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## SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH

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# **SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH**

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## XALQARO HUQUQ VA DIPLOMATIYA

### INTERNATIONAL LAW AND DIPLOMACY

### МЕЖДУНАРОДНОЕ ПРАВО И ДИПЛОМАТИЯ

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**Annotatsiya:** *Xalqaro huquq va diplomatiya bir-biri bilan chambarchas bog'langan sohalar bo'lib, ular davlatlarning global maydondagi xatti-harakatlarini tartibga soladi. Xalqaro huquq davlatlar o'rtasidagi o'zaro munosabatlarni, jumladan, inson huquqlari, savdo va qurolli mojaro kabi masalalarni tartibga solish uchun asos yaratadi. U vaqt o'tishi bilan shakllangan shartnomalar, odatiy amaliyotlar va huquqiy tamoyillarga asoslanadi. Diplomatiya esa dialog, hamkorlik va murosaga kelish orqali muzokaralar olib borish va xalqaro munosabatlarni boshqarishni nazarda tutadi. Bu esa davlatlar o'rtasidagi nizolarni hal qilish, ittifoqlar tuzish va milliy manfaatlarini ilgari surish uchun asosiy vositadir. Diplomatiya ko'pincha shartnomaviy muzokaralar va diplomatik konferensiyalar orqali xalqaro huquqiy normalarni shakllantirishda hal qiluvchi rol o'ynaydi.*

**Annotation:** *International law and diplomacy are closely related fields that regulate the behavior of states in the global arena. International law provides a framework for regulating relations between states, including issues such as human rights, trade, and armed conflict. It is based on agreements, customary practices and legal principles developed over time. Diplomacy involves negotiating and managing international relations through dialogue, cooperation and compromise. This is the main tool for resolving disputes between countries, forming alliances and advancing national interests. Diplomacy often plays a decisive role in the formation of international legal norms through treaty negotiations and diplomatic conferences.*

**Аннотация:** *Международное право и дипломатия — тесно связанные области, регулирующие поведение государств на глобальной арене. Международное право обеспечивает основу для регулирования отношений между государствами, включая такие вопросы, как права человека, торговля и вооруженные конфликты. Он основан на соглашениях, обычной практике и правовых принципах, разработанных с течением времени. Дипломатия предполагает ведение переговоров и управление международными отношениями посредством диалога, сотрудничества и компромисса. Это главный инструмент разрешения споров между странами, формирования альянсов и продвижения национальных интересов. Дипломатия часто играет решающую роль в формировании международно-правовых норм посредством переговоров по договорам и дипломатических конференций.*

**Kalit soʻzlar:** *xalqaro huquq tushunchasi, xalqaro huquq funksiyalari, diplomatiya huquqi, diplomatiya normalari, tushuncha va tamoyillari, xalqaro huquq xususiyatlari.*

**Key words:** *concept of international law, functions of international law, diplomatic law, diplomatic norms, concepts and principles, features of international law.*

**Ключевые слова:** *понятие международного права, функции международного права, дипломатическое право, дипломатические нормы, понятия и принципы, особенности международного права.*

Xalqaro huquq - davlatlar va boshqa xalqaro huquq subyektlari xohish-irodasini muvofiqlashtirish yoʻli bilan vujudga keladigan, ular oʻrtasidagi turli munosabatlarni tartibga soladigan, xalqaro huquq subyektlari tomonidan xalqaro majburiyatlarni vijdonan bajarilishini taʼminlashga xizmat qiladigan xalqaro shartnomalar va odat normalari tizimi, umum tan olingan prinsiplar yigʻindisi. Xalqaro huquq uzoq vaqt davomida ijtimoiy munosabatlarning rivoji natijasida vujudga keldi. Uning paydo boʻlishi va shakllanishi urugʻ jamoasi va qabilalararo munosabatlar davriga toʻgʻri keladi. Xorijiy huquqshunos Martti Koskenniemi, xalqaro huquq tushunchasiga turli xil xalqaro subyektlarning siyosiy qadriyatlari hamda manfaatlarini amalga oshirilishi vositasi sifatida yondashadi. Uning taʼkidlashicha, xalqaro huquq davlatlararo munosabatlarda adolatni taʼminlash boʻyicha nazorat olib boradi<sup>1</sup>. Xalqaro huquq xalqaro munosabatlarning arjalmas qismi hisoblanadi va bir-biriga taʼsir qilib turadi. Bunday taʼsir insoniyat jamiyati rivojining manbalaridan biri hisoblanadi. Shunga muvofiq xalqaro munosabatlarning rivoji xalqaro huquqni muntazam oʻzgartirib turadi. Boshqacha soʻz bilan aytganda, xalqaro huquq rivoji bosqichlari xalqaro munosabatlar rivoji bosqichlariga mos keladi.

Xalqaro huquq milliy huquq bilan bir qatorda turuvchi alohida huquq sohasi hisoblanadi. Xalqaro huquqning oʻziga xos xususiyatlari quyidagilarni oʻz ichiga oladi:

1. Xalqaro huquq xalqaro xarakterdagi ijtimoiy munosabatlarni, davlatlar chegarasi doirasiga kiradigan va davlatlarning ichki vakolatlariga kirmaydigan munosabatlarni tartibga soladi.

2. Xalqaro huquq normalari xalqaro hamjamiyat ishtirokchilarining teng huquqliligiga asoslangan holda xalqaro huquq subyektlari tomonidan yaratiladi.

3. Xalqaro-huquqiy normalarning bajarilishini taʼminlash xalqaro huquq subyektlarining oʻzlari tomonidan amalga oshiriladi (alohida xalqaro-huquqiy javobgarlik instituti orqali yoki kollektiv - BMT Xalqaro Sudi, BMT Xavfsizlik Kengashi sanksiyasi, turli qoʻmita va komissiyalar orqali)

4. Xalqaro huquq manbalari xalqaro huquq subyektlari tomonidan xohish-irodani muvofiqlashtirish yoʻli bilan xalqaro shartnoma va xalqaro odat shaklida yaratiladi. 5. Xalqaro huquq subyektlari suveren davlatlar, oʻz mustaqilligi uchun kurashayotgan millatlar va xalqlar, xalqaro hukumatlararo tashkilotlar, davlatga oʻxshash tuzilmalar. Yuqoridagi xususiyatlar xalqaro huquq tizimini ichki davlat huquqi tizimidan tubdan ajratib turadi. Xalqaro huquqning oʻziga xos xususiyatlaridan yana biri, uning normalari aynan xalqaro

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<sup>1</sup> !What is International Law for?. Martti Koskenniemi. International Law. Malcolm D.Evans. Oxford University Press,



huquq subyektlari tomonidan yaratiladi. Xalqaro shartnoma va xalqaro odat xalqaro huquq normalarini yaratishning asosiy ikki yo'li hisoblanadi. Xalqaro huquq normalari rang-barang sanksiyalardan iborat bo'lishi, ya'ni huquqbuzarga taqiq qo'yish, majburlov choralari shular jumlasidan. Masalan, BMT Ustavining 41-moddasiga muvofiq huquqbuzarga Xavfsizlik Kengashi qarori bilan turli xildagi sanksiyalar qo'llanilishi mumkin: iqtisodiy munosabatlarni, temiryo'l, dengiz, havo, pochta, telegraf, radio va boshqa aloqalarni to'liq va vaqtinchalik to'xtatib qo'yish, shuningek, diplomatik aloqalarni uzish va boshqalar.

Xalqaro huquq funksiyalari ko'p qirraliligi bilan ajralib turadi, ular nafaqat xalqaro-huquqiy obyektlarga ta'sir ko'rsatishi bilan, balki u yoki bu munosabatlar sohasida erishilgan xalqaro-huquqiy tartibga solish darajasi bilan baholanadi. Xalqaro huquqning ta'siri natijasida qandaydir munosabatlar paydo bo'ladi, tartibga solinadi, to'xtatiladi yoki bekor bo'ladi.

Xalqaro huquq funksiyasi - xalqaro-huquqiy tartibga solish predmeti hisoblangan munosabatlarga xalqaro huquq tomonidan ta'sir ko'rsatishning asosiy yo'nalishlari. Quyidagi funksiyalarni alohida ajratib ko'rsatish mumkin:

1. Barqarorlashtirish - uning mazmuni shundan iboratki, xalqaro huquqiy normalar dunyo hamjamiyatini birlashtirishga, muayyan xalqaro tartibotni mustahkamlashga, ko'proq barqaror holatga keltirishga chaqiradi;

2. Tartibga solish - uning qo'llanish chog'ida ijtimoiy munosabatlar tegishli yo'llar bilan tartibga solinadi va xalqaro tartibot o'rnatiladi;

3. Muhofaza qilish — xalqaro-huquqiy munosabatlarni lozim darajada himoya qilishni ta'minlashdan iborat. Xalqaro huquq subyektlarining huquq va qonuniy manfaatlarini himoya qiluvchi mexanizmlar mavjud.

4. Ta'minlash - xalqaro huquq javobgarlik haqidagi normalarni ham o'z ichiga oladi, ushbu funktsiya xalqaro huquqning umum tan olingan normalariga xalqaro huquq subyektlari tomonidan rioya qilinishini ta'minlaydi. Xalqaro majburiyatlar buzilganligi uchun xalqaro huquq subyektlariga xalqaro huquq yo'l qo'yadigan javobgarlik choralari va sanksiyalarni qo'llash mumkin;

5. Axborot-tarbiya - davlatlar tomonidan to'plangan tajribalarni bir biriga yetkazish, kishilarning o'z huquqlarini xalqaro darajada himoya qilish, kishilarni qadriyatlar va inson manfaatlariga rioya qilish ruhida tarbiyalashdan iborat.<sup>2</sup>

Diplomatiya (Fransuzcha - davlatlarning tashqi siyosat sohasidagi vazifalarini amalga oshirish, shuningdek, chet elda huquq va manfaatlarini himoya qilish sohasidagi rasmiy faoliyati. "Diplomatiya" termini yunon tilidagi "ikki bukilgan qog'oz" so'zidan olingan. Qadimda Yunoniston va Rimda taxtakach muqova ichiga solingan xat elchilarga ular vakolatini tasdiqlovchi ishonch yorlig'i yoki hujjat sifatida taqdim etilgan. Bu termin hozirgi ma'noda G'arbiy Yevropada 18-asr oxirida rasm bo'lgan. Diplomatiya davlat tashqi siyosatining eng muhim vositalaridan biri hisoblanadi, ana shu siyosatning maqsad va vazifalari diplomatiya shakli va uslublarini belgilab beradi. Diplomatiya faoliyatning asosiy

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<sup>2</sup> Xalqaro huquq. Darslik. Mas'ul muharrir y.f.n., prof. G.Y. uldasheva// Mualliflar jam oasi. -T.: TDYU nashriyoti, 2018. - 450 bet.

shakllari: diplomatik kongresslar, konferensiyalar yoki kengashlar; nota, memorandum, bayonot va hokazo shakllardagi diplomatik yozishma; xalqaro shartnomalarni tayyorlash va imzolash; davlatning elchixonalar va missiyalar orqali amalga oshiradigan chet eldagi vakilligi; xalqaro tashkilotlar faoliyatida ishtirok etish; tashqi siyosiy masalalar bo'yicha hukumat nuqtai nazarini matbuotda yoritish. Diplomatik muassasalar va ularning mas'ul xodimlari diplomatik imtiyoz va immunitetlardan foydalanadi. Xalqaro huquqqa binoan, diplomatik vakillarga o'zlari ishlayotgan mamlakat ichki ishlariga aralashish man etiladi. Diplomatikaning shakllanishi davlatning yuzaga kelishi, uning muayyan organlari va lavozimdor shaxslari faoliyati bilan bog'liq bo'lgan. O'zbek davlatchiligi tarixida chet ellar bilan muntazam aloqalar yo'lga qo'yilganligi yaxshi ma'lum. Amir Temur davlati Frantsiya, Angliya, Kastiliya, Konstantinopol, Genuya va Venetsiya bilan elchilar orqali aloqalarni yo'lga qo'ygan. O'zbekiston mustaqil davlat bo'lgach, xalqaro munosabatlarning to'la huquqli sub'yektiga aylandi. 120 dan ziyod davlat bilan diplomatik aloqa o'rnatdi (2002 -yil yanvar). BMT, Yevropa xavfsizlik va hamkorlik tashkiloti va boshqa obro'li xalqaro tashkilotlar va Kengashlarga a'zo bo'ldi. Uning tashqi siyosati, diplomatik faoliyati O'zbekiston Respublikasi Konstitutsiyasida belgilanganidek, davlatlarning suveren tengligi, kuch ishlatmaslik yoki kuch bilan tahdid qilmaslik, chegaralarning daxlsizligi, nizolarni tinch yo'l bilan hal etish, boshqa davlatlarning ichki ishlariga aralashmaslik hamda xalqaro huquqning umum e'tirof etgan boshqa qoida va me'yorlariga asoslanadi. Teng huquqlilik, o'zaro manfaatdorlik va o'zaro hurmat O'zbekiston Diplomatikasining asosiy tamoyillaridir. O'zbekiston Respublikasi jahonda yangicha iqtisodiy tartib o'rnatish, butun dunyoda, jumladan Markaziy Osiyo mintaqasida yalpi tinchlik va xavfsizlikni ta'minlash uchun, xalqaro terrorizm va giyohvandlikka qarshi kurashda jahon hamjamiyati bilan birga faol harakat qilmoqda, bu yo'lda barcha diplomatik kanallarni ishga solmoqda. O'zbekistonda Diplomatika kadrlari Toshkentdagi Jahon iqtisodiyoti va diplomatiya institutida tayyorlanadi.<sup>3</sup>

Diplomatik huquq - davlatlar va xalqaro huquqning boshqa subyektlari o'rtasidagi aloqalar tartibiga taalluqli prinsip va normalami o'z ichiga olgan xalqaro huquqning sohasidir. Shu bilan birga, diplomatik huquq xalqaro huquqning qadimiy va alohida mustaqil sohasidir. Diplomatik va konsullik huquqini bir-biridan farqlash maqsadga muvofiqdir, chunki ularning oxirgisi davlatlararo munosabatlarning maxsus va yetarli darajada tor sohasini ifodalaydi. Shuningdek, diplomatik huquq xalqaro-huquqiy normalarning nisbatan mustaqil tizimi bo'lib, xalqaro munosabatlarda davlatlar vakilligini tartibga soladi. Mazkur munosabatlarning ishtirokchilari davlatlarning o'zlari bo'lib, ushbu xalqaro munosabatlar huquqiy munosabatlar xarakterini oladi. Tegishli diplomatik muassasalar funksiyasi o'z davlati manfaatlarini u ishtirok etayotgan turli xalqaro (siyosiy, iqtisodiy, ijtimoiy, madaniy va boshqa) munosabatlarda himoya qilishdir. Diplomatik huquq garchi cheklangan doiralarda bo'lsa-da, konsullik munosabatlarini ham qamrab oladi. Diplomatik huquq, avvalambor, davlatning tashqi aloqa idoralarining huquqiy holati va faoliyati hamda hukumatlararo tashkilotlarning va ularning xodimlari imtiyoz va immunitetlari masalalarini tartibga soladi. Diplomatik huquq "tashqi aloqalar huquqi" deb

