказнике-мальчугане, восприняли только её отдельные и второстепенные мотивы. Идейная концепция осталась им глубоко чуждой. Уже в самом начале своего творческого пути Твен создал злую пародию на книжки для воскресной школы в двух юморесках: "Рассказе о дурном мальчике" и написанном 5 лет спустя "Рассказе о хорошем мальчике". В остро пародийной форме они демонстрируют несовместимость реальных законов жизни с теми, которые навязывает ей воскресная школа. Исполненные иронии рассказы о плохом и хорошем мальчиках являются своего рода прологом к "Приключениям Тома Сойера".

Писатель изгоняет из своего романа слащавость тогдашней литературы для детей - эта литература, по его выражению, была "до тошноты приличной", - но сохраняет в нём те лучшие черты хорошей детской книги, которые делают произведение классическим. Ребёнок мыслит конкретно, то есть образно; ему присуща красочность восприятия, свойственно стремление к яркому и необычайному; неизменным обаянием обладает для него повествование непосредственного участника событий. Завладеть вниманием такого читателя, поразить его воображение - это и означает для писателя повести маленького читателя за собою и рассказать ему о возвышенном и благородном в поведении человека.

Марк Твен пишет именно такие книги для детей: смелые по мысли, простые по структуре, сложные по задачам автора, безудержно увлекательные, яркие и обязательно весёлые. Благодаря этим качествам "Приключения Тома Сойера" интересны и детям и взрослым.

В этой книге Твен подвёл итог целого периода своей деятельности. Писатель здесь дал законченное выражение многим мотивам своего раннего творчества. Бунт Твена против условностей, традиций, предрассудков буржуазного общества,

начатый им ещё в его юмористических рассказах, приобретает в "Томе Сойере" последовательный и чёткий характер. Тема задорной, буйной жизни, стремящейся вырваться из стесняющих её мёртвых, искусственных форм, - одна из центральных тем раннего творчества писателя - легла в основу его первой детской книги.

Работая над "Томом Сойером", Твен сам хорошо не знал, пишет ли его для взрослых или для детей. Вложив в эту задорную, насмешливую, жизнерадостную книгу свои заветные мысли и стремления, писатель был склонен думать, что "Приключения Тома Сойера" "будут читаться только взрослыми". Однако восторженные письма юных читателей, а также отклики признанных корифеев детской литературы убедили Твена в том, что он, неожиданно для себя, стал автором детской книги. Эта точка зрения нашла поддержку у многих представителей современной Твену американской литературы и критики. Так, У. Д. Хоуэллс писал Твену: "Неделю тому назад я кончил читать "Тома Сойера". Я не вставал, пока не дошёл до конца рукописи, - просто нельзя было оторваться. Это лучшая повесть для мальчиков, которую я когда-либо читал. Книга будет иметь беспредельный успех. Но вы должны совершенно определённо относиться к ней, как к книге для мальчиков. Если это будет так, то и взрослые будут наслаждаться ею в равной степени, а если вы перейдёте к изучению характера мальчика с точки зрения взрослого - это будет неправильно.

Марк Твен считал свой первый самостоятельно созданный роман поэзией детства. "Это просто гимн, переложённый прозой для того, чтобы дать ему словесную оболочку", - говорил он.

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## MEDICINE

### METHOD OF LASER PHOTODYNAMIC THERAPY IN THE TREATMENT OF WOUND INFECTION IN DIABETIC FOOT SYNDROME

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*Abstract: the use of local laser photodynamic therapy in the complex treatment of wound infection in diabetic foot syndrome should be carried out taking into account the phase course of the wound process (in the I-phase for 10 minutes, in the II-phase for 5 minutes). The proposed scheme allows for a short time to achieve cleaning of the wound surface from various microorganisms, which contributes to reducing the number of progression of the pathological process on the foot from 27.1% to 6.7% of cases, as well as performing forced high amputations of the lower extremities.*

*Keywords: diabetic foot syndrome, wound infection, photodynamic therapy.*

Objective: to develop an optimal scheme for the use of laser photodynamic therapy in the treatment of wound infection in patients with diabetic foot syndrome.

Material and methods: we analyzed the results of a comprehensive examination and treatment of 145 patients with purulent-necrotic lesions of the lower extremities in diabetes mellitus. Among the examined patients, men were 80 (55.2%), women 65 (44.8%), the age of patients varied from 35 to 75 years. Revealed changes in the foot were represented by the following morphological forms: focal tissue necrosis - 12 (8.30%); purulent-necrotic ulcers of the toes - 23 (15.86%); purulent-necrotic phlegmon of the foot-31 (21.37%); gangrene of the toes (dry and wet) - 44 (30.34%); distal gangrene of the foot (dry and wet) - 35 (24.13%).

Examination of patients included General clinical methods, laboratory methods, instrumental methods of investigation of the arterial bed of the lower extremities, bacteriological studies of wound exudate. Clinical and instrumental, laboratory studies were carried out in dynamics on 3-, 5-, 7-, 10-day after treatment.

Depending on the methods of complex treatment, all patients were divided into 2 groups: the First (control) group consisted of 70 patients with purulent-necrotic lesions of the lower extremities, who were treated with a complex of therapeutic measures, including surgical placement, antibacterial therapy, infusion, detoxification therapy, drugs that improve microcirculation, correction of the level of glycemia, and symptomatic treatment of concomitant diseases. Local treatment was carried out in the traditional way. The second (main) group consisted of 75 patients who, in addition to the above-mentioned complex medical measures, after surgical treatment of a purulent focus, local treatment was supplemented by laser photodynamic therapy (LPDT). The total time of LPDT was 10 minutes in the first and 5.0 minutes in the second phase of the wound process.

Results and discussion: Comparative indicators of relief of clinical signs (normalization of the temperature curve, reduction of perifocal inflammation and redness surrounding the wound tissue, reducing local edema, infiltration in the field of wound edges) in

patients with purulent-necrotic lesions of lower extremities in diabetes after treatment showed that patients of the second group improvement of all investigated clinical symptoms occurred on average 1-2 days earlier than patients of the first group. This fact confirms the clinical effectiveness of our proposed treatment of this category of patients.

Comparative indicators of the leukocyte intoxication index (LII) in patients with purulent-necrotic lesions of the lower extremities in diabetes mellitus showed that in patients of the second group, the LII decrease to normal values occurred on average 3 days earlier than in patients of the first group, which proves the positive effect of LPDT in patients. The inclusion of LPDT in the complex of treatment of wounds not only had a positive clinical effect and reduced LII, but also has a bactericidal effect in a short time after treatment on the seeded pathogens of purulent-inflammatory diseases - gram-positive cocci, gram-negative bacteria, anaerobes and *Candida* spp.

Of the 70 treated patients of the first group in 19 (27,1%) against the background of a range of traditional methods of treatment was the progression of the pathological process in the foot, which for health reasons had performed high amputation of the lower extremities in 12 patients (17,1%) at the level of the middle third of the thigh, 7 patients (10,0%) implemented an improved method neoplasticescoy amputation at the upper third of the leg. 9 (12,8%) patients developed septic shock with signs of multiple organ failure, which resulted in death in 7 (10,0%) cases. At the same time, the average length of stay of patients of the first group in the hospital on average was 17.5±3.0 bed days.

Against the background of LPDT in patients of the second group (n=75), only 5 (6,7%) patients showed progression of the pathological process of the foot, the cause of progression was critical ischemia of the lower extremities due to atherosclerotic multilevel lesions of the limb arteries. 3 (4,0%) patients underwent myoplastic amputation at the level of the upper third of the lower leg for life reasons.

In 2 (2,6%) patients with progressive signs of multiple organ failure, cardiac arrest was observed leading to a fatal outcome. The average length of hospital stay in this group of patients averaged 12.5±2.5 bed days.

Analysis of the described clinical parameters indicates that all indicators of the second group significantly differed in relation to the data of the first group in a positive direction ( $P < 0.05$ ), which indicates the high effectiveness of the proposed method of treatment with LPDT.

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## HEART RHYTHM DISTURBANCES IN RELATION TO DIASTOLIC DYSFUNCTION IN PATIENTS WITH DIABETES MELLITUS.

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*Annotation: the study is devoted to assessing the relationship of ventricular arrhythmias with diastolic heart function in patients with diabetes mellitus. The study revealed a relationship between the severity of diastolic dysfunction and ventricular arrhythmia.*

*Key words: heart rhythm disturbances, diastolic heart function, diabetes mellitus*

**Objective:** to evaluate cardiac arrhythmias in patients with type 2 diabetes mellitus (T2DM) in the presence of left ventricular diastolic dysfunction (LVDD).

**Materials and methods of the research:** the study included 63 patients with coronary artery disease and diabetes and the presence of LV DD (mean age 54.9 ± 7.1 years). **Exclusion criteria:** unstable forms of coronary heart disease, postinfarction atherosclerosis, grade 3 arterial hypertension, EF below 50%, liver and kidney diseases in the decompensation stage. All patients underwent daily ECG monitoring, echocardiography. As diagnostic criteria for LV DD, the ultrasound standards of the European Society of Cardiology were used. Three groups of patients were distinguished, depending on the type of LVDD: group I (n = 29) with abnormal LV relaxation, group II (n = 20) with the pseudo-normal type of LVDD, group III (n = 14) with the restrictive type of LVDD. Statistical data processing was carried out using the Statistica 6.0 software package.

**Results:** in general, in the group of cardiac arrhythmias were recorded in 57 (90.4%) patients. Supraventricular arrhythmias in the form of extrasystoles and paroxysms of supraventricular tachycardia were observed with the same frequency in all groups. Ventricular arrhythmias were detected in 51 (80.9%) patients. Significant differences were found in the incidence of frequent ventricular extrasystoles (Lown class II) between group I and group III patients (31% versus 64%,  $\chi^2 = 4.2$ ,  $p = 0.03$ ). Paired ventricular extrasystoles significantly more often in comparison with I was found in II (35% versus 7.4%;  $\chi^2 = 6.2$ ;  $p = 0.01$ ) and in group III patients ( $\chi^2 = 5.7$ ;  $p = 0.01$ ). We have identified a relationship between the duration of diabetes and the degree of ventricular extrasystoles: in group I it was 3.5 ± 2.1 years, in group III 8.8 ± 3.2 years ( $p < 0.05$ ).

**Conclusion:** the relationship between the frequency of occurrence of complex types of ventricular arrhythmias and the severity of LVDD in patients with type 2 diabetes is proved.

## THE RESULTS OF SURGICAL TREATMENT OF AORTIC VALVE DISEASE WITH A SMALL FIBROUS ANNULI

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*Annotation: Operation Ozaki is the method of choice for the surgical treatment of patients with aortic valve stenosis with a small fibrous annuli.*

*Key words: aortic valve stenosis, a small fibrous annuli*

**Purpose:** analysis of the results of surgical treatment of aortic valve disease with a small fibrous annuli

**Material and methods:** Correction of aortic valve disease with a small fibrous annuli was performed in 20 patients with aortic valve stenosis ( $n = 12$ ) and with combined aortic valve disease ( $n = 8$ ). The mean age of patients was  $29 \pm 5,4$  years. There were 11 men (55%), women - 9 (45%). A small diameter prosthesis was implanted in 6, reconstruction of the aortic root with expansion of the fibrous annuli was performed - 5 (according to the Nicks Nunez method) and plastic surgery of the aortic valve by autopericardium (Ozaki operation) - 9 cases. The mean size of the fibrous annuli of the aortic valve was  $18,4 \pm 2,3$  mm.

**Results:** According to echocardiography, the peak transvalvular pressure gradient before surgery in patients varied  $101,8 \pm 14,4$  and an mean of  $54,2 \pm 13,6$  mm Hg. The ejection fraction was preserved at  $58,5 \pm 1,3\%$ . The left ventricular end-diastolic volume was  $131,6 \pm 25,2$  ml. The mean perfusion time was  $131,4 \pm 18,5$  minutes. The peak and mean transvalvular pressure gradient after Ozaki surgery decreased by  $15,3 \pm 2,2$  and  $8 \pm 2,1$  mm Hg and after the rest of the operation, it decreased by  $23,1 \pm 4,2$  and  $15,6 \pm 2,1$  mm Hg. The ejection fraction was  $58,3 \pm 1,2\%$ , the left ventricular end-diastolic volume was  $90,4 \pm 1,3$  ml, respectively. The mean of stay - in hospital bed days is  $12,8 \pm 3,2$ . In the early postoperative period bleeding and thromboembolic complications were not observed.

**Conclusion:** Operation Ozaki is the method of choice for the surgical treatment of patients with aortic valve stenosis with a small fibrous annuli.

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## DAMAGE TO THE PLACENTA DURING INFECTION OF THE FETUS WITH HERPES VIRUS INFECTION.

**Radjabova Zulola Abdukhakimovna**

*Summary. The article presents the features of changes in placental tissue in pregnant women with herpes virus infection. A microscopic description, organometry, and macroscopic examination of 63 subsequent samples taken from women in labor with a genital form of herpes virus infection were carried out.*

*Keywords: herpes virus, genital herpes, pregnancy, placental insufficiency, intrauterine infection.*

In recent years, there has been a tendency to increase the infection of pregnant women with herpes simplex virus (HSV). Great attention is paid to genital herpetic infection, since its ability to actively multiply in the placenta and embryonic tissues, penetrate the placental barrier and cause intrauterine damage to the fetus leads to the formation of placental tissue insufficiency and the development of fetal malformations. The increasing role of intrauterine infections among the causes of adverse perinatal outcomes determines the relevance of a comprehensive study of this problem.

The objective of our study was to present the features of changes in placental tissue during herpetic infection.

**Research Methods.** A macroscopic description, organometry, and light-optical microscopic examination of 63 afterbirth 38–40 weeks of gestation were carried out.

In our study, the 63P placenta with lesions of the herpes simplex virus type 1 and 2 was studied. In observations, type 1 herpes was found in 22.5%, type 2 herpes in 42.8% and double herpes infection of types 1 and 2 in 34.7%. Therefore, we divided them into 3 groups.

**Results.** Macroscopically, the appearance of the placenta did not differ much from the usual one. It looked like an oval disk. The fertile surface of most placentas was smooth. Only one had thickenings of the chorionic plate. The maternal surface, as a rule, had distinct lobules. In 13.8% of the placentas, their sizes were not the same. In these cases, the small lobules were compacted and whitish in the section. The surface of the lobules was often smooth, and in 27.4% of the placentas, plaque whitish thickenings were determined on it. As with other viral infections, the villous chorion tissue had a spongy appearance, depending on the blood supply of gray-red or cherry-red color. Multiple small foci of dense white consistency were detected in the placenta tissue, in 6 placentas they were larger, however, not exceeding 8–12% of the total volume, and were located mainly on the periphery of the placental disc. In addition, in 32.1% of cases, hemorrhages were found in the maternal part of the placenta, the villous chorion, and less often in the membranes and umbilical cord. In one placenta, nodes of capillary hemangioma were identified. The umbilical cord had properly formed vessels. In 11 observations, its marginal or eccentric attachment was noted. The extraplacental membranes of all the placentas, with the exception of 43, were thin, smooth. In 27.4% of cases there were plaque-like focal thickenings, and in 16.9% of cases green staining. In the 1st group, the placental-fetal index was 0.13, in the 2nd group 0.16 and in the 3rd group 0.17.

A histological examination in all cases in the presence of a full-term pregnancy in the placenta showed varying degrees of severity of structural differentiation. In this case, fields of villi located at different stages of development were revealed. Terminal villi predominated. Along with them, areas were determined that contained immature and mature intermediate, chaotic, sclerosiropo, and single embryonic villi. Immature

intermediate villi were characterized by irregular shape, large sizes (diameter 110-180  $\mu\text{m}$ ), single small branches extending from them, loose stroma, weak vascularization (5-8 centrally located small capillaries), and the presence of Kashchenko-Hoffbauer cells. The presence of a significant amount of such villi in the placenta during a full-term pregnancy indicates a violation of the development of villous chorion with a gestational period of 19-25 weeks. Thus, in all the observations, dissociated development of the villous chorion with a predominance of terminal villi was noted. In all cases, widespread lesions of the walls of the vessels of the villi were observed in the form of focal endovasculitis, sometimes with necrosis of part of the inner lining and the formation of blood clots. Intervillitis was common and was focal in nature. Hemorrhages or foci of thrombosis in the intervillous space were more typical. Basal deciduitis of varying severity occurred in 31.7% of cases. Necrotic changes were found both in individual cells and in the form of foci. In addition, areas of sclerosis, diffuse deposits of calcium salts, fibrinoid in the villi and basal lamina were constantly revealed.

Changes in the placenta largely depended on the time of occurrence of relapses and their number. The degree of destruction was more pronounced in patients with 4 relapses or more.

Exacerbation of the disease in the I and II trimesters of pregnancy was morphologically manifested by fibroplastic changes. In the vessels of stem, mature intermediate and terminal villi, there were manifestations of productive vasculitis, with fibrosis of the walls, obliteration and stenosis of the lumen of some of them. The chorionic plate looked thickened, intensely stained with fuchsin according to Van Gieson. Fetal membranes are edematous, their epithelium is thickened in places, forms several rows. Inflammatory changes were focal in nature. It was morphometrically established that the number of avascular terminal villi was  $15.3 \pm 0.62\%$ ;  $46.0 \pm 3.24\%$  contain 1-2 capillaries,  $24.8 \pm 0.96\%$  - 3-5 capillaries,  $9.4 \pm 0.86\%$  - 10 capillaries,  $4.5 \pm 0.11\%$  - more 10 capillaries.

The occurrence of relapses of herpetic infection in the III trimester of pregnancy was combined with alternative processes in the structures of the afterbirth. In the basal plate, septa, large and small villi, amnion, smooth chorion, pronounced dystrophic changes, necrobiosis, foci of fibrinoid necrosis are found. At the same time, there was a lymphoid-plasmacytic and lymphoid-macrophage inflammatory reaction, often with giant cell metamorphosis and focal hemorrhages. Inflammatory changes and necrosis of the membranes were accompanied by rupture of the fetal bladder, premature outflow of amniotic fluid, and the occurrence of an ascending infection. In this case, infiltration by polymorphonuclear leukocytes penetrating from the vessels of the decidual or amniotic membranes and the polymorphous space prevailed microscopically in the amnion. nuclear leukocytes that migrated from the vessels of the chorion plate. In the intervillous space, inflammatory changes were of limited focal nature and represented by scanty lymphoid-plasmacytic infiltration, and the presence of fibrin strands. In the villi there were deposits of calcium salts. In 19 observations, focal hemorrhages were detected in the intervillous space. It was morphometrically established that the number of avascular terminal villi is  $13.8 \pm 0.3\%$ ;  $37.2 \pm 1.22\%$  contain 1-2 capillaries,  $24.0 \pm 1.1\%$  - 3-5 capillaries,  $7.6 \pm 0.31\%$  - 6-10 capillaries.

Along with the described changes characterizing the violation of the maturation of the placenta, its damage and inflammation, there are varying degrees of severity of compensatory-adaptive processes. The latter are determined by the degree of vascularization of the villi, depending on the time of relapse, the presence of functional syncytial nodules and the amount of circulating maternal blood in the intervillous space. Functioning syncytial nodules, reflecting the proliferative capabilities of trophoblast, are available in

all cases. They are a cluster of basophilic nuclei closely adjacent to each other. Often these structures form "bridges" connecting terminal nap and supporting their internal mutual arrangement.

Conclusion. Genital herpetic infection leads to the development of chronic placental tissue insufficiency, the severity of which depends on the time, frequency and duration of the disease recurrence. Changes in the placenta are characterized by the presence of both destructive and compensatory processes, the degree of preservation of which determines the further development and condition of the fetus.

Pregnant women with this pathology should be assigned to a high-risk group for the possible development of placental insufficiency. The examination plan for patients with this pathology should include modern diagnostic methods for the status of the fetoplacental complex and morphological examination of the placenta. The revealed morphological changes in the placenta allow timely initiation of pathogenetically substantiated therapy for newborns, which helps to reduce the incidence of complications of herpesvirus infection.

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## ОПТИМИЗАЦИЯ ЛЕЧЕНИЕ ГНОЙНО-ДЕСТРУКТИВНЫХ ЗАБОЛЕВАНИЙ МЯГКИХ ТКАНЕЙ ПУТЕМ ПРИМЕНЕНИЕ ЛАЗЕРНЫХ МЕТОДОВ.

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### *Annotation.*

*Purpose: Optimization of treatment methods for purulent-destructive disease due to local application of photodynamic therapy (PDT) and CO<sub>2</sub> laser.*

**Materials and methods.** A survey and treatment of 335 patients with purulent wounds of soft tissues was performed. Depending on the treatment, the patients were conditionally divided into 2 groups: the 1st (control group) included 171 patients who underwent generally accepted traditional methods of treatment; in the 2nd group (main group) 164 patients who, in combination with traditional methods, were treated with PDT (a 0.05% methylene blue buffer solution was used as a photosensitizer) and a CO<sub>2</sub> laser.

**Results.** In patients of the main group, normalization of temperature and heart rate was observed at  $2.0 \pm 0.5$  days, a decrease in LII to a normal level was observed at  $7.0 \pm 0.5$  days after treatment. Hyperemia of the skin around purulent wounds and a decrease in perifocal inflammation persisted for  $3.5 \pm 0.5$  days, a decrease in local edema was noted for  $2.0 \pm 0.5$  days. The average length of hospital stay in patients of the main group averaged  $5.0 \pm 2.5$  bed days. After 3-5 sessions of PDT with a photosensitizer, methylene blue in the main group, the microbial contamination decreased to a critical level, and after 6-8 sessions there was no microbial growth.

**Conclusions:** The combined use of PDT and CO<sub>2</sub> laser is the most effective compared to traditional treatment methods.

**Key words:** Photodynamic therapy, photosensitizer, methylene blue, Streptococcus pyogenes, microbe, CO<sub>2</sub> laser, laser surgery, planimetry.

Лечение больных с гнойными заболеваниями мягких тканей до настоящего времени продолжает оставаться одной из наиболее актуальных проблем хирургии [8,12].

В общей структуре хирургических заболеваний хирургическая инфекция наблюдается у 35 - 45% больных. В структуре послеоперационных осложнений хирургическая инфекция составляет от 32 до 75% [5,1,2, 6,10, 4,7, 13,14]. Более 30% всех летальных исходов в послеоперационном периоде связаны с различными гнойно-воспалительными процессами [3,4, 12,9,4].

Одним из перспективных направлений современной медицины в решении этой проблемы является использование лазерных методов лечения. Фотодинамическая терапия (ФДТ) - уникальная медицинская технология: высокоэффективная, щадящая, органосохраняющая, обеспечивающая хорошие косметические и функциональные результаты [11].

**Цель:** Оптимизация методов лечения гнойно-деструктивных заболеваний за счет местного применения фотодинамической терапии (ФДТ) и CO<sub>2</sub> лазера.

**Материалы и методы.** Проведено обследование и лечение 335 пациентов с гнойными ранами мягких тканей. В зависимости от проводимого лечения больные были условно разделены на 2 группы: в 1-ю (контрольная группа) включены 171 пациентом которым было проведено общепринятые традиционные методы лечения; во 2-й группе (основная

группа ) 164 больных, которым в комплексе традиционными методами лечение применяли ФДТ (в качестве фотосенсибилизатора использовали 0,05 % буферный раствор метиленовой сини) и CO<sub>2</sub> лазер. Среди обследованных больных женщин было 187 (55,8 %), мужчин – 148 (44,2%), возраст пациентов варьировал от 18 до 82 лет. По нозологическим формам у больных преобладали рожистое воспаление у 54 больных (16,1%), карбункул у 48(14,3%), инфицированные раны 43(12,8%), флегмоны у 22(11,9%) и послеоперационные нагноение ран 37(11%) различной локализации. Исследованы клинические, микробиологические, морфологические и планиметрические методы для оценки эффективности метода.

**Результаты.** У больных контрольной группы нормализация температуры происходило на 4,0±0,5 сутки, нормализация частота сердечных сокращений на 4,5±0,5 сутки, снижение показателей ЛИИ до нормального уровня наблюдалось на 8,5±0,5 сутки после проведения лечение. Гиперемия кожи вокруг гнойных ран и уменьшение перифокального воспаления сохранялась в течение 4,5±0,5 сутки, уменьшение местного отёка отмечалось на 3,5±0,5 сутки. Средняя продолжительность пребывания в стационаре больных контрольной группы в среднем составило 7,0±3,5 койко-дня.

У больных основной группы нормализация температуры и частота сердечных сокращений наблюдался на 2,0±0,5 сутки, снижение показателей ЛИИ до нормального уровня наблюдалось на 7,0±0,5 сутки после проведение лечебных мероприятий. Анализ динамики клинических проявлений показал, что лечение гнойных ран с использованием ФДТ с фотосенсибилизатором метельного синий приводит к быстрому уменьшению перифокальных воспалительных проявлений. Гиперемия кожи вокруг гнойных ран и уменьшение перифокального воспаления сохранялась в течение 3,5±0,5 сутки, уменьшение местного отёка отмечалось на 2,0±0,5 сутки. Средняя продолжительность пребывания в стационаре больных основной группы в среднем составило 5,0±2,5 койко-дня.

Анализируя в целом клинические проявления раневого процесса важно отметить, что после проведения ФДТ сократились сроки очищения ран от гнойного детрита и фибриновых масс, а также время появления грануляций и начала эпителизации особенно основной группе. В среднем, очищение ран от гнойного детрита и фибриновых масс наступало на 3,8±0,5 день, а появление грануляций выявлено на 3,5±0,6 сутки. На 4,9±0,4 день отмечено начало краевой эпителизации, что достоверно лучше, чем при традиционном лечении. У больных группы сравнения, получавших традиционное лечение, у 4 пациентов на 3-4 сутки выявлено образование вторичных некрозов с последующим выполнением некрэктомий, что не имело место в основной группе пациентов.

Проведенные этапные планиметрические исследования показали, что в группе больных, где для лечения была использована ФДТ с метиленовой синью, площадь гнойных ран сокращалась быстрее, чем в контрольной группе. Так, в основной группе больных площадь гнойных ран сократилась к 10-м суткам на 75%, в то время как при традиционном лечении площадь гнойных ран уменьшилась на 56% (p<0,05).

При традиционном лечении больных с гнойными ранами средний койко-день составил 10 дней, то у пациентов основной группы , комплексно леченных в послеоперационном периоде с применением лазерной фотодинамической терапии и CO<sub>2</sub> лазера, длительность пребывания в стационаре составила 5 дней(P <0,05).

При количественных микробиологических исследованиях установлено, что до начала лечения у больных обеих групп имелся высокий уровень обсемененности тканей ран, в 1 г ткани ран содержалось в среднем 10<sup>6-9</sup> КОЕ. После проведения ФДТ и CO<sub>2</sub> лазера микробная обсемененность ткани ран через 1 сутки обсемененность ткани раны микробной флорой уменьшилась до 10<sup>6-7</sup> КОЕ/г, при применении ФДТ и традиционное лечение 1 сутки обсемененность ткани раны микробной флорой уменьшилась до 10<sup>7-8</sup> КОЕ/г. При традиционном лечении данные показатели не изменялись и составляли 10<sup>7-9</sup>

КОЕ/г. На третьи сутки у больных основной группе содержание микробов в 1 г ткани составило  $10^{4-5}$  КОЕ/г, на 7 сутки после выполнения ФДТ в гранулированных ранах этот показатель снизился до  $10^{2-3}$  КОЕ/г. У больных получавший традиционное лечение в этот же срок показатель микробной обсемененности ткани ран составил  $10^{4-5}$  КОЕ/г, отличалась разнообразием представителей. Полученные результаты свидетельствуют, что применение  $\text{CO}_2$  лазера и ФДТ с фотосенсибилизатором метилен сини более эффективно снижает бактериальную обсемененность тканей ран, чем традиционное лечение.

**Выводы:** Комплексное применение ФДТ и  $\text{CO}_2$  лазера приводит к более раннему очищению от гноя и микробов, а также укорочению сроков койка дня. Фотодинамическая терапия является достаточно эффективным не инвазивным и щадящим методом лечения гнойных ран и является обоснованным применением этого метода в клинической практике для лечения острых гнойно-воспалительных процессов в комплексе с традиционными методами.