<sup>3</sup> <https://milliycha.uz/ru/diplomatiya/>

nomlash lozim bo'lgan xalqaro huquq institutining bir qismidir, chunki xalqaro huquq normalari bilan tartibga solinadigan xalqaro munosabatlarda nafaqat davlatlar, balki boshqa subyektlar, xususan, xalqaro tashkilotlar - universal, mintaqaviy va mahalliy, xalqaro organlar va o'z tashqi aloqalarini ular nomidan qatnashuvchi tuzilmalar orqali ifoda etuvchi boshqa xalqaro institutlar ishtirok etadi. Diplomatik huquq xalqaro huquqning eng qadimiy sohasidir. O'tmishda boshqa davlatlarga vaqti-vaqti bilan yuboriladigan elchilar instituti mavjud bo'lgan. Shu bilan bir qatorda diplomatik aloqa asoslari, dastlab elchilarning daxlsizligi to'g'risidagi normalar yuzaga keldi. Yevropada XV1-XV1II asrlarda doimiy diplomatik vakolatxonalarining vujudga kelishi bilan asta sekin diplomatik huquq rivojlana bordi. Ikkinchi jahori urushiga qadar diplomatik va konsullik huquqi asosan odat normalaridan tashkil topgan edi. Yagona umumiy xarakterga ega bo'lgan hujjat 1815-yilgi diplomatik vakillarning darajalari to'g'risidagi Vena protokoli (reglamenti) hisoblanadi. Mazkur Reglamentning normalari vaqt o'tishi bilan bilan umume'tirof etilgan normalarga aylandi. Ikkinchi jahon urushidan so'ng diplomatik va konsullik huquqining progressiv taraqqiyoti va kodifikatsiyasi maqsadida bir qator xalqaro konvensiyalar tuzildi. Bular amaldagi: 1961 -yilda qabul qilingan Diplomatik aloqalar to'g'risidagi Vena konvensiyasi; 1969-yilda qabul qilingan maxsus missiyalar to'g'risidagi konvensiya; 1975-yilda qabul qilingan davlatlarning universal xarakterdagi xalqaro tashkilotlar bilan o'zaro munosabatlaridagi vakilligi to'g'risidagi Vena konvensiyasi; 1963-yilda qabul qilingan konsullik aloqalari to'g'risidagi Vena konvensiyasidir. Ulardan tashqari, xalqaro tashkilotlarning imtiyoz va immunitetlari to'g'risidagi tegishli qoidalar odatda, ushbu tashkilotlarning nizomlarida bo'ladi. BMT va ixtisoslashtirilgan muassasalarga taalluqli ikkita asosiy konvensiya, ya'ni 1946-yilgi BMT imtiyoz va immunitetlari to'g'risidagi konvensiya hamda 1947-yilgi BMT ixtisoslashtirilgan muassasalarining imtiyoz va immunitetlari to'g'risidagi Konvensiya harakatdadir. Ko'pgina davlatlarda diplomatik va konsullik, vakolatxonalar to'g'risidagi qonunchiliklari mavjud. O'zbekiston Respublikasida ham "O'zbekiston Respublikasining diplomatiya daraja va martabalarini belgilash to'g'risida"gi, "O'zbekiston Respublikasining diplomatik vakolatxona rahbarlarini chaqirib olish tartibi to'g'risida"gi O'zbekiston Respublikasining Konsullik ustavi" to'g'risidagi qonunlari shular jumlasidandir.

Diplomatik huquq manbalari ichida markaziy o'rinni xalqaro shartnomalar egallaydi. Ma'lumki, xalqaro shartnomalar turlicha nomlanishi mumkin va ularning shakli ham turlicha bo'lishi mumkin. Diplomatik huquqda xalqaro shartnomaning turi hisoblangan — xalqaro konvensiyalar eng asosiy manba hisoblanadi.

Diplomatik huquqda manbaa vazifasini o'tagan yana bir muhim hujjat bu 1963-yil 24-aprelda qabul qilingan "Konsullik aloqalari to'g'risidagi Vena konvensiyasi"dir. Konvensiya 1967-yili kuchga kirgan, unga 152 dan ortiq davlatlar qo'shilgan, ular orasida O'zbekiston ham bor. Konvensiya 79 moddadan iborat yirik hujjat bo'lib, unga qo'shib ikki protokol qabul qilingan. Ularning mazmuni diplomatik aloqalar to'g'risidagi Vena konvensiyasining protokollari kabidir. Salohiyati jihatidan diplomatik huquqning manbalariga ko'p tomonlama shartnomalarniing yana ikkitasini kiritish joizdir. Bulardan birinchisi 1969-yilda qabul qilingan "Maxsus missiyalar to'g'risidagi konvensiya bo'lib,

ikkinchisi 1975-yilda qabul qilingan “Universal xarakterdagi xalqaro tashkilotlar qoshidagi davlatlardagi vakolaixonalari to'g'risidagi Vena konvensiyasi”dir. Shuni alohida ta’kidlash kerakki, diplomatik huquqda xalqaro shartnomalardan tashqari, ikki tomonlama, ya’ni ikki davlat tomonidan tuzilgan xalqaro shartnomalar ham manbalik vazifasini o’taydi. Ular diplomatik munosabatlar to’g’risidagi, konsullik aloqalari to’g’risidagi xalqaro shartnoma bo’lib, ular xalqaro huquqning subyektlari - davlatlar, xalqaro tashkilotlar tomonidan tuzilishi mumkin. Ular ikkala davlat yoki xalqaro tashkilot o’rtasida paydo qiluvchi, majburiyatlar tug’diruvchi xususiyatlarga egadir.<sup>4</sup>

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**CONSANGUINEOUS MARRIAGES AND ITS CONSEQUENCES****Asadov Asatillo***Student of the Faculty of Medicine of SamSMU***Ruzikulova N.A***K. b. Sc., Department of Medical Biology and Genetics*

**Abstract:** *The article analyzes data on consanguineous marriages and its consequences. A consanguineous marriage is a marriage between relatives of varying degrees. Close people have a higher chance of carrying the same alleles and therefore their children are more homozygous than those born from non-consanguineous unions. The harmful effects of consanguineous marriages are high. In this case, the frequency of autosomal recessive hereditary diseases increases significantly.*

**Аннотация:** *В статье анализировано данные о близкородственных браках и его последствиях. Близкородственным браком считается брак между родственниками различной степени. Близкие люди имеют более высокий шанс носительства одинаковых аллелей и поэтому их дети являются в большей степени гомозиготными, чем родившиеся от не близкородственных союзов. Вредные последствия близкородственных браков высоки. В этом случае существенно повышается частота аутосомно-рецессивных наследственных заболеваний.*

**Ключевые слова:** *Близкородственные браки, противопоказания, генетика, больные дети*

**Key words:** *Consanguineous marriages, contraindications, genetics, sick children*

Despite a lot of contraindications, people enter into related marriages, because of this, children are born with various diseases and defects, as a result, the topic of limiting these marriages is relevant. In genetics, two people are considered close relatives if they have at least one common ancestor. In this case, only parents, grandparents and great-grandparents are considered. A marriage between relatives is called consanguineous, or inbreeding. Marriage between siblings (incest) is considered unacceptable and prohibited by law in most world cultures. Despite the emerging trends towards a decrease in the frequency of consanguineous marriages in many countries, this problem remains relevant due to the possible risk of poor health of children born in such families.

The work of Turkish scientists who studied the perinatal outcomes of more than 7 thousand births revealed a significant excess in the level of postnatal mortality in the case of consanguineous marriages by an average of 45%: by 57% in cities and by 39% in rural areas [2]. About the high frequency of consanguineous marriages in Uzbekistan among women who gave birth to children with congenital malformations of the maxillofacial region (20.97%) [2].

One study conducted in Uzbekistan found that in consanguineous marriages, the incidence of primary infertility was 7.7%, and if the parents of these women were relatives, the incidence reached 12.5%. Another study studying sensorineural hearing loss indicates

the frequency of inbred marriages among those examined is 36.8%, which is more than 2 times higher than this figure for the entire population. The largest number of these marriages were marriages between first cousins: children of sisters – 42.5%, children of brothers and sisters – 35.8%, and children of brothers – 21.7% of cases [3]. The human chromosome set is diploid. In the nucleus of each cell, similar chromosomes are present in pairs. And if from a pair of chromosomes one has a gene with a defect, then the normal gene of the second chromosome from this pair “works” and the disease is absent. The likelihood that parents who are not relatives in a pair of chromosomes will have defective genes responsible for the same function is very small.

This explains the low frequency of gene diseases in children if the parents are not related. The likelihood that a child will have identical gene defects on paired chromosomes increases many times over. And the greater the degree of relationship, the higher the probability even for healthy parents.

If the parents of the unborn child are relatives, then prenatal diagnosis of hereditary diseases is carried out. Many diseases in children from consanguineous marriages are congenital and are diagnosed in newborns based on characteristic symptoms. In some cases, genetic testing is performed. Etiological treatment of hereditary diseases associated with consanguineous marriages is impossible. Therefore, the main method of preventing these diseases remains screening of newborns for hereditary diseases and syndromes, genetic counseling and health education.

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## YOSH VOLEYBOLCHILARNI TEXNIK HARAKATGA O'RGATISHDA YONDASHTIRUVCHI MASHQLARDAN FOYDALANISH

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**Abstract:** *Sport amaliyotida o'rgatish jarayoni serqirrali va keng qamrovli bosqich bo'lib, o'ziga xos uslublar, vositalar va pedagogik prinsiplar asosida amalga oshiriladi. Mazkur dissertatsion ish yosh voleybolchilarni texnik harakatlarga o'rgatishda maxsus yondashtiruvchi mashqlardan foydalanish afzalligini tadqiqot asosida o'rganishga bag'ishlangan.*

**Keywords:** *Yosh, voleybolchilar, texnik harakatlar, yondashtiruvchi mashqlar, o'rgatish, qo'l va oyoq harakatlari, komanda ishbilarmonligi.*

### KIRISH:

Yosh voleybolchilarni texnik harakatga o'rgatishda yondashtiruvchi mashqlar hayajanli va samarali yondashuv vositalaridan biridir. Bu mashqlar, o'yinchilarning qo'llanmalarini, bloklarini, servislarini va boshqa voleybol ko'nikmalarini o'rganish va rivojlantirishda muhim rol o'ynaydi.

Voleyboldagi asosiy harakatlanish bu yurish, yugurish, yonga qadam tashlab yugurish, orqa bilan, qadam tashlab to'xtash, sakrashdan iboratdir. Ko'p hollarda harakatlanishlar qiyin emas deb izohlanib, ularga yetarli e'tibor berilmaydi. Bu esa noto'g'ri fikrdir. Chunki o'yinchining turli harakatlarni bajarishi uchun holat va joy tanlashi bajariladigan harakatning samarasiga to'g'ridan-to'g'ri ta'sir qiladi. Shuning uchun harakatlanishlarni o'rgatishga katta e'tibor qaratish zarur

Umumrivojlantiruvchi mashqlar. Bu bo'limning asosiy vositalari tarkibiga yugurishlar va harakatli o'yinlar kiradi. Shu maqsadda quyidagi yugurishlardan: to'g'ri yo'nalishda yugurishlar; sonni yuqoriga ko'tarib yugurish; sakrab-sakrab yugurishlar; boldirni orqaga siltab yugurishlar; orqa tomon bilan yugurishlar; yo'nalishni o'zgartirib yugurishlardan foydalaniladi. To'pni: tayanch holatdan ikki qo'llab, sakrab ikki qo'llab, sakrab bir qo'llab, orqaga yiqilib turib ikki qo'llab uzatish mumkin. Oxirgi usuldan voleybolda kamdan-kam, keskin holat yuzaga kelganda foydalaniladi. Yo'nalishi bo'yicha to'p uzatishlar (to'p uzatuvchiga nisbatan) quyidagicha bo'ladi: oldinga, o'z ustiga, orqaga. Mashqlarni bajarish vaqtida qo'llar tirsak qismidan bukilgan bo'lib, harakatlanishga faol yordam berishi kerak. Depsinishdan so'ng oyoqlarning to'g'irlanishiga erishish zarur. "Kun va tun", "Raqamlarni chaqirish", "Olib ketishga intil" va boshqa shu kabi harakatli o'yinlardan foydalaniladi.

Tayyorlov mashqlari. Tayyorlov mashqlari o'zining ta'siriga qarab diqqat va javob harakat reaksiyalarining tezkorligi va ayrim harakatlar tezkorligini rivojlantiruvchi mashqlarga ajratiladi. Birinchi guruhdagi mashqlarga eshitish va ko'rish signallari bo'yicha harakatlanish mashqlari kiradi. Mashqlarni guruhdagi shug'ullanuvchilar yoshiga va jismoniy holatiga qarab moslashtirgan holda tanlanadi va yuklamalar berib boriladi. Mashqlarni berishda "oddiydan – murakkabga" tamoyiliga rioya qilish kerak. Masalan,





trenerning signaliga asosan tezlikni o'zgartirmasdan harakat yo'nalishini o'zgartirgan holda harakatlanish yoki aksincha bajarish mumkin. Mashqni o'zlashtirish darajasiga qarab ular turli usulda qo'shib olib boriladi

## ORGANIZATIONAL AND ECONOMIC BASES OF IMPLEMENTATION OF SOCIO-ECONOMIC MANAGEMENT OF TERRITORIES

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**Abstract:** *This article presents ideas and considerations about the organizational and economic foundations of the implementation of social and economic management of territories.*

**Key words:** *socio-economic development, regional management, regional development strategy, production, investment potential.*

### INTRODUCTION:

It has been observed in experience that any global problem first arises in certain regions and regions, and if it is not prevented, it will take shape on a global scale. It follows from this that when studying the processes of socio-economic development, it is appropriate to study them from a territorial point of view, and for this it is necessary to deeply understand the meaning of the concepts of "territory management" and "territory socio-economic development". Many economists are conducting scientific research in this regard.

Therefore, if we judge from the reforms carried out on the socio-economic development of the regions in the Republic of Uzbekistan, the emerging economic space within the state is determined by the fact that the regions are becoming independent economic entities. In this context, it is appropriate that regional policy is increasingly viewed as a competition policy and a more comprehensive development policy, rather than as a way to eliminate disadvantages. It should be noted that until now the concept of "territorial management mechanism" has not found a clear definition and a clear reflection. In the economic literature, it is often equated with the concept of "management system", which leads to a tautology of precise definitions.

In order to justify the nature of the structure and mechanisms of regional administration, it is important to explain the concept of "territorial administration system".

On the basis of our study of the theoretical foundations of management and modern concepts of management, the following definitions of this important scientific category arise: regional management system is a set of complex components, management bodies, target strategies, principles, tasks, structures, resources, methods and methods, integrated in the regional economy. It includes the closely related techniques and technologies that create integrity and the mechanisms of influence on it, the potential of the territory, socio-economic processes, the level of well-being of the population, households and enterprises.

From this definition, it follows that the regional management system creates management mechanisms through all the above-mentioned main elements: the activities of management bodies, management's target instructions, principles, functions, structures, resources, methods, technologies and tools. It can be said that the management mechanism

cannot exist without the above structural components, and at the same time, there is no management system without the socio-economic management mechanisms of the region.

Regarding the relationship of the main components with the regional management system, it should be noted that each of them is adequately covered in the literature on regional management. That is why their general definitions are inconsistent here.