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## **ВЛИЯНИЕ ТРАНЕКСАМА НА ВЕЛИЧИНУ КРОВОПОТЕРИ У ЖЕНЩИН В АКУШЕРСКИХ КОАГУЛОПАТИЧЕСКИХ КРОВОТЕЧЕНИЙ.**

### **EFFECT OF TRANEXAM ON THE AMOUNT OF BLOOD LOSS IN WOMEN IN OBSTETRIC COAGULOPATHIC BLEEDING.**

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#### *Резюме,*

*Целью нашего исследования оценить эффективности применения транексановой кислоты для профилактики кровотечения в раннем послеродовом периоде. Нами был проведен анализ 100 случаев родов у родильниц, имеющих на риск на послеродовые кровотечения. Случаи были разделены на 2 группы ( по 50 чел.) в зависимости от проводимой терапии в родах: 1- исследуемая группа, 2- контрольная группа. Транексамовая кислота относится к антифибринолитическим средствам. Обладает местным и системным гемо статическим действием при кровотечениях, связанных средствами с повышением фибринолиза, а также противовоспалительным, противоаллергическим, противомикробным и противоопухолевым действием за счет подавления образования кининов и других пептидов, участвующих в аллергических и воспалительных реакциях.*

*Ключевые слова: Акушерские кровотечения, гемотакрит , транексамовая кислота*  
*Resume,*

*The aim of our study is to evaluate the effectiveness of tranexanoic acid for the prevention of bleeding in the early postpartum period. We have analyzed 100 cases of childbirth in puerperas, at risk for postpartum hemorrhage. Cases were divided into 2 groups (50 people each), depending on the therapy carried out in childbirth: 1 - study group, 2 - control group. Tranexamic acid refers to antifibrinolytic agents. It has local and systemic haemostatic effects in bleeding associated with increased fibrinolysis, as well as anti-inflammatory, anti-allergic, anti-infectious and anti-tumor effects due to the suppression of the formation of kinins and other peptides involved in allergic and inflammatory reactions.*

*Keywords: Obstetric hemorrhage, hemotacritis, acid trexaxamic.*

#### **Актуальность**

Кровотечение, самое драматичное осложнение акушерской практики, и в XXI веке остается одной из главных причин материнской смертности во всем мире. Согласно данным ВОЗ, акушерские кровотечения являются причиной 25-30 % всех материнских смертей [ 1,3 ]. Риск смерти от кровотечения, связанного с беременностью и родами, в развитых странах соответствует 1 : 100000, в развивающихся странах достигает 1 : 1000 родов [ 6 ].

Основной задачей демографической политики Республики Узбекистан: продолжение депопуляции, снижение материнской и младенческой смертности, не менее чем в 2 раза. Очевидно, что существенным условием достижения поставленных целей является сохранение укрепления здоровья женщин, в том числе репродуктивного. ( 8,9 ).

На ранние послеродовые кровотечения, возникающие в первые 24 ч после родов, приходится четверть всех случаев материнской смертности во всем мире , также в нашей Республике Узбекистан( 8,9 ). Частота кровотечений в раннем

послеродовом периоде колеблется от 8- до 18%.

Для снижения объема кровопотери после родов на сегодняшний день разработаны протоколы их лечения и стандарты по профилактике. Одним из профилактической терапии кровотечения в раннем послеродовом периоде применяются методы активного ведения третьего периода родов, ведением утеротоников сразу после рождения новорожденного.

Введение окситоцина и паллиативные методы являются основными методами остановки кровотечений в последовом и раннем послеродовом периоде. Вместе с тем в последние годы появились данные о необходимости применение прогемостатических препаратов с целью профилактики кровотечения наряду с вышеуказанными методами.

Целью нашего исследования явилось: Оценить эффективности применения транексановой кислоты для профилактики кровотечения в раннем послеродовом периоде.

#### Материалы и методы исследования

Нами был проведен анализ 110 случаев родов у родильниц, имеющих на риск на послеродовые кровотечения. Случаи были разделены на 2 группы ( по 55 чел.) в зависимости от проводимой терапии в родах: 1- исследуемая группа, 2- контрольная группа. В первой группе родильницам в латентной фазе родов была проведена инфузия транексановой кислотой 500 мл натрия хлора 0,9% + 5 мл ( препарат тренакса), внутривенно капельное. Во 2-й группе пациенток роды велись без применения препарата.

Транексам назначается по 500 мг 3-4 раза в сутки до полной остановки кровотечения. После внутривенного введения целесообразен переход на пероральный прием препарата.

#### Результаты и их обсуждение

Выполненное сравнение полученных данных в обеих группах позволило выявить статистически значимое различие. При использовании гравиметрического метода и расчета по гематокритному методу показатели кровопотери в исследуемой группе были меньше чем в контрольной группе ( $p < 0,05$ ). При расчете по формуле Нельсона в 1-й группе кровопотери были больше, чем в контрольной группе, но различие было статистически незначимым. В обеих группах не выявлены случаи проявления побочных эффектов.

**Таблица №1**

**Сравнительные данные объема кровопотери (мл) в исследуемых группах.**

Группы	Гравиметрический метод	Гематокритный метод	Формула Нельсона
1- группа	237,7	219,9	338,9
2- группа	328,3	302,9	329,0

Из данных таблицы №1 видно, что имелись различия по объёму кровопотери в сопоставимых группах. По гравиметрическому методу разница составила 90,6+-3мл, по гематокритному методу 83,0+- 4мл.

При расчете по формуле Нельсона в исследуемой группе кровопотеря была больше на 8,1 мл в сравнении с контрольной группой, этот показатель оставался

незначимым. При изучении показателей гемоглобина ее снижение не имел статистического различия. Это объясняли тем, что в первые часы после кровопотери еще не произошла гемодилюция, и концентрация гемоглобина остается прежней, несмотря на уменьшение его абсолютной величины.

**Таблица №2**

**Сравнительные показатели гемоглобина до и после родов.**

Группы	Показатели Нб до родов	Показатели Нб после родов
1-группа	94,0+/-1,2	31,3+/-1,02%
2-группа	92,0+/-1,4	30,2+/-1,04%

Не было значимых различий в общем анализе мочи в обеих группах и отмечались побочные эффекты в виде тошноты, рвоты, диареи тромбоэмболических осложнений.

**Выводы**

Таким образом, доказана эффективность применения транексамовой кислоты в снижении количества кровопотери у пациенток с высоким риском на кровотечения в родах и в раннем послеродовом периоде.

Профилактическое применение этого препарата у беременных групп высокого риска развития кровотечений снижает величину кровопотери.

Использование транексамовой кислоты в акушерской практике не требует предварительного исследования параметров системы гемостаза, что существенно сокращает затраты и время подготовки к проведению гемостатической терапии. Этот гемостатический препарат может быть использована в качестве гемостаза в раннем послеродовом периоде в комплексной терапии послеродового кровотечения.

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## CLINICAL SIGNIFICANCE OF TISSUE MARKERS IN CHILDREN'S CARDIOVASCULAR PATHOLOGY

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*Abstract. Cardiomyopathy still remains one of the least studied cardiovascular diseases, being the object of studying the actively developing area of modern pediatric cardiology. The aim of researches was to study the clinical significance of tissue markers in pediatric cardiovascular pathology. We examined 60 children with dilated cardiomyopathy and 40 children with non-rheumatic myocarditis aged from 2 months to 18 years, who were hospitalized in the cardioreumatology department of the Republican Specialized Scientific-Practical Medical Center for Pediatrics of the Ministry of Health. In order to determine the presence of cardiac insufficiency and assess its severity, great attention is paid to finding objective criteria, including the determination of cardiac markers in the blood. These criteria included creatine phosphokinase (CPK), creatine phosphokinase MV (CPK-MV), lactate dehydrogenase (LDG), brain natriuretic peptide (NT-pro BNP), and the de Rhytis AST/ALT ratio, which is 1.5 in the norm. Determining the level of CPK-MV and NT-proBNP in plasma helps to assess the severity of chronic heart failure, to predict further development of the disease, as well as to evaluate the effectiveness of the therapy.*

*Keywords: children, dilatational cardiomyopathy, creatine phosphokinase, lactate dehydrogenase, sodium peptide.*

**Relevance:** The problem of cardiovascular diseases (CVD) is one of the most important in pediatrics, which is due to the variety of clinical forms, difficulties in diagnosis and treatment and the tendency to form the main risk factors for the development of cardiovascular events, the implementation of which worsens the remote prognosis of the disease, reducing the quality of life and social adaptation. Cardiomyopathy (CMP) has a special place among CCTs, the growth of which has been noted recently, which is associated not only with the true increase in this pathology, but also with the widespread introduction of highly informative instrumental methods of heart examination.

**The research objective:** to study the clinical significance of tissue markers in children with cardiovascular pathology.

**Materials and methods:** We examined 60 children with dilated cardiomyopathy and 40 children with non-rheumatic myocarditis aged from 2 months to 18 years, who were hospitalized in the cardioreumatology department of the Republican Specialized Scientific-Practical Medical Center of Pediatrics of the Ministry of Health. The control group consisted of 30 practically healthy children.

The diagnosis was determined on the basis of complaints, anamnesis data (obstetric anamnesis of the mother, anamnesis of the life and diseases of the child, the diseases suffered, the nature of the course and duration of the disease), clinical and functional (ECG, EchoCG, Holter ECG monitoring), laboratory (general haematological analysis, Blood biochemical analysis with the determination of cardio specific markers - creatine kinase, creatine phosphokinase CF, lactate dehydrogenase, sodium peptide) and instrumental (chest X-ray, multispiral computer tomography of the chest) examination methods.

**Results and discussion:** In order to determine the presence of heart failure and to assess its severity, great attention is paid to the search for objective criteria, which

include the determination of cardiac markers in the blood. These included: creatine phosphokinase (CPK), creatine phosphokinase of MV (CPK-MV), lactate dehydrogenase (LDG), brain natriuretic peptide (NT-pro BNP), and the de Rhytis AST/ALT ratio, which is normal at 1.5. The analysis of research results showed that the following blood biochemical parameters were reliably increased in children with neurotic myocarditis: - CFC -  $255.9 \pm 14.9$  ME/l ( $p < 0.01$ ); - LDH -  $476.9 \pm 43.8$  ME/l ( $p < 0.01$ ); de Ritis AST/ALT ratio -  $1.48 \pm 0.09$  ( $p < 0.01$ ). The expressed increase in all three indicators prevailed in 30% of children with NM, while 53.3% of children with DCMP had an increase more often than one in three biochemical indicators. In contrast to the above mentioned laboratory parameters, CFM- $40.5 \pm 2.3$  ME/l was significantly increased in children with DCMP, which indicated congestive heart failure.

To assess the prognosis of heart failure in children with DCMP and NM, a level of natriuretic peptide (NT-pro BNP) has been determined at all stages of NK. The analysis of NT-pro-BNP results in the blood showed that children with DCMP were significantly elevated from Art. III NK. (IV MP) reached up to 38000 pg/ml, while in children with nonrheumatic myocarditis with NT-III st. (IV MP) was up to 1200 pg/ml, while in children with non-rheumatic myocarditis with NK III st.

Conclusions: Thus, the most expressed increase of biochemical markers is observed at DCMP, which is confirmed by unfavorable outcomes in the process of progression of this pathology in children. All this determines in the presence of risk factors for the development of DCMP, along with functional studies it is necessary to determine cardio specific markers - creatine phosphokinase, lactate dehydrogenase, as well as brain natriuretic peptide. Determining the level of CPK MB and NT-proBNP in plasma helps to assess the severity of chronic heart failure, to predict further development of the disease, as well as to assess the effectiveness of therapy.

## CONDITIONS OF PSYCHOVEGETATIVE FACTORS AT REGULATION IN PATIENTS WITH BRONCHIAL ASTHMA COMPLICATED BY PULMONALE HYPERTENTION

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*Annotation. The actual problem of clinic pulmonology is the investigation of the new, perspective, modern alternative methods of diagnostics in patients with bronchial asthma (BA) complicated by pulmonale hypertention (PH) failure.*

*Key words: bronchial asthma, pulmonale hypertention, psychovegetative factors*

**Purpose.** To study the psychovegetative conditions factors of regulation and heart rate variability at the patients with BA complicated by cor pulmonale and their correction.

**Materials and metods.** Clinical and phsychological examination were performed at 24 patients with bronchial asthma complicated by cor pulmonale.

**Results.** In 56%, anxiety and depressive symptoms were observed. These patients, comparing to those without psychological disturbances, demonstrated great manifestation of autonomic disbalance at heart rate variability assessment (increased sympathetic and deceased vagal activity). Disturbed heart rate variability correlated with progressing anxiety and depression. In sudden death group, psychological and heart rate variability disturbances were substantially more manifested, regardless of PH clinical course severity. This can trigger fatal arythmiadevelopment. In particpants with anxiety and depression symptoms, including those with sudden death, personality anxiety level were high.

## MEDICAL ASPECTS OF THE LIFE SICK QUALITY OF CHRONIC OBSTRUCTIVE LUNG DISEASES.

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*Annotation. To study parameters of the quality of life (QL) in patients with chronic obstructive lung diseases (COLD) complicated by cor pulmonale (CP).*

*Key words: chronic obstructive lung diseases, cor pulmonale*

**Material and methods.** At screening-questioning on the Seattle questionnaire were 32 patients. The control group (CG) was made by 30 healthy volunteers. Depending on the level of average pulmonary arterial pressure and the presence of structurally functional changes of right ventriculi (RV) of heart. All patients were distributed on 2 groups: 1st group - 15 patients with a pulmonary hypertension (PH) and 2nd group - 12 patients with dilatation right ventriculi of heart (DRV).

**Results of research.** It was established, that parameters of QL were lowered at all patients with CP in comparison with CG. However expression of changes in the specified groups is not unequivocal. So, 2nd sick group was worse adapted for moderate physical activity, and among them is sharp restriction of physical activity. More often difficulties were authentically observed at walk, that among patients with PH were observed authentically less often ( $P < 0,05$ ) accordingly. At patients with DRV emotional distress more expressed by low points of an estimation of an emotional condition, in comparison with patients with PH is established. Patients with DRV authentically had fear of physical activity, than patients with PH ( $P < 0,03$ ) is more often.

**The conclusion.** At patients with DRV the QL degree becomes more perceptible than expressed depression of quality of a life on an emotional condition and professional suitability and satisfaction treatment that it is necessary to consider at carrying out of rehabilitational actions.

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## PEDAGOGY

### PEDAGOGICAL APPROACH TO THE PREVENTION OF OCCUPATIONAL DEFORMITIES

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*Basic concepts: deformation, stress, model, socio-pedagogical stability, competence, concentration, self-management, motivational process, cognitive, psychological climate.*

*Abstract: This article discusses the professional deformation that occurs in teachers in pedagogical activities. The negative impact of professional deformities on the effectiveness of pedagogical activity, the pedagogical possibilities of overcoming it (trainings, master classes, business games) were discussed. At the end of the article, the author developed and presented recommendations for the prevention of occupational deformities.*

The problem of improving the professional activity of a teacher has always been in the focus of psychological and pedagogical science and practice. Lack of teachers and lack of professionalism in educational institutions are more and more reasons for researchers to solve the problem of overcoming the professional deformities of the teacher. President Sh.Mirziyoev said: "The increase of the capacity of higher education institutions, scientific and scientific-pedagogical personnel is one of the most important issues - the expansion." [12]

Symptoms of professional deformation are manifested in indifference to students and colleagues, imperfection of theoretical knowledge and practical skills of professional pedagogical activity, that is, in the deterioration of the teacher's personality, despite the increasingly stable negative features.

At the present stage, the problem of occupational deformation is considered from different perspectives. At the same time, the analysis of modern sources on this issue (S.P.Beznosova, R.M.Granovskaya, E.F.Zeer, L.N.Korneeva, A.K.Markov, E.I.Rogova, T.V.Formanyuk etc.) shows that insufficient attention is paid to the creation of conditions for the prevention of professional deformation of teachers of educational institutions. [1.14]

There is a need to develop a pedagogical model for the effective prevention of the process of professional deformation of the teacher's personality.

As V.A.Shtof points out, "if the model is designed for mental imagination, is materially realized, reflects the object of research, and is able to replace it, then we will be able to gather new information about the object in the process of learning". [2.34]

In creating the model, the real process, not the model of the educational institution, was taken into account, and on this basis, the prevention and elimination of professional deformation of the personality of teachers of preschool education organizations were divided into important components. These components are:

- object;
- Stages of prevention and elimination of professional deformities of the teacher's

personality;

- conditions and forms of implementation of these stages;
- learning outcomes and indicators of its evaluation.

The idea of the model is based on the gradual prevention and elimination of professional deformation of teachers of preschool education institutions.

At the initial stage, the conditions for the prevention of professional deformation of teachers are implemented, at this stage, the use of active forms and methods of prevention of professional deformation, the organization of teachers' cooperation based on understanding the forms and methods of effective prevention of professional deformation:

1. Motivation - the formation of motivation for the activities of teachers through the creation of a positive socio-psychological microclimate in the community. Most teachers are aware of the need to prevent career deformities, but in practice, few teachers apply existing knowledge in practice. It is not enough to know the need for some external and internal incentives that force the teacher to carry out the desired activity, such incentives can shape the motivation for teachers' activities by creating a positive socio-psychological microclimate in the community. [4 .714]

Psychological climate is an interpersonal relationship specific to a work or study group that determines the underlying mood.

If the team is in an environment of goodwill, caring for everyone, trust and perseverance, the climate is said to be comfortable. When team members are ready to work, they show creativity and achieve high quality.

An important condition for the development of the team, its stability, vitality is to create conditions for active participation of participants in this pedagogical process. A friendly environment based on mutual respect and tranquility influences the psychological climate in the team, the position and behavior of management and colleagues, the progressive life of the team, the progressive movement towards its goals.

M uhit has a strong influence on the successes and failures of every teacher. If a positive environment is not created in the community, the pedagogical process is effectively organized with great difficulty. Caring for the human factor, which represents a positive environment within a team, is a prerequisite for a successful team. [1.14]

The unification of the teaching staff is not only based on ideas, it is carried out primarily in activities (professional pedagogical, social). No teacher within a team should ignore the nature of interpersonal relationships ( likes or dislikes) so that they do not feel lonely among their peers. Involving teachers in the community helps by implementing activities that require shared responsibility. In these processes, it is very important that teachers understand their abilities, their creative features.

The process can be effectively organized using the following forms: through trainings, master classes, master classes. At this stage, the teacher should increase the following indicators of effective professional activity: teacher satisfaction with work, awareness of professional motivation, desire to engage in their professional activities, cohesiveness and organization of team members, basic, life-affirming mood in the team. [5.20]

2. Cognitive - raising awareness by teachers about the need to overcome professional deformation and increase their ability to self-improve. The content of this concentration is based on the fact that teachers not only form theoretical ideas about professional deformities, but also teach the relationship between professional deformities and self-education.

The constant pursuit of self-improvement should become a need of every teacher. It is well known that only knowledge becomes a belief that man himself has independently, imagined and experienced, and that this is the result of self-education.

Self-education is a process aimed at expanding and deepening the theoretical knowledge

of the teacher, the acquisition of new professional skills based on the modern requirements of existing pedagogical and psychological sciences. During the school year or other time, the teacher should deal with a problem that is causing certain difficulties or that is of particular interest to him or her.

She continued to work to improve the development of the child's development and education activities aimed at teaching specific features, such as important. A teacher cannot achieve effective results without a serious knowledge of the pedagogical and psychological foundations of upbringing and education, without comprehensive knowledge and skills in the issues raised in his life and professional activity. At this stage, the teacher must have the following indicators to prevent occupational deformities: desire for self-development, desire to achieve high professional results, understanding of the need to prevent occupational deformities. These results can be effectively used in educational practice, business games, master classes, pedagogical trainings. [6.463]

3. Behavior is the formation of teachers' resilience to stress and self-management skills. Without the targeted formation of stress management skills and self-management skills, it is almost impossible to implement high-quality prevention of professional deformation of teachers who teach adolescent students.

A teacher's resilience to stress is the most important factor in ensuring the effectiveness and reliability of a professional's work. In addition to threats to physical and mental health, stressful conditions significantly reduce the success and quality of work, increase the level of psychophysiological degradation of activity, and can lead to a number of socio-economic, socio-pedagogical problems such as decreased professional satisfaction, personality and character deformation.

Stress resistance is the ability to maintain normal functioning during the action of stress. The role of stress management in a teacher's professional activity is related to the structures of his or her inner world (beliefs, aspirations, values). For example, a teacher who is tolerant of high levels of stress perceives problematic situations that arise in professional activities as stressful, not threatening, but as demanding solutions that stabilize his or her professional orientation. Pedagogical competence is the appropriate combination of stress management required to carry out pedagogical activities.

Stress tolerance is not a characteristic of a person and depends on the level of formation of emotional self-management skills (self-management is the influence of an individual on himself to normalize his activities). [7]

The three stages are interrelated. The implementation of the second stage will allow us to move to the third final stage, the purpose of which is to analyze the results of the implementation of the program aimed at the prevention of occupational deformities.

Content of the work:

- conducting surveys;
- generalization of work;
- study and comparative analysis of the results (before and after the implementation of the program).

In conclusion, the proposed prophylactic model allows to effectively prevent the professional deformation of the teacher's personality.

The effectiveness of occupational deformation prevention depends on:

- positive socio-psychological microclimate in the community;
- the level of awareness of teachers about the need to activate the ability to overcome professional deformation and self-development;

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## AUTHENTIC TEXTS IN THE EFL CLASSROOM

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*Annotation: This article discusses issues on the use of authentic texts in the English classroom and highlights interactive activities, which can motivate students and increase their interest in learning English.*

*Keywords: authentic material, authentic text, interactive activities, comprehension, motivation.*

Actively engaging language learners in the classroom will help them think more deeply about the course content, bring additional energy to the classroom, and help identify the extent to which they may be struggling with the material. Today, some teachers of English are having problem to draw students' attention. Incorporating authentic material and interactive activities such as jigsaw reading, walk around, article discussion and round table discussion can be alternative ways to deliver the materials. The purpose of this paper is to highlight types of authentic texts and interactive activities, which can motivate students and increase their interest in learning English.

Using authentic texts in the target language has many varied benefits. Authentic materials are often more recent and can therefore be more interesting to students, as they pertain to current events that are of interest to them. Authentic materials also provide a firm answer to that age-old student question: "Will I really use this language in my future job?" Of course, using authentic materials in the language classroom is not so easy as simply buying a native language newspaper. As the teacher, one must do some research and discover not only which authentic materials are useful, but how to best take advantage of them in the classroom.

Context plays an important role in the construction of meaning. Foreign language pedagogy recommends the necessity to teach language in context although it is not always clear how teachers relate language with its social context. According to Halliday's definition "the context is the total environment in which a language unfolds" that is its five dimensions; linguistic, situational, interactional, cultural and intertextual are shaped by people in dialogue, in "a variety of roles and statuses" (Kramsch, 2010, 67). Due to the complexity of meanings, contexts are not stable; they are constantly changed and recreated to fit the individual needs of the learners. The context can be shaped through the foreign language so that the students explore, discover and exchange certain types of meanings.

Most teachers advise that literary and other authentic texts should not be simplified or modified in order to help students comprehend them. It is better to provide students with reading strategies and activities. In turn, these strategies and activities will help students comprehend the authentic material. Generally, the strategies, explanations, and activities related to a reading selection fall into three categories called pre-reading, during-reading, and post-reading activities.

Authentic current event stories are some of the easiest materials to get your hands on for the foreign language classroom, thanks to modern technology. Many foreign language newspapers are available online, so teachers can access articles in just a few clicks.

'Walk around' is a good example to make any article discussion more interesting and engaging. The teacher on four different colored papers prints out four different articles, and these papers are stuck on the walls. Students are divided into three or four teams (it depends on the number of students in the classroom). The teacher provides each team

with a set of questions prepared beforehand. Questions should be taken from each article and the answers to these questions should be short (it is advisable). Then time the teacher sets the time. All team members walk around the classroom and find answers from the articles stuck on the walls. The sooner they find the answers the better it is. This activity involves all types of learners, and students develop teamwork and reading comprehension skills.

Another example of involving the students to learn a foreign language is talking about the weather. Familiarizing them with the climate by exposing them to weather reports can be motivating, informative and beneficial. A wide range of weather reports are provided online. Learners can take information not only about weather but they can also do some research about natural disasters.

After reading a weather report or watching a video online or in class, the teacher can ask students to do further research on the subject and make a minilesson/presentation that:

- summarizes key points in the weather report
- teaches 2-3 vocabulary related to the weather condition
- gives practical tips on how to prepare for this kind of catastrophe.

Authentic materials are beneficial because they show a real-world use of language and often present content that is of high interest to students. Most authentic materials present current topics in news or culture or help students learn information that is useful in their everyday lives. For this reason, using authentic materials often increases students' motivation. Real materials, unlike materials made specifically for teaching, are not created with certain grammatical structures or vocabulary in mind. Instead, they provide an opportunity for students to read or hear language as it is used in a real-life situation. This can help advance students' language learning by exposing them to new vocabulary and grammatical concepts in a meaningful way.

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## COMPUTER - ASSISTED TEACHING A LANGUAGE IN PRE-SCHOOL EDUCATION.

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*Annotation: With the development of technology traditional method of teaching was replaced by innovative one. This work presents modern ways of learning and teaching a language.*

*Key words: promote, study, acquisition, self-esteem, speed, interaction, primary.*

Today, mobile phones, video cameras and tablet computers are becoming commonplace. We may come across them in any developed and developing sphere, so education is not an exception. Modern teachers turn to innovative technologies to conduct their lesson productively and in an entertaining way. With a help of the Internet and technologies for communication, visualization, and simulation, students can be offered a more authentic learning experience. Hartley (2007) explains the use of digital cameras, video projectors, electronic whiteboards, virtual environments, mobile technologies and various types of control switches in teaching and learning. Miller and Robertson (2010) found that using computer games led to significant gains in general self-esteem and high speed of computation for primary school children. These studies show how new technology can and will infiltrate the home and the educational system. Children are even much more relaxed than adults in using these modern technologies.

Therefore, ICT is likely to be advantageous for the acquisition of 21st century, skills which include ways of thinking, ways of working, tools for working and skills for living in the world. There are a lot of using methods to conduct language classes productively. For example, in order to teach vocabulary we can use words with colorful pictures without translations, short videos, songs that contain new words, at the end entertaining games with the same words. Teaching with ICT in primary education requires teachers to act as if they were learners themselves in the computer enhanced environment (Hardy and Kirkwood, 1994). The Internet is one major aspect of ICT, but the Internet is fraught with misleading and inappropriate information that may harm young primary students. According to Anastasiades and Vitalaki (2011), teachers who are competent and professional in ICT tend to have high sensitivity and be effective in

providing pedagogical guidance, promoting Internet safety, teaching students moral behaviors when navigating the Internet for educational, recreational, and interpersonal purposes. It means in the process of preparing materials to children we must attentively select appropriate style of teaching with positive effect on children. Also, teachers must bear in mind the time they need. Using ICT does not mean that from the beginning till the end of the lesson we must use them, such as videos or cartoons in order to keep the class in silence. But explain the topic with a help of ICT is the right understanding. Human interaction cannot be replaced by ICT and teachers play a key role in supporting interactions between and among students. To see the effect of teaching we conducted a lesson in one of kindergartens of our city. The topic was "Fruits", there were 16 participants. From the beginning of the lesson were used only gadgets. In order to teach vocabulary we utilized a Power Point Presentation with name and picture of fruits. Then, we sang a song with learnt name of fruits, to teach the correct pronunciation.

To sum up, we realized that using technology is much better than old method of teaching, which is also entertaining for learners.

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## COMPUTERS IN NURSERY SCHOOL

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*Abstract: This article shows effective methods of teaching a language to kids with a help of innovative technology.*

*Key words: nursery school, review, translate, keep in mind, obvious, program, digital, style, opportunity, thoughtful, enhance, entertaining, various, colorful.*

The role of ICT in gaining knowledge is rapidly expanding. By ICT we refer to a collection of computer-based technologies, which are exploited to support teaching and learning, communication and collaboration, self-expression, creation, that is, for the promotion of all developmental domains of children, and learners of any age. It is agreed that even lessons in primary or nursery schools are conducted with a help of technology. Undoubtedly, children have fresh mind when it comes to learning something, it means they are able to get at once. According to curriculum of primary schools, teaching program of second languages, for instance in Uzbekistan, (Russian, English, Deutsch) is vocabulary. The easiest way to make children learn them is to give a list of new words with translations every lesson. It is not challenge to pupils to fulfill the task; unfortunately, it may cause some dilemmas while reviewing them after a while. Because it is obvious that just learning words only with translations cannot be kept in mind for a long time. Scientists, psychologists advise a number ways of teaching children. Not most of them is book- based, but practical. ICT has its high value in every subject. First of all let's take as an example in learning a language. As Papert (1999) points out, education itself has two perspectives that could also be called informational (getting information and skills) and constructional (creating, discovering, constructing knowledge). Although both sides are equally important, the constructional side is sometimes undervalued. Therefore, more and more authors use the term digital technologies instead of ICT to emphasize the need for balance between the informational and constructional sides. Recent developments in educational psychology suggest that literacy is best taught within a context that stimulates problem solving and analysis along with reading, writing, and ICT literacy competencies. ICT can offer such learning opportunities (Alfassi, 2000). While learning with ICT, students are likely to become thoughtful, literate users of language. Here we explore the different roles ICT may play for enhancing learning outcomes related to literacy. Teachers are able to use ICT in any subject and in various ways depending on teacher's creativeness or subject. Like for instance, while teaching math, exactly addition or subtraction instead of using only numbers we can use pictures of countable nouns. For instance, in kindergartens now there are all opportunities to teach productively. It is not a problem to play cartoons or music in nursery schools; however it does not mean that teachers must do nothing. It is very significant work, in terms of selecting suitable way of conducting a lesson due to the fact that we must see a child as a paper, where nothing is written.

To conclude, using all necessary innovative technology we hope to have productive results in teaching a language to children.

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## SINGING IS A MODERN APPROACH TO TEACH A LANGUAGE.

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*Annotation: This article explores whether purposeful application of song can add a new dimension to existing language programs, offering a meaningful and engaging context for learning.*

*Key words: social, culture, life, visualize, play, absorb, environment, integral, maximize, speech.*

Imagine life without song. When people gather for any significant event, it is highly likely to involve singing. For children, singing is a form of personal and cultural expression, evoking emotional responses, telling stories, and creating a sense of belonging and well-being. Imagine a classroom in which children sing every day, establishing singing as an important social and cultural experience in each child's life. Singing is celebratory and social, establishing meaningful connections to children's lives and experiences, such as birthdays, welcomes, sports events, and festivals. If they sing country, national songs first of all, it shows respect to their culture and traditions. On the other hand, if songs in English or in language they are learning, it helps to enhance language acquisition.

Sacks (2007) suggest that music has the ability to stimulate the brain in ways that nothing else can, leading to higher level thinking. One only has to consider advertising jingles to realize the impact of song on memory. Some adults may recall the "Alphabet Song" or counting songs from early childhood days. Murphey (1996, cited in Macias, 2008) describes this as the song stuck in my head phenomenon. It is clear without any doubt, most of people remember the English alphabet, so if we ask them to tell it in order without music, they may not do it.

Children absorb as well as acquire language through song, so that after several repetitions the language begins to be internalized. In this way, children begin to make meaning of the ideas they are receiving. Romeo (2002, cited in Woolley, 2010), believes that enhanced visualization arising from the reading aloud of rich descriptive texts leads to improved comprehension.

Children arrive at school and recorded music is playing. Just before the bell is due to ring, the class song of the day is played. So if the topic is about daily routines, family or seasons, teacher plays suitable song to the class. It can be used not just in schools however, in high education. Once singing has become an integral feature of the classroom environment, language-learning possibilities may be maximized. As with any text, each song will offer particular language features worthy of drawing attention to, such as parts of speech, vocabulary, semantics, syntax, and rhyming words. Traditional language teaching methods have to be reviewed, and music introduced as one means of further enhancing learning. Singing can be beneficial to adult learners to acquire a language. Fluency would be the outcome of merged methods of teaching and learning, together with motivated learners, improved vocabulary development, use of vocabulary in context and communicative confidence, as evidenced by the case study cited. There was positive impact on the four key language learning areas: listening, reading, writing and speaking. Horn suggests that music should be used to encourage learners to listen in a mentally active and analytical way, adding that 'In learning the language of music, just as in learning any language, learners need to listen to the language and its sound patterns before they are able to use it. Clearly, listening ability is basic to the teaching and learning of reading and comprehension, being therefore a central component of language

acquisition, education and social development. In language learning, studies reveal a correlation between the teaching of music and reading.

Learning a language through lyrics in the target language will motivate students because they define who they are through their own culture, and through the music that they enjoy. Through music as a teaching methodology, students are further exposed to foreign language and culture, making the learning experience far more integrated than perceived. Language acquisition evolves into culture and communication acquisition.

Following methods are effective to teach language skills:

- activities using word cards featuring favorite words of songs;
- forming new sentences from words in favorite songs;
- guessing first lines of songs, with the teacher giving word configuration clues, and
- creating crossword puzzles in which the entries are words in song titles.

In conclusion, a positive attitude and motivation are essential when learning a second language. Experience of success is vital to the learner's progress, providing the motivation for the next step.

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## FORMATION OF LEGAL TRAINING AIMED AT COMPETITIVENESS IN PUPILS OF SECONDARY SCHOOLS

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*Abstract: Development of competence aimed at legal education for pupils of secondary schools, as well as the formation of competitiveness of pupils legal awareness and legal knowledge in the field of education and science, and development and inculcation of other science compilations.*

*Key words: legal competence, competitiveness, legal consciousness, legal culture, legal knowledge, didactics, socially active civic competitiveness*

By applying competency-aimed at legal education to pupils of secondary schools, are encouraged to have legal background and legal competence in law and constitutional law. Two important aspects of the development of legal education are important component of the subject, focusing on its training and upbringing. It investigates the problems of education (didactics), intellectual development of the individual, essence, stages, principles, legality of the educational process, unity of teacher and teacher activity, content, forms, methods and means of teaching, ways to improve the learning process.

By acquiring knowledge of legal competence, pupils learn the concepts of constitution, state, law, duty, compulsion, citizenship, humanity, law, morality, knowledge of rights and law-abiding rights, ethics and legal rules, knowledge, skills, experience and competence. The level of development of the general secondary education is determined by the following levels of knowledge (A1, A2, A2 +, B1). It is well known that in the formation of legal education pupils of secondary schools should be able to explain the legality of the society, state and law, constitutional rights and obligations of people and citizens, principles of governance and its division, civil society, rule of law and its foundations. In forming the competence of pupils to be legal culture

If A1 level pupils follows to the principles of good morals and law, respect for citizens' rights set forth in the Constitution and laws of the Republic of Uzbekistan, and ability to create legal agreements on legal issues and legal issues in the manner prescribed by law.

At the A2 level, pupils are faced with actions such as the rule of law, the reflex of compliance with legal requirements, adapting their actions to legal requirements, protecting their rights and interests, and showing corruption intolerance.

If A2 + level pupils participate in legal relationships applying law rules, pupils will be able to demonstrate their legal culture in dealing with any legal event

B1 level pupils understands civic duty and commitment, recognizing their concepts, adhering to them, using legal sources, legally suiting their rights and interests, drawing conclusions on legal events and events, negative consequences of corruption in society, to have the ability to resist corruption on the basis of legal norms, to participate actively in the political life of the country and society, the state's own rights and freedoms, the ability to make the right decisions in the exercise of their legitimate interests

As to the concept of "competence" and "competency", firstly we must analyze using of these concepts by the scientists of our country and world. The conceptual approach is the word "Competence" derived from the word "to compete," means "to compete," "competition,". N.Muslimov, the scientist of our country, emphasized the etymological analysis of the concept of "competence" and "competency". The notion of competence is

denounced by the student as not necessarily acquisition of particular knowledge and skills, but the inclusion of integrative knowledge and action in each of the independent areas.

G.Asilova in her research work, pointed out that education based on a competent approach is aimed at using competences of pupils in applying knowledge, skills and experience in their personal, professional and social activities. In his research, B. Khodjaev, mentioned that in the field of competence approach, there are three more elements of knowledge, skills and experience as three traditional elements of education: experience of practical activity, competence, competency.

In foreign research, many interpretations of the terms "competence" and "competency" are given, including G.Garfinkel, he stated that comprehensiveness to the knowledge, skills and experience of person, social-professional, professional position in the society, his ability to perform his duties, was interpreted. F.Delamare and J.Winterton noted that the competence was the result of standard behavior, behave himself/herself, requiring a certain activity, and competence as the final outcome of the demonstration of the degree of competence of the student (standard).

O. Permyakov describes the competence as a result of training of person as a graduate of vocational education institution as a description of the generalized qualities of working in certain fields. In his opinion, "competence - is the ability of the subject reflecting knowledge, abilities and skills of the person, and demonstrating his / her capacity for a particular type of activity".

In the formation of competence-oriented legal education of pupils of general education schools will benefit from the fact that the teaching process using teaching methods will be improved. For example, if we consider that "teaching methods are the means of organizing learning activities of learners". Teaching methods serve to highlight the purpose of learning, through which the content of learning is expressed, and behavior and attitudes of teachers and learners are reflected. The method is, firstly, means of achieving educational outcomes, and secondly, it is a condition for educational activities. Through the teaching method, the teacher and pupils co-operate. The method of teaching is the way in which teachers and learners are guided by the content of information. Teaching methods are structured in the form of teaching methods and reading methods.

Determination and analysis of the following tasks for the formation of legal competence of pupils of secondary schools:

- data analysis on the formation of legal competence in pupils;
- explain the essence of formation of legal competence in pupils;
- inculcation into practice methods of formation of legal comprehension of pupils;
- formation and evaluation of legal competence of pupils;
- theoretical development of legal competence of pupils systematization of the concepts of "competence", "competency", "legal competence", "pedagogical competence", "competence of legal recognition", "competence of legal culture" and scientific substantiation on their concrete approach;

- social formation of legal competence of pupils definition of pedagogical conditions of pedagogical creativity and development of creative thinking;

In summary, knowledge and skills related to competence were analyzed. Legal competence means, first of all, the ability of person to have legal culture through his / her involvement in and participation in society's events, events and processes, and his / her civic duty, legal knowledge, and legal awareness.

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## INNOVATIVE TECHNOLOGIES IN TEACHING SPEAKING SKILLS OF ENGLISH LESSON TO MEDICAL STUDENTS

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*Abstract. The research is based on peculiarities of teaching speaking skills and interactive methods using at English classroom. Among the techniques that are recommended for use in English classes to improve students' speaking skills are the following: "Cluster", "Brain Storming", "Cinquain", "Jigsaw", "Insert".*

*Keywords: communicative activity of students', innovative technologies, speaking skills, problem-based learning, interactive methods.*

In modern conditions, foreign language communication is becoming a significant component of the future professional activities of the specialist, in connection with this, the role of the discipline "Foreign Language" in non-linguistic universities is substantially increasing. Due to the requirements of the state educational standards of higher professional education, teachers should take into account professional specifics in the study of a foreign language, its focus on implementation the principle of professional orientation.

There are four skills in learning foreign languages: listening, speaking, reading and writing. Speaking is very important because speaking and human being cannot be separated from each other. Speaking is used to express their ideas and to communicate to people in civilized world. Speaking seems intuitively the most important skill to master. The success is measured in terms of the ability to carry out conversation in language speaking in an interactive process of constructing meaning that involves producing, receiving, and processing information.

Speaking is very important because by mastering speaking skill, people can carry out conversations with others, give the ideas and exchange the information with others. In speaking, students should master the elements of speaking, such as vocabularies, pronunciation, grammar, and fluency. While it is a bit of an exaggeration, students clearly feel that classroom-based speaking practice does not prepare them for the real world. As a foreign learner in Republic of Uzbekistan, many students have amount vocabularies and mastering the grammatical structure, but they still have difficulty in speaking. This problem also appears to the teachers of "Foreign languages" department of Tashkent Pediatric Medical Institute.

This research is based on the important of speaking skills. Speaking was important to be learnt because speaking is the way to communicate with other people in order to deliver opinion and express idea, but in fact the students' ability in speaking English is low. It is caused by several factors such as there are some elements of speaking such as vocabulary, pronunciation, grammar and fluency that must be mastered by students in order to be good English speaker.

In this research, we used "Cluster", "Brain Storming", "Cinquain", "Jigsaw", "Insert" techniques to improve students' speaking skills. The main objective of this research is to describe the implementation of innovative technologies in teaching speaking and to identify how much students' speaking skills improvement after being taught by using "Cluster", "Brain Storming",

"Jigsaw", "Insert" techniques.

Innovations in the educational process are a special type of innovative technologies that contain all the characteristics of social innovations. Of these, the most popular in the university are the flexibility of forms and the transition to a new level of organization

of not only the educational process, but also the relations between all participants in the educational process. The organization of an innovative invariant of the educational process can be carried out within the framework of a problem-activity approach. Problem-based learning is a student-centered approach in which students learn about a subject by working in groups to solve an open-ended problem. This problem is what drives the motivation and the learning.?

Among the techniques that are recommended for use in English classes to improve students' speaking skills are the following: "Cluster", "Brain Storming", "Jigsaw", "Insert".

This study is classroom action research that was done in two cycles. The data collection was done using observation and test. The data from the observation that had been taken from every cycle analyzed descriptively while the data from test were analyzed quantitatively. The implementation of "Cluster", "Brain Storming", "Jigsaw", "Insert" techniques in teaching speaking skills of medical students at the English language lessons at the Tashkent Pediatric Medical Institute was conducted in two cycles including cycle one and cycle two. The participants of this experience were 40 students. The result of this study shows that using innovative technologies can improve students' speaking skills. This was proven by students' test score that improved in every cycle. In the first cycle, the students' average score was 75.4 and in the second cycle students got 86.8.

Let's consider these effective innovative technologies by more details:

"Jigsaw" Method.

Possibilities of use: when working with the given topic each student receives for development a subtopic. There is an exchange of information. Everyone listens to each other, asks questions, and makes notes, because this is the only way to get all the information.

"Insert" Method.

This technique works at the stage of understanding and discussing the content.

I - interactive;

N - noting;

S - system;

E - effective; R - reading;

T - thinking.

These are marking icons:

"V" - already knew;

"+" - new;

"-" - thought differently;

"?" - I do not understand, there are questions.

While speaking, students can use notes, fill out a table in which the icons are the headings of the graph, information from the content is entered into the table abstractly.

"Insert" method is a method of active speaking, when the speaker stays alert and interested in the topic of communication. To keep this interest alive, we recommended our students to use three different colors of stickers and use stickers to demonstrate that they are 'familiar' or 'less familiar' with certain things from the given topic, or they 'wish to know more'.

Using this method we tested with 4 groups of 2nd year students studying at the Tashkent Pediatric Medical Institute. To test the effectiveness of this experiment we asked 40 students to fill a short survey, and organized one focus group with 6 students. The survey included questions related to "Insert" method and its application and if the students followed the recommendations of the teachers and used stickers when speaking a topic. We also were interested if the students shared with their peers when they faced challenges or if they applied this method when preparing for other subjects. During the

focus group we tried to understand if the attitudes of students changed to the given topic and the subject, and to what extent this method was useful in comparison with more traditional methods.

□ "Brain Storming" Method.

This method is a simple technology for recording thoughts, ideas, and conversations. Recording is fast, associative. The theme is in the center. First comes the word, idea, thought. There is a stream of ideas, their number is unlimited, they are all fixed, students begins to speak them down from the top left and end right down. The method is an individual product of one person or one group. Expresses individual capabilities, creates a space for the manifestation of creative abilities,

The possibilities of use are diverse:

- in the systematization, repetition of the material;
- when working with the topic;
- when repeated at the beginning of the lesson;
- with the introduction to the topic;
- when collecting the necessary language material; - under control.

For example:

□ Date, Season, Week, Weekdays.

□ Calendar, months.

□ Holiday, year, numbers.

Through brainstorming, students call everything that they know and think on a topic, a sound issue. All ideas are accepted, regardless of whether they are correct or not. The role of the teacher is the role of the guide, which makes students think, while carefully listening to their thoughts,

□ "Cluster" Method.

This method stimulates mental activity. Spontaneity freed from any censorship. It is graphic method of organizing the material. Thoughts are not piled up, but "piled up," that is, arranged in a certain order.

Compilation technology: recording words that spontaneously come to mind are written around the main word. They are circled and connected to the main word. Each new word forms a new core, which causes further associations. In this way, associative chains are created.

This method can be used.

- in the systematization of information obtained before acquaintance with the main source in the form of questions or headings of semantic blocks.
- at the stage of reflection. When checking acquired knowledge on the topic.

As language teachers, we have a tradition of integrating new media into our teaching. We have embraced any new technology, which was likely to improve learning. From the facts above, we give suggestions to the English teachers to use innovative technologies for effective oral communication. The most important feature of a classroom activity is to provide an authentic opportunity for the students to get individual meanings across and utilize every area of knowledge they have in the second or foreign language. They should have the opportunity and be encouraged to become flexible users of their knowledge, always keeping the communicate goal in mind.

Using innovative technologies in a classroom as a tool for language learning has many benefits. It gives stimulus to undertake the tasks. And could help in creating a long lasting impact on the learners. The role of teacher will change from an instructor's role to a coordinator. Self-paced independent learning methodology is what is being propagated with the help innovative technologies in English Language Teaching.

Thus, the innovative technologies that we reviewed today significantly enrich and

diversify the teaching of foreign languages. In place of the monotonous work comes intelligent creative search, during which formed a new type of personality, active and purposeful, focused on constant self-education and development.

Conclusion. Summarizing we can say, that modern innovative technologies are a great number of opportunities that lead to motivation as the main effective mechanism of human education and self-education.

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## PRINCIPLES OF APPLICATION OF ELECTRONIC EDUCATIONAL-METHODICAL COMPLEXES IN THE EDUCATIONAL SYSTEM

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*Abstract. The article discusses in more detail the purpose and content of the EUMC structural components by the example of the manual on the discipline "Computer Science Information Technology" for students enrolled in the specialty of ekonomiki and religious studies*

*Keywords: technology, program, model, educational blocks, corrections, work route, component, bibliography.*

### Introduction

One of the main tasks of the 2nd stage of the National Program for the Training of Personnel of the Republic of Uzbekistan is the strengthening of the material and technical and information base of educational institutions and their improvement, providing the educational process with textbooks, teaching aids, methodical literature and advanced pedagogical technologies. The implementation of these tasks will contribute to the introduction of modern information technologies in the teaching and educational process, improving the quality of education and training competitive personnel. The quality of education is a complex concept, which is characterized by a whole range of parameters and indicators, among which the quality of education dominates. In recent years, significant changes have occurred both in the equipment of educational institutions with information technologies, and in the content and forms of organization, as well as in improving the quality of the educational system.

The main feature of textbooks and teaching aids is their orientation on students' independent learning activities when studying material. The effectiveness of this activity depends not only on the scientific level of the textbook or manual on the method of presenting educational information, but to a greater extent on the method of working with it, determined by the structure and method of presenting educational material [1].

### Research background

Structuring of the material should be carried out in accordance with the main didactic goal - the creation of a system of scientific knowledge of the student. Traditionally, the textbook is based on the organization of the academic discipline (linear structure). Theoretical information is given; examples, methods for calculating the characteristics and parameters of the phenomena being studied, devices, etc., control tasks and questions; reference data; list of recommended literature. When working with such a textbook, students, as a rule, consider it sufficient to study theoretical material, perform tasks on the model, i.e. the development of knowledge occurs at the level of "recognition", "reproduction", which leads to the great difficulties of translating students' knowledge into skills and abilities. In addition, such a structuring of the material of the textbook does not ensure the implementation of the didactic principle of the individuality of learning, as successful students who do not succeed have the same "route" of obtaining educational information, as well as volume.

### Methodology

In the organization of teaching and methodological support of independent learning activities, students in the study of computer science, the main role, undoubtedly,

belongs to the textbook or teaching aid. On the basis of a comparative analysis of the didactic opportunities of educational publications, preference was given to multimedia manuals.

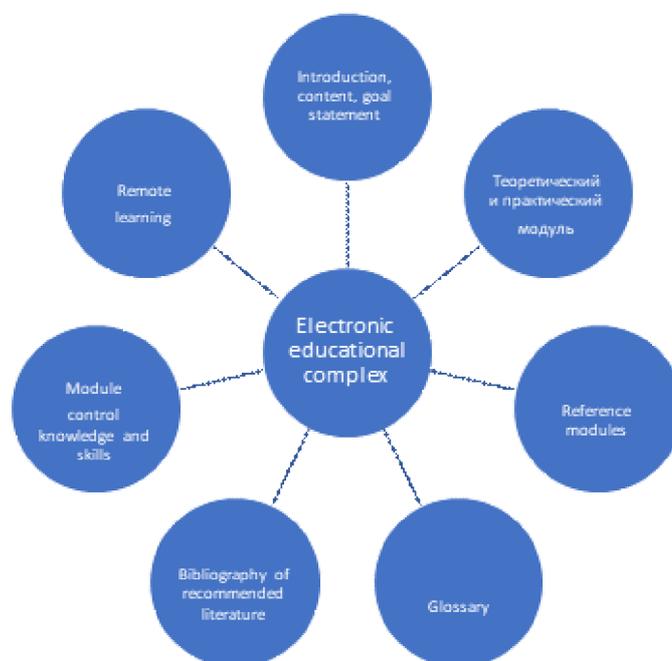
#### Main part

Let us consider in more detail the purpose and content of the structural components of EUMK by the example of the manual on the discipline "Computer Science Information Technology" for students studying in the specialty of ekonomiki and religious studies [6].

One of the main directions of educational and methodical work of the department "Modern information and communication technologies" The International Islamic Academy of Uzbekistan can now be considered the following:

Textbooks and tutorials of the new generation, including those created using multimedia technology, as opposed to traditional ones, have an extensive or combined structure of educational material. For such complexly structured textbooks used beam-modular model of the presentation of educational material.

Consider the structure of the main blocks EUMK:



Such a structuring model is preferable for e-learning materials, since it allows them to take full advantage of their advantages in comparison with printed publications. Such advantages include the ability to quickly change the content while reducing the time spent on modifying and developing a new electronic teaching and methodical complex, i.e. Creation of adapted EUMK for related specialties or EUMK for practical and laboratory work.

To create a high motivational attitude of students working with EUMK, first of all, they should disclose the goals of studying this discipline, the need and significance of mastering this educational material for their further perception and application in their professional activities. In teaching concepts, goals are specified regarding the learning process: a description of the state of knowledge and skills that must be achieved by the learner as a result of his learning activities.

#### Data analyses

The content of the EUMK educational material in accordance with the requirements of the State Educational Standard of Higher Education (5220400-Religious Studies, 5120100-Classical Oriental Literature and Source Studies, 5330200-Informatics and Information Technologies) is divided into educational blocks according to the discipline under study. And the next stage of goal-setting includes the development of private learning goals and their inclusion in the introduction of each section of the training course. On the basis of the work program, taking into account the general goals for the discipline, a range of typical tasks is determined, which the student must learn to solve after studying each module, each topic.

Through the formulation and disclosure of the objectives of the study of this discipline, the implementation of such didactic principle as awareness, which significantly increases the effectiveness of students' independent educational activities, contributes to its additional motivation. The objectives of the study of this discipline can be used by the student in assessing and correcting their activities. The principle of orientation in this training as mandatory implies the presence of a module of the reference system. The help system provides a detailed description of the structure of the material being studied, which allows the student to get a general idea of the course being studied; free to navigate the location of educational material, as well as independently choose the route of working with EUMK.

The principle of orientation of educational material on independent learning also provides for sufficient completeness of its presentation. The main part of EUMK includes a module of theoretical and professional knowledge with practical tasks, allowing students to independently master the necessary knowledge, skills and abilities.

In the theoretical module EUMK for each topic, each section presents a mandatory minimum content of educational material, the study of which allows students to achieve their goals.

One of the most important structural components of the content of EUMK is the module of control of mastering the studied discipline as an evaluative and productive component of educational activity. Moreover, in contrast to traditional educational publications, EUMK controls at all stages of learning and developing skills, which is ensured by the special organization of educational material and students' learning activities. In the knowledge control module, feedback is also foreseen: a student who has not been tested should be given recommendations on which sections, topics he should pay attention to, which topics should be studied again and then re-checked.

When working with EUMK, a student receives a set of information from the point of view of information processing, which forms the information field of the studied discipline, characterized by the development of keywords of the necessary information in the student's memory. In the glossary module, the basic concepts of the studied discipline and the basic themes of previous courses are included. Since the studied discipline is based on the material of previous courses. This set of keywords becomes common to these previous and studied courses. In order for a student to fully master the information retrieval algorithm, it is necessary to master these key words with simultaneous knowledge of the main provisions of the discipline under study.

For self-study material EUMK necessarily included the module bibliography of recommended literature. The module provides two references: mandatory and optional, which contribute to a broader or detailed study of any topic.

Work with EUMK can also be carried out in extracurricular time, for this reason a distance learning module has been introduced. This module includes a registration system for students working with EUMK, as well as a question and answer page for consulting with a teacher. If EUMK is located in the electronic library of the university, then the

student on this page may ask a question on any topic and any section of EUMK; note the difficulties that he has when working with EUMK. Thus, both teachers and developers have operational information about the level of mastering educational material from virtually every student, i.e. implemented the principle of feedback in learning.

#### Conclusion

The development and creation of an electronic textbook is a creative process. Therefore, the proposed structure of the content of an EEMC can be considered rather conditional, and depending on the characteristics of the educational material, it can be supplemented with a module for solving problems on topics, a methodology for solving them; blocks of research assignments, diagrams, drawings, etc., so that a textbook or study guide would encourage students to self-education and creativity [4].

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## ETHICS OF THE INTERNET

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*Annotation: This article is about the rapid development of many new information technologies in the world of information, such as Internet TV, Internet Radio, Email, Online Video, and how their audience and sphere of influence is expanding, gives an insight into the culture, mainly given that young people are very interested and widely used, it is really not difficult to understand how huge this issue is.*

*Key words: Internet, dating sites, manipulation, information and communication technologies (ICT), Virtual, Physiological, Globalization, Mass Media, Informatization.*

Today, Internet users are conditionally divided into two categories can be separated. The first category is based on the demand of the profession for the purpose of obtaining information and information necessary for scientific research, while those who turn to the internet, the second category is just as interested in, say, dirt, sunbathing dating sites or playing online games. He manipulates the virtual world. Manipulation and intellectual dependence by submitting to Him It is no secret that now some children or teenagers are turning their Internet cafe into a second home. If boys or girls during this period aggressive roller coaster online games, with unpleasant consequences is likely to come. Understanding human time in the virtual world The system is disrupted and social activity is reduced. Time in front of the computer Here's the reason for not feeling past. Consequently, today Internet It combines the capabilities of all sectors. Information and communication technologies (ICT) in the first place, The Internet is a factor that directly influences the upbringing of children and adolescents. At the moment 5 million young people in our country the user has their profile on social networks. Of these, 3.6 millions use their mobile phones for access. According to experts, information technology has become such an integral part of the society that it is no longer a technological process, but rather a social process, which depends on the economic power of the State, international prestige, and the level of development of democratic institutions. Information of the society began in the 70s of the last century in the USA and in the 80s in Japan, and on the other continents began the process of realization from the 90s of last century. It was well known. For example, in the US, about 75% of the information industry able-bodied population is employed. In other countries this figure is 40% The number of Internet users in some countries is less than 20-25%. The best way to ensure the security of users on the Internet the development of a culture of its use. However, today cybercrime, ideological and technical (hacking) common in the Internet world violations of the Internet culture of users non-observance It is a firm decision that young people today have a sense of spiritual awake upbringing, spirituality, spiritual purity in the mind, education, promotion progressive, effective, and effective, forward-looking pedagogical work The use of technology is a time requirement. Youth and the national and universal values ICTs play an important role in upbringing spirit. The present task of this requirement in an increasingly informative educational environment with an increasing number of listeners. Upbringing a healthy and harmoniously developed generation in our country acquisition of modern knowledge and progress, their abilities and talents The necessary conditions are being created for the Growing up in the process further strengthening the legal protection of the younger generation

education in the spirit of respect for national traditions and values of our people special attention is paid to the issues of the world. Their upbringing No one can deny that the influence of the media is high cannot. A distinctive feature of the process of globalization is its ideological influence can be a weapon of transfer.