This ensures taking into account the requirements of the internal and external environment, as well as the aggregation of similar activities, or the changing economic activity, or the timely restructuring of the socio-political situation. Analysis of the factors determining the growth of territorial subjectivity shows that they are mainly exogenous and have an external effect on the territory. These include, first of all, the globalization of the economy, the development and formation of the territory. The main products of the activity of the region as a development subject are:

- competitiveness of the territory and its subsystems (social, economic, management, environmental, infrastructure, institutional, security);

- competitiveness of products produced in the region;

- competitive resources, potential and opportunities of the region.

The main legislation and principles of regional management are explained in detail in the first chapter of the dissertation, as well as the developed model and the above-mentioned symbols form a certain theoretical base. Based on this, the modern system of regional administration should meet the following requirements:

- implementation of scientifically based expediency, stimulating and regulating the development of the territory in accordance with the national socio-economic policy and the market conditions of economic management;

- ensuring systematization, purposefulness, balance, compactness of the internal economy of the territory;

- formation of flexibility, flexibility of regional economy and effective movement of special opportunities;

- optimization of the interaction of factors in different periods of extended public reproduction;

- to coordinate the processes of modernization of the regional economy;

- participation and assistance in the formation of an innovative model in the regional economy;

- integration of various socio-economic interests of regional associations of different levels for the prosperous development of the region;

- encourage and support creativity in all spheres of life activity of regional associations;

- creation of strategic development of the region and organization of implementation of strategic plans;

- establishment of mutually beneficial interregional cooperation;

- increase the competitiveness of the region and actively establish itself in the system of world economic relations.

The establishment of a modern regional management system opens the way to effective use of its management mechanism in a specific region of the Republic of

Uzbekistan, integration of society's development into global processes, and ensuring the growth of the population's quality of life.

Due to the fact that it is not possible to review all the structural components of this mechanism in detail through a single scientific study, various aspects of the organizational-economic component that deserve to be studied in terms of its comprehensiveness, role and main importance as a central, large and independent mechanism, while being considered the main one in the territorial management system we focus on disclosure. The organizational-economic mechanism of regional management mainly affects the socio-economic processes of the regional community, the performance of tasks and the achievement of goals. At the same time, in the current changing conditions of social development, the socio-economic mechanism of territorial management remains insufficiently studied.

According to our definition, the organizational-economic mechanism of regional management is a complex set of activities of the regional community, which serves to increase the efficiency of the regional economy and the level of living well-being of the population, and is regulated by means of coordination, promotion, and regulatory means of social and market conditions.

In the presented organizational-economic mechanism, it is carried out by regional management bodies based on the consideration of external national and global environmental factors. Also, it will be formed based on the proposed organizational-economic mechanism of regional management, specific principles of management, tasks, territorial structure, resources, new methods and modern management technologies.

In order to implement these influencing processes, the organizational-economic mechanism has the ability to make economic decisions based on its means. In addition, the individual components of the enlarged impact tools are usually interconnected with some elements of other tools in various ways. For example, a valuable tool for developing a strategy for modern regional development includes a number of analytical, evaluation, target, design, expert, organizational and other methodological tools. It is also closely related to the creation of legislative norms, forecasting, development planning and programming, formation of innovative activity, regional marketing, involvement of the regional community, and others. Based on defining the strategic management of socio-economic development of the region as a management activity, it is aimed at achieving the strategic goals set in unstable, competitive, market conditions, and its diagnostic analysis. It will also be improved based on the planning of the region's development strategy, the implementation of the selected strategy and the monitoring of its results. Therefore, it is always necessary to take into account a certain complexity of the influence of various tools that make up the organizational-economic mechanism by summarizing its systemic tools.

Thus, the organizational-economic mechanism of territorial management is a multidimensional, multifaceted system of influence tools and processes, which is usually a diverse, sometimes complex interdependence set to achieve a certain result in the real economy. Therefore, it is possible to ensure the necessary "chain reaction" that achieves the intended economic efficiency based on the use of various content, direction-based,



interdependent, complementary means of influence, and to show the necessary impact on socio-economic processes.

Based on the above, to conclude, the presented organizational-economic mechanism is to create a basis for the priority development of the national economy in the field of territorial management.

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## IMPROVEMENT OF INDUSTRIAL ENTERPRISES IN THE CONDITIONS OF DIGITAL ECONOMY

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**Abstract:** *The article examines the issues of improvement of industrial enterprises in the conditions of digital economy. Proposals and recommendations have been developed to diversify the fuel and energy balance of the country through the widespread use of modern energy, in particular, renewable energy sources.*

**Keywords:** *global energy sector, technological transformation, virtual power plants, renewable energy sources, cost-effectiveness, energy resources, energy efficiency, energy capacity, alternative energy sources.*

### INTRODUCTION:

According to the results of the conducted research, the first place was taken by Japan. The country of Kunchikar received the highest marks in terms of the main indicators of the research - the number of Nobel laureates, the average IQ (intelligence) level of the population, and the mastery rate in schools. Switzerland, China, the USA and the Netherlands took the next place. China ranked third because of its high population intelligence, while the United States ranked fourth thanks to the number of Nobel laureates. South Korea, Taiwan and Singapore are in the leading positions in terms of the number of educated (intelligent) young people, but they did not rank high only because of the small number of Nobel laureates. According to McKinsey experts, digital assets currently account for about 10% of global GDP, while their development rate is equal to 30% of global economic growth. The development of digital assets is like an accelerator. As a result of the reforms implemented in the new Uzbekistan, openness, the development of international economic and political relations have created opportunities for the modernization of industrial sectors in our country, as well as technical and technological re-equipment. An example of this is the increase in the volume of foreign trade of our country. Hundreds of expressions such as "electronic government", "electronic management", "telecommunications", "internet", "website" have become an integral part of our life. IT covers every aspect of our daily life.

As a result of the ongoing reforms, 178 services have been launched through the Electronic Government and the unified interactive services portal, and these services save time and costs of citizens. We know very well that building a digital economy requires the right infrastructure, a lot of money and labor resources. Therefore, active transition to the digital economy will be one of our top priorities in the next 5 years. Digital technologies not only improve the quality of products and services, but also dramatically reduce excess costs, especially corruption.



Here, let's talk about the concept of digital economy. It is an activity aimed at optimizing the interrelated production, distribution, sharing, consumption and management processes (inter-human, inter-machine, cloud and BIG DATA) by optimizing the exchange of information with the help of digital technologies and the Internet.

It should be noted here that the foundations of a new renaissance period - the third Renaissance - are being laid, which shows the greatness of our perspective. It is difficult to imagine the development of society and country without knowledge and enlightenment.

Yusuf Khos Hajib wrote in his work "A person without knowledge is a tree without fruit, what should a hungry person do with a tree without fruit?" showed how relevant and important the place of knowledge is. The special emphasis of the head of our state on science and education and putting the issues of development of the digital economy on the agenda is a clear indication that the path chosen by Uzbekistan leads to only one destination, that is, we have entered a new stage of building a society that is economically and socially strong, and the laws of the market economy are fully applicable. is enough.

Specific quantitative indicators for the development of the digital economy in Uzbekistan have also been established, covering the period from 2020 to 2023. In particular, in 2020-2021, connecting all health institutions, schools and preschool educational organizations, as well as villages and neighborhoods to a high-speed Internet network, and improving the quality of communication services, fully modernizing the digital infrastructure, and ensuring access to modern telecommunications services in all regions, by 2022 plans to increase the share of electronic government services to 60 percent by 2023 and to double the share of the digital economy in the country's gross domestic product by 2023.

The results of practical efforts did not wait long. According to the results of June 2020, "Speedtest Global Index" published new data, and in the rating of Internet speed, Uzbekistan currently occupies the 94th place, an increase of 36 places was observed in one year. In general, the speed of wired Internet in Uzbekistan has increased by 2.5 times in the last year.

In order for us to join the ranks of developed countries, first of all, it is necessary to take the shortest path to progress through the in-depth acquisition of knowledge in the field of advanced modern information and communication, Internet and digital technologies.

After all, due to our geographical location, we have to cross at least two national borders in order to reach ports on large water bodies by land. This will have a negative impact on our position in the world market, both in terms of time and economically. The solution is directly related to intelligence, new innovations and the potential of skilled personnel.

Another important aspect is digitization of the sectors that the population is facing the most in our country, priority is being given to lightening people's burden. In particular, practical processes for digitization of health care, cadastre, social protection, agriculture, and education have started and will soon bring positive results.

The digital economy will bring about certain changes in society, in particular, its impact on working conditions will be significant. In the conditions of digital transformation,

the increase in the automation of processes, artificial intelligence, analytical systems working with huge data, and the increase in the use of robots serve as substitutes for labor resources. As a result, business conditions improve and efficiency increases significantly.

Today, the global energy sector is entering the next significant phase of technological transformation that began with the invention of the light bulb by the Edison Electric Light Company in 1880. Business models are built around innovative technologies, including decentralized energy generation technologies, virtual power plants and energy storage devices. In the near future, widespread traditional energy supply and energy exchange will give way to modern energy infrastructures. Soon, the regulation of the sector with new technologies, especially subsidies for renewable energy sources, will increase the demand for smart energy metering and transmission systems. Modernization of the economy based on the large-scale implementation of modern energy, in particular, renewable energy sources and smart systems of energy metering and transmission, will reduce the dependence of countries on external energy resources. It allows to save a part of the stock of fuel resources, such as oil, gas and coal. This means that in the near future, the increase in the use of renewable energy sources will become one of the main factors in the sustainable development of countries, the basis of energy strategy in the long term, and it will have a great economic effect.

The fact that the indicator of the energy capacity of the GDP of Uzbekistan is 1.7-2.0 times higher than that of developed countries indicates that there are sufficient opportunities for effective use of energy resources in the near future in our country, and the optimal use of energy resources, improvement of energy efficiency, which should be resolved in the light of our policy in the energy sector. shows that there are priority issues such as reduction of energy capacity, extensive use of alternative sources of energy. Therefore, providing the economy with energy resources in our country can be done by solving the following two tasks:

First, diversification of the fuel and energy balance of our country through the wide use of modern energy, in particular, renewable energy sources in all sectors of the economy. It is achieved by replacing traditional fuels with renewable energy sources in the production of electricity and thermal energy.

Secondly, implementation of long-term programs to reduce the energy capacity of production in economic sectors and measures to improve the environmental condition in industrial sectors based on digitization of energy sectors.

Digitization of energy sectors in our country and the use of renewable energy sources in all sectors of the economy is an important factor in increasing the competitiveness of sectors in the long term. The development of digital energy and the widespread introduction of renewable energy sources will have a positive effect on the provision of energy resources services in the networks, the reduction of costs, the increase of production efficiency, as well as the availability of sustainable energy, the saving of financial resources, and the mitigation of the complications of climate change.

The large potential of renewable energy sources in our country will further encourage the development of an ecologically clean and green economy. The total potential of

Uzbekistan for renewable energy sources is 117,984 mln. establishing t.n.e., its technical potential is 179.3 mln. equal to t.n.e. The main share of this potential is solar energy, and its total potential is 50,973 mln. t.n.e. and technical potential of 177 mln. equal to t.n.e. The technical potential of solar energy is 3-3.5 times more than the primary energy consumption of our country. The favorable climatic and geographical location of our country allows the use of solar energy potential for industrial purposes on a large scale (Table 1).

**Table 1**

**Potential of renewable energy sources in Uzbekistan [1]**

Renewable energy sources	General potential	Technical potential
Hydropower	9,2 million t.n.e.	2 million t.n.e.
Wind energy	2,2 million t.n.e	0,4 million t.n.e.
Solar energy	50 973 million t.n.e	177 million t.n.e
Total renewable energy sources (excluding geothermal energy)	50 984 million t.n.e	179 million t.n.e
Geothermal energy	67 000 million t.n.e	0,3 million t.n.e
Common renewable energy sources	117 984 million t.n.e	179,3 million t.n.e

As in other developing countries, there remain a number of problems, challenges and negative factors related to the development of digital energy and the relatively innovative renewable energy sector:

First, the production cost of renewable energy sources is high and they have less capacity compared to conventional energy sources, the unit cost of conventional energy sources compared to other countries. Today, in developing countries, the cost of electricity production based on renewable energy sources remains high compared to traditional energy sources. Our country ranks among the leaders in the world in terms of the low cost of supplying electricity to the population, which is produced in a traditional way. In our country, the average price of electricity for residents per kWh in 2018 was 2.4 cents [2], while in Kazakhstan it was 3.5 cents [3], in Turkmenistan 0.7 cents [4], in Russia 4.8 cents, 13.0 cents in China [5], 33.8 cents in developed countries Germany, 18.6 cents in Great Britain, 33.3 cents in Denmark, 31.8 cents in Belgium [6]. Currently, due to the cheapness of using natural gas in the production of electricity for our country, the production of electricity based on renewable energy sources is gaining importance mainly in providing electricity supply and continuity in remote areas.

Secondly, there are no specific financial mechanisms for the use of digital energy and renewable energy sources (tariffs and taxes) and government support. Inadequate formation of the legal framework for the economic mechanisms of encouraging the use of renewable energy sources.

Thirdly, insufficient development of progressive techniques and technologies based on modern management systems. One of the main reasons for the slow development of digital energy and renewable energy sources is the technical imperfection of these types of energy

production technologies and the low efficiency of capital return of financial resources involved in this energy system in the short term from an economic point of view.

Fourthly, as in many developing countries, the population does not have enough information about digitalization in the energy sector and the possibilities of modern types of energy, especially renewable electric energy, and is adapted to old views.

Fifth, the fact that digital energy and renewable energy sources have the character of innovative rapid development of techniques and technologies. For example, solar electric panels were originally manufactured on the basis of semiconductor silicon, but later the production of photovoltaic panels switched to amorphous silicon. Initially, only glass solar panels were produced, but now modern flexible plastic solar panels are also being produced. Due to the insufficient localization of the production of renewable energy sources and technologies, their cost, installation and maintenance costs remain high. Rapid development in the field requires transition from previously implemented technologies to new technologies until the return on capital is fully realized over time.

Based on the above, the following conclusions were drawn:

- it is necessary to eliminate a number of problems and negative factors related to the digitization of the energy sector in the country and the development of the renewable energy sector;

- it is necessary to effectively use the factors that have a positive effect on the development of the energy sector and to increase the level of digitalization in the energy sector and the share of renewable energy sources in the primary energy consumption;

- to ensure that renewable energy sources are practically not exhausted, that they are available in some form in all regions, and that interest in using this type of energy will increase in the near future, etc.

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## THE NEED TO DEVELOP THE ACTIVITIES OF ISLAMIC WINDOWS IN BANKS

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**Annotation:** *The development of Islamic windows in banks provides an opportunity to improve and strengthen the social protection system of the population in the process of transition to a competitive market economy. The introduction of the principles and definitions of this institution is of great importance at a new stage of the country's economic development.*

*This article analyzes the concept of the Islamic financial system, its characteristics and significance, its impact on the national mentality and public life, the principles of Islamic finance, the problems of opening branches and their solutions.*

*The article is based on research and legal analysis of Islamic finance. The ethical, legal, economic and personnel issues of the establishment of Islamic branches in the bank have been studied and the author's conclusions have been formed on this issue.*

**Keywords.** *Islamic finance, religious beliefs, riba, principles and rates of Islamic finance.*

Radically improving the effectiveness of reforms in the socio-economic sphere in our country, as well as organizing programs for the development of regions, industries and industries in 2022-2026 on the basis of scientifically based innovative approaches is one of the issues raised at the level of public policy<sup>5</sup>. It is impossible not to take into account the national mentality, religious and moral values and the main directions of state policy in the development of the economic foundations of the state. One of the foundations of such an economy is Islamic finance.