Then the mental changes in it will not coincide with adolescence Man, heedless. lonely, selfish and arrogant seems to be aiming. Unfortunately, lately it has been frustrating There are many such cases. In addition, it has become more and more popular in recent times, and it is important to raise the genre, parents, even some groups of the Ministry of the Interior are concerned. currents occur. "Death groups" in the media Such groups are often referred to as social network involving school-age children. Groups by experienced psychologists under management. Humane, legal democratic state and citizenship information and related information in the formation of society The legal regulation of the process is of particular importance. Above The reason is the popularization of foreign information websites among young people The opportunity is there. The presence of negative content on the Internet is minimal instead, youthful minds are exposed to immoral, extremist, aggressive ideas causes some arrivals, as well as some inaccurate sites. The number of Internet users in our country is growing rapidly. 2007 1 million people use the Internet every year, but that's a good indicator today ten million two hundred thousand. It is becoming a powerful ideological weapon The main users of the global network are the younger generation the vigilance and awareness of all of us, the proper use of the internet a serious threat to the morale of young people if they demand to strengthen their culture is calculated. Therefore, if we pay no attention to the youth today, tomorrow is tomorrow it can. Young people use the Internet today, not tomorrow The culture must be deeply ingrained in the mind, and tomorrow may be too late.

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## USE OF MODERN INFORMATION TECHNOLOGIES IN TEACHING MATHEMATICS

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*Annotation: This article discusses the role of modern information technology in education, how to make mathematics more effective, and the purpose of using ICT in the classroom.*

*Keywords: ICT, e-government, e-home, e-commerce, e-learning, mathematics, "Mathematical ingenuity" verbal arithmetic development application, "GeoGebra" program and etc.*

It is well known that education is the mirror of the country's future and the foundation of its future. Under the motto of "Focusing on education- focusing on the future", our government annually spends about 10-12% of the country's GDP on education. This is 35% of the state budget. However, in world practice, this figure does not exceed 3-4%. As the 21st century is the age of information and digital technologies, a more efficient and meaningful organization of the educational process depends in many respects on the use of modern technical means. Resolution of the President of the Republic of Uzbekistan dated September 5, 2018 "On the program of measures to further improve the system of public education of the Republic of Uzbekistan in 2018-2021" № PP-3931. According to this resolution, the task is to improve and introduce innovative educational technologies, according to which the use of new, foreign-made media in the effectiveness of lessons, and thus the involvement of students in the lessons was put forward.

As you know, the elements of digital existence, such as e-government, e-home, e-commerce, e-learning have become part of our lives and common place. Mankind is now aiming to use electronic resources not only as a source of information, but also in an interactive environment. This requires the use of rapidly evolving information and communication technologies at the level of communication, data processing and, in a sense, forcing people to "think" instead.

Software such as Smart Government, Smart Home, Smart Business, and Smart Education are now coming into our lives. Creating electronic resources that communicate and teach with such a "smart" person is a very urgent and difficult task, which requires the combination of the most qualified specialists from around the world. One of the significant steps in this direction is the "Smart education" project, which is being implemented around the world in the field of education. "Smart education" is a new global learning technology that is flexible and individualized in an interactive virtual environment using open information resources. Its main feature is that it is implemented worldwide and provides access to information and education for all. The smart education environment, in turn, requires its participants to update and integrate the entire educational process, the methods and technologies used. To this end, EU countries are working to bring their education systems up to the same standard and are urging other countries around the world to do the same." The Action Strategy for the Development of Uzbekistan for 2017-2021" also includes a national action plan for the development of functional literacy of students.

Based on the results and analysis of international research presented in the above paragraphs, the development of students' mathematical literacy is more important than ever. We know that mathematics is a very complex science for some and a very easy

science for others. For example, the "Mathematical Ingenuity" verbal arithmetic application displays algorithms available to the user for quick calculations. Each student can study them and then consolidate theoretical knowledge into practical exercises, thus enriching the practical experience of verbal arithmetic. The developers of this application also took into account the possibility of verbal competition with other users on the network.

"GeoGebra" is also a program for learning math at all levels. There you will find geometry, algebra, statistics and many more. In general, it takes longer for a person to remember what they saw than what they heard. It has been proven that the effective and appropriate use of pedagogically sound audio devices can increase the learned information by up to 15%, and on a visual basis by up to 25%. Applying sound and visual techniques together, in combination, can increase the amount of information that students learn by up to 65%.

In summary, the goals of using computers and other information technology in math lessons are:

- Development of the connection between mathematics and computer science;
- Develop students' independent work in the classroom;
- Implement a unique personal approach.

At this point, I think the responsibilities of a math teacher should include:

- Ensuring serious mathematical preparation of students;
- Preparing students for the use of information technology and other information structures.

Thus, the use of ICT in the classroom, especially in mathematics, or the use of gadgets (smartphones) with a mathematical application, along with the effectiveness of the lesson, will naturally benefit both parties.

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## THE USE OF MILITARY THEME PHRASEOLOGIES IN THE LANGUAGE OF MODERN MASS MEDIA

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*Annotation: The article discusses the reasons for the active use of military-style phraseologisms in texts of a journalistic style, analyzes their origin, expressive coloring, ways of enriching the vocabulary of modern journalism with military phraseology.*

*Key words: mass media, journalistic style, phraseological units, phraseological units of military subjects.*

The media in the late of XX and early XXI centuries became one of the most influential phenomena in the life of modern society. This is due to the globalization of information flows, the development of new ways of communication, and the expansion of the media audience.

The journalistic style is a functional style that is closely related to the socio-political sphere of communication. It is implemented in newspaper and magazine articles on political and other socially significant topics, in public speeches at rallies and meetings, on radio, television, the Internet, etc.

The active use of phraseological units is one of the linguistic features of the journalistic style. Phraseologism is a bright artistic means, a technique, the use of which helps journalistic texts to maintain expression, appraisal, individuality, forms the image of the author.

Phraseologism has an expressive and graphic character of meaning that distinguishes it from neutral language units. This particular expressiveness is connected with the fact that phraseological unit not only expresses the real characteristics of the person, subject, action, but also conveys the opinion of the speaker about it: a bright feat is a very important, significant selfless act, a mortal battle is a hard, fierce battle to exhaustion.

Phraseological composition of domestic journalism is constantly updated. Recently, it has been actively replenished with phraseological units of military subjects. The reasons for the widespread use of military phraseology include:

- the foreign policy situation associated with the existence of a number of military conflicts and the more or less active participation of the armed forces of the Russian Federation in them;
- the political course of the President and the Government of the Russian Federation on the modernization and rearmament of the army and the related changes in the economy, politics, public activities in the country;
- production and rental of feature films telling about the outstanding commanders of our country, significant military battles and campaigns;
- increasing the prestige of military service, respect for representatives of the armed forces, military traditions, victories and heroes of the Russian state.

Professional speech is one of the richest educational resources of phraseological units in a language. Terminological vocabulary easily acquires figurative meaning due to figurative and metaphorical use, gradually turning into the category of phraseological units with their characteristic signs and properties.

Military terms are a fairly large group of words in a language. Among them are:

- military-political terms (strategic, tactical): design, personnel, commander in chief;

- military-diplomatic terms (organizational): capitulation, indemnity, trophy;
- military-technical terms (refer to different types of armed forces and military branches): camouflage, radio silence, fuse;
- Combined arms terminology: shoulder straps, barracks, outfit.

At the moment, military terminology has penetrated into many areas of life: politics, diplomacy, journalism, private conversations. Combined with neutral vocabulary, the terms are able to form phraseological units that are actively used in texts of a journalistic style: labor feat, sports reserves, labor army.

Also, modern journalism perceived and learned words and expressions borrowed from the professional jargon of the military: windshield - helicopter, greenback - green space, double bass - soldier or sergeant who signed the contract, etc.

Most of these words originally existed only in the spoken language of the military and never reproduced in official documents, but in recent decades they have become fixed in the language precisely due to their use in the media. This vocabulary is often derived from official terminology: self-willed - unauthorized abandonment of the duty station, abbreviations are often used: AK - Kalashnikov assault rifle. Such vocabulary is highly emotional, therefore it is readily used in socio-political communication. Bright phraseological units are created on its basis: a demobellic chord - a good deed or a gift to the unit of a soldier leaving the reserve, a rubber day - Wednesday, the day on which radiation-chemical-biological protection events are held in all parts.

## THEORETICAL FOUNDATIONS OF PROBLEM-BASED LEARNING

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The principles of modern socio-economic development require further increase of our spiritual potential and economic power to take a worthy place among the developed countries of the world, their reconstruction in accordance with the requirements of scientific and technological development of the XXI century. To do this, it is necessary to change the worldview of our youth, to raise their knowledge and spirituality to the level of world standards. Today, the society has set itself the task of educational institutions: to develop their special abilities in accordance with the purpose of their independent knowledge.

Problem-based learning technology plays a leading role in solving these tasks.

Problem-based learning is a process of logical thinking (analysis, generalization, etc.) and a previously known form of teaching and learning that takes into account the laws of students' research activities (problem situation, interest in learning, need). is a new system of rules for applying the methods you want. Therefore, problem-based learning provides more development of the student's thinking ability, his general development and formation of beliefs. Without excluding all the achievements of didactics, but using them, problem-based learning remains an education that develops scientific knowledge and concepts, the formation of worldview, as a means of comprehensive development of the individual and his intellectual activity.

Problem-based learning theory explains the psychological and pedagogical ways and means of organizing the developmental development of the intellectual power of the student.

Determining the role and importance of problem situations led to the idea of restructuring the learning process based on the consistent consideration of the psychological and pedagogical laws of student active thinking. The main idea of problem-based education is determined on the basis of theoretical consideration of new pedagogical facts: in problem-based education almost most of the knowledge is not given to students ready, but is acquired by students in the process of independent learning activities in problem situations .

It is known that an important indicator of a person's comprehensive and harmonious development is the presence of a high level of thinking ability. If education leads to the development of creative ability, then it can be considered as an evolving education in the modern sense of the word.

Developmental education can be considered as education that leads to general and special development, in which the teacher, in the process of learning the basics of science to his students using special pedagogical tools, based on the knowledge of the legitimate development of thinking. conducts goal-oriented activities related to the formation of thinking ability and the need to know.

In order to apply problem-based learning technology to the teaching process, the teacher must address the following issues:

1. Curriculum topics can be taught in the form of problem-based lessons;
2. Identify questions, assignments that raise a problematic situation on the issues in the text of the topic, while adhering to the principles of scientific, systematic, logical sequence, consistency of didactics;

It is important to identify the tools and methods that enable students to activate and

manage their learning activities, and to identify ways to use them appropriately and effectively.

Theoretical foundations of problem-based learning.

The main goal of schools is to ensure the harmonious development of students. The main factor in the comprehensive harmonious development of the student's personality is his high level of independent thinking.

If the learning process teaches the student to think independently, it can be considered as a learning process based on the development of education.

Problem-based education can be called a system of developing students' interest in science, teaching them to think freely, using special tools aimed at thinking.

An effective method of activating the student is explained by the fact that his methods are based on a didactic approach to the implementation of traditional education.

It is a simple way to achieve the goal of developing students' intellectual thinking in ways that are readily available, and it does not lead to creativity or inquisitiveness.

In the process of problem-based learning, the student acquires new information independently, applying, synthesizing, generalizing, identifying factual material on the basis of analysis. In other words, it is the ability to expand and deepen knowledge, to master and apply it on the basis of the acquired knowledge.

In the new application of the acquired knowledge, the teacher does not give a manual, a textbook, it is searched by the student. This is the situation that develops the ability to work in an inquisitive, selective way.

Mental research is a very complex process, it occurs mainly when a problematic situation is created, when specific problems are exacerbated. If a teacher gives an assignment, tells you how to do it, and encourages you to do it, it does not solve the problem. It only teaches the student to solve alone.

Problem-based education differs from traditional education in terms of its goals, principles, methods and objectives. The main purpose of traditional education is to acquire knowledge already known to science, to equip students with information known to science, to form in them an understanding and skills about them.

## THE FORMATION OF PROFESSIONAL REFLECTION OF THE TEACHER AS A TOOL OF HIS DEVELOPMENT

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*Annotation: the article considers mechanisms of formation, pedagogical conditions and criteria of development of professional reflection of the teacher; provides recommendations to the teacher for analysis, introspection and reflection of his activities with the purpose of professional development.*

*Keywords: teacher's reflection, professional development of a teacher, pedagogical competence, mechanisms of formation of professional reflection of the teacher, pedagogical conditions of development of professional reflection of the teacher.*

The organizational basis of implementation of state policy of the Republic of Uzbekistan in the field of education is the State program of development of the Republic of Uzbekistan for 2017-2021, one of the main aspects of which is to ensure the modernization of the education system. One of the objectives of the Program is providing the education system with highly qualified personnel, improvement of the objectives of the training system, which is determined by the need to develop teacher's professional competencies required by the time and socio-economic situation, as well as the ability to various activities and needs for self-development.

In a rapidly changing world, the goals of the professional development system are determined by the need to develop teacher's professional competencies required by the time and socio-economic situation, as well as the ability to various kinds of activity and the need for self-development.

The diversity of social, life problems and professional problems, in particular, psycho-pedagogical and methodical - pedagogical plans (variety of innovative learning technologies, approaches, projects both native and foreign, new pedagogical conditions imposed by time; the need to be in line with innovation processes; psychological discomfort and fear of the crisis of professional competence; the abundance of new terms and interpretations of concepts, development of a new terminology) put teachers in a difficult position required decision making, of choice. Under these conditions, invaluable is the ability to reflect, to compare, to analyze, to evaluate, to choose. In the works on philosophy, sociology, psychology is increasingly showing the idea that a person needs to use the internal mechanisms of protection, assistance and development.

In a constantly and rapidly changing world of internal reserves of the person gaining importance of sustainable factors and tools of self-discovery, self-help, self-esteem, self-improvement, self-study. Among these factors, and instruments the contemporary sources often focus on the concept of "reflection".

Pedagogical reflection in a situation of innovation development is of particular importance as a means of developing innovative learning technologies, a system factor and a method of professional development of the teacher in the process of self-education. This is an important aspect of pedagogical culture of the modern teacher who is able to give a reasoned analysis and self-evaluation of own activities.

When thinking about his professional experience, the teacher uses as a result of his thinking not experience itself, but the idea, derived from it (K. D. Ushinsky). Researchers believe that the combination of professional experience and reflection - the key to development of professional skills.

In every person's life there are times when he thinks about himself, his life, his personal qualities, his character and how it affects other people. Trying to decide what

is true and what is false, person is looking for arguments to support or refute his particular act, thought, attitude to someone. This search is in the process of so-called internal dialogue.

Internal dialogue with yourself or someone imagined others enables a person to become in the position of the researcher in relation to itself, to consider himself, as in a mirror. Internal dialogue with ourselves is a reflection.

The problem of formation of professional reflection of a teacher is extremely important, since the profound changes in social and economic life, result in increase of requirements to quality of preparation and retraining of experts, produced by the graduate school.

In a direct sense (from lat. reflexio) reflection is a kind of mirror. If we use a metaphor to describe your inner state, you can use the image of the mirror. The position "in front of the mirror" allows you to see yourself as if from outside, from the point of view of an external observer.

The ability to reflect is invaluable in communication. A particularly important sphere of reflection is the mental process; no wonder it is sometimes defined as thinking about thinking. Person reflexive drawn to the culture, he is capable of transforming activities for self-development. Reflection is a search path to spiritual, essential, is the way to yourself.

In a broad term, reflection is a fundamental mechanism of human way of life. Professional reflection of the teacher we define as an integrative quality of the personality, which in the whole system connected reflective professional knowledge to professional knowledge reflexive and reflective activity and, in fact, reflexive behavior.

Mechanism of development of professional reflection of a teacher is the process of finding by a teacher of the personal meaning of his own activities through his own understanding of professional attitudes in problem-conflict situations.

As a result of such changes there is a new qualitative state, the basis of which is dialectical unity of the possible and the actual (Aristotle, Hegel), the potential and the actual.

The development of professional reflection of a teacher contributes to the following complex of pedagogical conditions:

- specially organized reflective activity of a teacher;
- the presence of the reflective surroundings;
- activation of the intersubjective relations between the participants in reflective activities;
- the use of the educational program of development of professional reflection.

Criteria of development of professional reflection of a teacher include:

- sufficiency reflective of the teacher's knowledge;
- attitude to pedagogical reflection and reflective activities;
- the reflexive behavior of the teacher.

The indication of reflective knowledge is problematic and conflict.

The own reflective criterion behavior of the teacher is the following indications: personal orientation, professional adequacy. Pedagogical reflection - the main tool of the professional development of a teacher. As pointed out by the doctor of psychological sciences Mitina L. A. in the article "Professional development and the health of the teacher: problem and solutions", - "the two major problems stand on the way of modernization of education. First, as experience shows, the weakest link in the process of innovation... became a school teacher, creativity and personal growth which is not always stimulated by the inclusion in innovative activity". The reason is that innovative programs and professional development of a teacher have a direct connection, as mediated by the level of development of personal characteristics of the professional identity of teachers. If the level of professional identity does not match the meaning of innovative

programs, some serious problems can be appearing. The teacher produces some means that lead him in the direction of the exploiting of his personal resources. As a rule, this leads to the emasculation of the essence of the innovative programs and professional deformations of the personality of the teacher (emotional burnout, fatigue or professional stagnation automation profession).

Development education places special demands on the person and work of the teacher. As pedagogical activity of the modern teacher is carried out in the context of the dynamic, unexpected, ambiguous and multifunctional situations, the teacher has problems with the contradiction between the need to think and act in new ways and the lack of formation of certain personality structures.

S. L. Fomenko considers professional development as improving the personal qualities of the teacher: " Professional development of teachers... - continuous training, finding opportunities to realize themselves in the profession, self-discipline, independence and responsibility, ability to innovate".

E. F. Zeer speaks about "the process of progressive personality changes under the influence of the social impacts of professional activity and a private activity for self-improvement and self-fulfillment".

All of these definitions researchers have highlighted the concept of self-reliance and self-development of a teacher, if he is active.

The most optimal is the definition of L. M. Mitina: "Professional development is an active qualitative transformation of teacher of the inner world, the inner activity of the teacher, leading to a fundamentally new way of professional life". An important reference of this definition is "a new way of professional life", which, of course, necessary in the development of innovation.

Reflection plays the special role in the professional activities of a teacher.

Among the main pedagogical competencies highlighted today reflective and analytical competence, which include the ability to analyze activities to find contradictions and flaws, to see ways of overcoming them. A.V. Khutorskoy offers to distinguish between "analysis", "introspection" and "reflection".

Despite the differences, it can be stated that reflection includes both elements of analysis and elements of self-analysis.

The ability and desire to reflect on their activities is associated with the process of self - knowledge, constant self-improvement, and therefore-continuous education.

Question "what is the difference between introspection and self-examination?" proposed by the famous psychologist V. Levi, get the following definitions:

"Introspection is an attempt to understand what is happening to you and how to change it. Self-searching is a continuous dream to change something, but a dream without action." At the same time, everyone is to blame for the lack of change: friends, relatives, fate and etc. "Self-examination is when a person, finishing an important conversation (business, work), then for a very long time "digests" what happened, using the phrase "it was Necessary.". And introspection is when what happened is analyzed using two turns:

- 1."What did I do right?"
- 2."What did I do wrong?"

Here are how teachers themselves formulate their own idea of reflection, both in direct and figurative definitions: "reflection-grinding, skipping, translating heard, seen, read and other information through yourself"; "reflection-tracking your own experience and planning new ideas"; " reflection - self-analysis of the activities of both the student and the teacher; reasoning, thinking about the questions: what was planned yesterday? what happened today? how will I apply it and act tomorrow? Self-assessment"; "reflection

is thinking, answers to questions of yourself", "Reflection is going back, "looking back" at your work, thinking about the disadvantages", "it is a twist of frames, stopping at the details and moments of work". The role of reflection in the professional development of a teacher can be present as a figure (Fig. 1)



Fig. 1-the Role of reflection in professional development

Reflection leads to important aspects of pedagogical activity, "serves" the needs of the teacher in improving his pedagogical skills.

However, it is impossible to fully analyze your own activities without correlating your experience with the experience of other teachers. Such processes as collective action and joint search for solutions are important: different teachers need different types of pedagogical support. However, when learning innovations to give stability to the formation of those competencies that help the teacher to act in a rapidly changing world, the development of pedagogical reflection requires support in the form of facilitation (K. R. Rogers, M. Clarin), cooperation and initiation aimed at the emergence of internal motivation. Creating such conditions is a kind of "provocation" (K. R. Rogers) of the teacher's analytical activity to improve practical skills.

Thus, the study of literature on the subject under study, the analysis of experience in the system of professional development shows that the formation of professional reflection of a teacher is a complex continuous process and one of the main professional competencies of a teacher.

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## РОЛЬ КОММУНИКАТИВНЫХ МЕТОДОВ ПРИ ОБУЧЕНИИ ИНОСТРАННОМУ ЯЗЫКУ

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*Аннотация. Иностранный язык является одним из основных инструментов воспитания людей. При коммуникации люди воспринимают друг друга по принципу групповой принадлежности. Находясь в определённых территориальных рамках, каждый человек является одновременно представителем различных групп (этнической, социальной, гендерной, территориальной, языковой, политической, религиозной и т.п.). Группирование в обществе осуществляется по культуре - исторически передающейся системе знаний и норм, разделяемой группой людей, консолидированной по определённым признакам (происхождению, социальному статусу, профессии и роду деятельности, религии и т.п.). Самоопределяясь в конкретном типе культуры, каждый человек делает свой выбор в пользу одного из вариантов поведения.*

*Ключевые слова: разговорная речь, говорение, коммуникация, метод, языковой барьер, общение, иностранный язык.*

При обучении иностранному языку необходимо научить учащихся и создать условия для: сбора соответствующей информации о культуре страны изучаемого языка; изучения собранных данных с целью обнаружения (определения) ценностей, отношений, поведения, характеризующих конкретную культуру или тип культуры; объединения, обобщения, классификации полученных данных.

В зависимости от возрастных характеристик обучающихся и уровня владения иностранным языком в качестве тематического наполнения могут использоваться материалы как об элитарной культуре (изобразительном искусстве, музыке, театре, литературе, истории), так и массовой культуре (паттернах одежды, питания, общения, использования общественного транспорта). Однако важно, чтобы отбор культуроведческого материала осуществлялся в соответствии с методическим принципом культуросообразности.

В настоящее время существует большое количество разнообразных подходов и методов обучению иностранным языкам. Одним из самых популярных и эффективных методов является коммуникативный метод. Это связано с тем, что коммуникативный метод обучения делает упор на языковую практику и способствует снижению страха общения на иностранном языке, т.е. языкового барьера. Необходимо в первую очередь развивать разговорную речь, чтобы в последующем не было трудностей в процессе реального общения.

Основной целью обучения иностранному языку коммуникативным методом является обучение говорению. Говорение - чрезвычайно многоаспектное и сложное явление. Во-первых, оно выполняет в жизни человека функцию средства общения. Во-вторых, говорение - один из видов человеческой деятельности. В-третьих, важно помнить, что в результате деятельности говорения возникает его продукт - высказывание .

Коммуникативный метод, отличается от иных методов тем, что в нём не используются вымышленные тексты, далёкие от реальной жизни. Учащиеся занимаются на основании жизненных диалогов, обыгрывании различных ситуаций из повседневной жизни, тем самым вызывая друг друга на диалог, т.е. мотивируют на изучение иностранного языка. В коммуникативном методе все стандартные

фразы, которые принято заучивать в рамках иных методов обучения, заменяют на фразы из реальных жизненных ситуаций. Это учит пользоваться языком спонтанно. Ещё одной особенностью коммуникативного метода является то, что учащиеся не могут точно знать, чем окончится занятие, т.к. невозможно предположить, что ответит каждый из участников диалога, всё зависит от ситуации. На каждом занятии преподавателем предлагаются новые упражнения и новые темы для обсуждения. Учащиеся должны научиться задавать и отвечать на вопросы типа: "Кто я в данной ситуации и как должен себя вести?", "Что является нормальным / не нормальным для представителей моего группового образования?". Это обяжет каждого следовать существующим в данном коллективе нормам, а также поведению, адекватному его представителям. Коммуникативный метод обучения иностранным языкам направлен на то, чтобы снять страх перед живым общением на иностранном языке в реальной жизни.

Несмотря на свою популярность, коммуникативный метод имеет как положительные, так и отрицательные стороны. "Плюсы" коммуникативного метода обучения иностранным языкам: погружение в языковую среду иностранного языка с первого занятия, позволяющее овладение не отдельными словами, а сразу фразами, которые можно применить в беседе; формирование грамотной разговорной речи на иностранном языке, что способствует разрушению языкового барьера; беглая и уверенная разговорная речь, формирование навыка общения на иностранном языке; хорошее понимание иностранного языка, что позволяет не только общаться, но и смотреть фильмы на иностранном языке, читать книги и т.д. расширение и использование словарного запаса; доступность и простота использования метода коммуникации; интересные и несложные занятия, предусматривающие использование различных приёмов (например, игровые приемы). "Минусы" коммуникативного метода обучения иностранным языкам: на время обучения желательно полностью отказаться от родного языка, чтобы полностью погрузиться в языковую среду изучаемого иностранного языка, что может вызвать стресс у неподготовленных учащихся; работа в группах и парах исключает возможность общения учащегося с преподавателем "тет-а-тет". Очень часто при использовании коммуникативного метода, преподаватель не может уделить достаточно внимания и времени всем учащимся (группе, паре, подгруппе и т.п.) .

Обучающиеся должны научиться и быть способными: осознавать себя в качестве поликультурных субъектов - представителей одновременно нескольких культурных групп (этнической, социальной, территориальной, религиозной, языковой и т.д.); видеть культурные сходства между представителями различных культурных групп стран соизучаемых языков, тем самым, расширяя рамки собственной групповой принадлежности за пределы политических границ родной страны.

Таким образом, коммуникативный метод можно назвать эффективным и актуальным, но его невозможно назвать идеальным. Это естественно, так как идеальных методов обучения на данный момент не разработано. В настоящее время без знания иностранных языков тяжело найти перспективную высокооплачиваемую работу. Коммуникативная методика открывает огромные возможности, которые обеспечат эффективность овладения иностранными языками.

## РАЗНЫЕ МНЕНИЯ УЧЕНЫХ В РАЗВИТИИ МАТЕМАТИЧЕСКОЙ СПОСОБНОСТИ

**ТЛЕУБАЕВА ГУЛЬНУР САГИБАЕВНА**

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*Аннотация: В этой статье даны данные о компонентах математических способностей, об условиях их развития. Особое значение имеют анализ немногочисленных, но очень содержательных работ ученых, в которых трактуются те или иные аспекты проблематики математических способностей. Без этого невозможна разработка объективных методов диагностики математических способностей, выявление оптимальных условий их формирования и развития на разных возрастных этапах.*

*Ключевые слова: математика, математические способности, исследования, алгебра, формулы, психология, интеллект, одаренность, умения, навыки, деятельность, анализ, знания.*

Впечатление исключительной трудности математики иногда создается ее плохим, чрезмерно формальным изложением на уроке. Обычные средние человеческие способности вполне достаточны, чтобы при хорошем руководстве или по хорошим книгам не только усвоить математику, преподающуюся в средней школе, но и разобраться, например, в началах дифференциального и интегрального исчисления. Тем не менее, когда дело идет о выборе математики в качестве основной специальности, вполне естественно желание проверить математические способности, или, как говорят иногда, математическую "одаренность". Ведь несомненно, что разные люди восприимчивы к математическим рассуждениям, решают математические задачи или - на более высокой степени - приходят к новым математическим открытиям с различной скоростью, легкостью и успехом. И, конечно, следует стремиться к тому, чтобы из миллионов нашей молодежи специалистами - математиками становились именно те, кто в этой области будет работать наиболее успешно.

В исследовании математических способностей внесли свой вклад такие яркие представители определенных направлений в психологии, как А.Бинэ, Э.Торндайк и Г.Ревеш, и такие выдающиеся математики, как А.Пуанкаре и Ж.Адамар.

Известный психолог Г.Ревеш рассматривает две основные формы математических способностей - аппликативную (как способность быстро обнаруживать математические отношения без предварительных проб и применять соответствующие знания в аналогичных случаях) и продуктивную (как способность открывать отношения, непосредственно не вытекающие из имеющихся знаний).

В.А.Крутецкий в своей книге "Психология математических способностей школьников" понятие математические способности трактует в двух аспектах:

а) как творческие способности - способности к научной математической деятельности, дающей новые и объективно значимые для человечества результаты, достижения, ценный в общественном отношении продукт;

б) учебные способности - способности к изучению (обучению, усвоению) математики (в данной случае школьного курса математики), быстрому и успешному овладению соответствующими знаниями, умениями, навыками.