Islamic finance is a partnership-based, asset-backed, ethical, sustainable, environmentally and socially responsible financial system<sup>6</sup>. In this system, the main focus is on the mutual distribution of risks, linking the financial sector with the real economy, increasing financial opportunities and the welfare of society<sup>7</sup>.

When it comes to Islamic finance, it is appropriate to analyze the opinions expressed on this issue. For example, according to Z.Iqbal, Islamic finance is a system that promotes social justice in society, based on the correct distribution of available opportunities (resources) in material and spiritual terms. A. Gheit and A. Worthington argue that Islamic finance is a financial service or product based on the principles of Sharia<sup>8</sup>. According to M.K. Lewis and L.M. Algaud, there are five religious characteristics that make up the

<sup>5</sup> Resolution of the President of the Republic of Uzbekistan RP-5223 dated August 13, 2021 "On additional measures to improve the quality and role of economic research in socio-economic development".

<sup>6</sup> Jahongir Imamnazarov. Analytical report on the results of a study on the introduction and use of Islamic financial products in Uzbekistan. UNDP, 2020 ([www.uz.undp.org](http://www.uz.undp.org))

<sup>7</sup> <https://www.worldbank.org/en/topic/financialsector/brief/islamic-finance>

<sup>8</sup> Zamir Iqbal is Vice President, Finance, and Chief Financial Officer at the Islamic Development Bank.

identity or basis of Islamic finance. These are riba (percentages), haram (prohibited) or halal (allowed), gharar (uncertainty) or maisir (gambling), zakat and Sharia (Islamic) advice<sup>9</sup>.

The Islamic financial system differs from the Western financial system in the following features:

**Firstly**, the Islamic financial system strives for equality, a just society and economic order. Therefore, in the Islamic financial system, fairness, priority of moral qualities, proper allocation of financial resources, prohibition of interest (riba), avoidance of exploitation, profit through price manipulation and protection of the poor (i.e. recipients of debt) is the main goal;

**Secondly**, Islamic finance emphasizes the principle of cooperation and brotherhood. This is evidenced by the risk, profit and loss allocation system, which contributes to improving business efficiency, rather than the creditworthiness of an entrepreneur in the traditional financial system.

Today, the most effective way to introduce Islamic finance is to revive the processes of creating Islamic branches in banks. The first steps towards the introduction of Islamic finance in our country date back to 2000. In particular, during this period, our country became a member of the Islamic Development Bank (2003) and the Islamic Private Sector Development Corporation (2004). These institutions have opened the door to a wide range of opportunities to enter the Islamic finance market.

Today, more than 36 million different nationalities and peoples live in our country. However, the majority of these citizens (93%) are Muslims. Therefore, religious values have priority in the public life of the country. For centuries, these values have influenced society and government. These cases once again confirm that Islamic finance as a national value has firmly entered the way of life of citizens.

Today, more than 36 million different nationalities and peoples live in our country. However, the majority of these citizens (93%) are Muslims. Therefore, religious values have priority in the public life of the country. For centuries, these values have influenced society and government. These cases once again confirm that Islamic finance as a national value has firmly entered the way of life of citizens.

According to the current legislation, the activities of business entities are constantly supported by the state. However, it is impossible not to take into account the national mentality and values when implementing economic reforms. This situation does not give citizens equal opportunities to fully enjoy the rights established by law.

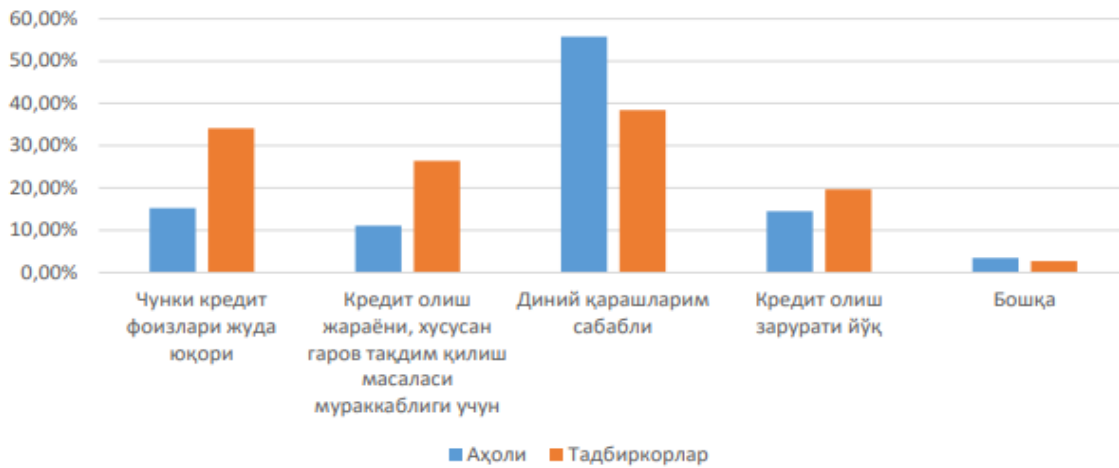
According to the results of a survey conducted by the Chamber of Commerce and Industry within the framework of the UN DP, the majority of respondents (business representatives) 38%, 56% of individuals reported that they do not take loans from traditional banks because of their religious beliefs (Table-1)<sup>10,11</sup>

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<sup>9</sup> Lewis M.K. and Algaoud L.M. (2001). Islamic Banking. Northampton, Massachusetts, USA: Edward Elgar Publishing Ltd.

<sup>10</sup> S.Z.Abrorov, J.M.Imamnazarov. Islamic Finance: new opportunities for Uzbekistan. Article. Economics and Education / 2021, issue 4. 146-159.

<sup>11</sup> What do we know about Islamic finance? <https://www.gazeta.uz/uz/2022/10/17/islamic-finance/>



**Table-1. Survey results**

**THIS CAN BE EXPLAINED AS FOLLOWS:**

According to Islamic Sharia, an additional amount that a creditor takes from a debtor over a certain period of time in addition to the original property is considered usury. Allah in the Quran mentions in the surah "Al-Baqara":

"Those who eat riba will rise (from the graves) only as a man beaten by Satan and gone mad. That's because they say: "Trading is like usury". However, Allah made trading legal, and usury was forbidden. Therefore, whoever stops when the message from his God comes, leave what happened before and your deeds to God. And whoever turns back (to riba) is the master of fire. They will abide in it forever" (verse 275).

"O you believers! If you are believers, fear Allah and renounce usury" (verse 278). "If you do not believe, then believe in the war that will be waged by Allah and His Messenger. If you repent, your benefits will be in yourself. Do not offend, and you will not be offended" (verse 279).

According to Islamic law, riba is a grave sin, which is confirmed by hadith. For example, according to a hadith transmitted from Jabir, may Allah be pleased with him:

**"The Messenger of God, peace be upon him, cursed the moneylender, his mediator, his secretary and his two witnesses and said: "They are equal".**

It is reported from Abdullah bin Khanzala, may God bless him and grant him peace: **"The Messenger of Allah, may God bless him and grant him peace, said: "One dirham, which a person earns by usury, is harder than committing adultery thirty-six times"** (Imam Ahmad, narration of Tabarani).

It is reported from Baro ibn Azib, may Allah be pleased with him:

**"The Messenger of Allah, peace and blessings of Allah be upon him, said: "There are seventy-two types of usury, and the smallest of them is equal as proximity to the mother of man. The worst form of usury is when a person encroaches on the honor of his brother"** (retelling by Tabarani).

Therefore, the norms established in the Quran regarding usury are imperative. They cannot be bypassed or discussed. These circumstances are the main reason for the non-use of loans offered by banks for those who follow Islamic values. This is a matter of faith, which, in turn, affects other issues related to financing activities.



The Islamic financial system pays great attention to the equitable distribution of economic resources within society. It believes that without this it is impossible to ensure social harmony and economic growth. This system covers economic relations in accordance with the norms of Islamic law in the process of using and distributing money.

At the same time, the Islamic financial system prohibits profit (interest) in exchange for lending or borrowing, and all financial processes must be based on real economic activity. It is not allowed to finance industries that can harm a person (for example, gambling, alcohol, tobacco products, etc.). These circumstances make it necessary to study the principles on which this activity is based.

The following are the basic principles of Islamic finance:

the financier's income is derived from the profit of the enterprise and should be based on the commercial risk that he assumes;

according to Sharia, money is a useless medium of exchange;

profit (loss) and risk in business are carried out on the basis of partnership;

non-guaranteed fixed income from profits and investments;

transactions are free from speculation or gambling (maysir);

prohibition of unclear (gharar) terms in the contract (transactions in which the price, delivery time or item are not determined in advance, do not comply with the principles of Sharia);

investments related to alcohol, drugs, gambling or other activities prohibited by Sharia are not allowed<sup>12</sup>.

Based on the above, the problems of the development of Islamic branches in banks can be divided into the following types:

#### **Moral issues.**

These problems are related to established religious values in society. The main reasons for this the prohibition of riba (interest-bearing loans) and financial sanctions (chanting). So, first of all, this issue needs to be regulated ethically.

It should be noted that the activities of current banks are based on loans, deposits, interest and penalties. Its activities are organized in accordance with economic procedures recognized by international law. However, these financial systems contradict the norms of Islamic Sharia, which limits the availability of services offered by banks.

#### **LEGAL ISSUES**

These problems can be explained by the fact that the norms of Islamic finance are not defined in the regulatory legal documents related to the industry. The absence of laws regulating Islamic financial products and services, as well as the lack of consideration of Islamic legal principles in the current banking and tax legislation, create problems related to legal regulation. In addition, the organizational element of this problem is also the lack of adaptation of existing software systems in banks for the practice of Islamic financial transactions.

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<sup>12</sup> Christopher G. Cross, Craig R. Nethercott, Harjaskaran Rai and Mohammed A. AlSheikh, Latham & Watkins LLP Islamic Project Finance Published on 11-Mar-2010. 4 p. Practical Law Publishing Limited and Practical Law Company, Inc.

It is worth noting that Islamic finance is based on murabah, salam, musharaka, istishna, idjara, credit, wadi, muzorab, wakal, takaful and other financial services (definitions based on the principles of Sharia). Therefore, initially these concepts should be defined in the applicable civil, tax and other legal norms. This situation gives citizens professing the religion of Islam the opportunity to enjoy the economic rights provided for by the Constitution and laws of the Republic of Uzbekistan.

### **ECONOMIC PROBLEMS.**

These problems include the creation of economic foundations for the organization of activities, in particular, attracting investment in activities, the lack of necessary infrastructure and deposit protection, as well as fiscal barriers. Although some work is underway to eliminate problems in this regard, the existing mechanism has not yet been debugged. For example, members of the delegation of the Islamic Finance Advisory and Insurance Services consulting company (Great Britain), invited to our country by the Ministry of Investment and Foreign Trade of the Republic of Uzbekistan with the support of the Islamic Development Bank, the Legislative Chamber of the Oliy Majlis, the Ministry of Finance, the Central Bank, commercial banks, microcredit held talks with representatives of leasing and insurance organizations. In order to create a legal basis for the introduction of Islamic finance in the country, attention was drawn to the next joint efforts to improve the current legislation.

### **PERSONNEL ISSUES**

It is probably important to have economists who understand Sharia law in the organization of the Islamic financial system. However, currently there are no separate institutions in the country to train such specialists. In this regard, in our opinion, it is advisable to create a system of personnel training in the fields of economics and law.

### **CONCLUSION**

Based on the above, we can say that there are systemic problems in the organization of Islamic branches in banks. Overcoming these problems requires certain reforms in this area. It is advisable to pay attention to the following questions:

Firstly, in order to revive Islamic windows in banks, it is advisable to review the mechanisms of legal regulation of the industry. In this regard, it is necessary to make changes and additions to regulatory legal documents regulating the activities of existing banks, as well as to the Civil and Tax Code of the Republic of Uzbekistan, taking into account the principles and definitions of the Islamic financial system;

Secondly, to include Islamic finance and banking in the curricula of relevant higher educational institutions (International Islamic Academy of Uzbekistan, TSUE, TFI, TSUL) and establish a training system in this direction. This situation allows us to solve problems related to staffing;

Thirdly, it is necessary to implement the certification of the Organization of Accounting and auditing of Islamic financial Institutions (AAOIFI) and organize training of banking specialists in Islamic finance and banking;



Fourthly, it is necessary to create Islamic branches in banks and widely publicize their contents through the media. This situation makes it possible to increase investment attractiveness and attract a wide range of financial resources.

## ВАЖНОСТЬ ОРТОФОТОПЛАНОВ В ВЕДЕНИИ ЗЕМЕЛЬНОГО КАДАСТРА В ЗАРУБЕЖНЫХ СТРАНАХ

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Одним из основных факторов развития экономики многих стран является рациональное использование содержащихся в них природных ресурсов. Земля является основным из таких источников. Использование информации о земле поможет составить план по увеличению ее урожайности, а затем предотвратить снижение качества земли.

Чтобы повысить эффективность использования земельных ресурсов, целесообразно собрать о них следующую информацию. Прежде всего, право собственности на землю, наличие права на ее использование, оценка стоимости земли и другой недвижимости, размер взимаемых с них налогов и даже создание плана развития региона, где расположены земля и недвижимость, - это включает в себя.

Формирование, сопровождение и постоянное обновление информационной системы, касающейся работ по дистанционному зондированию государственных кадастровых земель, осуществляется на основе цифровых ортофотопланов.

Используя современные ресурсоемкие технологии, аэролизация обеспечивает повышение производительности труда при создании ортофотопланов, снижение финансовых затрат, точность данных земельного кадастра и ресурсосбережение.

Ортофотоплан является важным источником качественной информации о количестве посадочных мест и планарных учениях. Результаты описанной инвентаризации могут быть использованы в качестве картографической основы и географической информации.

Возросшая потребность в знании географического пространства побудила население искать различные способы заселения новых территорий. Эти методы пытаются описать поверхность Земли благодаря точным данным, которые современные технологии могут получить с помощью аэрокосмической съемки в *ham*. Для достижения этих целей были созданы различные системы, в том числе ортофотопланы. Это разновидность фотограмметрического метода, основанного на использовании фотографических изображений с летательных аппаратов, оснащенных специальными фотографическими приборами. Этот тип моментальных снимков формирует основу для процесса создания планов и карт различного масштаба, которые используются в кадастровой системе

Это осуществляется с помощью летательных аппаратов, оснащенных специальным оборудованием для фотографирования поверхности Земли. Эти аэрокосмические снимки служат для построения макетов различного масштаба и карт, предназначенных для работы кадастровой системы.

Использование ортофотопланов становится все более распространенным во всех областях, связанных с Землей. Использование ортофотопланов в социально-экономическом развитии страны дает большой эффект. Благодаря такой информации удовлетворяются потребности в исследованиях, планировании и многих специалистах.

Таким образом, с помощью этого преобразования можно устранить все нарушения контура, вызванные изгибом воздушной камеры. Существуют также различные изменения, которые происходят в результате смещения рельефа. Это приводит к ошибкам в размерах. Изменения, присутствующие на поверхности сфотографированной Земли и камерах, связаны с уклонами, характерными во время съемки.

Благодаря этому методу получения информации можно получить одинаковые и точные измерения для всей поверхности ортофотоплана.

Система земельного кадастра или учета недвижимости создается для того, чтобы собирать большое количество информации о земле и другой недвижимости в одном месте, обрабатывать их, хранить и, при необходимости, решать проблемы их использования. Кадастровая система настоящего времени имеет свои особенности в каждой зарубежной стране.

Например, текущие задачи земельного кадастра Франции включают в себя: составление кадастровых планов, определение права собственности на земельные участки, измерение их площадей, оценку земли и другой недвижимости. Рассчитать сумму налога с учетом этого. А деятельность Управления государственной службы кадастровой документации заключается в составлении и ведении кадастровых планов.

Региональная налоговая администрация, с другой стороны, занимается обновлением имеющейся информации, поддержанием ее в той мере, в какой она соответствует требованиям времени, и, как таковая, оценкой недвижимости и налогообложением ее.

В целом, основной задачей автоматизированной системы является сбор, хранение, обработка информации на территории всех земельных участков, объектов недвижимости.

Соединенные Штаты. В США ортофотопланы используются для составления, обновления карточек и получения дополнительной информации. Их также можно использовать для получения информации о собственности на землю или других ее свойствах. В США аэрокосмическая съемка используется для изучения состава почв в дополнение к сельскохозяйственным, лесным или городским исследованиям и другим подобным исследованиям.

Среди ортофотопланов, используемых Sox в Соединенных Штатах, мы можем с уверенностью видеть, что гавани, улучшающие общественную безопасность и контроль за дорожным движением, защиту противопожарных зон, помогающие правоохранительным органам, имеют различные цели общественного пользования, контроль за землей и ее имуществом, осуществляются в случаях купли-продажи



недвижимости. Природные ресурсы используются информационными центрами, лесохозяйственными компаниями и различными корпорациями для получения информации о природных ресурсах по аэрокосмическим снимкам. Он также используется для определения истории развития землепользования, общего землепользования и сельскохозяйственных культур. Многие системы севооборота также определяются исследованиями с использованием ортофотопланов.

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Беларусь. Комитет по земельным ресурсам, геодезии и картографии при Совете Министров страны и его предприятия и региональные структуры работают над использованием современных методов измерения и верификации в кадастровой системе, а также компьютерных технологий для обеспечения получения и хранения необходимой информации на уровне современности с минимальные финансовые и трудозатраты. Использование и исследование аэрокосмических снимков позволяет за короткое время получить обширную информацию обо всей территории страны и учесть текущие изменения в распределении, статусе и использовании земельного фонда, что считается очень важным для правильного формирования государственного земельного кадастра.

Земельная информационная система в Республике Беларусь имеет трехуровневую структуру (местную, региональную и центральную). Важную роль в обслуживании этих систем играют ортофотопланы разного масштаба. Для кадастровых целей технологически приемлемо создание земельных информационных систем на основе топографических карт и планов, аэрокосмических материалов, выполненных с учетом требований к обновлению картографических материалов. В связи с этим планирование полетов осуществляется в пределах номенклатурных табличек размером 1:50 000.

Цифровые ортофотопланы создаются для наземной информационной системы при составлении цифровых карт, проведении полевых исследовательских работ, решении различных спорных вопросов. Кроме того, до завершения оцифровки ортофотопланы передаются в округ для текущего учета, а также в государственный геодезический и картографический центр для продажи в качестве конечного продукта сторонним заказчикам.

При создании ортофотопланов используются программные продукты "Realistic Map" и "PhotoMod". Рассматриваемое программное обеспечение используется для создания цифровой модели рельефа, затем векторных топографических карт и вводится в эксплуатацию в качестве конечного продукта через Государственный геодезический и картографический центр Республики Беларусь.

Зарубежный анализ показывает, что при создании различных карточек развитыми странами государственные организации систематизировали работу по созданию или обновлению карточек на основе единого геопортала. Это, в свою очередь, было получено различными государственными учреждениями и организациями, составлявшими дубликаты карточек. Эта работа по систематизации предоставляет следующие возможности при составлении карт, созданных государственными организациями:

- прогнозирование геодезических координат, визуализация приблизительных координат и соответствующее планирование перед отправкой в район исследования;
- запрашивая наличие карточек весов любого типа, если карточка составлена, производитель может определить информацию о государственной организации;
- можно найти ответы на запросы и получить подробную информацию, например, когда, где и как карты составлены, какой государственной организацией;

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## TECHNOLOGY AND EDUCATION

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**Annotation:** *Technology has revolutionized the field of education, transforming the way students learn and teachers instruct. This article provides an overview of the impact of technology on education, highlighting its benefits and challenges.*

**Keywords:** *Technology, education, accessibility, collaboration, efficiency.*

### INTRODUCTION

**Benefits of Technology in Education:**  
**Accessibility:** Technology has made education more accessible, allowing students to learn from anywhere in the world.  
**Personalized Learning:** With technology, educators can tailor learning experiences to individual students' needs, enhancing engagement and understanding.  
**Collaboration:** Technology enables collaboration among students and teachers, fostering a more interactive and dynamic learning environment.  
**Resources:** The internet provides a vast array of resources, such as online courses, videos, and articles, enriching the learning experience.  
**Efficiency:** Technology streamlines administrative tasks for educators, allowing them to focus more on teaching.

#### Advantages of Technology in Education

##### 1. Access to Information

**Vast Information Resources:** Technology provides access to a vast amount of information through the internet, digital libraries, and online databases, enabling students to explore a wide range of topics beyond what is covered in traditional textbooks.

**Up-to-Date Content:** Digital resources can be easily updated, ensuring that students have access to the most current information and developments in their field of study.

**Flexible Learning:** Online resources allow for flexible learning schedules, enabling students to access educational materials at their convenience and pace.

##### 2. Interactive Learning

**Engagement:** Technology offers interactive and engaging learning experiences through multimedia content, simulations, and educational games, making learning more enjoyable and effective.

**Visualization:** Visual aids such as videos, diagrams, and animations help students visualize complex concepts, making them easier to understand and remember.

**Immediate Feedback:** Educational technology provides immediate feedback on quizzes and assignments, allowing students to track their progress and identify areas for improvement.

##### 3. Personalized Learning

**Adaptive Learning:** Technology can adapt educational content to suit individual learning styles and pace, providing a personalized learning experience for each student.

**Customized Content:** Teachers can create customized learning materials and assignments tailored to the specific needs and interests of their students.

**Self-Paced Learning:** Online resources allow students to learn at their own pace, enabling them to spend more time on topics they find challenging and less time on topics they already understand.

#### 4. Collaboration and Communication

**Global Connectivity:** Technology enables students to collaborate with peers and experts from around the world, breaking down geographical barriers and fostering a global learning community.

**Enhanced Communication:** Educational technology facilitates communication between students and teachers through email, discussion forums, and online chat, promoting active participation and engagement.

**Group Projects:** Online collaboration tools allow students to work together on group projects, improving their teamwork and communication skills.

#### 5. Accessibility

**Inclusive Education:** Technology has made education more accessible to students with disabilities, providing tools and resources to support their learning.

**Flexible Learning Options:** Online education offers flexible learning options for students who may not be able to attend traditional classes due to work, family, or other commitments.

**Cost-Effective:** Online resources and digital textbooks are often more affordable than traditional textbooks, reducing the financial burden on students.

#### 6. Efficiency and Productivity

**Automation of Tasks:** Technology automates administrative tasks such as grading and attendance, saving teachers time and allowing them to focus on teaching.

**Resource Sharing:** Digital platforms allow for easy sharing of educational resources among teachers, enabling them to collaborate and learn from each other.

**Real-World Skills:** Technology prepares students for the digital world by teaching them valuable skills such as digital literacy, critical thinking, and problem-solving.

#### 7. Environmental Impact

**Reduction in Paper Usage:** Digital resources reduce the need for paper, helping to conserve natural resources and reduce waste.

**Carbon Footprint:** Online learning reduces the carbon footprint associated with traditional education, as it eliminates the need for commuting to and from school.

#### 8. Enhanced Teaching Methods

**Professional Development:** Technology provides opportunities for teachers to engage in professional development and stay updated with the latest educational trends and practices.



**Innovative Teaching Tools:** Educational technology offers innovative teaching tools such as virtual labs, 3D printing, and coding platforms, enhancing the learning experience for students.

#### 9. Parental Involvement

**Parent-Teacher Communication:** Technology facilitates communication between parents and teachers, allowing parents to stay informed about their child's progress and engage in their education.

**Home-School Connection:** Online resources enable parents to support their child's learning at home, strengthening the home-school connection.

#### 10. Global Perspective

**Cultural Exchange:** Technology enables students to learn about different cultures and perspectives, fostering a greater understanding and appreciation of diversity.

**Global Citizenship:** Technology prepares students to be global citizens, equipping them with the skills and knowledge to participate in the global economy and society.

These advantages demonstrate the significant impact of technology on education, enhancing learning experiences, promoting.

### **CONCLUSION**

Technology has fundamentally changed the landscape of education, offering new possibilities and challenges. By leveraging the benefits of technology and addressing its challenges, educators can create a more inclusive and effective learning environment for all students.

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## "LOTIN TILINING AHAMIYATI VA ISTIQBOLLARI"

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Lotin tilining o'zining ahamiyatini, tarixiy, ma'nolari va bugungi kunda istiqbollari to'g'risida bir maqola yozishni tavsiya qilaman. Bu mavzu, tarix, ko'p o'qilgan so'zlar, lotin alifbosi va boshqa xususiyatlardan iborat bo'lishi mumkin. Maqolaning sarlavhasi: "Lotin Tilining Ahamiyati va Istiqbollari: Tarixdan Bugungacha". Ushbu mavzuda Lotin tilining tarixiy rivojlanishi, undagi muhitning o'zgarishi, xalqaro aloqalar va boshqa turli sohalar bo'lishi mumkin. Bu siz uchun qat'iy ilgi ko'zlangan bir mavzu bo'lsa, maqola yozishni boshlashda sizga yordam bera olish uchun menga ma'lumotlarni berishingiz mumkin.

### **KIRISH:**

Lotin tilining ahamiyati va istiqbollari haqida ko'chirilgan oqimlarning ortasidagi muhim bir konsept bo'lib, bu mavzu tarixdan bugungi kunga qadar o'z o'rnini saqlagan va o'zaro aloqalarda ko'p muammolar tug'ilishiga olib kelgan. Lotin tilining tarixi, undagi muhitning o'zgarishi, xalqaro aloqalar va boshqa turli sohalar, bugungi kunda shu tilning ahamiyatini oshirish va rivojlanishida katta rolni o'ynaydi. Bu maqola, lotin tilining o'zining tarixiy o'zgarishlarini, bugungi kunda qanday ishlatilishini va undagi istiqbollarni tahlil qilish uchun yaratilgan.

Maqola yozishni boshlashdan oldin, bu mavzuda ko'rsatilgan asosiy nuqtalarni ta'kidlash uchun bir qancha muhim analizlarga e'tibor berish foydali bo'ladi:

1. Lotin Tilining Tarixi: Maqolada Lotin tilining tarixiy rivojlanishiga qo'rqinchli diqqat qaratilishi kerak. Bu tarix, tilning paydo bo'lishidan bugungacha o'tgan jarayonlarni o'z ichiga oladi va qanchalik o'zgaruvchanligini ko'rsatadi.

2. Muasirlashish va Tarixiy O'zgarishlar: Lotin tilining muasirlashishi va tarixiy o'zgarishlari, uning foydalanish sohasida qanday o'zgarishlarga olib kelganligi haqida tahlil qilinishi kerak. Bu, lotin tilining qanday o'zgaruvchanliklarga duch kelganini va bu o'zgarishlarning qanday ta'siri bo'lganligini tushuntirishga yordam beradi.

3. Xalqaro Aloqalar va Istiqbollar: Lotin tilining xalqaro aloqalarda, masalan, akademik sohada, IT sohasida, ilmiy tadqiqotlarda qanday o'rnatilishi va qanday ishlatilishi haqida tahlil qilish muhimdir.

4. Lotin Alifbosining Ma'qullari: Lotin alifbosining o'zining ma'qullari, boshqa tillar bilan qiyoslash va undagi ma'qullar yordamida tilning o'zining ahamiyatini tushuntirish uchun ko'rsatilishi kerak.

Bu muhim analizlar, maqolaning tuzilishini, tartibini va nuqtai nazarlarini belgilashga yordam beradi. Keyinroq, ularni ta'kidlash, ilova qilish va maqolani batafsilroq rivojlantirish mumkin.

Maqola yozish jarayonida asosiy natijalarni olish uchun bir qancha chet el va so'roq nashrlar, akademik maqolalar va statistik ma'lumotlar asosida muvaffaqiyatli natijalar olishingiz mumkin. Bu qanday muvaffaqiyatli tilning o'zining ahamiyatini va istiqbollarni o'rganish uchun ko'proq tahlil va shu tilning muasirlashishini ta'kidlaydi.

1. Chet El va So'roq Nashrlar: Chet el va so'roq nashrlar, lotin tilining dunyoda qanday o'rnatilishi va uning o'zining ahamiyatini ko'rsatadigan yangi tadqiqotlar, o'rganishlar va tushunchalar olib keladi.

2. Akademik Maqolalar: Akademik jurnallarda chiqarilgan maqolalar, lotin tilining tajribalarini, muasirlashishini va istiqbollarni tushuntiradi. Ular tilning rivojlanishi, o'qitish usullari, tili boshqa sohalar bilan qanday bog'liqligi va boshqalar haqida ko'proq tushuncha berishadi.

3. Statistik Ma'lumotlar: Statistik ma'lumotlar, lotin tilining o'zining dunyoda qanday tarqalganligi, qaysi sohalar yoki mintaqalarda qanday ko'rinishi haqida malumot beradi. Bu ma'lumotlar tilning o'zining o'zgaruvchanligini va istiqbollarni tushuntirishda yordam beradi.

Barcha bu manbalardan olingan ma'lumotlar, maqolani boshlash va davom etishda foydalaniladi, va ular o'z fikr-mulohazalaringiz va natijalaringizni ta'kidlaydi.

Maqola yozish jarayonida ko'rsatilgan tahlillar va ma'lumotlar yordamida, lotin tilining ahamiyati va istiqbollari haqida muhim natijalarga yetkazdim. Bu tahlillar o'z ichiga olgan mavzularning ko'rsatilishi, lotin tilining tarixiy rivojlanishi, bugungi kunda uning muasirlashishi, xalqaro aloqalarda o'zining o'rnini ta'kidlash, va tilning istiqbollari to'g'risida tushunchalar berishni o'z ichiga oladi.