В работе У.Ж.Содикова в процессе обучения математики была усовершенствована методика развития творческих способностей учащихся, на основе использования принципов задачного подхода (определение цели,

полнота, системность, последовательность) при математическом моделировании (количественное обозначение, описании, изучение взаимосвязи) проблемных ситуаций практико-прикладного характера.

Б.М.Теплов, возражая против приписывания к способностям любого свойства личности, установил некоторые границы: способностью можно назвать только такое личностное свойства, которое влияет на эффективность деятельности.

В.Д.Шадриков считает, что способности - это характеристики продуктивности функциональных систем, реализующих тот или иной психический процесс (восприятие, память, мышление и т.д.)

Завершая обзор психологической и педагогической литературы по проблеме математических способностей, следует отметить, что, несмотря на наличие в этой области ряда очень ценных работ, о математических способностей еще не разработана с достаточной полнотой. У нас, в частности, нет четкого представления о сущности и структуре математических способностей, о возрастной динамике развития структуры, о различных типах структур.

Тесты на интеллект весьма хорошо коррелируют с показателями школьной успеваемости, но довольно плохо предсказывают профессиональные достижения в науке и искусстве. В итоге мы можем дать определение основного для нашего исследования понятия. Под способностями к изучению математики мы понимаем индивидуально-психологические особенности (прежде всего особенности умственной деятельности), отвечающие требованиям учебной математической деятельности и обуславливающие при прочих равных условиях успешность творческого овладения математикой как учебным предметом, в частности относительно быстрое, легкое и глубокое овладение знаниями, умениями и навыками в области математики.

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## ИНТЕРАКТИВНЫЕ МЕТОДЫ ПРИ ОБУЧЕНИИ АНГЛИЙСКОМУ ЯЗЫКУ СТУДЕНТОВ НЕЯЗЫКОВЫХ ВУЗОВ

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*Аннотация: Данная статья посвящена изучению и исследованию применения интерактивных методов в процессе обучения иностранному языку, в частности английскому языку, студентов с экономическим направлением обучения. Рассмотрены игры и игровые приемы как вид интерактивного обучения на современном этапе на основе новых тенденция преподавания языков учетом профессиональных потребностей обучающихся.*

*Ключевые слова: интерактивные методы, игры, кейс-стади, дискуссионная практика, дискуссия как интерактивный прием.*

С начала 90-х годов XX века, после провозглашения независимости республики социально-экономическое положение Узбекистана пережило кризис, тенденции к приостановке которого и только еще начинающаяся стабилизация последних лет в области экономики, производства и строительства вселяло надежду на возрождение страны в будущем. В связи с этим население Узбекистана переживало глобальные перемены и реформы практически во всех областях жизнедеятельности человека и общества. Несомненно, этот процесс затронул и систему образования, а именно с повышением спроса на мировом рынке труда на специалистов, владеющих несколькими иностранными языками, в нашей стране стало больше уделяться внимание на подготовку высококвалифицированных кадров, обладающими не только профессиональными знаниями, но и языковыми компетенциями, отвечающими современным мировым стандартам.

На сегодняшний день в процессе обучения иностранному языку студентов нелингвистических вузов, в частности обучающихся экономических специальностей, широко применяются интерактивные методы преподавания, одними из которых являются игры и игровые технологии. Игры часто используются в коммуникативном языке обучающихся. Студенты находят их приятными, и если они правильно разработаны, они дают студентам ценные языковые навыки. Кроме того, игра является формой организации в условных ситуациях, направленных на приобретение опыта и развития поведения индивидов. Большинство игр имеет следующие признаки:

- свободное развитие деятельности в соответствии с пожеланиями людей и удовольствия, не только для результата;
- творческий, импровизированный и активный характер этой деятельности;
- эмоциональная активность, конкурентоспособность, привлекательность;
- прямые и косвенные правила, отражающие содержание темы;
- логическая и временная последовательность ее проведения.

Также дидактический игровой метод актуален и четко относится к цели, имеющей учебно-познавательную направленность.

Помимо этого, игры являются важными инструментами изучения языка, что можно рассмотреть в нижеследующих особенностях игр и игровых приемов:

- игры полезны для аспектов в развитии языка;
- игры подчеркивают использование правил;
- игры могут улучшить знания;

- игры развивают ряд навыков.

Эти методы, ориентированные на учащихся, весьма уместны, особенно для более активного вовлечения учащихся в приобретение знаний, навыков и стратегий.

Не менее интересным интерактивным методом, который преподаватель иностранного языка может использовать при обучении студентов экономических специальностей, является кейс-стади. Его основная цель - научить будущих специалистов анализировать информацию, оценивать альтернативные способы решения проблемы и найти наиболее оптимальный вариант из нескольких возможных.

Примером может служить следующая ситуация: американская компания American Building Corporation, производящая строительство высотных зданий, ведет жесткую конкуренцию с азиатскими строительными компаниями, выполняющие ту же работу, но по гораздо более низким ценам. Доля American Building Corporation на рынке падает. Правление компании принимает решение о расширении деятельности и выходе на европейский рынок.

Руководство корпорации разрабатывает соответствующие маркетинговые стратегии. Студенты объединяются в группы и выступают в качестве руководителей American Building Corporation. Они получают четыре подробные стратегии, тщательно их изучают, а затем проводят совещание, обсуждая преимущества и недостатки каждой маркетинговой стратегии внутри группы. Затем студенты объединяются в единую группу и принимают окончательное решение о том, какие два маркетинговых средства должны быть использованы для расширения бизнеса.

Как видно из приведенной выше ситуации, преимуществом рассматриваемого метода является способность развивать навыки командной работы, междисциплинарную осведомленность, контекстный анализ, оценку выбора, а также способность представить результаты проведенного исследования и спрогнозировать последствия своего решения.

Дискуссионная практика является еще одним важным интерактивным методом обучения английскому языку как иностранному студентов-экономистов. Участие в дискуссии - профессионально значимая коммуникативная ситуация для экономистов, тем более она требует более высокого уровня владения языком и определенного достигнутого уровня профессиональных знаний, поэтому такие дискуссии целесообразно проводить на заключительных этапах изучения лексики.

Как правило, дискуссия начинается учителем, который ставит спорный вопрос. Например, после изучения темы "типы бизнес-ассоциаций" можно предложить студентам обсудить, какая организационная форма лучше, предполагая, что участники будут активно спорить о преимуществах и недостатках частных предприятий, партнерств и публичных компаний, приводя аргументы "за" и "против". Обратите внимание, что для адекватного процесса обсуждения преподаватель должен предоставить обычные фразы делового общения, выражающие различные намерения, например те, что регулируют дискуссионный процесс ("начнем?" и т. д.), расположение заявлений ("есть несколько моментов, которые я хотел бы сделать"), выражение уверенности или сомнения или согласия ("я уверен в этом...- Мне так кажется..." / "Я согласен с точкой") и т. д. Практика группового обсуждения обеспечивает консолидацию темы и дает дополнительные междисциплинарные возможности.

Таким образом, к настоящему времени изучение иностранных языков приобрело сравнительно новый характер, что требует от специалистов практически любой области деятельности владение языковыми компетенциями, которые соответствуют

современным мировым стандартам. По этой причине с развитием данной отрасли образования, преподавателями и психологами, учеными-лингвистами уделяется больше внимания на совершенствование методики эффективного обучения английскому языку как иностранному учащимся неязыковых учебных заведений с учетом их профессиональных потребностей.

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## FEATURES OF MASTERING READING SKILLS BY STUDENTS WITH INTELLECTUAL DISABILITIES

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*Аннотация: В статье осуществляется теоретический анализ изученности процесса чтения. А также в статье раскрываются причины и недостатки, препятствующие овладению навыком чтения учащимися с нарушением интеллекта.*

*Abstract: The article provides a theoretical analysis of the knowledge of the reading process. And also the article reveals the reasons and shortcomings that impede the acquisition of reading skills by students with intellectual disabilities.*

*Ключевые слова: чтение, навык чтения, беглость, учащиеся с нарушением интеллекта, фонематическое восприятие, буквы, слова.*

*Keywords: reading, reading skill, fluency, students with intellectual disabilities, phonemic perception, letters, words.*

С приобретением независимости в Узбекистане уделяется большое внимание системе народного и высшего среднего и специального образования. До сегодняшнего дня, нашим государством были приняты ряд постановлений и указов, которые предусматривают получение качественного и эффективного образования, воспитание подрастающего поколения в духе сплоченности, гуманизма и физически развитого гражданина.

Перед ребёнком при поступлении в школу возникает специальная задача, которая имеет познавательное значение. При этом параллельно возникает необходимость овладения фонетическим компонентом речи в процессе обучения письменной речи: формирование понятий, что речь состоит из слов, слова из слогов и звуков, сознательное выделение звуков и слогов из слов, в дальнейшем формирование умения объединять их с целью создания слов, используя буквы.

Чтение - совокупность практик и процедур работы с письменным текстом и непосредственно процесс работы с текстом, направленный на извлечение из него информации, на восприятие текста и его понимание. В широком смысле - процесс извлечения информации также из любой символической системы (символов Брайля, нотного письма и так далее).

Изучением процесса чтения занимались такие авторы, как А.А. Леонтьев, И.А. Зимняя, Л.П. Добраев, Н.И. Жинкин, Т.М. Дридзе, А.Р. Лурия, и др. Описывая феномен осознания в процессе чтения, многие исследователи (И.Р. Гальперин, И.А. Зимняя, А.А. Леонтьев и др.) видят его специфику в выявлении смысла, скрытого в текстах. Семантическая обработка текста при чтении является одним из наиболее трудных видов перцептивной деятельности учащихся. Несмотря на актуальность и важность, эта проблема является недостаточно разработанной в современной методической и учебной литературе.

Все мы знаем, что от читательского умения зависит успешность ученика в учебной деятельности, его психическое развитие. В данном случае для ученика с нарушением интеллектуального развития это умение приобретает особую значимость. Так как проблемы обучения чтению учащихся с нарушением интеллекта обусловлена тем, что до конца сформированный навык чтения помогает человеку постоянно расширять свои знания, создает благоприятные условия для развития его интеллектуальных способностей. Таким образом, автоматизированное овладение навыком чтения - одна из основных условий эффективной работы

учащихся с нарушением интеллекта по всем предметам и дисциплинам. Это определяет актуальность исследования по проблеме данного исследования.

Психология навыка чтения раскрыта в исследованиях А. Я. Трошина, Д. Б. Эльконина, Т. Г. Егорова и др., методика обучения чтению раскрывается в исследованиях К. Д. Ушинского, А. М. Богуш, В. Г. Горецкого, Л. К. Назаровой, В. А. Бородиной, Е. Л. Николаевой, Т. Д. Полозовой, Е. П. Лебедева, М. И. Омороковой и др.

Б. Г. Ананьев описывает процесс чтения как сложный процесс взаимодействия между собой анализаторов (зрительный, речедвигательный, речеслуховой). В. А. Сухомлинский подчёркивал важность такого качества чтения как беглость, лишь тогда он будет готов к применению.

В. Г. Петрова занималась непосредственно исследованием особенностей формирования письменной речи при нарушении интеллекта. В исследовании она выявила причины, препятствующие формированию этого процесса. По ее мнению, нарушения чтения возникают, когда учащиеся долго не могут понять смысл прочитанного слова.

Учащиеся с нарушением интеллекта испытывают трудности в чтении вследствие недоразвития всех компонентов речи, недоразвития фонематического восприятия. Следовательно смешивая звуки близкие по акустическому признаку, невозможно воспроизвести правильную и точную звуковую форму слова на основе визуально воспринимаемых графических знаков, тесть букв. Также дети данного контингента затрудняются в усвоении букв. Это в свою очередь объясняется несформированностью процесса дифференциации акустически близких фонем. При этом не формируется связь между звучанием фонемы и его оптическим образом. В результате этого ребёнок одну и ту же букву читает по-разному, или наоборот разные буквы читает одинаково.

Нарушение взаимодействия между слуховым, зрительным и кинестетическим анализаторами, слабость процессов памяти является ещё одной причиной нарушений при чтении. Существуют ученики, которые запоминают буквы в течение двух-трех лет обучения. Дети то правильно называют некоторые буквы, то забывают их совсем, то путают с другими буквами. Учащиеся с нарушением интеллекта в процессе чтения трудно соблюдают определенную направленность движений органов зрения - слева направо, соответственно последовательность расположения букв в слове.

Слияние звуков является самой сложной операцией чтения для школьников с нарушением интеллекта. Наблюдаются случаи, когда ученик может хорошо знать все буквы, но не может синтезировать целое из отдельных частей. У учеников с нарушением интеллекта при чтении могут быть ошибки, которые нарушают логику повествования, когда одно слово заменяется другим, сходным по акустике. Учащиеся данной категории искажают слова, не замечая этого, не чувствуя, что эти искажения разрушают смысловое содержание текста.

Понимание прочитанного осложняется бедностью жизненного опыта и искажением представлений об окружающем мире, несформированностью интеллектуальных интересов и слабой мотивацией деятельности, трудностями распределения внимания. При чтении внимание ребенка полностью сосредоточено на том, чтобы правильно прочитать каждое слово, смысл прочитанного при этом остается без внимания.

Перечисленные недостатки требуют глубокого анализа уровня сформированности навыков чтения школьников с нарушением интеллекта в современных условиях и на этой основе определения путей развития организационно-методической

системы воспитания школьников-читателей с нарушением интеллекта в соответствии с требованиями современного общества нашей страны.

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## ИГРОВЫЕ ТЕХНОЛОГИИ ОБУЧЕНИЯ РУССКОМУ ЯЗЫКУ КАК ИНОСТРАННОМУ ДЛЯ СТУДЕНТОВ-АРХИТЕКТОРОВ

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*Аннотация: В статье анализируются текущие интерактивных технологии обучения и преподавании русского языка как иностранного для студентов архитектурного направления. Роль и статус русского языка радикально изменились за последние годы: вследствие глобализации русский язык повсеместно стал языком международного общения. В связи с этим должны быть критически пересмотрены традиционные взгляды на вузовский предмет русский язык.*

*Ключевые слова: русский язык, интерактивные технологии обучения, архитектурный ВУЗ, роль преподавателя.*

### Введение

Очевидно, что значительное место в системе образования укрепляет позиции любого языка в современном мире. Перспектива партнерского сотрудничества с Россией, где русский язык является государственным, создает необходимость практического изучения русского языка. Это также объясняет необходимость существования современного экспорта образовательных услуг в рамках подготовки специалистов для зарубежных стран.

В настоящее время преподавание русского языка как иностранного активно развивается как актуальное и перспективное направление. Интерес к изучению русского языка постоянно растет во всем мире.

Овладение основами русского языка является необходимым условием для выполнения учебно-профессиональной деятельности при обучении в архитектурном вузе. Актуальной проблемой является повышение мотивации студентов к изучению русского языка, в частности к архитектурным исследованиям, поиск методов, приемов и технологий повышения эффективности учебного процесса, а также поддержка активного речевого общения в ходе аудиторных занятий. Решение этой проблемы требует применения новых педагогических технологий.

### Методы

Методы исследования включают аналитические и описательные методы исследования, обзор теории и текущей педагогической практики, обзор существующих литературных и интернет-ресурсов, а также методику анализа педагогического опыта.

### Результаты

Результаты нашего обзора позволяют предположить, что использование интерактивных технологий в обучении русскому языку как иностранному для студентов-архитекторов представляет собой новый методологический подход к организации учебного процесса. В целях формирования личностного отношения студентов и преподавателей к образовательному процессу данный подход, как сообщается, исходит из механизмов диалога, рефлексивности и сотрудничества, обеспечивающих вовлечение субъектов образования в учебный процесс и их личную ответственность за его результаты [1]. На основе теории педагогической практики в архитектурном вузе и результатов обзора литературы, основные характеристики интерактивных технологий по сравнению с традиционными

методами обучения мы определили в таблице 1.

Проведенный анализ отличительных особенностей интерактивных технологий обучения русскому языку как иностранному свидетельствует об их соответствии современным требованиям обучения, подтверждает эффективность их использования в современных условиях обучения. Проще говоря, учащиеся могут легче понять и запомнить изученный ими материал, активно участвуя в учебном процессе. Исходя из этого, сегодня основные методологические новшества связаны с интерактивными педагогическими технологиями.

#### Обсуждение

В современной психолингвистике и социальной психологии коммуникативная деятельность становится ключевым объектом изучения. Появляются новые психолого-педагогические теории, в которых особое внимание уделяется социальному взаимодействию и сотрудничеству людей, рассматриваемому как межличностное общение. В межличностном общении человек берет на себя определенную роль, играет ее и получает представление о том, как воспринимает ее партнер по общению, интерпретирует ситуацию и координирует свои действия. Это взаимодействие способствует развитию личности и ее творческих способностей, а также способности мыслить и осознавать себя как особую личность.

Все сказанное становится очень актуальным для лингвистической подготовки. В связи с этим разрабатываются новые технологии и формы обучения иностранным языкам, в частности русскому языку как иностранному.

Технология, как известно, является наиболее эффективным способом достижения поставленных целей [2]. Являясь интегральным понятием, образовательная технология рассматривается как модель образовательной деятельности преподавателя и студента (или группы студентов) в рамках подготовки и проведения образовательного процесса. Новая образовательная технология в обучении языку относится к современному этапу развития обновленных методов и приемов обучения, используемых для формирования и развития коммуникативной компетентности студентов. Среди современных образовательных технологий выделяются интерактивные технологии, основанные на активном взаимодействии и общении студента с преподавателем и другими студентами (умение работать совместно в группе). Они основаны на интеракционизме, который является одним из самых популярных понятий современной социальной психологии.

Эти технологии успешно используются как в традиционной модели обучения, так и в современной, в том числе в преподавании иностранного языка, в частности русского как иностранного. Овладение коммуникативными навыками и социальными взаимодействиями иностранных студентов становится основной целью современной методики преподавания русского языка.

**Сравнительная характеристика традиционного обучения и  
 интерактивных технологий:**

Особенности	Традиционные формы обучения	Итерактивная технология
Главный предмет	Учитель преподаватель главным образовательного процесса	или является субъектом образовательного процесса
Деятельность студентов	Пассивная студентов	Высокая активность и взаимодействие студентов
Стиль	Авторитарный стиль взаимодействия	Более демократичный стиль взаимодействия
Источник	Учитель - это главный источник информации, единственный переводчик знаний. Именно учитель решает, как и чему учиться, и формирует взгляды учеников.	Общение и сотрудничество являются основными составляющими учебного процесса. Учитель - это партнер и координатор общения. Открытость, взаимодействие участников образовательного процесса, равенство их аргументов, накопление совместных знаний, возможность взаимной оценки и контроля.

Благодаря такому подходу коммуникативность перестает быть простым явлением, но становится существенным принципом построения учебного процесса. Лучшим вариантом развития коммуникативных навыков студентов является сотрудничество. По мнению педагога Кена Робинсона, образовательные системы должны признать, что "самое большое обучение происходит в группах", потому что "сотрудничество – это основа роста" [3]. Конечно, чтобы общаться на любом языке, учащиеся должны разговаривать друг с другом. Поэтому языковые классы – это очень естественное место для использования стратегий совместного обучения.

Исследования показали, что когда учащиеся работают в группах, это приводит к улучшению их успеваемости, сохранению обучения и социальных отношений, а также повышению их внутренней мотивации. Это может уменьшить стресс, связанный с внесением вклада в ситуацию всего класса, и дать учащимся больше времени для работы в своем собственном темпе. Развитие навыков совместного обучения в университетских условиях помогает подготовить студентов к будущей жизни и работе в команде. Например, работая над групповыми проектами в вузовских условиях, студенты готовятся к совместной работе с общими целями и коллективной, а также индивидуальной, ответственностью, которая требуется на большинстве рабочих мест.

Как показывает наш педагогический опыт, основными задачами использования интерактивных технологий в обучении русскому языку как иностранному являются формирование и развитие коммуникативных умений и навыков деятельности (говорение, письмо, чтение, аудирование), эффективное усвоение учебного материала, а также повышение и поддержание интереса к изучению русского языка. Используя подобные технологии в учебных аудиториях, студенты могут обобщать свой учебный и коммуникативный опыт. Основное внимание должно уделяться развитию коммуникативных навыков, совместной деятельности и навыков командной работы. Парная и групповая работа имеют решающее значение в коммуникативном классе. В этом процессе учитель языка берет на себя роль организатора, руководителя и непосредственного участника общения, координирует коммуникативную деятельность учащихся и помогает им.

Интерактивные технологии обучения требуют специальных методов и приемов образовательного взаимодействия, таких как обсуждение вопросов-ответов, поиск аргументов для различных точек зрения, обмен мнениями, экспертная оценка. Интерактивные образовательные технологии полностью отвечают современным требованиям обучения, представляя собой более демократичный подход к организации обучения, направленный на повышение внутренней мотивации студентов, развитие их личности, познавательной активности и креативности. Среди стратегий совместного обучения и интерактивных технологий обучения, используемых в нашей профессиональной практике преподавания русского языка как иностранного, можно выделить: работу в парах или в малых группах, цепочку, пресс-конференцию, мозговой штурм, командные игры, задания, лингвистические игры, головоломки, кроссворды, ролевые и имитационные игры, кейсы, Проектные технологии, технологии работы с архитектурными документами, тандемный метод, интерактивные экскурсии, квесты и веб-квесты, литературные и музыкальные композиции, дискуссии, мультимедийные и интернет-технологии, подкасты, информационно-развлекательная технология, развитие критического мышления, конкурсы чтецов / литературные конференции, фестивали русской речи. Эти виды работы универсальны, так как они соответствуют различным этапам обучения и могут быть использованы для развития социальных, культурных и научных речевых навыков.

### Вывод

Указанные интерактивные формы обучения являются основой для развития навыков иноязычного общения и способствуют формированию коммуникативной и социальной компетентности иностранных студентов. Профессиональный педагогический опыт свидетельствует об эффективности и актуальности использования интерактивных технологий для совершенствования межличностных и коммуникативных навыков.

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## PHILOLOGY

### SOME PROBLEMS IN TEACHING SPEAKING SKILLS

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*Annotation: This article is written for teachers with large classes of students who have encountered some of the following or similar problems during speaking activities in their English classes, and dealing with the arguments against teaching speaking skills.*

*Key words: speaking activities, motivation, human communication, positive feedback, overcome the difficulties, learner-centered classroom.*

Many students equate being able to speak a language as knowing the language and therefore view learning the language as learning how to speak the language, or as Nunan (1991) wrote, "success is measured in terms of the ability to carry out a conversation in the (target) language." Therefore, if students do not learn how to speak or do not get any opportunity to speak in the language classroom they may soon get de-motivated and lose interest in learning. On the other hand, if the right activities are taught in the right way, speaking in class can be a lot of fun, raising general learner motivation and making the English language classroom a fun and dynamic place to be.

Speaking is fundamental to human communication, just think of all the different conversations you have in one day and compare that with how much written communication you do in one day. Which do you do more of? In our daily lives most of us speak more than we write, yet many English teachers still spend the majority of class time on reading and writing practice almost ignoring speaking and listening skills. Do you think this is a good balance? If the goal of your language course is truly to enable your students to communicate in English, then speaking skills should be taught and practiced in the language classroom.

One of the problems in teaching speaking skills in the classroom is when students won't talk or say anything. One way to tackle this problem is to find the root of the problem and start from there. If the problem is cultural, that is in your culture it is unusual for students to talk out loud in class, or if students feel really shy about talking in front of other students then one way to go about breaking this cultural barrier is to create and establish your own classroom culture where speaking out loud in English is the norm. One way to do this is to distinguish your classroom from other classrooms in your university by arranging the classroom desks differently, in groups instead of lines etc. or by decorating the walls in English language and culture posters. From day one teach your students classroom language and keep on teaching it and encourage your students to ask for things and to ask questions in English. Giving positive feedback also helps to encourage and relax shy students to speak more. Another way to get students motivated to speak more is to allocate a percentage of their final grade to speaking skills and let the students know they are being assessed continually on their speaking practice in class throughout the term.

A completely different reason for student silence may simply be that the class activities are boring or are pitched at the wrong level. Very often our interesting communicative speaking activities are not quite as interesting or as communicative as we think they are and all the students are really required to do is answer 'yes' or 'no' which they do quickly and then just sit in silence or worse talking noisily in their L1(language one). So

maybe we need to take a closer look at the type of speaking activities you are using and see if they really capture student interest and create a real need for communication.

Another way to encourage our students to speak in English is simply to speak in English ourselves as much as possible in class. If we are shy about speaking in English, how can we expect our students to overcome their fears about speaking English? The more we practice the more we will improve our own oral skills as well as help our students improve theirs.

When students work in pairs or groups they just end up chatting in their own language.

Is the activity or task pitched at the right level for the students?

We give the students all the tools and language they need to be able to complete the task. If the language is pitched too high they may revert to their L1, likewise if the task is too easy they may get bored and revert to their L1. Also, be aware of the fact that some students especially beginners, will often use their L1 as an emotional support at first, translating everything word for word to check they have understood the task before attempting to speak. In the case of these students simply be patient as most likely once their confidence grows in using English their dependence on using their L1 will begin to disappear. Are all the students actively involved and is the activity interesting? If students do not have something to say or do, or don't feel the need to speak, we can be sure it won't be long before they are chatting away in their L1. Was the timing of the activity good? The timing of a speaking activity in a class can be crucial sometimes. How many teachers have discovered that their speaking activity ended up as a continuation of the students break-time gossip conducted in the L1? After break-time, why not try giving students an activity to calm them down and make them focus before attempting speaking activities that involve groups or pair work. Another way to discourage students speaking in their L1 is to walk around the classroom monitoring their participation and giving support and help to students as they need it. If certain students persist in speaking in the L1 then perhaps we should ask them to stay behind after class and speak to them individually and explain to them the importance of speaking English and ask them why they don't feel comfortable speaking in English in the class. Maybe they just need some extra reassurance or they don't like working with certain students or there is some other problem that you can help them to resolve. When all the students speak together it gets too noisy and out of hand and I lose control of the classroom. First of all separate the two points a noisy classroom and an out-of-control classroom. A classroom full of students talking and interacting in English, even if it is noisy, is exactly what we want. Maybe we just feel like we are losing control because the class is suddenly student-centered and not teacher-centered. This is an important issue to consider. Learner-centered classrooms where learners do the talking in groups and learners have to take responsibility for using communicative resources to complete a task are shown to be more conducive to language learning than teacher-centered classes (Long & Richards 1987). Nevertheless, many classrooms all over the world continue to be teacher centered, so the question we have to ask ourselves is, how learner-centered is my classroom?

Losing control of the classroom, on the other hand, is a different issue. Once again walking around and monitoring the students as they are working in groups can help, as we can naturally move over to the part of the classroom where the noise is coming from and calm the rogue students down and focus them back on the task without disrupting the rest of the students who are working well in their groups. If students really get too rowdy then simply change the pace of the class and type of activity to a more controlled task, for example a focus on form or writing task where students have to work in silence individually. Once the students have calmed down we can return to the original or

another interactive group activity.

These are just some of the problems that teachers with large classes face when teaching speaking activities in the classroom. These problems are not new nor are the solutions offered above. Teachers all over the world continue to face the same hurdles, but any teacher who has overcome these difficulties and now has a large class of energetic students talking and working in English in groups together will tell us it is worth all the trial and error and effort at the outset. If we believe in the importance of teaching speaking skills in the classroom but are having difficulties making speaking activities work in our classroom why not contact our local teaching associations or branch of TESOL. Maybe they run workshops for teaching speaking skills, or maybe they can put us in contact with other teachers in similar situations but with more experience teaching speaking skills who will be willing to share their experiences with us.

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## THE IMPORTANCE OF COMMUNICATIVE APPROACH IN FOREIGN LANGUAGE TEACHING

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*Abstract: This article focuses on the significance of using Communicative Approach in foreign language teaching. The article discusses the impact of Communicative Approach on improving language proficiency and provides analysis of both advantages and disadvantages of this approach.*

*Key words: Communicative Approach, language acquisition, Grammar-Translation Method, Audio-Lingual Approach, target language, communicative competence, language proficiency.*

Foreign language teaching (FLT) has always been complicated. Teachers put an extra effort to support their students in the process of language learning and use various approaches. Each foreign language teaching approach has its own peculiarities and focuses on the simplifying the process of second language acquisition for learners making it more engaging. Nowadays one of the most widespread and effective approaches of FLT is the Communicative Approach (CA) also known as the Communicative Language Teaching (CLT).