Lotin tilining yuqori mobaynida bo'lishi, uning dunyoda keng ommalashganligi va ko'p sohalar bilan bog'liqligi ma'lumdir. Bu til, akademik sohalar, kommunikatsiya, IT sohasi va boshqalar uchun katta ahamiyatga ega. Bu maqola, lotin tilining bugungi kunda o'zining o'rnini ta'kidlash, uning muasirlashishini tahlil qilish va istiqbollarni qarash uchun asosiy ma'lumotlar taqdim etdi.

Jamiyatlarning, tadqiqotchilarning va boshqa shaxslarning bu tilni o'rganish va uning istiqbollari haqida ko'proq tahlil qilishi, lotin tilining muasirlashishi va rivojlanishiga yordam beradi. Muqobil, lotin tilining o'zining ahamiyati va istiqbollari hozirgi va kelajakda xilma-xil sohalar uchun muhimdir, va bu maqola bu mavzuga aloqador diskussiyalarni boshlash uchun bir to'plam taqdim etadi.

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Konstitutsiya» lotincha «constitutio» soʻzidan olingan boʻlib, «belgilash», «tuzilish» degan maʼnolarni anglatadi, yaʼni Konstitutsiya jamiyat va davlat tuzilishini, davlat hokimiyati va boshqaruv organlarini tuzish hamda ularning ish faoliyati asosiy prinsiplari va vakolatlarini, fuqarolar asosiy huquqlari va burchlarini, jamiyat va shaxs oʻrtasidagi munosabatlarni belgilab beradi. Oʻzbekiston Respublikasi Konstitutsiyasi loyihasi 1990-yil 20-iyundan boshlab olim, jamoat namoyandalari va davlat boshqaruv organlari mutaxassislarini tomonidan puxta ishlab chiqildi. Konstitutsiya loyihasining umumxalq muhokamasi uch oy davom etdi. Umumxalq muhokamasi jarayonida kelib tushgan 6 000 taklif asosida loyihaga 80 dan ortiq tuzatishlar kiritildi. Keng umumxalq muhokamasi davomida bildirilgan koʻp takliflar inobatga olingan holda komissiya tomonidan tayyorlangan Konstitutsiya loyihasi Oliy Kengash muhokamasiga qoʻyildi. 1992-yil 8-dekabrda Oliy Kengashning XI sessiyasida bu loyiha maʼqullandi va Oʻzbekiston Respublikasining hozir amal qilayotgan Konstitutsiyasi qabul qilindi. Mustaqil Oʻzbekistonning birinchi Konstitutsiyasi shu tarzda amalga kiritildi. 8-dekabr – Oʻzbekiston Respublikasining Konstitutsiyasi qabul qilingan kun umumxalq bayrami deb eʼlon qilindi.

Konstitutsiya– davlatning Asosiy qonuni boʻlib, konstitutsiyaviy tuzum, davlat va jamiyat qurilishi asoslarini belgilab beradi; qonun chiqaruvchi, ijro etuvchi va sud hokimiyati organlari tashkillashtirilishini tartibga solib turadi; saylov tizimini belgilaydi; fuqarolarning huquq va erkinliklarini, davlat ramzlarini mustahkamlab qoʻyadi. Konstitutsiyada mafkuraviy xilma-xillik, koʻppartiyaviylik, yaʼni biror muhim muammoni hal etish boʻyicha fikrlar xilma-xilligi koʻzda tutiladigan siyosiy plyuralizm mustahkamlab qoʻyilgan. Konstitutsiya davlatni emas, balki insonni birinchi oʻringa qoʻydi. Inson, uning hayoti, erkinligi, shaʼni, qadr-qimmatini va boshqa daxlsiz huquqlari oliy qadriyatlar deb eʼlon qilindi. Konstitutsiya, shuningdek, fuqaro va davlatni oʻzaro huquqlar va burchlar bilan bogʻlovchi prinsipni ham mustahkamlab qoʻydi.

Yangicha qarash, yangicha hayot tarzi Konstitutsiyaning ayrim moddalariga tuzatish va oʻzgartirishlar kiritish zarurligini taqozo qildi. Shuning uchun ham yangi konstitutsiya xalq hukmiga havola qilindi, ularning takliflari eʼtiborga olinib konstitutsiyaga oʻzgartirishlar kiritilayotgani, ochiqlik, oshkoralik, demokratik tamoyillarga toʻla amal qilinayotgani bejiz emas. Bu yoʻlda yangi tahrirdagi konstitutsiyamizning qabul qilingani mamlakatimizning yangi rivojlanish davrini boshlab berdi. Umumxalq muhokamalarida 220 mingdan ziyod takliflar kelib tushganligi qayd etildi. Konstitutsiyaviy qonun loyihasi bilan amaldagi Konstitutsiyaga 27 ta yangi modda kiritilildi, moddalar soni 128 tadan 155 taga oshdi. Konstitutsiyamizning amaldagi 275 ta normasi 434 taga koʻpaydi, yaʼni amaldagi Konstitutsiyamiz 65 foizga yangilandi. Shu maʼnoda yangilanayotgan Konstitutsiya tom



ma'noda xalq Konstitutsiyasi bo'layotganligi e'tirof etildi. Yangi O'zbekistonda amalga oshirilayotgan izchil islohotlarda "inson qadri uchun", degan tamoyil ustuvor maqsad etib belgilangan. Aytish joizki, Konstitutsiyamizda ilgari qonunchilikda mavjud bo'lmagan bir qator muhim qoidalar mustahkamlandi va ular mazmun-mohiyatiga ko'ra, "Inson — jamiyat — davlat" tamoyilini konstitutsiyaviy qoida sifatida muhrlashga qaratilgan.

Binobarin, 15-moddada Konstitutsiya mamlakat hududida to'g'ridan-to'g'ri amal qilishi va yagona huquqiy makonning asosini tashkil etishi qat'iy belgilandi. Asosiy qonunning 20-moddasida "Insonning huquq va erkinliklari bevosita amal qiladi. Insonning huquq va erkinliklari qonunlarning, davlat organlari, fuqarolarning o'zini o'zi boshqarish organlari, ularning mansabdor shaxslari faoliyatining mohiyati va mazmunini belgilaydi", deyilgan. Ushbu qoida inson huquq va erkinliklariga bevosita amal qilish uchun qandaydir mezonlar talab etilmasligini ko'rsatadi. Shunga ko'ra, endilikda inson huquq va erkinliklari bilan bog'liq normalarga biror-bir qonun va qonunosti hujjati qabul qilinmasdan turib, to'g'ridan-to'g'ri amal qilinadi. Bu esa barcha davlat organlari tizimida inson huquqlariga rioya etish madaniyati va mexanizmlarini takomillashtirishni taqozo etadi.

Ma'lumki, shu vaqtga qadar normativ-huquqiy hujjatlar, shu jumladan, qonunlarning asosiy funksiyasi bu ijtimoiy munosabatlarni tartibga solishdan iborat edi. Yangilangan Konstitutsiyaga asosan, inson huquq va erkinliklarini ifodalash qonunlarning ajralmas funksiyalaridan biriga aylandi. O'z navbatida, insonning huquq va erkinliklari davlat organlari, fuqarolarning o'zini o'zi boshqarish organlari, ularning mansabdor shaxslari faoliyatining mazmun-mohiyatini belgilashi to'g'risidagi qoida davlat organlari va ularning mansabdor shaxslari faoliyatini tubdan isloh qilishga olib keladi. Unga ko'ra, davlat xizmatchilarining asosiy maqsad, vazifa, funksiya hamda majburiyatlari inson huquq va erkinliklarini ifodalashga qaratiladi. Davlat organlari tomonidan insonga nisbatan qo'llaniladigan huquqiy choralar mutanosiblik prinsipiga asoslanishi va qonunlarda nazarda tutilgan maqsadlarga erishish uchun yetarli bo'lishi kerakligi belgilandi. Ushbu qoida shaxsga qo'llaniladigan barcha huquqiy ta'sir choralari insonparvarlik tamoyillari asosida qaytadan ko'rib chiqishni nazarda tutadi. Inson bilan davlat organlarining o'zaro munosabatlarida yuzaga keladigan qonunchilikdagi barcha ziddiyat va noaniqliklar inson foydasiga talqin etilishi belgilab qo'yildi. O'z navbatida, Konstitutsiyaning 21-moddasida inson huquq va erkinliklarini cheklash asoslari aniq belgilab qo'yildi. Xususan, insonning huquq va erkinliklari faqat qonunga muvofiq va faqat konstitutsiyaviy tuzumni, aholining sog'lig'ini, ijtimoiy axloqni, boshqa shaxslarning huquq va erkinliklarini himoya qilish, jamoat xavfsizligini hamda jamoat tartibini ta'minlash maqsadida zarur bo'lgan doirada cheklanishi mumkin. Inson huquqlarini cheklash asoslari faqat qonunlarda belgilangan bo'lishi kerak, vazirlik, idora va tashkilotlarning hujjatlari inson huquqlarini cheklay olmaydi. E'tibor qaratish lozim bo'lgan masalalardan yana biri inson huquqlarini cheklash asoslari belgilangan qonunlar ijrosi yuzasidan qabul qilinayotgan qonunosti hujjatlari tegishli qonunlarda nazarda tutilganidan ko'ra, ko'proq darajada inson huquqlarini cheklemasligi kerak. Jinoyat-protsessual munosabatlarda shaxs huquqlarini himoya qilishning konstitutsiyaviy asoslari yanada mustahkamlandi. Xususan, insonning sha'ni va qadr-qimmatini daxlsizligi, zo'ravonlik va qiynoq holatlarining oldini olish, aybsizlik

prezumpsiyasi, yuridik yordam olish huquqiga oid normalarning Konstitutsiya darajasida belgilab qo'yilgani surishtiruv, tergov, sud hamda jazoni ijro etish jarayonida huquqni muhofaza qiluvchi organlar zimmasiga ulkan mas'uliyat yuklamoqda. Bundan tashqari, shaxsiy hayot daxlsizligi, shaxsiy va oilaviy sirga ega bo'lish, o'z sha'ni va qadr-qimmatini himoya qilish huquqining konstitutsiyaviy asoslari kengaydi. Har kim o'z shaxsiga doir ma'lumotlarni himoya qilish, shuningdek, noto'g'ri ma'lumotlarning tuzatilishini, o'zi to'g'risida qonunga xilof yo'l bilan to'plangan yoki huquqiy asoslarga ega bo'lmay qolgan ma'lumotlarning yo'q qilinishini talab qilish huquqiga egaligi ilk bor Konstitutsiya darajasida belgilab qo'yildi.

Yana bir muhim jihat: har kimning yozishmalari, telefon orqali so'zlashuvlari, pochta, elektron va boshqa xabarlari sir saqlanishi huquqiga ega ekanligi belgilandi. Ushbu huquqning cheklanishiga faqat qonunga muvofiq va sudning qaroriga asosan yo'l qo'yilishi nazarda tutildi. Yangilangan Konstitutsiyada axborot erkinligiga oid muhim normalar o'rin olgan. Xususan, davlat internet jahon axborot tarmog'idan foydalanishni ta'minlash uchun shart-sharoitlar yaratishini, axborotni izlash, olish va tarqatishga bo'lgan huquqni cheklashning aniq asoslari belgilab qo'yilganini ta'kidlash joiz.

Yangi normaga ko'ra, axborotni izlash, olish va tarqatishga bo'lgan huquqni cheklash bo'yicha qat'iy tartib belgilanmoqda. Mazkur qoida davlat organlari faoliyatida ochiqlikni ta'minlash bilan bir qatorda, fuqarolarga ular tomonidan so'ralgan axborotni taqdim etishda idoraviy manfaatlarni ro'kach qilish kabi salbiy holatlarning oldini olishni ta'minlaydi. Konstitutsiyada nazarda tutilgan inson huquq va erkinliklariga oid yangi normalar sudlar zimmasiga nihoyatda katta mas'uliyat yuklaydi. Inson huquq va erkinliklari qonunlarning mazmun va mohiyatini belgilashi hamda inson huquqlari konstitutsiyaviy tuzumini, aholining sog'lig'ini, ijtimoiy axloqni, boshqa shaxslarning huquq va erkinliklarini himoya qilish, jamoat xavfsizligini hamda jamoat tartibini ta'minlash maqsadida zarur bo'lgan doirada cheklanishi mumkinligi to'g'risidagi qoidalar sudlar faoliyatini yangi mezonlar asosida tashkil etishni taqozo etadi. Yangi tahrirda qabul qilingan Konstitutsiya Yangi O'zbekiston strategiyasini amalga oshirishning siyosiy-huquqiy asoslarini yaratib, milliy davlatchilik taraqqiyotining tarixiy muhim bosqichida davlat va jamiyatni yanada rivojlantirishning ustuvor yo'nalishlarini belgilab berdi. Bu esa inson huquq va erkinliklariga oid masalalarda huquqni qo'llash amaliyotiga yangicha yondashuvlar joriy qilishni dolzarb zaruratga aylantirmoqda. Zero, barchamizning vazifamiz inson, uning huquq va erkinliklari oliy qadriyat hisoblanadigan va hurmat qilinadigan adolatli jamiyat barpo etishdir.

Yangi asosiy qonunimizning alohida bobi – XIV bob "Oila, bolalar va yoshlar" deb nomlanishi bejizga emas. Bunday yangicha yondashuv, shubhasiz, Yangi O'zbekistonda yoshlar siyosati ustuvor ekanligidan dalolatdir. Yangi tahrirdagi Konstitutsiyada davlat tomonidan yoshlar huquqlari himoyalaniishi va ularning jamiyat va davlat hayotida faol ishtiroki rag'batlantirilishi kafolatlab qo'yildi. Konstitutsiyamizning 79-moddasi birinchi bandida aytilganidek: "Davlat yoshlarning shaxsiy, siyosiy, iqtisodiy, ijtimoiy, madaniy, ekologik huquqlari himoya qilinishini ta'minlaydi, ularning jamiyat va davlat hayotida faol ishtirok etishini rag'batlantiradi". Shu o'rinda yangi tahrirdagi Konstitutsiyadan ilk



marotaba uzluksiz ta'lim tizimi, uning har xil turlari va shakllari, davlat va nodavlat ta'lim tashkilotlari rivojini ta'minlash davlatning vazifasi etib belgilanganini ta'kidlash maqsadga muvofiqdir. Ta'limga oid normalar 50,51 va 52-moddalarda belgilab qo'yildi.

Xulosa qilib aytganda, yangi tahrirdagi Konstitutsiyamizda davlat yoshlarga g'amxo'rlik masalasida o'z zimmasiga g'oyat muhim majburiyatlarni olgani alohida diqqatni tortadi. Eng asosiysi, mazkur konstitutsiyaviy normalar nafaqat O'zbekiston yoshlari manfaati, balki butun jamiyatimiz va mamlakatimizning kelgusi taqdiri uchun nihoyatda ahamiyatlidir. Yangi tahrirda qabul qilingan Konstitutsiya Yangi O'zbekiston strategiyasini amalga oshirishning siyosiy-huquqiy asoslarini yaratib, milliy davlatchilik taraqqiyotining tarixiy muhim bosqichida davlat va jamiyatni yanada rivojlantirishning ustuvor yo'nalishlarini belgilab berdi. Bu esa inson huquq va erkinliklariga oid masalalarda huquqni qo'llash amaliyotiga yangicha yondashuvlar joriy qilishni dolzarb zaruratga aylantirmoqda.