It is obvious that our modern world thrives on communication and it is an integral part of FLT as well. The Communicative Approach is being widely used in FLT. Theories of American linguist Noam Chomsky related to this approach appeared in the 1960s. However, linguists Michael Halliday and Dell Hymes elaborated conceptual basis for CA. Besides that in 1976 notional syllabus was published by British linguist D.A.Wilkins. According to Marius Narcis Manoliu, Wilkin contributed to the development of CA with his deep analysis of communicative meanings that language learners need to understand and express. [3]

CA is one of the most comprehensive approaches in FLT. The aim of approach is based on making the communicative competence the main goal of language teaching. Apart from Grammar-Translation Method and Audio-Lingual Approach that are mainly based on grammar, the CA is focused on the development of four language skills that define linguistic competence of language learners. However, linguist Ike Revita contends "If the literature of Communicative Approach is studied deeply, it will be found that what is truly called the Communicative Approach is not intended to replace Audio-Lingual Approach". [2]

The priority of CA is to enable language learners to use target language in a communicative situation expressing ideas related to their life experiences. Approach has many advantages which are as follows:

- It is learner-centered and correspondingly it is mainly based on learners interests and needs;
- It uses authentic materials such as print, audio materials or videos which are extremely motivating;
- It can be adapted to any level;
- It provides interactive relationship between teacher and learner;
- It gives students the opportunity to identify their abilities and demonstrate them;
- It takes into account language's communicative dimensions.
- It increases fluency in target language.

CA has some disadvantages as well. Approach is mainly focused on learner's

fluency but not accuracy on a target language. Moreover, it requires teacher to spend much time on searching for special lesson materials that will be interesting and motivating for learners. Besides that, this approach is not applicable in crowded classes. In large classes it will be difficult for teacher to control whole class and it badly impacts on lesson efficiency.

In conclusion, after having analyzed both advantages and disadvantages of CA, it is urgent to point out that alternating this approach with other approaches of FLT increases efficiency and improves language proficiency of language learners.

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## USING MOTIVATIONAL TECHNIQUES TO DEVELOP SPEAKING AND READING SKILLS OF ESP LEARNERS

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*Abstract: Communication is a process in which we send and receive information among people. People communicate with others not only face-to-face, but also by sharing information via the Internet and their mobile phones. Many of people confirm that the significance of communication is like the importance of breathing.*

*Keywords: knowledge, modern, activity, communication, student, teacher, method, motivation, vocabulary, achievement.*

Certainly, communication facilitates the spread of knowledge and connects relationships between people. To achieve the goal teachers should try as much as they can to break the silence in the classroom and make students speak no matter how many mistakes they make or how long it takes them to produce sentences. In

order to decrease shyness while speaking in front of the whole class, students may be offered the opportunity to work in groups or pairs, which is a suitable approach for enhancing the active language use. It declares that "motivation is very strongly related to achievement in language learning".

This statement results from teaching practice showing that eager learners willing to invest effort in speaking activities are likely to make greater progress. On the contrary, those sitting silently at the desk without desire to be involved in any kind of speaking activity, may find themselves stuck to be able to improve their speaking skill. Having noticed this, teachers should encourage low-motivated students to develop the interest in communicative activities. Ur describes some strategies to enhance students' motivation to speak in a lesson. The principal one is

selecting the topic carefully and to make it as interesting for students as possible. If the teacher's choice fails in the class, there should be no panic or embarrassment. The possible solution to this situation may be asking the students to vote for a topic they would be interested in talking about.

Varied tasks are also suggested for a successful and efficient speaking lesson as well as using visuals to enhance students' motivation to speak. Average pictures copied from different sorts of textbooks and workbooks do not encourage adult learners to speak anymore. Adult learners prefer to be set into real situations, dealing with real and current news items concerning today's world and society. Communication is a process in which we send and receive information among people. People communicate with others not only face-to-face, but also by sharing information via the Internet and their mobile phones. Many of people confirm that the significance of communication is like the importance of breathing.

According to Thornberry [1, c. 48], speaking is a speech production that becomes a part of daily activities which involves interaction. It means that if one is able to communicate well she or he will be able to interact with the society, can visit many places without having any barriers, work in any fields of life because speaking is a key to pass the interview test. Nolasco mentions that being able to speak reasonably correct and even fluent English is one thing, but being able to engage in on-going, interactive, mentally satisfying conversation is another.

Conversation is such a natural part of our life that many people are not aware of what

happens within it.

However, conversation follows certain rules which should abide by them in order make participants feel relaxed and be satisfied with it. Arthur adds that the main purpose of conversation is the exchange of information among people. While communicating, our students may find themselves in different social situations playing various social roles and the main task for language teachers is to prepare them for these real situations they might participate in. This also includes leading students to develop the ability to initiate and sustain conversation whenever it occurs. When students learn a foreign language, they very often build up enough knowledge on their grammar and they enrich their vocabulary at the same time. There is always hindrance that impedes them to speak immediately. Then they acknowledge that they cannot actually use this language to communicate when they want to. Scrivener states that it seems to be difficulty in moving language from passive knowledge into active usage. Without experience in using the language, learners may tend to be nervous about trying to say things.

Actually, they might feel a fear to be seen foolish in front of others, they might worry about getting things wrong or else they may want to evade teacher's comments or correction. One of the best ways of helping learners to activate their knowledge is to put them in "safe" situations in class where they are inspired and

encouraged to try to speak a foreign language. He claims that students' attitude to speaking the language may be affected by different factors from the outside, such as people in close surroundings, previous speaking experience in a foreign language or the job opportunities offered after mastering foreign language communication [2, c. 1246].

Success is also based on students' willingness to learn to speak a foreign language, which may be influenced by the teacher's methods used in teaching communication and above all, his or her personality. Students' personalities also play an important role in determining how quickly and correctly they will manage a speaking task. Those who are shy may take a long time to speak confidently, but when they finally manage it, their English contains fewer errors. The aim of both types of students is the same, indeed - to use the language correctly and fluently.

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## ROLE-PLAYING AND BUSINESS GAMES IN RUSSIAN LANGUAGE LESSONS

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*Аннотация: В данной статье говорится о ролевых и деловых играх на уроках русского языка для студентов ВУЗа с нерусским языком обучения. Предложенные здесь игры могут быть полезны при построении индивидуальных образовательных траекторий на основе личностных характеристик студентов.*

*Abstract: this article describes role-playing and business games in Russian language classes for University students with non-Russian language of instruction. The games proposed here can be useful in building individual educational trajectories based on students' personal characteristics.*

*Ключевые слова: активизация, коммуникативность, воображение, любознательность, дидактика.*

*Keywords: activation, sociability, imagination, curiosity, didactics.*

By definition, a game is an activity aimed at recreating and assimilating social experience, in which self-management of behavior is formed and improved (S. I. Ozhegov's Explanatory dictionary).

According to the theory of development of cognitive interest by T. I. Shchukina and the theory of activation of educational activity of students by T. I. Shamova, the pedagogical game has essential features - a clearly set goal of training, a corresponding pedagogical result and is characterized by an educational and cognitive orientation.

Game technologies are used to solve the following tasks: activation of cognitive interest; development of sociability; creation of conditions for creative self-expression; development of memory, attention, thinking, imagination; constructive communication as part of a social group; creation of a positive psychological climate in the team.

The game requires participants to be smart, attentive, teach endurance, perseverance, develop their imagination, curiosity, develop the teaching to quickly navigate, find the right solutions, create a situation of excitement, search, and desire to help their team.

Gaming technologies are the most ancient technologies in the world. This is a way to transfer knowledge, wisdom, and everyday experience to a new generation. Play, along with work and study, is one of the main human activities.

The game, being entertainment, recreation, can develop into learning, into creativity. Games can be classified in different ways. But in my classes, I mostly use a classification of games based on thematic principle: games are divided into sections of linguistics.

These are phonetic games, lexical and phrase logical games, games on morphemic and word formation, and syntactic games. This classification is offered by L. V. Petranovskaya. Any technology has tools that activate students' activities, but in some technologies these tools are the main idea and the basis for the effectiveness of results. These technologies include gaming technologies. Among many game technologies, didactic games are singled out.

Lesson with a didactic game.

Determining the place of the didactic game in the structure of the lesson and the combination of elements of the game and teaching largely depend on the correct understanding of the functions of didactic games and their classification by the teacher. First of all, they should be divided according to the didactic tasks of the lesson.

It is primarily a game of learning to control the synthesis.

The game will be educational if students, participating in it, acquire new knowledge, skills and abilities or are forced to acquire them in the process of preparing for the game. Moreover, the result of learning will be the better, the more clearly the motive of cognitive activity is expressed not only in the game, but also in the content of the material itself.

Moreover, the result of learning will be the better, the more clearly the motive of cognitive activity is expressed not only in the game, but also in the content of the material itself.

The controlling game will be the didactic goal of which is to repeat, consolidate, and test previously obtained knowledge. To participate in it, each student needs a certain linguistic training.

Generalizing games require the integration of knowledge. They contribute to the establishment of inter-subject relations, aimed at acquiring the skills to act in various educational situations.

Connect the halves of complex sentences. Highlight the main and subordinate among them. The team that collects the most offers wins. When conducting a game related to a team competition, the results must be monitored by the entire team or selected individuals. Accounting for the results of the competition must be open, clear, and fair.

You need to finish the game in this lesson and get the result. Only in this case it will play a positive role.

The value of such games and techniques lies in the fact that their material can also work out reading speed, expressiveness, develop spelling sharpness, and much more.

In Russian language and literature lessons, you can create conditions for the formation of students' cognitive actions. For example, using the technique of drawing up of puzzles or crosswords. Students with great interest work independently in the lesson, then demonstrating their proposed version.

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## THE USE OF ZOOM PROGRAM IN DISTANCE LEARNING ENGLISH VERBS

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*Annotation. This article discusses the problems of using the "Zoom" program during the Pandemic to learn English. Currently, there are many methods of teaching English, but still teachers a language of high quality and interesting for distance learning. Also, several modern methods of teaching the language on the "Zoom" platform were considered.*

*Keywords: distance learning, form, Zoom program, methods, Internet*

In the modern world, everything is changing rapidly, especially now in time COVID-19. The Methods of teaching English are also demand to change simultaneously. As a result, in the context of the pandemic, many educational organizations have switched to online education. At present, the use of information and communication technologies in teaching English is one of the priorities of education, on the basis of which it is possible to form vocabulary and grammar skills of students continuously. The most common are types of distance learning based on interactive television; computer telecommunication networks (regional, global), with various didactic capabilities depending on the configurations used (text files, multimedia technologies, video conferencing); a combination of technology and the Internet (through the Zoom program or Telegram).

One of the most advanced methods of learning a foreign language is the method of language immersion through the Zoom platform. "The rudiments of the idea of the method of language immersion were used by the German teacher Berlitz, who specifically avoided using his native language in teaching" [1, p. 112.] In his classes, he insisted that students talk more specifically in the language they are learning, and thus learn vocabulary and grammar without learning the rules and words. In accordance with the technique of "immersion", English should be the only means of communication between the teacher and students, with distance learning this is relevant and interesting for students.

The characteristic features of the immersion method are the following features:

- focus on mastering and the concept of a new topic (in our case, give an idea of the role of the verb in the sentence);
  - creating an atmosphere of immersion in the atmosphere (the use of visual aids such as tables or diagrams);
  - activation of the personality's reserve capabilities (during the conference, through "Zoom" to separate the functions of students according to their capabilities) [2, p.207.].
- Thus, when using the "Zoom" platform, the student has the ability to conduct dialogues and independent work skills. The basis of the immersion method is the use of vocabulary and the perception of speech by ear - this is the main barrier to the Zoom program in distance learning. Therefore, it is necessary to apply various techniques that help create a comfortable environment during self-isolation.

It should be noted that on the Zoom platform, you can use various teaching methods, as mentioned above, for example, a presentation or a communicative method:

- Presentation through the Zoom program: presentation of verbs will then be correct when they are initially presented with a preposition in a connecting function. If the meaning of the verb with the preposition varies, then you need to be guided when presenting them to the level of knowledge of students. At the basic stage of mastering the

language, learning and practicing the use of the to look verb in combination with several prepositions is impossible at once. It will be more appropriate to limit ourselves to the meaning of to look at, and then, as lexical skills are formed, other combinations of the same verb can be considered. If we are talking about level 2 and 3 of mastering the language, then it is recommended to give a verb in several meanings:

To remind of/ to remind about/ to remind to do smth Remind someone, something / remind about someone, about something / remind to do something;

- The communicative method through the program The communicative method is configured to overcome the problem of the language barrier, as it combines translation and grammar exercises with speech exercises, films, film clips, recordings of radio and television broadcasts, etc. They can introduce students to the history and culture of the country of the language being studied, help to visualize and comprehend the phenomena of nature and public life.

Thus, this situation greatly affects the condition of a person, his mood, performance, self-confidence, creative generation of ideas. To create a comfortable environment for communication, it is necessary to use various teaching methods on the Zoom platform. "When using this program, new principles for selecting and organizing speech and language material should be applied, of which the leading ones are activity, personality-role, situational and thematic principles" [3, p.98.]. In order to apply their knowledge in practice, students should train a lot, gradually overcoming the excitement that prevents them from concentrating and this can be done on the basis of the "Zoom" conference, and it is also necessary to apply the communicative method, which ensures the active participation of each student, stimulates speech communication, promotes the formation of interest and desire to learn a foreign language.

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## DEVELOPING SPEAKING IN WRITING CLASSES

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*Annotation: This article deals with the essential problems of teaching foreign languages, developing students' speaking skills in writing classes.*

*Key words: foreign languages, process writing, creative, speaking, listening, method, mind maps, brainstorming, language skills, interaction.*

Aldous Huxley once wrote, "Language has made possible man's progress from animalist to civilization". In doing so, he is effectively summarized the importance of language in humans' lives. It is through language that we are civilized. One could argue that nothing is more important to the human species than that. Aldous Huxley continued by explaining the value of language:

Language permits its users to pay attention to things, persons and events, even when the things and persons are absent and the events are not taking place. Language gives definition to our memories and, by translating experiences into symbols, converts the immediacy of craving or abhorrence, or hatred or love, into fixed principles of feeling and conduct.

In the article we try to dwell on how process writing helps to develop students' speaking in writing classes. Before we considered writing as boredom, but with the help of the New Preset Program it turned out to be really interesting and we enjoy writing different pieces of writing...

Process-oriented writing emphasizes that students should understand the writing process first before learning composition. Teaching methods in the process-oriented approaches are fundamentally different from those in the past; "it involves much more than studying a particular grammar, analyzing and imitating rhetorical models, or outlining what it is one plans to say. The process involves not only the act of writing itself, but prewriting and rewriting, all of which are interdependent". Practical experience and formal research confirm that people cannot learn a language without multiple opportunities for meaningful repetition. Oral language interactions and the chance to produce the language in meaningful dialogue and activities provide the practice that is critical to internalizing the language. James Asher's work (2003) on Total Physical Response (TPR) supports the notion that very soon after the teacher models the language students want to imitate what has been said. Crasher's research looked at the linkage between listening and speaking. He does not suggest that more listening results necessarily in more talking, at least on the part of the students. Crashes argues that when English learners finally speak, their speaking provides evidence that they have acquired the language.

Studying writing and speaking is essential for students to develop their language skills. Some say that writing is more important than speaking and vice versa. While some people have the opinion that written language is a reflection of spoken language, others claim that written language is worth more than spoken language since it is a more proper form.

Several methods can be used to improve students' writing. In many cases, the hardest thing for a student concerning writing is to get started with the entire writing process. According to Elbow, there are different reasons why students have trouble with this.

One reason could be that the students are afraid of failing and that they are under pressure to perform. The teacher must calm them down and persuade them that if they do make mistakes, it is not a disaster. They will just have to correct them afterwards. There could also be other methods. Elbow mentions warm-up exercises, rewards and challenges for the students to increase their motivation .

What to write about is a quite common problem. The process of collecting information and coming up with ideas is not easy for everyone. Making mind maps is a recommended option. If you have the topic Christmas, the teacher tells the students to close their eyes and think of all the things they can come up with that are connected with Christmas. This is an efficient method and Ramies maintains that this works with almost any topic.

Brainstorming is a second alternative where the students gain information by discussing in groups. White and Arndt write that both the teacher and the students have important roles in this session. One example of brainstorming is that every student starts by writing down their own ideas about a certain topic. After a few minutes they join a partner and they discuss their ideas. Some time later the two students become four and they elaborate their ideas. At the end of this activity the discussion stops and each group suggests at least three ideas that are written down on the board by the teacher. It is, according to White and Arndt, crucial that the teacher goes through all these ideas with the students before the writing starts so that everyone understands what the ideas mean. After this session the writing can start, with the students' minds filled with ideas.

When we are learning the rules of writing, it is better listening to teachers than learning it by ourselves. Teaching is conducted by speaking. Listening to a good teacher is like sitting by a flowing stream whose soothing sound, little by little enters our brain and becomes part of us. A deep impression is left on the mind. This is not to say that we cannot learn the rules by ourselves. Psychologically, it is better to listen to someone learned and experienced in the art of speaking. Information can be found in reference books, but it is more effective to hear it delivered by someone learned in the subject.

Therefore, students can develop their speaking skills in writing classes through different methods which was mentioned above.

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## PSYCHOCORRECTION ACTIVITIES FOR CHILDREN AND ADOLESCENTS WHO ARE BAD-TEMPERED

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*Annotation. This article provides information on the need to take into consideration the age and individual psychological characteristics of children and adolescents who are bad-tampered and psychological correctional training to prevent educational disorders.*

*Keywords: children and adolescents, the reason of bad-mannered, individual-psychological characteristics, correctional activities.*

It is impossible to carry out activities in various areas of social practice and the process of training psychologists without psychocorrectional work. Therefore, it is necessary to ensure the compatibility of psychocorrectional procedures with psychological diagnostic research, based on which to draw initial conclusions and define the goals and objectives of correctional and developmental work. The effectiveness of corrective work is determined only by the initial thorough psychological diagnostic work. At the same time, "the most accurate, in-depth diagnostic data may become meaningless if they are not combined with a system of well-thought-out psychological and pedagogical correctional measures"[1.5].

It is known that the role of individual psychological characteristics of a person in the origin of behavioral disorders is great. Therefore, one of the main problems in social psychology is the serious dealing with this problem and the correction of the personality of bad-mannered children and adolescents. Especially if we take into consideration the fact that the individual develops through the participation of a wide range of relationships, social practice and upbringing, there is a need to conduct more extensive research on the personality of adolescents who are bad-tampered. Because every person is formed and developed as a result of the influence of family, school and community. Their health and increase the effectiveness of educational influence play an important role in preventing behavioral disorders among young people.

The improvement of a person's character is achieved through the conscious adaptation of the adolescent to the social environment and the desire to take his place in life. Therefore, it is necessary to begin the work of improving a person's behavior by changing his worldview, consciousness and spiritual world.

It should be born in mind that when conducting preventive work with children and adolescents with behavioral disorders, it is necessary to take into account their age and individual psychological characteristics. Therefore, it is important to approach each adolescent in a unique way to prevent behavioral deviations. In this way, it is possible to achieve the formation of a certain strong belief in adolescents, increase confidence in people[2. 49].

It is well known that learning, work teams and various informal groups have a positive effect on adolescents. However, the involvement of adolescents in children's camps and clubs for the re-education of adolescents with behavioral disorders can sometimes lead to behavioral disorders in other adolescents. This is because adolescents with behavioral disorders in camps or clubs have the opportunity to develop their own negative behaviors and to shape them in others. Therefore, it is advisable to bring up adolescents with behavioral disorders as individually as possible.

In our opinion, today there is a need to involve more psychologists, pedagogical specialists in juvenile correctional facilities, to carry out educational activities on the

basis of their recommendations and instructions.

Based on the above, it can be concluded that the psychocorrection of bad-mannered children and adolescents is important in the prevention and elimination of behavioral disorders among them.

We can recommend psychological correctional exercises to prevent behavioral disorders and bad-manner in children and adolescents:

Activity 1 "Help." The psychologist tells the teenager about his personal, daily, everyday problems in order to establish a trusting relationship with him. In the process, the teenager is asked to put himself in his place and solve the problem.

Activity 2 "Assessment of movement". The psychologist tells the teenager a story of behavior. Asks the teenager's personal reaction to the actions in the story.

Activity 3. "Doing good". During the interview, the psychologist asks how to help people in need.

Activity 4. "Strategy of life". During the interview, the psychologist asks the teenager about his life plans. They discuss together what can help or hinder the implementation of life plans.

Activity 5. "Talking about yourself and others." Psychologist 1 week from adolescence. Asks to write and tell about the events that took place 1 month ago. After the interview, the question is asked, was it possible to live differently at this time? The answers are analyzed together.

Activity 6 "My ideal." During the interview, the teenager is asked and evaluated his life goals. It is analyzed that positive moral qualities are necessary for the dream to become true.

Activity 7 "A fairy tale for a teenager". This lesson is conducted in the form of fairy tale therapy. The teenager is told a story about a hero who looks like him and the people around him. At the end of the story, the psychologist and the teenager come to a joint conclusion.

Activity 8 "Thought Relay". Students are told a topic. They continue, supplement and interpret the given topic on a chain basis. Opinions are analyzed and problems are solved together.

Activity 9 "Self-stimulation". Adolescents are divided into groups. They ask each other questions about self-stimulation. Questions are discussed with all students.

Activity 10 "Creating on a free theme." Students are encouraged to draw or write stories on topics of great interest to them. Stories and pictures are analyzed together [3.51].

In training, the psychologist should set an example, use humor and jokes. New ideas can appear after each lesson. Some students may or may not like the lessons. Therefore, each lesson should be conducted on the basis of individual methods. The main purpose of correction is to help the client to understand their game, life scenario, "ego" and to make new decisions about the behavior of life.

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## СРАВНИТЕЛЬНЫЙ АНАЛИЗ ГЛАГОЛОВ ЯПОНСКОГО И УЗБЕКСКОГО ЯЗЫКА

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*Аннотация: в этой статье мы описываем сходства, а также различия между японским и узбекским языками как по уровням морфологии, так и по синтаксису, таким образом, будет возможно применить наше сравнительное исследование по грамматике японского и узбекского языков на непосредственном обучении.*

*Грамматическое сравнение японского и узбекского языков.*

*Ключевые слова: грамматика, японский язык, узбекский язык, морфология, глагол, сравнение.*

*In this paper, we describe the similarities as well as differences between Japanese and Uzbek in both levels of morphology and syntax, we are aiming at applying our comparative study on Japanese and Uzbek grammars.*

*Keywords: grammar, Japanese language, Uzbek language, morphology, verb, comparison.*

Как и все другие тюркские языки, имеет порядок слов "субъект + объект + глагол" и считается агглютинативным языком с очень продуктивным инфекционным и деривационным суффиксальным процессом, в котором последовательность нефлективных и деривационных морфем прикрепляется к стволу слова. На узбекском языке глагол может иметь сотни форм, последовательно добавляя различные аффиксы к основанию слова. Японский, который также считается агглютинативным языком, также имеет тот же порядок слов и морфологические особенности, что и узбекский.

В следующих разделах мы проведем сравнение между синтаксисом с пристальным вниманием к их различиям.

Морфологическое сравнение

Когда мы сравниваем словообразование, мы можем обнаружить, что, как в японском, так и в узбекском языках словоформы создаются путем присоединения множества суффиксов, обозначающих регистр, настроение, личность, время и т. д., к одному словосочетанию, как показано в примере (1) *yozilmanligidan* ("как это не было написано") *йоз + иль + ма + ган + лигидан*

(書か + れ + な + かつた + ので) *йоз / 書か* (запись): ствол + ил / れ:

пассивный голос + ма / な: отрицание + Ган / かつた: прошедшее время + лигидан / ので

Причинная форма. Обычно японцы и узбеки имеют много общих морфологических и синтаксических признаков. Тем не менее, есть также некоторые различия в образовании слов существительных, глаголов и т. д. В следующих разделах мы рассмотрим некоторые аспекты словообразования, отличающий японский от узбекского.

В узбекском языке в выражении "владение" существительное всегда сопровождается некоторыми грамматическими категориями, такими как лицо, число и т. д., и с присоединенными разными суффиксами, существительное будет выражать различное владение объектом. Кроме того, этот же суффикс одновременно показывает разные категории лица и числа. Существует много сходств в образовании глаголов в слове, и большинство суффиксов слов в японском языке соответствуют суффиксам слов на узбекском. Таблица 1 показывает сходство

спряжения глаголов в японском и узбекском языках (с примером глагола "писать" в двух языках). Японский узбекский глагол Stem Katsuyogobi Суффикс

書く	Yozmoq
書かせる	yozdirmoq
書かされる	yozdirilmoq

Между японским и узбекским языками есть некоторые различия. Как и в узбекском языке, понятия единственного и множественного числа выражаются посредством словосочетаний существительных, и глагол также получал бы различные нефлективные формы в соответствии с числом и лицом субъекта в предложении. И в то же время суффиксы глаголов выражают число и время. Однако это не относится к японскому языку, поскольку японские существительные не требуют суффиксов для выражения лица, числа и, следовательно, нет необходимости в согласении существительным и глаголом. В таблице 2 показана категория лиц глагола на узбекском языке.

	Настоящее время		Прошедшее время	
	Ед. число	Мн. число	Ед. число	Мн. число
<b>1-лицо</b>	yoz-aman	yoz-amiz	yoz-dim	yoz-dik
<b>2-лицо</b>	yoz-asan	yoz-asiz	yoz-ding	yoz-dingiz
<b>3-лицо</b>	yaz-adi	yoz-ishadi	yoz-di	yoz-ishdi

Категория "лицо" в глаголе на узбекском языке. Когда мы сравним порядок аффиксов, которые прикреплены к основанию глагола в определенном порядке, то наблюдается сходство.

Когда мы сравним порядок аффиксов, которые прикреплены к основанию глагола в определенном порядке в Таблице 3: Грамматические категории глагола на японском и узбекском языках:

花子は新しい先生について太郎に詳しく聞いてみた。
Hanako yangi muallim tog`risidaTaro dan batafsil sorab ko`rdi.

На японском и узбекском мы найдем много общего, за исключением следующих двух моментов:

II. Японские глагольные формы не зависят от лица и числа субъекта в предложении, а узбекские глаголы имеют разные словоформы в зависимости от лица, числа и времени предмета. Таблица 3 показывает порядок суффиксов на двух языках.

Синтаксическое сравнение. Порядок слов в японском, и узбекских языках могут рассматриваться как правило: субъект + объект + глагол, в котором составляющие могут свободно менять порядок, поскольку грамматические роли составляющих могут быть идентифицированы с помощью явных морфологических разметок на них, не полагаясь на их приказ.

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## PHILOSOPHY

### SOCIAL STRUCTURE OF SOCIETY AS INTEGRATED TOTALITY OF ALL COMMUNITIES FUNCTIONING IN IT

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#### *Abstract*

*This article discusses the issues of optimizing social policy, which are becoming crucial for the Republic of Karakalpakstan. The author emphasizes that changing the state of affairs in this area requires better analytical work in the process of preparing decision-making in the socio-economic sphere.*

*Keywords: large-scale transformations, Action Strategy in five areas, optimization of social policy, reforms.*

Over 3 years ago, a new round of development began in Uzbekistan. The introduction of new reforms, which are characterized by deep and large-scale transformations in all spheres of life and activity of our state, has begun. President of Uzbekistan Sh.M. Mirziyoyev, by his decree of February 7, 2017, approved the Action Strategy for the five priority areas of the country's development in 2017-2021. [4] Here, special attention is paid to issues of socio-economic development, creating an open economy, healthy competition, reducing the state presence in the economy, achieving high economic growth rates by diversifying the economy and increasing labor productivity, and implementing a stable monetary policy. A balanced macroeconomic policy is being implemented, which is aimed at maintaining a balance between social support of the population and stimulating the growth of economic sectors. Much has already been done in all these areas, which ensures higher efficiency of the economy and has led to positive social changes - the creation of new jobs and the growth of incomes. [3]

For a multinational state, the population of which over the years of independence has increased by one and a half times, the issues of optimizing social policy are becoming crucial. Changing the situation in this area requires better analytical work in the process of preparing decisions in the socio-economic sphere. Indeed, the social sphere of society incorporates the interests of various social, socio-demographic groups, nations and nationalities, the relationship of society and the individual, working and living conditions, health and leisure. In this regard, I would like to recall the First President of the Republic of Uzbekistan I.A. Karimov, who, summing up the rich experience of social development in many countries of the world, noted: "During the formation of national statehood, the implementation of democratic reforms, the transformation of the economy and the transition to market relations, special attention should be paid to social problems". [2, P. 203] In fact, the reforms carried out in our country are characterized by their focus on radical transformations of all spheres of public life, social, in particular. Here, it is especially worth pointing out the processes of implementing social motivation of people, the coincidence of ideas about the meaning and goals of reforms with their real results. When reforming and updating our society, such important tasks are set up as creating the necessary conditions so that everyone can realize their rights and potential

opportunities. The implementation of these principles in reality and their finding and implementation in the values and orientations of people are bearing fruit. The proof of this, above all, is the stability of the pace of socio-economic development, the sequence of the progressive movement of the well-being of the population, as well as the social and political activity of our people.