## КОМПЛЕКСНЫЙ ПОДХОД СПЕЦИАЛИСТОВ ПО СОЦИАЛЬНОЙ АДАПТАЦИИ ДЕТЕЙ-ИНВАЛИДОВ

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### **АКТУАЛЬНОСТЬ ПРОБЛЕМЫ**

По данным ООН, в мире насчитывается примерно 450 миллионов людей с нарушениями психического и физического развития. Это составляет 1/10 части жителей нашей планеты. Данные Всемирной организации здравоохранения (ВОЗ) свидетельствуют, что число таких жителей в мире достигает 13% (3% детей рождаются с недостатками интеллекта и 10% детей с другими психическими и физическими недостатками) всего в мире около 200 миллионов детей с ограниченными возможностями. Как показывает опыт многих стран мира, люди с ограниченными возможностями нередко даже имея все потенциальные возможности активно участвовать в производственной и общественной деятельности, не могут их реализовать потому, что остальные сограждане не хотят общаться с ними, зачастую просто в силу устоявшихся негативных стереотипов. Поэтому организационные меры по социальной адаптации, не подготовленных в психологическом плане детей, могут оказаться неэффективными. И тут должны сыграть главную роль специалисты образовательных учреждений – педагоги, медицинские работники совместно с другими государственными и общественными организациями. При этом не малое место должно отводиться деятельности медицинских сестёр в общеобразовательных учреждениях, где в первую очередь можно психологически подготовить здоровых и детей с ограниченными возможностями к совместному активному участию в жизни общества.

### **ЦЕЛЬ**

Провести анализ существующих проблем в области социальной адаптации детей инвалидов в образовательных учреждениях и определить роль медицинских сестер по их устранению.

### **МАТЕРИАЛЫ И МЕТОДЫ ИССЛЕДОВАНИЯ**

Материалом исследования послужили законопроекты, их реализация, мнение специалистов работающих в специализированных учреждениях г. Ферганы и Ферганской области, среднего медицинского персонала работающего как в специализированных учебных, так и в общеобразовательных заведениях, а так же мнение родителей детей инвалидов. Было опрошено 69 родителей 2 специализированных школ-интернатов (№ 86, 88) и 27 общеобразовательных школ города Ферганы и Ферганской области, 27 медсестер общеобразовательных учреждений и 4 медсестры специализированных школ-интернатов, а так же 30 специалистов, среди которых преподаватели, руководители учреждений, дефектологи и врачи.

## РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЯ

В ходе исследования наиболее проблемной была отмечена семейно-бытовая сфера 47%, многие семьи не идут на контакт с медсестрами, не оказывают активного участия в жизни ребенка. На втором месте была указана медицинская сфера 29%, основные проблемы, которые указывали медицинские сестры, это отсутствие командной работы со специалистами других сфер, основных стандартов по работе с детьми с ограниченными возможностями, недостаточное количество информации. Среди мер по совершенствованию роли медсестры в социальной адаптации детей с ограниченными возможностями были отмечены: повышение квалификации медсестер 69%, комплексный подход в работе с ребенком всех специалистов 41%, организация обучающих тренингов 31%, совершенствование диагностики 9% и 34% отметили, что необходимо повышение зарплаты медицинским сестрам, работающим с детьми с ограниченными способностями. Мнение специалистов по поводу совместной учебы здоровых детей и детей с ограниченными возможностями в большей степени было положительным 70%, 45% считают, что это возможно благодаря комплексному подходу всех специалистов и 25% считают, что для этого необходимо создание благоприятных условий. 20% специалистов не согласны и 10 не знают, будет ли это возможным.

## ВЫВОДЫ

Социальная адаптация детей в образовательных учреждениях не возможна без преодоления социальных барьеров, но для этого необходим комплексный подход специалистов работающих с детьми, в том числе и медицинских сестер.



## ALGORITMLARNI ISHLAB CHIQISH USULLARIDAN FOYDALANISH

*Maxsus fan o'qituvchisi: Nazarboyev Sardor Raim o'g'li*

*Maxsus fan o'qituvchisi: Rustamova Feruza Isroilovna*

*Toshkent imkoniyati cheklangan shaxslar uchun ixtisoslashtirilgan 1-son kasb-hunar maktabi*

**Annotatsiya.** Oddiy masalalarni yechishda ma'lum bir sxemadan foydalanishingiz mumkin. Matematikaning hisoblash matematikasida har xil hisoblash masalalarini yechishda ko'p yillik tajriba to'plagan bo'limi mavjud.

**Kalit so'zlar:** Algoritm, hisoblash, matematika, masala, misol xotira.

### KIRISH

Masalalarni yechimlarini aniqlash va ularni algoritmini tuzish - bu ijodiy ish hisoblanadi. Har qanday masalaga algoritmini osongina tuzishga imkon beradigan universal usul yo'q. Chunki hayotiy vaziyatlar va vazifalar juda xilma-xil va oldindan aytib bo'lmaydi! Agar narsalar boshqacha bo'lsa edi, algoritmlashtirish jarayonini o'zi avtomatlashtirish uchun haqiqiy imkoniyat bo'lar edi, uni ba'zi bir avtomatlashtirilgan ijrochiga ishonib topshirish mumkin bo'lar edi. Bu tizimni aqlli kompyuter sifatida ko'rishimiz mumkin.

Shunga qaramay, algoritmlarni ishlab chiqish usullariga oid ba'zi tavsiyalar berilishi mumkin.

Oddiy masalalarni yechishda ma'lum bir sxemadan foydalanishingiz mumkin. Matematikaning hisoblash matematikasida har xil hisoblash masalalarini yechishda ko'p yillik tajriba to'plagan bo'limi mavjud. Yaratilgan algoritmlarni qayta ishlab chiqishga hojat yo'q - ularni o'rganish va muammolarni hal qilishda amalda qo'llash kifoya. Bularga misol sifatida chiziqli bo'lmagan tenglamalarning ildizlarini topish usullari, aniq integrallarni hisoblash, differentsial tenglamalarni raqamli integrallari, ma'lumotlarni saralash usullari va boshqalar.

Ko'pgina hollarda, u yoki bu muammoni bir nechta raqamli usullar bilan hal qilish mumkin. Muammoni hal qilish uchun ma'lum bir raqamli usulni tanlash odatda quyidagi mezonlarga muvofiq amalga oshiriladi:

- muammoni hal qilish uchun maqbul vaqtni ta'minlash;
- mavjud resurslardan (xotira) optimal foydalanishni ta'minlash;
- hisob-kitoblarning talab qilinadigan aniqligini ta'minlash;
- minimal xarajatlar qiymati;
- standart tartiblardan foydalanish qobiliyati.

Kompyuterda muammoni yanada shakllantirish bilan muammoni hal qilishning eng oqilona usuli topilgan.

Biroq, algoritmlar tobora murakkablashib borar ekan, ularning qanday ishlashini tushunish tobora qiyinlashmoqda. Ulardan xatolarni topish va ularni tuzatish yoki o'zgartirishlarni kiritish yanada qiyinroq. 50% dan 100% gacha dasturchi dasturlarni tuzishga va o'zgartirishga sarflaydi. Shu munosabat bilan- dasturlash sanoati dasturlash

uchun yanada tizimli yondashuvlarni taklif qiladi ya'ni, dasturlarda xatolar ehtimolini ularni tushunishni osonlashtiradigan va o'zgartirishni osonlashtiradigan taklif etadi

Strukturaviy dasturlash eng ommalashgan usullardan biridir. Strukturaviy dasturlashning asosini Bemom va Jakopini isbotlagan strukturalash teoremasi tashkil etadi. Ushbu teorema, vazifa qanchalik murakkab bo'lmasin, tegishli dasturning blok diagrammasini har doim juda cheklangan elementar boshqaruv tuzilmalari yordamida namoyish etish mumkinligini ta'kidlaydi.

Ushbu teoremani isbotlashning asosiy g'oyasi algoritmning har bir qismini uchta asosiy tuzilmalardan biriga yoki ularning kombinatsiyasiga aylantirishdan iborat. Bunda algoritmning tuzilmagan qismi kamayadi. Yetarli miqdordagi bunday o'zgarishlardan so'ng, tuzilmagan qism yo'q bo'lib ketadi yoki keraksiz bo'ladi. Natija algoritmning asl nusxasiga teng bo'lganligi va faqat ko'rsatilgan boshqaruv tuzilmalaridan foydalanilganligi isbotlanadi.

Strukturaviy dasturlashning maqsadi - asl muammoni qismlarga bo'lish orqali dastur tuzilishini tanlashga olib keladi. Dasturlar oddiy tuzilishga ega bo'lishi kerak. Murakkab, chalkash dasturlar ishlamay qoladi va ularni sinab ko'rish qimmatga tushadi.

Algoritmni ishlab chiqish aniq mantiqiy jarayon bo'lib, har bir bosqichda bosqichma-bosqich soddalashtiriladi. Keyinchalik, jarayonda algoritmlash usuli bosqichma-bosqich takomillashtirish usuli orqali qo'llaniladi. Birinchidan, muammo bir butun sifatida ko'rib chiqiladi, uning eng katta qismlari ajratiladi. Ushbu qismlarning bajarilish tartibini belgilash algoritmi kichik detallarga kirmasdan tizimli ravishda tavsiflanadi. Umumiy tuzilishdan, ular alohida qismlarni tavsiflashga o'tadilar. Shunday qilib, algoritmni ishlab chiqish algoritmi takomillashtirishga qaratilgan qadamlar ketma-ketligidan iborat. Strukturaviy dasturlashni yanada rivojlantirish, kengaytirish - bu modulli dasturlash hisoblanadi, uning g'oyasi shundaki, algoritmni tizim sifatida namoyish etilishi va alohida modullar to'plami sifatida ifodalanishi mumkin. Har bir modul faqat shu modulda mavjud bo'lgan ma'lumotlar va funksiyalar to'plamini o'z ichiga oladigan mustaqil dastur sifatida qaraladi.

Modulli dasturlash bir vaqtning o'zida bir nechta mutaxassislarni jalb qilganligi sababli jarayonni sezilarli darajada tezlashtirishga imkon beradi. Har biriga alohida modul ishlab chiqishni ishonib topshiradi. Bundan tashqari, modulli dasturlash oldindan aniqlangan standart dasturlardan foydalanish imkoniyatini nazarda tutadi.

Bir nechta kichik topshiriqlardan tashkil topgan murakkab masalalarni yechish algoritmini loyihalash bosqichida ikkita yondashuv qo'llaniladi: yuqoridan pastga va pastdan yuqoriga.

Yuqoridan pastga qarab loyihalashda birinchi navbatda boshqarish dasturining funksiyalari ishlab chiqiladi. Keyin har bir kichik topshiriq batafsilroq tanishtiriladi va boshqa modullar ishlab chiqiladi. Yuqoridan pastga yo'naltirilgan loyihalashda har bir qadamda modulning ishlashi batafsil qadamlarga havolalar yordamida tavsiflanadi.

Pastdan yuqoriga qarab loyihalashda birinchi navbatda quyi darajadagi dasturlar, ba'zan esa qism dasturlar shaklida ishlab chiqiladi. Keyin har bir bosqichda yuqori darajadagi modullar ishlab chiqiladi.

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## O'ZBEK VA OZARBAJON XALQINING SEVIMLI SHOIRI

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**Annotasiya:** *Shayxzoda, badiiy ijodning barcha tur va janrlarida asarlar yozibgina qolmay, adabiyotshunos va tanqidchi sifatida ham samarali ijod qilgan.*

**Kalit so'zlar:** *asarlar, dramaturg, tanqidchi, adabiyotshunos, iste'dod sohibi, she'rlar, "Toshkentnoma", Forobiy qabristonida dafn etilgan.*

Aslida qondosh ozarbayjon naslidan bo'lib, keyinchalik o'zbek xalqining chinakam sevimli shoiri, yozuvchisi, dramaturgi, zabardast olimi sifatida dong taratgan Maqsud Shayxzoda 1908-yili Ozarbayjonning Ganja viloyatiga qarashli Oqtosh shahrida tug'ildi. Otasi Ma'sumbek elu-yurtda katta obro'ga ega shifokor edi.

Shayxzoda she'riy ijodida, asosan, zamonaviy mavzularda qalam tebratdi, dramaturgiyasida esa, tarixiy o'tmishga teran nazar tashlab, undagi zamonaviy muammolarni yoritishga yordam beruvchi siymolar va voqealarga yangi badiiy hayot bag'ishladi. U umrining so'nggi yillarida Beruniy to'g'risida so'nggi sahna asarini yozdi.

Shayxzoda, badiiy ijodning barcha tur va janrlarida asarlar yozibgina qolmay, adabiyotshunos va tanqidchi sifatida ham samarali ijod qilgan. 1941-yildayoq „Genial shoir“ monografiyasini e'lon qilgan Shayxzoda umrining so'nggi kunlariga qadar Navoiy hayoti va ijodi bilan muttasil shug'ullanib keldi.

U Navoiyning 500 yilligi munosabati bilan yozgan „Navoiyning lirik qahramoni haqida“ (1948) maqolasidan keyin „Navoiy lirikasining ba'zi bir poetik usullari haqida“ (1959), „Ustodning san'atxonasi“ (3 qismli maqola, 1965—66), „G'azal mulking sultoni“ (1966), „Tazkirachilik tarixidan“ (1968) singari yirik ilmiy tadqiqotlar yaratib, navoiyshunoslik fanini yangi taraqqiyot bosqichiga olib chiqdi.

O'zbek xalq og'zaki ijodining Fozil shoir singari namoyandalari, „Alpomish“, „Shirin bilan Shakar“ kabi asarlari, o'zbek mumtoz va zamonaviy adabiyotining Bobur, Muqimiy, Furqat, Oybek, G'afur G'ulom, Hamid Olimjon, jahon adabiyotining Nizomiy Ganjaviy, Sh. Rustaveli, A.S. Pushkin, N.A. Nekrasov, A.N. Ostrovskiy, T.G. Shevchenko, A.P. Chexov singari namoyandalariga bag'ishlangan asarlar yozdi. Pedagog olim va shoir sifatida esa talaygina shoir, adabiyotshunos va tanqidchilar avlodining yetishib chiqishiga munosib hissa qo'shdi.

1929-yili yosh shoirning o'zbek tilidagi dastlabki she'ri „Sharq haqiqati“ gazetasi sahifalarida bosilib chiqadi. Oradan ko'p o'tmay, Shayxzodaning birinchi to'plami „O'n she'r“, keyinroq „Undoshlarim“ (1933), „Uchinchi kitob“ (1934), „Jumhuriyat“ (1935) kabi to'plamlari nashr etiladi.

Maqsud Shayxzoda „xalqimizning mehnat qahramonligi, kurash va jang, ozodlik va do'stlik, baxt va alam, yurtning go'zal manzaralari va insonning ma'naviy jamoli mening qalamimga oshno, dilimga mazmun bo'lib keldi“ deb ta'kidlagan edi.

Shoirning bu fazilatlarini, eng avvalo, hayotdagi, voqelikdagi va odamlarimizning ruhiy olamidagi o'zgarishlar, holatlarni ifodalashga qodir yangi, betakror obrazlarida namoyon bo'ldi. Bu Tarix –Yo'l – Safar – Kema –Karvon, Xarita (yer kurrasi va Vatani), Manzil, Raqam, Sur'at va Vaqt obrazlaridir. Bular bir-biri bilan uzviy bog'langan bo'lib, insoniyat tarixi yaxlitdir va doim olg'a qarab harakat qiladi, bu insoniyat karvonini – kemani to'xtatib bo'lmaydi, u insoniyat orzusi – baxt-saodat manzili sari harakat qiladi.