In this regard, there are many normative acts, decrees, etc. at the state level, which are aimed at combining public and individual being of people. For example, the announcement of 2019 as the "Year of Active Investment and Social Development", as well as practical measures taken on this basis, because investment is the driver of the economy, figuratively speaking, its heart. New technologies, advanced experience, highly qualified specialists come to all sectors and spheres, to all regions with investments, entrepreneurship is developing rapidly. "Our highest goal is that every person in Uzbekistan, regardless of their nationality, language and religion, live freely, in peace and prosperity, be happy with their life. ... Only by actively attracting investments, introducing new production facilities, we will achieve accelerated development of our economy. And positive results in the economy will allow us to consistently solve the accumulated problems in the social sphere", - said Shavkat Mirziyoyev. [1]

It is also necessary to emphasize that the social sphere, the social structure, in particular, the place and role of education in it, are comprehensively reflected in these regulatory documents.

Of course, not only these elements of the modern social structure of the Republic of Karakalpakstan, but also its other structural components - ethnic, demographic, settlement, social and stratification, due to socio-economic and cultural conditions and factors of independent Uzbekistan and Karakalpakstan, require their understanding. In addition, the announcement of 2020 as the "Year of the Development of Science, Education and the Digital Economy" poses new challenges for researchers: to take a fresh look at the further development of the social structure of society and fully appreciate its growing importance, as well as point out problems and difficulties.

Given these and other aspects of the social structure, in our opinion, it is necessary to conduct monitoring in order to identify the attitude of a certain group of the population to the ongoing processes in the Karakalpakstan society, the way and way of life, to clarify the current state and development of the social structure of the Republic of Karakalpakstan. Here we want to note that in modern literature the complexity of the social structure of society itself is not taken into account, since the ratio of the above components depends on the stage of development of society. And therefore, during the study, we must take into account this dependence of the elements of the social structure. Thus, to define the social structure of society as an integral set of all the communities functioning in it, taken in their interaction, starting its analysis with the ethnic - national structure of society.

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## SOCIOLOGY

### AXIOLOGICAL APPROACH TO THE ANALYSIS OF SPIRITUAL CULTURE OF UZBEKISTAN

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*Abstract: The value of spiritual culture is a key factor in the formation and development of national ideology. This scientific article argues that spiritual culture is a value, that spirituality and culture are interconnected and inseparable. In addition, the role and influence of spiritual culture in the development of national ideology is scientifically and philosophically investigated. The content is illuminated through the concept of axiology, which is a value philosophy. Scientific research was carried out using concepts such as axiology, value assessment, value approach, moral quality of a spiritual person. The scientific conclusion was made that our country has a rich spiritual heritage, which is a key tool for the comprehensive development of young people through spiritual heritage, especially in shaping their national ideological worldview.*

*Keywords: national ideology, philosophy of values, national idea, axiology, spiritual heritage, spiritual culture, individual spirituality, social values, social culture, human-society relations, human qualities.*

In the formation of the spiritual culture of man, the nation of society, value orientation is important. It is known that with all the objective significance of the culture of society, spiritual, as well as material culture is a product of human activity, the centuries-old creativity of various generations. In that place, culture is nothing more than the objectified activity of the subject. In this article, it is precisely in the practical activity of man, in the relationship between man and society, that representations and concepts of value, value orientation are created. The value assessment of spirituality is, as it were, a criterion for the degree of development of a person's spirituality and his culture. In the value orientation, people's ideas about the significance of the most diverse phenomena of the material and spiritual life of society are accumulated. It is possible to determine and explain the value of something, including one or another side of spirituality, only from the standpoint of such a science as axiology. Axiology is this philosophy of values. The concept of values denotes the characterization of various objects and material and spiritual life. The concept of value reflects objective reality. Value is the objective significance of the diverse components of reality, the content of which is determined by the needs and interests of public entities.

The value orientation itself is inseparable from social values. Value orientation acts as a subjective perception by a person of the achievements of material and spiritual culture [1, C.7]. In essence, it means a completely conscious choice of values, the ability of a person to obey in certain circumstances to social expediency. Spiritual values play an extremely important role in human life and the whole society, since in their totality they represent a combination of knowledge, feelings and aspirations. They contribute not only to the awareness of the meaning and goals of life, but also contribute to the self-affirmation of a person as a creative person, they determine his life position to all sides

of public life. They give us the opportunity to evaluate the real merits of a person to humanity, as well as the true value of each specific stage of social development in general, social progress. Without understanding the meaning and content of a person's spirituality, it is impossible to understand the content and nature of a person's spiritual culture, its moral qualities, and to understand the value orientation chosen by it. Values are always functionally significant, they express the spiritual aspirations of a person, the orientation of his behavior and specific actions. Spiritual and moral qualities of a person can act as regulators of relationships between people, as well as between a person and society. Spiritual values acquire a social meaning and influence the behavior of an individual when they are deeply comprehended, recognized by the individual and society. If a person does not have harmony between a value orientation and its social meaning, then his spiritual qualities remain unfulfilled, they exist on their own, and are one of the sources of contradictions between a person and society, between social and individual value orientations. There are cases in life when one or another person who knows, knows how to understand and comprehend certain social values, but ignores them in his behavior. In such cases, a situation arises when a wide abyss separates a person's awareness of certain values from what he does and how he acts in reality. As a rule, in the process of choosing from the whole variety of value orientations, a person experiences serious difficulties, fluctuations, doubts, as a result, ways of realizing certain values are not always correctly chosen, as has happened more than once in the historical process [2, P.81] . It is known that the historical process is not carried out automatically, it is carried out through the activity of value-oriented individuals, masses, social parties and movements. It follows from this that the development and progress of civilization is directly based on the spiritual qualities of man, which are a set of individual properties and traits of social values, and historical experience of the social environment. Therefore, by studying the value orientations of the personality, as the driving forces of her actions and motives of her activity, it is possible not only to reveal the essential qualities of the personality, but also to explain the patterns of development of her consciousness and behavior, to understand the characteristics and originality of the development of society, the modern era from the point of view of their value . It should be borne in mind that the value attitude is formed in the process of human activity that is social in nature.

The results of human activity are objectified, objectified, acquire the ability to become the property of not only their creators, but also other people, can be included in the culture of society, which can be seen in the mastery of tools, communication, spiritual heritage, fixed in traditions, in works of art, moral imperatives and norms of behavior. Of course, not all results and not all human activities become elements of culture, but only those that are socially significant, meeting the public needs and interests of people. Moreover, not only spiritual relations and spiritual production act as values, but also the results of material relations in the production process. In a certain sense, value is the objective significance of the diverse components of reality, the content of which is determined by the needs and interests of public entities [3, P.76]. In this case, the concept of significance is unacceptable to be identified with practical significance. The fact is that social significance can be both positive and negative. At the same time, both positive and negative value affect the interests and needs of large groups of people or even the whole of humanity. However, value is expressed precisely, and only positive significance. Although in reality each given concrete thing or property can in various respects bring to a person both good and harm, and good and evil, justice and injustice, it can also be both positive and negatively significant. We consider each thing as value from the positive side. At the same time, things themselves do not appear as values, they become values, acquire a value orientation. Values are not a characteristic

of things in themselves, but of reality phenomena, directly or indirectly included in social relations, value is a manifestation of social being, which indicates that in the process of interaction things acquire a social nature. Change and development of the analyzed processes and phenomena, due to a change in their value relationships, a complex dialectical relationship between the absolute and relative in value. In the process of development of society, the values themselves and their value orientation are changing. What appeared as values yesterday may cease to be value today. In the future, along with the emergence of new values, a turn to the values of the past is possible. The material and spiritual values existing in society show that side of the relationship that has a direct impact on the subject. Through the assimilation of diverse values, a person gains social experience, in other words, he becomes sociologized, he receives information about the different sides of a complex social organism, joins spiritual culture. As part of the development of culture, a person creates new values and preserves old ones, which also affect the further development of culture.

The value of actions, thoughts, and things that belong to a certain historical period lies in the fact that they contribute to social progress, and also, to one degree or another, contribute to the improvement of the subject. When characterizing various types of values, it is important not to miss the differences between the values of material and spiritual culture. Spiritual values exist not only in substantive form, but also as an act of activity inseparable from the spiritual production itself. The concept of value and the concept of value orientation derived from it reflects the most important aspects of spiritual and moral relations. In these concepts, the whole complex of moral, political and, in general, worldview values is refracted, which predetermines the worldview and civic position of a person [1, C.10]. Value orientation is organically included in the motives of all types and forms of behavior of moral subjects, determines their meaning and orientation. Thus, value orientation acts as a regulator embodying the volitional and other qualities of a person's behavior. Value orientation, as it were, directs actions and all the activities of society and each of its subjects, as a carrier of social relations. Value orientation is a conscious choice of values, a person's ability to navigate in certain circumstances of social expediency. The presence in society of a huge variety of values creates significant difficulties for a person in choosing the right value orientation. Therefore, in the process of formation of moral and value orientations, a person should rely on fundamental social, political, moral and cultural values, the content of which concentrates ideas about the social ideal, social justice and the duty of honor and dignity. Historical practice confirms that all types of value orientations have a regulatory effect on human behavior. However, the strength and direction of this influence are different for each of them. Values and value orientations are derived from social reality. In this regard, the definition of value orientation is justified as a reflection of certain objective relationships that take shape before the process of value orientation and act as the ultimate determinant of its content. In other words, as a mandatory element of the structure of all forms of social consciousness, value orientations are secondary, derived from social reality and are determined primarily by one or another character of social relations.

Historical practice shows that all types of value orientations have a regulatory effect on human behavior. However, the strength and direction of this influence are different for each of them. So at the level of psychology, value orientations were most often manifested in various kinds of unsystematized value orientations that direct a person's behavior to satisfy his individual needs and interests, which go beyond his everyday everyday life. Moreover, the mechanism of these needs is based on emotional factors, rather than on a logical interpretation of upcoming decisions. Therefore, at the level of social psychology, a value orientation cannot be transferred to the spiritual culture as a

whole, to moral, political, legal and other types of social behavior; it in this form cannot be a criterion for evaluating their behavior, even in its meaningful form, the value orientation in psychological aspect acts only as a psychological mechanism for the functioning of the individual. Value orientation as a reflection of objective social relations is determined, determined by the social relations that are reflected in it. In this regard, the value orientation of the individual is filled with a deep social meaning, and becomes a factor in its worldview position. Despite the fact that social progress is carried out as a result of the interaction of different cultures, each of which has its own unique, distinctive and original spiritual values, and naturally has its own national value orientation. The tendency to integrate different cultures is intertwined with the desire of each culture to preserve and develop traditional national values, rites, customs, language, and its own way of life. And in this regard, strives for a certain isolation. Various cultural programs and value systems reproduce in the consciousness and behavior of subjects value orientations associated with a specific carrier of certain spiritual values, value orientations.

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## STATE AND LAW

### КАК ЦИФРОВАЯ СУДЕБНАЯ ЭКСПЕРТИЗА МОЖЕТ ПОМОЧЬ БОРОТЬСЯ С ФИНАНСОВЫМИ ПРЕСТУПЛЕНИЯМИ?

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*В данной статье рассматривается важность судебной цифровой экспертизы, настоящее состояние и перспективы международного сотрудничества в этой области экспертизы. А также проанализирован опыт зарубежных стран в области регулирования судебной цифровой экспертизы, а также изучены вопросы совершенствования законодательства в этой области.*

*Ключевые слова: экспертиза, международное право, принцип взаимности, доказательств, информационная-технология, судебной цифровой экспертиза.*

Цифровая судебная экспертиза может помочь справиться с "зависимостью" от отслеживания электронных и рукописных документов вручную, которое делает невозможным проведение масштабного расследования. Как именно?

Технологии играют всё более важную роль в выявлении случаев мошенничества в организациях и снижении издержек, связанных с соблюдением требований в отношении финансовых преступлений и проведением расследований.

Цифровая криминалистика выходит на первый план, поскольку регуляторы финансового рынка, его участники и инвесторы сосредоточены на предотвращении или противодействии коммерческому мошенничеству в цифровую эпоху.

В старом бумажном мире доказательства обычно собирали на основе допросов и анализа документов.

Одним из этапов судебной экспертизы является поиск поддельных подписей или фальсифицированных записей в архивах документов, к примеру, в договорах с подрядчиками, счетах-фактурах и т.д.

Процесс сбора доказательств, требующий большой группы судебных следователей, также часто был долгим и утомительным. Это как найти иголку в стоге сена.

С ростом технологий возросла и роль цифровых методов раскрытия финансовых преступлений.

#### Большая точность

Поскольку в последние годы основная часть финансовой документации постепенно переводится в цифровые форматы, бухгалтерская отчетность все чаще регистрируется точнее и с большей детализацией. Данные также могут находиться "в движении", то есть в виде сообщений на персональных устройствах, в приложениях мессенджера или даже в облаке.

Где технология, там и преступность. Сейчас, увы, цифровое мошенничество находится на подъеме в формате кибер- и фишинговых атак, проникновения в корпоративную систему через вирусы.

В опубликованном в 2017 году международном исследовании КПМГ подчеркивается, что в тех случаях, когда мошенники используют технологии, около 24% из них создают фальшивые счета-фактуры или фальсифицируют

бухгалтерские данные, а 13% - нарушают права доступа к компьютерным системам. Около 20% связано с мошенничеством в соцсетях и мессенджерах, вброса фейковой информации.

Чтобы экспертиза сегодня была эффективно, необходимо быстро сохранять и использовать базы цифровых данных, используя передовые технологии и методики.

#### Цифровая экспертиза

Цифровая экспертиза сегодня играет очень важную роль в расследовании мошенничества.

Это объясняется и ростом возможностей криминалистики, и увеличением компьютерных мощностей, и эволюцией технологий хранения данных.

Сегодня стало проще собирать данные с множества устройств: компьютеров, смартфонов, планшетов, серверов, в том числе облачных, а также с различных носителей: внешних жестких дисков, флэш-накопителей и компакт-дисков.

Переход к цифровизации также способствует более широкому применению инструментов электронного обнаружения для более эффективного анализа цифровых данных.

Например, в соответствии с отраслевым стандартом электронных расследований (EDRM) такие инструменты используются для того, чтобы помочь компаниям правильно заниматься сбором, обработкой, анализом и размещением информации, хранящейся в электронном виде (ESI).

Специальные инструменты могут преобразовывать изображения документов в цифровые файлы, чтобы поиск данных происходил быстрее, а главное - эффективнее.

Эти инструменты также могут удалить дублирующуюся информацию, а также позволить параллельно работать нескольким специалистам.

Еще один плюс: это возможность удаленной работы с документами, а соответственно, международное сотрудничество между следователями, юристами и регулирующими органами, которые могут одновременно рассматривать цифровые доказательства на общей платформе.

Большее количество электронных данных - больше возможностей для анализа данных криминалистами.

С развитием возможностей искусственного интеллекта и машинного обучения эксперты могут использовать методы анализа данных для выявления потенциальных аномалий или пресловутый эффект "дымящегося ружья" в огромном массиве электронной информации.

Цифровая экспертиза может помочь справиться с "зависимостью" от отслеживания электронных и рукописных документов вручную, которое делает невозможным проведение масштабного расследования.

#### Быть настороже

Что должны делать компании, чтобы защитить себя?

Мошенники становятся более сообразительными и изобретательными, ведь и у них есть доступ к передовым технологиям.

В прогнозе генерального директора KPMG на 2018 год кибербезопасность определили приоритетной темой. Только треть компаний считает, что способны отразить кибератаку.

Таким образом, компании должны совершенствовать управление рисками финансовых преступлений в цифровом формате для предотвращения, выявления и реагирования на финансовые преступления.

#### Что должно быть в арсенале компаний?

Внедрение технологий для обнаружения рисков, связанных с корпоративными

коммуникациями: с агентами, дистрибьюторами, сотрудниками и поставщиками.

Проведение периодической криминалистической экспертизы данных по прошлому бухгалтерскому отчету, а также оперативных данных для выявления слабых мест, а также признаков потенциального мошенничества.

Внедрение технологий непрерывного мониторинга для оперативного выявления слабых мест или признаков потенциального мошенничества.

Профилактические работы по упреждению киберугроз в корпоративных системах.

Для эффективного снижения рисков финансовых преступлений компаниям необходимо также изменить методы управления и проведения цифровой экспертизы финансовых преступлений.

При надлежащем использовании технологии помогут значительно повысить эффективность в то же время снизить издержки, связанные с соблюдением требований по предупреждению угроз финансовых преступлений и проведению расследований.

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# TECHNOLOGY

## COLOR SCHEME OF THE INTERIOR

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*Аннотация: Когда мы оформляем интерьер помещения, мы влияем на его цветковое решение, а это цветковое решение в свою очередь влияет на нас. Вот почему одно помещение вызывает у нас хорошее, легкое, приподнятое настроение, в другом мы чувствуем - угнетенность, оно подавляет, сдерживает.*

*Abstract: When we design the interior of a room, we influence its color scheme, and this color scheme in turn affects us. This is why one room makes us feel good, light, elated, while in another we feel oppressed, it suppresses, restrains.*

*Ключевые слова: Интерьер, цвет, комфорт, подбор, чувство, психология.*

*Keywords: Interior, color, comfort, selection, feeling, psychology.*

In fact, it all depends on the color scheme of the interior. Color can have different psychological effects on a person - it excites in us a feeling of cold, and then warmth, it can give cheerfulness or Vice versa, fatigue, lightness or heaviness. The color scheme of the interior can visually expand the space, and narrow it, make it smaller, closer. With the help of color, you can give the interior transparency and massiveness, openness or closeness.

It is proved that a well-chosen color for the shop floor, for example, increases the productivity of workers, and a correctly and successfully selected color of the apartment interior can affect a person's mental activity, as well as affect their health and well-being.



Skillfully, correctly selected color, taking into account its properties, for the interior will help to achieve harmony and comfort in it. Ignoring the properties of color and its psychology, you can go to the extreme - to make the house dull and inexpressive, or Vice versa, too colorful for daily perception, and, consequently, tiring the eyes and brain.

The group of warm shades includes: yellow, red, yellow-orange, red-orange, and red-purple, and all colors derived from them. If the green color is more blue, it is cold; if it is dominated by yellow - it can be called warm. A warm group of colors seems closer, so these colors are called protruding, while cold shades are visually perceived further away, and they are called retreating.

The cold group includes-purple, blue, blue, blue-green, blue-purple shades. If the Windows of the room face South, it is better to use cold colors in it, they will make the room cooler, especially on hot summer days. If the room faces the North-design it in warm colors - it will seem warmer and more comfortable.



As a rule, it is recommended to paint the ceiling in white, because it creates the illusion of air, space, in

contrast to dark shades. But, if in a small room, but very high, the ceiling can be painted with dark colors, and the walls in light, cold tones, the room with this solution will visually seem more spacious, but a little lower, that is, natural, normal sizes.

Painting the ceiling in a dark color is justified only when the room is high and narrow, but in this case, the shade should be selected very carefully. If there is insufficient natural light, especially in old houses, warm light shades and tones are used for decoration - orange, white, green, beige, gray, and blue. These colors reflect 2 times more natural light than other colors. In southern cities, darker colors are used for decoration of rooms, and we have already discussed this, because they absorb excess sunlight - this is blue, terracotta, dark blue.

Do you want your room to evoke a state of rest? Then the best color is green. This is the color of nature and foliage, this is the color of freshness. Green color has a beneficial effect not only on the psyche, it reduces blood pressure, and in case of mental overstrain, it has a very beneficial effect on the brain. Green is great for decorating home interiors, but a room painted or papered with diluted green looks boring, soulless and unviable. In green, it is better to design rooms designed for relaxation and recreation. To avoid oversaturation of the green color, it is better not to use it in apartments with large wide Windows that also face green parks and arrays.

The color scheme is influenced by many factors: the size of the room, the purpose of the room, lighting and orientation, and the length of stay in this place. Having correctly distributed the purpose of rooms, you can almost accurately determine the color of the interior. For example, for a children's room, you should choose light, calm, gentle tones. Yellow color will help to correct the child's attention, increase his creative potential. Red shades will make it more active and mobile, but will interfere with a quick fall asleep and a restful sleep.

Blue or blue color - represents peace, silence and coolness. Darker shades help to relax, while lighter ones give a message of lightness and carelessness. Red color - excites and excites, as well as encourages action. It represents fire and blood. This color is suitable for strong and powerful people, it has a strong energy. Treatment with red color is contraindicated for hypertension and can not be used for people with unstable psyche, emotionally unbalanced.

Choosing a color solution for the interior of residential premises is a task whose importance cannot be overestimated. It is the right color that determines the mood and performance, comfort and convenience of a person's life. Color can not only decorate, but also spoil the interior of the home. You need to work with it very carefully and preferably after getting acquainted with the nature of color and the laws of building color compositions.

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## REQUIREMENTS FOR 3D EDITORIAL PROGRAMS USED IN THE EDUCATIONAL PROCESS

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*Annotation. The aim of the study was to review and analyze the requirements for 3D editors that allow students to work with 3D graphics and animation at universities. In this purpose, the possibilities of programs that allow the creation of models of varying complexity were explored. The article discusses several widely used 3D editors. The features of 3D graphic editors and the requirements that users place on them are defined.*

*Keywords. GoogleSketchup, SweetHome 3D, Autodesk 3ds Max, Autodesk Maya, Blender, KOMPAS-3D, SculptrisAlpha 6, Wings3d, three-dimensional graphics, animation, modeling, 3D, threedimention, 3d editor.*

Three-dimensional graphics and animation have a special place among computer technologies. Commercial software is still the leader in the professional software market, but there is a wide selection of free software among 3d editors. Significant changes are taking place in the modern industry, many organizations and firms need professionals who can work with 3D modeling packages.

The purpose of our study is to determine the requirements for training software, to analyze the features of 3d editors that are most suitable for the learning process.

The 3D symbol is derived from the English word "three dimensions", which means three-dimensional space. The concept of 3D editors and 3D graphics appeared in the 90s of the twentieth century, then it became clear that it is possible to create a third dimension - size. Such a discovery could only be made by a person with a spatial imagination that could reflect all the features of the object.

Thus, the existing two coordinate axes were filled with the depth "Z", which is the third criterion. One of the most brilliant researchers was Ivan Sutherland. He was just a graduate student at the Massachusetts Institute of Technology in 1961. Sutherland developed the Sketchpad program, which allowed to build simple three-dimensional images.

The graduate student was assisted by his best students, Ed Cathmull and Jim Blinn. Cathmull, led by Ivan Sutherland, modeled his first space object - his hand. Jim Blinn introduced the concept of 3D animation by moving three-dimensional shapes.

Today, there are many software products that specialize in creating 3D graphics and 3D animations. It's hard to choose needed one among so many programs.

For this, we first need to figure out what purpose we are going to use the 3D editor for. In our case, its used the learning process. 3D graphics can be used by the teacher as demonstration materials. On the other hand, students can learn 3D editors and use

them to create object models.

3d editors used in the training process must meet the following requirements:

1. Minimum financial costs.

In our opinion, the most important criteria for choosing a software tool is its free distribution. First, not every educational institution's budget can afford to buy an extra license for a 3D editor. Second, being able to practise in a 3D editor at home is very convenient and effective for students.

2. Computer system requirements.

Standard descriptions that a computer must comply with in order to use any software. These characteristics can describe the requirements for hardware (processor type and frequency, RAM size, hard disk capacity) and software environment (operating system, availability of installed system components and services, etc.). Typically, such requirements are created by the manufacturer or software author.

3. Compatibility with other graphics packages.

The ability to be an additional complement to another package is critical to creating a complete 3D model. Even the most professional 3D editors cannot provide the model with complete realism and therefore sometimes have to look for solutions from other editors. In such cases, the compatibility of the program with other packages will come in handy.

4. Orientation to the use of skills acquired in professional activities.

Editors selected for training should have the basic qualities of a professional editor, as their ability to work may be an advantage in future employment.

Given the above requirements that must be met by a program suitable for use in education, we present the results of our analysis of the most common types of 3D editors (Figure 1).



Figure 1. The most common types of 3D editors.

Depending on the characteristics of the above programs, the following conclusions can be made:

1. GoogleSketchup, Wings3d, SweetHome 3D, SculptrisAlpha 6 programs have the simplest and most convenient interface;

2. GoogleSketchup, Blender, Wings3d, SweetHome 3D, SculptrisAlpha 6 programs set minimum requirements for PC;

3. GoogleSketchup, Autodesk 3ds Max, Autodesk Maya, Blender, Wings3d programs work compatible with other packages;

4. SweetHome, 3D Wings3d, GoogleSketchup, Blender programs are suitable for

students with minimal ability to work with graphics.

5. Blender, Autodesk 3ds Max, Autodesk Maya, КОМПАС-3D software are professionally useful in 3D modeling.

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## RESCUE ROBOTS AND ITS APPLICATIONS

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*Abstract-Technological advances in robotics lead to robots becoming an integral part of human life due to their efficiency and high performance. In recent years, rescue robot systems tend to be more useful in a natural disaster. In this paper, we propose a sensor-based rescue robot system for use in a disaster.*

*Keywords: rescue robot system, sensors, natural disaster, emergency.*

A rescue robot is one of the types of a robot that can serve rescuing people. Rescue robots employ common situations such as mining accidents, urban disasters, hostage situations, and explosions. The advantages of rescue robots to these operations include reduced personnel requirements, reduced fatigue, and access to otherwise unreachable areas. Rescue robots in development are being made with abilities such as searching, reconnaissance and mapping, removing or shoring up rubble, delivery of supplies, medical treatment, and evacuation of casualties.

Types of disaster robots

- water rescue robots
- urban search and rescue robots
- earthquake and fire robots
- aerial rescue robots

Water rescue robots

E.M.I.L.Y.

E.M.I.L.Y. (acronym for Emergency Integrated Lifesaving Lanyard) is a robotic device used by lifeguards for rescuing swimmers. It operates on battery power and is operated by remote control after being dropped into the water from shore, a boat or pier, or helicopter [1]. Using an impeller motor to travel through water, it is able to reach victims much faster than a human lifeguard can by swimming, and it is more compact and less expensive to maintain than manned watercraft. It can also operate in weather and surf conditions that make other rescue attempts impractical. Once it reaches the victims its foam core allows it to function as a flotation device for up to 4-6 people holding onto side ropes or handles [2], [3].

Urban search and rescue robots

Atlas

Atlas is a bipedal humanoid robot primarily developed by the American robotics company Boston Dynamics, with funding and oversight from the U.S. Defense Advanced Research Projects Agency (DARPA). The 1.8-meter (6 ft) robot is designed for a variety of search and rescue tasks, and was unveiled to the public on July 11, 2013.

Atlas is intended to aid emergency services in search and rescue operations, performing tasks such as shutting off valves, opening doors and operating powered equipment in environments where humans could not survive. The Department of Defense stated in 2013 that it had no interest in using the robot for offensive or defensive warfare [4].

Earthquake and fire robots

Momaro

This robot has been specifically designed by the team NimbRo Rescue from the University of Bonn in Germany, to the requirements of the DARPA Robotics Challenge. It consists of an anthropomorphic, or human-like, upper body fitted on a flexible

hybrid mobile base. Momaro has four legs which end in pairs of directly-driven, steerable wheels. This allows for omnidirectional driving on rugged terrains and allows for adjustment of the height of the upper body. To overcome larger obstacles and climb stairs, individual legs are lifted and the robot makes steps [5].

Aerial rescue robots

Mountain drones

A search and rescue drone is an unmanned aircraft used by emergency services, such as police officers, firefighters or volunteer rescue teams, ideal for searching over vast areas for missing persons and crime victims in need of rescue and in any environment.

Unmanned aerial vehicles (UAVs) can provide real-time visual

information and data in the aftermath of an earthquake or hurricane. They can also become an eye in the sky to locate a lost person in the mountain for example. When a disaster or incident threatens lives and livelihoods, emergency responders need information and real-time imagery in order to make better decisions and save time. UAVs can provide situational awareness over a large area quickly, reducing the time and the number of searchers required to locate and rescue an injured or lost person, greatly reducing the cost and risks of search and rescue missions. The possibilities for helping ensure public safety are endless [6].

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RESEARCH INTO THE EXTRACTION OF PLASTICS

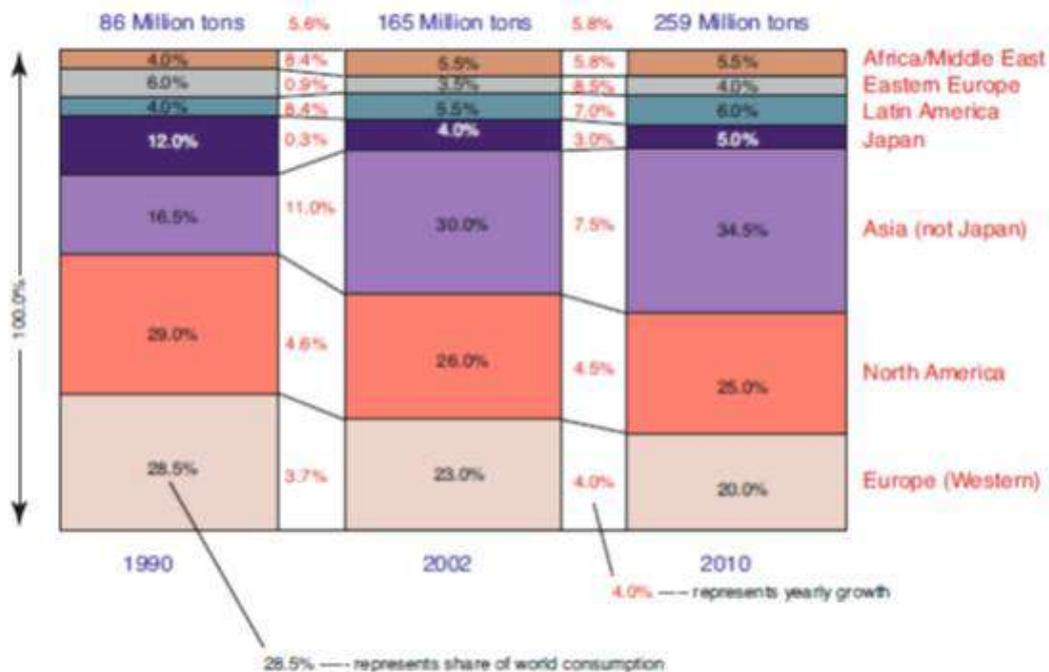
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*Abstracts: The article examines the rapid penetration of plastics into human life, their recognition as a long-lasting material to replace metals, as well as the types and applications of plastics.*

*Key words: plastic, thermoplastics, categories, polyethylene, polypropylene, natural polymers, polyamides, thermosetting, thermoplastics, chemical resistance.*

Today, almost fifty years later, plastics production is ten times higher than in 1967, while production of metals has barely doubled. However, to be fair, in the popularity contest between metals and plastics we can always present the data differently, namely by weight. This way, the tonnage of metals produced worldwide is somewhat lower as the tonnage of polymers.[2]

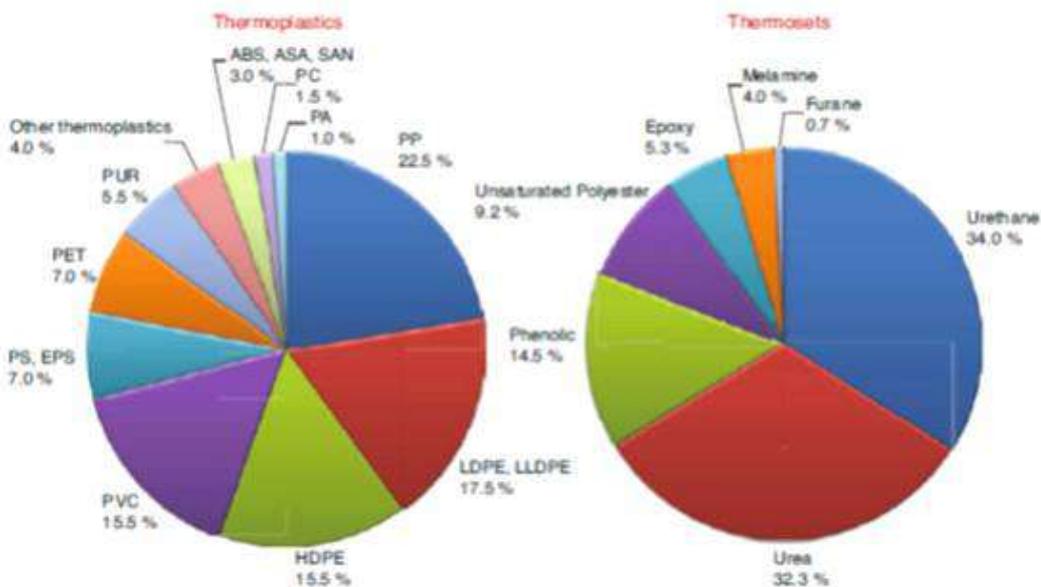
The use of plastics has seen continuous growth for the past 150 years. In fact, the world's annual production of polymer resins has experienced a steady growth since the beginning of the century, with growth predicted way into the 21st Century. This increase in use does not seem to slow down, as can be seen in Fig1, where the world trends of plastic use are depicted for the last two decades. [6] It is



**Figure 1-World annual plastics production since 1990**

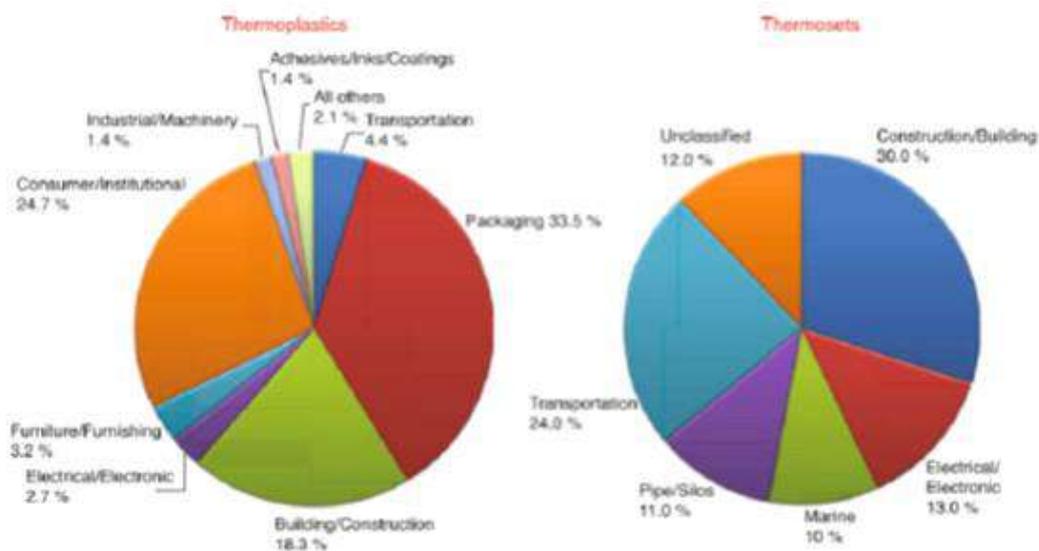
clear that between 1990 and 2010 the amount of plastics used world wide has tripled, growing at a consistent rate of over 5.5% annually. While every region has experienced a growth, the growth in Asia has been the greatest, making it the largest player in the world, followed by North America and Europe. There are over 18,000 different grades of polymers available today in the US alone 12 . As pointed out in Chapter 1, they can be divided into two general categories - thermosetting and thermoplastic polymers. Today, 88% of polymers produced were thermoplastics. Figure 2, shows a percentage break down of world's polymer production into major

polymer categories. Polyethylene is by far the most widely used polymeric material, accounting for 33% of the US plastic production. [1]

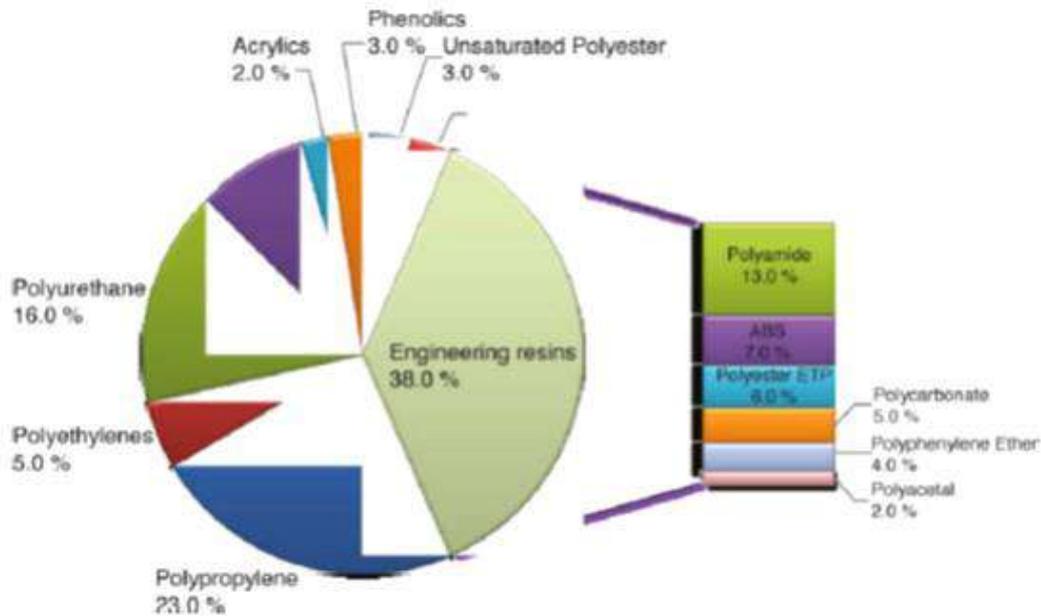


**Figure 2-Break-down of the world polymer production into major thermoplastic (2012) and thermoset (2010) polymer categories**

Packaging accounts for over one-third of the captive use of thermoplastics as graphically depicted in Fig. 2, whereas construction accounts for about half that number, and transportation accounts for only 4% of the total captive use of thermoplastics. On the other hand, 30% of thermosets are used in building and construction, followed by 24% used in transportation. [5] The transportation sector is one of the fastest growing areas of application for both thermoplastic and thermo-



**Figure 2.17 Break down of the 2011 world thermoplastic (2012) and thermoset (2010) polymer production into major areas of application**



**Figure 2.18 Break down of the 2012 world polymer use in automotive applications setting resins.**

Figure 2.18 presents a breakdown of plastic use in automotive applications in 2012. As expected, engineering resins are widely used; polyamides having the largest share in this category. Polyamides are ideal because of their high temperature resistance, toughness and chemical resistance, making them suitable for under-the-hood components and indispensable for applications such as fuel lines. Polypropylene, a commodity thermoplastic, occupies first place as an individual plastic. This is also expected because of its low cost and because PP is a common material found reinforced with glass in large structural parts in automotive applications, such as compression molded long fiber reinforced thermoplastic (LFT) automotive front ends, bumpers and spare wheel wells. Polyurethane, which is used to manufacture items such as reaction injection molded (RIM) automotive bumper fascia, occupies third place. [4]

It cannot be argued that, for some time now, polymers have become an indispensable material in everyday life. From sports to medicine and from electronics to transport, polymers are not only the most widely used material, but also the material that allows them to be used in many situations.. One can sum it up with Hans Uwe Schenck's often quoted phrase - "Without natural polymers, there would be no life; without synthetic polymers, no standard of living." [3]

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## SMALL ARCHITECTURAL FORMS IN LANDSCAPE DESIGN

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*Аннотация. Ландшафтное проектирование - это очень ответственный этап в процессе озеленения и благоустройства садового участка. Составление проекта ландшафтного дизайна дает возможность рационально использовать пространство, создать композицию в саду, правильно рассчитать и задействовать трудовые и экономические ресурсы, а также заранее увидеть весь образ обновленного сада при помощи проектных чертежей.*

*Abstract. Landscape design is a very important stage in the process of gardening and landscaping of a garden plot. Drawing up a landscape design project makes it possible to use space efficiently, create a composition in the garden, correctly calculate and use labor and economic resources, as well as to see the entire image of the updated garden in advance with the help of project drawings.*

*Ключевые слова. Малые формы, ландшафт, функция, беседка, форма, сад, композиция.*

*Keyword. Small forms, landscape, function, gazebo, form, garden, composition.*

Small architectural forms are functional and aesthetic elements of landscape design intended for the design of garden space. They decorate the exterior, organize the territory of the site, largely determine and emphasize the style of the garden, distract the eye from possible shortcomings, create expressive accents in the landscape of the landscaped area. At the same time, small forms serve not only as design elements, but also carry a functional load.

Do not think that small architectural forms are available only to well-off people. In fact, any cottager can afford to design a garden plot, you only need to attract a little imagination and feel the style of your garden. It is not necessary to erect on your site an expensive pavilion for recreation, instead of it you can build a small gazebo, replace the sculpture with an original pergola, and a step-by-step path that runs through the reservoir, on a small decorative bridge created by your own hands.

Types of small architectural forms.

A gazebo is probably the most common garden structure designed to protect from the scorching rays of the sun and rain. But for us, the gazebo is not just a utilitarian element of the garden. It has a huge emotional value and serves as an example of comfort in our garden space. A gazebo surrounded by an original flower garden is the first thing that appears in our garden in the process of landscaping.



A pergola is a wrought-iron or wooden structure that has an upper floor that resembles a roof. It is designed to create a cozy shaded area, for example, over a path or a Seating area. Such a small architectural structure may well replace the gazebo.

The rotunda is a type of gazebo and is characterized by a round shape, the presence of a colonnade and a dome. The rotunda is made of stone or concrete.

The pavilion is not much different from a closed gazebo except that it can be used all year round. More often it is said that it is an extension that is separate from the main house.



The bench is wide, thick planks on four legs connected by legs. This is how Wikipedia defines a bench. What does "bench" or "bench" really mean? Definitely, this word breathes romance. And for sure everyone has their own bench with memories.

Since ancient times, classical sculpture has been considered a symbol of luxury and taste. It was based on the image of a person - an athlete and a warrior, in particular, the texture of the body and various poses. A little later, the classical sculpture was joined by animal figures and fountains.



In modern gardens, classical sculpture still serves as a semantic and decorative accent of the overall garden composition. Especially classical sculpture is suitable for a garden in a romantic or regular style. To place the sculpture, you need to choose a place where it will look spectacular itself and decorate the place where it is installed.

Choosing a sculpture, you need to pay attention to its color and scale, so that it is harmoniously combined with the surrounding plants.

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## ZONING OF THE INTERIOR

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*Аннотация. Большинство из нас выросли в стандартных квартирах с комнатами, ограниченными четырьмя стенами. Волей-неволей мы принимали тот образ жизни, что навязали нам проектировщики типовой застройки, и только в последние годы начали перекраивать свои жилища по собственному разумению. Однако грамотная организация пространства не всегда требует сноса стен - порой достаточно продуманного зонирования площади в пределах уже имеющейся планировки.*

*Abstract. Most of us grew up in standard apartments with rooms bounded by four walls. Willy-nilly, we accepted the way of life that was imposed on us by the designers of standard buildings, and only in recent years have we begun to re-design our homes according to our own understanding. However, the proper organization of space does not always require the demolition of walls - sometimes a well-thought - out zoning of the area within the existing layout.*

*Ключевые слова. Интерьер, зонирование, комната, функция, дизайн, мебель.*

*Keyword. Interior, zoning, room, function, design, furniture.*

Interior (Fr. int<sup>?</sup>rieur-internal) - architecturally and artistically designed internal space of a building that provides a person with favorable living conditions; the internal space of a building or a separate room, the architectural solution of which is determined by its functional purpose.

Each room in the room is intended for something, i.e. it has its own function. We receive guests in the living room, sleep in the bedroom, and work in the office. One room can have one or more functions - the so-called multifunctional room. There are also new functions that were not previously allocated separately and are not included in the living environment - billiard rooms, gyms, libraries.

Zoning a room is a great way to combine several places in one room that will perform different functions and not overlap. After all in each room you can highlight and emphasize certain areas [4].

To date, a huge number of interiors of individual residential buildings have been designed. Different styles, different approaches, different results. Inexorably growing potential in the development of materials, enriching the ideas of designers, expanding the possibilities when creating a project [1].

When decorating residential premises, professional designers, first of all, take into account the individual preferences of the customer, his habits, lifestyle and personal interests. This is impossible without ensuring that the interior environment is fully consistent with the ideas of the owners of the house about the comfort and optimal level of comfort. The design of residential interiors should in many ways be a kind of visual portrait of a person living in a given country house or apartment [2].

Accordingly, at the first stage of the development of stylistic interior design, designers try to find out in as much detail as possible the customer's wishes and determine his personal type. Each person's views on personal space and home comfort are completely different: some people appreciate the harmony of interiors in each room and calm, bright colors, while others prefer non-standard, creative solutions and bright colors.

The main task of the designer is to make the most efficient use of the available space. To do this, in addition to combining individual functions in one room, the designer considers the use of such interior elements that could be as ergonomic as possible and

were able to ensure the rational use of a small living space. For example, installing prefabricated and folding furniture that can perform several functions at once. This can be a folding sofa in the bedroom with a storage compartment or a two-story children's bed, which saves space in the room [1].

Therefore, architects and designers made the following conclusion for themselves: the living environment should be free to move in it, interior items and furnishings should not interfere with it.

In addition, people need to easily move to all parts of the living space without intersecting with each other. This will preserve psychological comfort, which in turn will create a favorable environment for rest and relaxation [3].

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## МЕТОДЫ РЕСТАВРАЦИИ СТЕКЛЯННЫХ АРТЕФАКТОВ В ПОЛЕВЫХ УСЛОВИЯХ.

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*Аннотация: В данной работе приводятся методы очистки и реставрации археологических артефактов из стекла. Приведенные методы можно использовать в полевых также и в лабораторных условиях.*

*Ключевые слова: метод, артефакт, кислоты, очистка, коррозия*

Археологические предметы из стекла находят в различной степени сохранности. Хорошо сохранившиеся образцы встречаются редко, чаще они разрушены почвенной коррозией, даже могут рассыпаться при попытке изъять их из земли. Причинами почвенной коррозии являются грунтовые воды, которые бывают щелочными, кислотными и соевыми. Коррозионные процессы усиливают хрупкость, изначально свойственную стеклу. Стекло могут разрушать также различные микроорганизмы.

Разрушение стекла может быть поверхностным и сквозным. Поверхностное разрушение ограничивается только верхними слоями вещества толщиной от 0,3 до 2 мм, внутренняя часть стекла сохраняется без изменения. Коррозионный процесс сводится к тому, что из стекла постепенно выносятся щелочные и щелочноземельные составляющие. На поверхности остается в основном гель кремневой кислоты, который со временем превращается в тончайшую пленку.

Коррозионный слой представляет собой пористую корку, не препятствующую доступу воды к поверхности стекла и дальнейшему его разрушению. Поверхность предмета может быть равномерно покрыта слоистой пленкой, которая легко отстает в виде перламутровых чешуек серебристого, золотисто-коричневого, серо-черного цвета. Иногда коррозионный слой представляет собой более плотное образование, довольно прочно прилегающее к стеклу и имеющее зернистую структуру. Под разрушенным слоем стекло во всех случаях имеет кавернозную поверхность.

Извлечь стеклянный предмет из земли можно двумя способами: укрепить предварительно консервантом или применить жесткий каркас. Это зависит от характера грунта, в котором находится предмет. В сырой почве предмет укрепляют водными растворами, например, эмульсией ПВА, в сухой почве растворами полимеров в органических растворителях (спиртовыми или ацетоновыми растворами ПВА или ПВБ). Пропитывающий состав применяют в минимальном количестве, чтобы была возможность его удаления в лабораторных условиях. После того, как консервант высохнет, хрупкий предмет можно извлекать из земли.

На сегодняшний день реставраторами разработаны специализированные методы очистки для двух групп стекол - свинцовой и щелочно-известковой.

Свинцовые стекла следует промывать в слабо подогретом до 40-50 °С 1-4% растворе уксусной кислоты. Она не образует в воде нерастворимых солей и при взаимодействии с окисью свинца образует ацетат свинца, хорошо растворимый в воде. Раствор такой концентрации не повреждает поверхности стекла, уксусная кислота легко вымывается, при подогреве промывных вод она разлагается на газ и воду. После промывки предмет просушивается в спирте и покрывается

консервантом. Для щелочно- известковых стекол рекомендуются два способа попеременной промывки в кислотном и щелочном растворах и кислотной промывки.

Способ 1: берут 1-4% растворы уксусной кислоты и едкого натра. Предмет погружают в кислотный раствор и начинают одновременно медленно подогревать оба раствора до 40-50 °С, постоянно поддерживая эту температуру. Затем предмет перемещают в уже подогретый щелочной раствор, и, подержав в нем некоторое время, снова переносят в кислотный раствор. Время пребывания в каждом растворе одинаково (от 5 до 10 минут). После этого предмет промывают в дистиллированной воде, подогретой до той же температуры, оставляя его там до полного остывания воды, затем предмет просушивают спиртом и покрывают консервантом. При попеременном воздействии кислоты и щелочи происходит бурная реакция нейтрализации, в результате чего возникает эффект механического и теплового воздействия на коррозионные слои. Весь процесс очистки занимает 30-50 минут.

Способ 2: используют 5-% раствор щавелевой кислоты и 3-6 % водный раствор аммиака. В этом случае растворы не подогревают. Предмет также попеременно погружают в растворы, затем промывают в дистиллированной воде и просушивают в спирте. Для щелочно-известковой группы стекол можно рекомендовать более мягкий и медленный метод-промывка в 5 % растворе щавелевой кислоты. Если предмет имеет сильно изъеденную коррозией поверхность, а также механическую поверхность повреждения (трещины), то надо отказаться промывки стекла подогревом, а если требуется, то глубокую промывку заменить компрессорами и расчисткой с помощью скальпеля и мягкой кисти.

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## ВЫСШЕЕ ОБРАЗОВАНИЕ УЗБЕКИСТАНА В РЕАЛИЗАЦИИ ПОТЕНЦИАЛА МОЛОДЕЖИ

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*Аннотация: Тезисно представлена проекция современных требований на процесс подготовки специалистов в высших учебных заведениях. Проведенный анализ показывает необходимость и развитие инновационной деятельности высшего образования в стране. Предлагается ряд рекомендаций в этом направлении.*

*Ключевые слова: высшее образование, инновации, качество высшего образования, совершенствования системы образования, социальное развитие, общество*

Перед Республикой Узбекистаном на нынешнем этапе реформ стоят целый ряд стратегических задач, среди которых дальнейшее развитие системы образования является важнейшим фактором процветания страны и устойчивого роста экономики. На сегодня высшее образование в Узбекистане готовит специалистов для различных сфер общественной жизни и отраслей хозяйства. Учебный процесс систематизирует знания и полученные навыки, ориентируя студентов на решение теоретических и практических задач в векторе выбранной специализации с творческим использованием достижений современной научной мысли и технологий.

"Наука и просвещение имеют первостепенное значение для повышения интеллектуального и духовного потенциала не только молодежи, но и всего нашего общества, - подчеркивал Ш.Мирзиёев в своём послании Олий мажлису, - для этого нам прежде всего необходимо воспитать кадры новой формации, выступающие инициаторами реформ, обладающие стратегическим видением, глубокими знаниями и высокой квалификацией. Именно поэтому мы начали реформирование всех звеньев образования - от дошкольного до высшего. Там, где не развивается наука, наблюдаются регресс, отсталость общества во всех сферах" Стремление овладеть современными знаниями, быть просвещенными и обладать высокой культурой должно стать для всех нас жизненной потребностью

В общественной структуре постиндустриального общества сфера образования тесно переплетена со всеми элементами социальной структуры, и от состояния этой сферы во многом зависит ход общественного развития. Именно от решения проблем образования, которые всегда остро стояли и которые еще более усугубились в последние десятилетия в связи с бурным развитием информационных технологий, зависят перспективы социально-экономического развития страны. В свою очередь, усиление роли знаний, информации в общественном развитии, постепенное превращение знаний в основной капитал принципиально изменяют роль сферы образования в структуре общественной жизни.

Высшее образование на базе среднего специального, профессионального образования является самостоятельным видом системы непрерывного образования и осуществляется в соответствии с законом Республики Узбекистан "Об образовании" и Национальной программой по подготовке кадров". В целях обеспечения высшей школы Узбекистана нормативно-правовыми актами приказом Министерства образования Республики Узбекистан было утверждено положение "О высшем образовании", которое вступило в силу 4 марта 2003 г.

Образование как система - это уникальный социальный институт, призванный развивать и преумножать человеческий капитал, формируя идеи, социально-

значимые идеалы, мировоззренческие позиции, надежды, конструирующие как будущее общество в целом, так и судьбу отдельных людей.

Одним из первых социологов - теоретиков был Т. Парсонс, сделавших тему образования предметом своего специального рассмотрения. В концепции образования Парсонса весьма чётко представлен процесс дифференциации образования как отдельной сферы жизнедеятельности общества, выявлены условия этой дифференциации. Применяя к анализу образования структурно-функциональный метод, Т. Парсонс рассматривает образование как социальную систему. Это позволяет выявить структуру и функции образования как системы, определить микро- и макроуровень функционирования образования - на уровне межиндивидуального взаимодействия в рамках образовательного учреждения и на уровне взаимодействия образования с другими подсистемами общества.

В монографии "Американский университет" Парсонс Т. сосредоточил своё внимание исключительно на изучении только одной структурной части системы высшего образования университета. Он рассматривает высшее образование, как специфический тип социальной системы - академическую социальную систему. Академическая социальная система определяется Т.Парсонсом, как тип социальной системы, имеющей особое отношение к культуре. Это особое отношение состоит в том, что первичная социальная функция данной системы - действовать "доверительное лицо" когнитивной культуры, то есть посредством постановки и решения исследовательских задач, создавая новое знание и распространять далее полученные результаты через преподавания. Согласно Т. Парсонсу, академическая социальная система является частью системы рациональности попечительной подсистемы общества. Образование, таким образом, - это система проектирования будущего.

Наиболее универсальным определением образования, отражающим изменение его функций в современном мире, является определение образования как "целостного феномена". Именно таким должно быть образование XXI века - оно базируется на высшем синтезе научного гуманизма, развития в личности ума, творческих способностей, духа социальной ответственности, баланса интеллектуальных, этических, эмоциональных и физиологических компонентов индивида.

Образование, в том числе и высшее - это процесс изменения и воспитания человека, придания ему новых качеств и свойств, которых не было ранее. Основной задачей высшего профессионального образования является формирование специалистов, не только способных разрабатывать и использовать методы и средства труда в определенных областях деятельности, но и людей, умеющих действовать и применять полученные знания в новых условиях - условиях конкурентной рыночной экономики.

Конкурентоспособность человека на рынке труда определяется отношением его качества и стоимости (потребляемыми ресурсами). Качество специалиста связано с его свойствами, относящимися к способности удовлетворять имеющиеся или предполагаемые потребности социально-экономической системы. Законы конкуренции требуют высокой адаптивности к требованиям рынка и непрерывного совершенствования человека во всех областях деятельности в разрезе идей и принципов всеобщего (полного) качества. Таких новых людей (специалистов) призван готовить вуз.

На сегодняшний день, процесс постоянного и непрерывного совершенствования системы образования, должен соответствовать не только требованиям государственных образовательных стандартов, но и социальным потребностям и

ожиданиям студентов и преподавателей.

Для инновационного прорыва страна должна иметь качественную систему образования на всех уровнях. Анализ отечественных и зарубежных исследований проблем качества образования показывает, что сама система образования любой страны выполняет базовую интегральную функцию - обеспечение приоритета развития интеллектуальной культуры населения над процессом интеллектуализации всех видов и форм его деятельности и поведения. При нарушении данного приоритета замедляется социальное развитие, начинают доминировать социальные явления, ведущие к краху социальной системы.



**EUROPE, SCIENCE AND WE**

**EVROPA, VĚDA A MY**

**ЕВРОПА, НАУКА И МЫ**

Publishing house Education and Science s.r.o.

IČO : 271 56 877

Frýdlanská 15/1314 , Praha 8

MS v Praze , oddíl C,vložka 100614