Buni Shayxzodaning o'z kitoblariga "O'n besh yillik daftari" yoki "Chorak asr devoni" deb sarlavha qo'yishidan ham bilish mumkin. Shoirning o'zi "Inson umri cheklangan muhlatli daftar", demak bu daftarni foydali, ezgu ishlar – "yozuvlar" bilan to'ldirish lozim deydi. "Raqamlar" she'rida esa shunday satrlar bor: "Men na munajjimman va na hisobdon va lekin ko'raman sonlar mag'zida osmoncha ma'nolar, yurtning obodon"...

"Qo'llar" she'rida qo'llarda insonning borlig'ini, uning ichki olamining muhrini ko'radi. Uningcha, "g'oyat shafqatli, hayotbaxsh qo'llar" ham "ayovsiz, yovuz, go'r kabi sovuq, tanbal" qo'llar ham bor, qisqasi, har bir qo'l "yurakning navkarlaridir", yurak neni buyursa, qo'l shuni ijro etadi.

Maqsud Shayxzoda ijodiy balog'atidan dalolat beruvchi asarlardan biri "Toshkentnoma" dostonidir. Adabiy jamoatchilik o'z vaqtida bu dostonni shoirning adabiyotimizning yirik ijodiy muvaffaqiyati sifatida baholadi. Chindan ham, "Toshkentnoma" Shayxzoda dostonlari ichida eng barkamoli bo'lib, unda shoir shaxsiyatining o'ziga xos qirralari ancha yorqin namoyon bo'lgan. Dostondagi o'ziga xoslik shundaki, asar yaxlit voqea asosiga qurilgan emas.

Shayxzoda ko'pqirrali iste'dod sohibi edi. U she'rlar va dostonlar bilan birga, juda yuksak badiiy quvvatga ega bo'lgan dramalar ham yaratdi. Shayxzoda umrining so'ngida yozishga kirishgan, lekin tugatib ulgurmagan "Beruniy" dramasi hisobga olmaganda ham, uning "Jaloliddin Manguberdi" va "Mirzo Ulug'bek" dramalari allaqachon xalqimizning badiiy mulkiga aylanib qoldi.

Shayxzoda asarlari qardosh xalqlar va xorijiy tillarga tarjima qilingan. Shoir tarjima jarayonida qardosh xalqlar va jahon adabiyoti namoyondalarining mahorat maktabidan ta'lim olib, ilg'or an'analarini o'zida mujassamlashtirgan she'rlar yozgan.

Shayxzoda 1967-yil 19-fevralda vafot etdi. U Toshkentning Forobiy qabristonida dafn etilgan.

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## ОСОБЕННОСТИ ПРОВЕДЕНИЯ ПОВЕРКИ АНАЛИЗАТОРОВ ПАРОВ ЭТАНОЛА ВО ВЫДЫХАЕМОМ ВОЗДУХЕ

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**Аннотация:** *Проведен анализ современного состояния метрологического обеспечения поверки анализаторов паров этанола, проработаны информации о нормативных документах и методиках поверки анализаторов.*

**Ключевые слова:** *алкогольное опьянение, алкотестер, безопасность дорожного движения, генератор газовых смесей, стандартные образцы водного раствора этанола.*

По информационным данным прокуратуры города Ташкента за 2023 год только на дорогах столицы республики погибли 95 человек, еще 1248 человек получили травмы, из них 10 обрели пожизненную инвалидность, и выявлены 4384 случаев езды в нетрезвом состоянии. Пьяные водители совершили 26 тяжких смертельных аварий.

С целью повышения безопасности дорожного движения, в связи дорожно-транспортные происшествия, вызванные вождением в нетрезвом состоянии водителей, составляют значительную долю от общего числа дорожно-транспортных происшествий были внесены изменения в административное и уголовное законодательство республики.

В Узбекистане утверждено **Положение о порядке определения состояния алкогольного опьянения водителей транспортных средств [1].** Постановлением **Президента Республики Узбекистан №ПП-3786** от 19.06.2018 г. был поручен разработать, утвердить и ввести упрощенный порядок определения состояния алкогольного опьянения водителей транспортных средств, в том числе при помощи переносных технических средств.

Обратимся к понятию технических средств – современных анализаторов паров этанола. Анализатор паров этанола – средство измерений, предназначенное для измерения массовой концентрации паров этанола в отобранной пробе выдыхаемого воздуха с нормированной допускаемой погрешностью и отображения результата измерения в цифровой форме на дисплее и бумажном носителе с помощью встроенного или внешнего принтера.

В сфере государственного регулирования обеспечения единства измерений, для измерения паров этанола в выдыхаемом воздухе используются алкотестеры с предельной допускаемой основной погрешностью до  $\pm 0,05$  мг/л.

Положением **о порядке определения состояния алкогольного опьянения водителей транспортных средств** определена допустимая предельная концентрация алкоголя. Раньше ее не было и формально любое содержание алкоголя в крови могло служить основанием для применения административного взыскания. Спорные ситуации по этому поводу возникали при употреблении продуктов и веществ,

содержащих алкоголь в малых количествах (квас, шоколадные конфеты, апельсины, бананы, соки, сигареты и т.д.), а также на следующие дни после употребления водителями спиртных напитков.

В случае если показатель концентрации паров этанола в выдыхаемом водителем транспортного средства в воздухе равен или превышает 0,135 миллиграмм, сотрудник ГСБДД в соответствии со статьей 131 Кодекса Республики Узбекистан об административной ответственности оформляет в отношении водителя административный протокол по факту употребления алкогольного напитка.

Теперь при использовании анализатора паров этанола во выдыхаемом воздухе состояние опьянения признают при показателе паров алкоголя во выдыхаемом воздухе в 0,135 миллиграммов и выше. А на медицинском освидетельствовании в лечебно-профилактическом учреждении – при концентрации алкоголя в крови в 0,3 промилле и выше.

**Миллиграммы** – количество алкоголя в 1 литре выдыхаемого воздуха. Измеряется уровень алкотестерами, а **промилле** – это содержание алкоголя в крови. Определяется уровень только лабораторным анализом крови.

Как уже отмечено, что анализаторы паров этанола во выдыхаемом воздухе используются в сфере государственного регулирования обеспечения единства измерений в области здравоохранения и выполнении работ по обеспечению безопасности дорожного движения, условий и охраны труда. Поэтому перед проведением теста водитель вправе ознакомиться с документацией на прибор. Повышенные показатели прибора не всегда говорят об опьянении.

Во-первых, этиловый спирт есть в организме всегда. Его называют эндогенным, и в крови взрослого человека можно найти до 0,08 промилле «природного» этанола. При этом повышенное содержание этанола может вызвать прием некоторых лекарств, как банальных спиртовых настоек, так и инсулина, адреналина и аскорбиновой кислоты.

Во-вторых, алкотестер имеет погрешность в 0,02—0,05 мг/л в зависимости от модели.

Он должен быть в установленном порядке проверен Министерством здравоохранения и иметь сертификат, выданный Узбекским Национальным институтом метрологии Агентства технического регулирования. Кроме того, работник государственной службы безопасности дорожного движения обязан строго следовать санитарно-гигиеническим правилам. Однако использование одноразовых мундштуков в документе прямо не прописано.

Здесь необходимо учитывать, что принятые в Узбекистане пороговые показатели алкотестера (мг/л) и его содержания в крови (промилле) строго соответствуют научно доказанному соотношению, где 1мг/л равен 0,45 промилле (1:0,45). Т.е. 0,135 мг/л – это 0,3 промилле. Однако алкотестер имеет погрешность в зависимости от модели 0,02 – 0,05 мг/л. Определение точной концентрации этанола в воздухе является актуальной проблемой, решение которой способствует обеспечению безопасности дорожного движения и сохранению жизни человека. Точность анализа зависит не

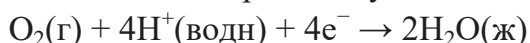
только от биологических особенностей человека, но и от типа используемого прибора и его калибровки. В работе [2] систематизированы результаты поверки около 3800 анализаторов паров этанола утвержденного типа. Погрешность анализаторов преимущественно связаны с конструктивными особенностями приборов, которые определяются применяемым чувствительным элементом – первичным измерительным преобразователем, на который непосредственно воздействует измеряемая физическая величина. В зависимости от используемых физико-химических принципов измерений первичные преобразователи анализаторов паров этанола классифицируются на следующие виды: термохимические; электрохимические; полупроводниковые; оптические сенсоры паров этанола.

• Сравнительные анализы [2], проведенные алкотестерами разной конструкции показали, что существенно лучшие показатели оказались у приборов с электрохимическим датчиком. Электрохимические датчики – отличаются повышенной надежностью и износостойкостью, применяются в профессиональных моделях алкотестеров.

Когда пользователь выдыхает в алкотестер, любой этанол, присутствующий в его дыхании, окисляется на аноде до уксусной кислоты:



на катоде кислород воздуха восстанавливается:



Общая реакция представляет собой окисление этанола до уксусной кислоты и воды.



Электрический ток, возникающий в результате этой реакции, измеряется микроконтроллером и отображается как приблизительное общее содержание алкоголя в выдыхаемом воздухе с помощью анализатора.

Основными показателями для любого типа анализаторов является погрешность измерений, точность измерений и диапазон измеряемых концентраций, а на результат измерений влияют три основные факторы [3].

Субъекты измерений. Результаты наблюдений, определяемых с помощью средств измерений, во многом зависят от профессиональной подготовки лиц, осуществляющих измерительную процедуру.

Средства измерений. Средства измерений оказывают большое влияние на результат измерений. Их выбор определяется требуемой точностью измерений.

Методы измерений. Разные методы отличаются различной точностью, поэтому также влияют на результаты измерения. Выбор их определяются требуемой точностью измерений. Любое отклонение от методики поверки приводит к нарушению результатов поверки [4]. В ходе поверки несоблюдение температурного режима или использования некачественного стандартного образца газовой смеси приводит к таким отклонениям.

При проведении измерений с помощью генератора газовых смесей необходимо собрать газовую систему согласно методике. Подготовить генератор газовых смесей к



работе согласно Руководству по эксплуатации, с использованием стандартных водных растворов этанола. Генератор газовых смесей водных растворов этанола имитирует выдыхаемый человеком воздух. По методике поверки корректировка показаний алкотестера проводят при помощи подачи газовой смеси от средства поверки – генератора на анализаторы.

Действительное значение массовой концентрации на выходе генератора газовых смесей рассчитываются по формуле:

$$C_1^Д=0,38866 \times C_p^Д,$$

где  $C_p^Д$ -аттестованное значение массовой концентрации этанола в используемом стандартном образце, указанное в паспорте, мг/см<sup>3</sup>.

Выполняют корректировку показаний анализатора, согласно эксплуатационным документам используемого конкретного анализатора.

Концентрация алкоголя в организме человека может быть измерено несколькими единицами:

1. Мг/л –миллиграмм этанола в литре выдыхаемого воздуха – используются в профессиональных приборах.

2. Промилле (‰) –грамм этанола в литре крови (г/л) – используются в большинстве персональных алкотестерах.

Концентрация в выдохе (воздушной среде) измеряют также в единицах мкг/л, или мг/м<sup>3</sup>. Перевод одной единицы в другую осуществляют из соотношения: 1,0 промилле=450 мкг/л=0,450 мг/л.

Если 1 промилле в крови соответствует примерно 0,45 мг/л в выдыхаемом воздухе, то 0,1 промилле=0,045мг, соответственно 0,3промилле=0,135мг/л

### ЗАКЛЮЧЕНИЕ

Проанализированы литературные данные и различные методики поверки анализаторов паров этанола, собраны сведения об анализаторах различной конструкции, о принципах их работы и стандартных образцов растворов этанола и эталонов их газовых смесей. Изучена поверочная схема анализаторов паров этанола, определены основные факторы влияющие на метрологические характеристики прибора.

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## BUGUNGI KUNDA ZAMONAVIY KASB TANLASHNING O'ZIGA XOS JIXATLARI

**Yusupov I**

*Toshkent viloyati Oqqo'rg'on tuman 1-son kasb-hunar maktabi maxsus fan  
o'qituvchisi*

**Annotatsiya:** *Ushbu maqolada shaxsiy hayotdagi yutuqlar zamonaviy jamiyatda asosan uning kasbiy tanlovi bilan bog'liqligi muhokama qilinadi. Kasb tanlash - bu og'ir sharoitda omon qolish uchun, u allaqachon poydevor qo'ygan jixatdir. Tasavvur qiling, siz xozir yoshsiz, o'zingiz uchun kasb tanlash va zavq bilan ishlash juda qiyin, Shu bois sizga nima kerakligini tasvirlamoqchiman.*

**Kalit so'zlar:** *kasb, yosh avlod, mutaxassislik, ish, yo'nalish, tanlash, hunar, mehnat.*

Bugungi jamiyatda shaxsning xayotdagi yutuqlari asosan uning kasbiy tanlovi bilan belgilanadi. Ba'zi manbalarda "kasb" so'zining ma'nosi, ta'rifi yo'q bo'lib, uning mazmuni "ish" tushunchasi bilan aks etgan, ishlash, qilish, qo'l bilan, tana kuchi bilan yoki aqliy jixatdan biror narsa qilish. Zamonaviy ma'lumotnomalarga ko'ra, "kasb"- bu inson mehnat faoliyatining shakllantiruvchi omilidir. Inson taraqqiyoti davomida aynan uning mehnat faoliyati hal qiluvchi ro'l o'ynagan. Ishlab chiqarish usuli va mehnat tabiati bo'yicha insoniyat shartli ravishda agrar, sanoat va postindustrial rivojlanish bosqichlaridan o'tdi. Tadqiqotchilar postindustrial jamiyatni bilimga asoslangan axborot jamiyati deb ham atashadi. Inson faoliyati tobora ko'proq moddiy ishlab chiqarish bilan emas, balki moddiy bo'lmagan mahsulot bilan texnologiyalar va kompyuter dasturlari yordamida kodlangan ma'lumotlar, bilimlar bilan bog'liq. Jamiyat hayotining "intellektualizatsiyalashuvi" paydo bo'lgan. Xalqaro tashkilotlar sezilarli darajada o'sishi va murakkablashgan axborot tizimlari maxsus axborot va telekommunikatsiya texnologiyalari yordamida uzatiladi. Zamonaviy jamiyat hayoti, uning taraqqiyoti sharoitida insoniyatning omon qolishi ko'p jihatdan yaratilgan texnologiyalarga bog'liq. Axborot davri zamonaviy shaxsning o'zini rivojlantirishga, ijodkorlikning o'ziga intilishini keltirib chiqaradi, axborot mahsulotlarini tobora ko'payib va kengayib borishiga yo'naltiradi va shu bilan birga axborot resursidan foydalanish qobiliyatini shaxsning ijtimoiy maqomida hal qiluvchi omil deb hisoblash mumkin. Ta'lim darajasi, ma'lumotni bilimga aylantirish qobiliyati, ijodiy faoliyat, axborot muhitida mustaqil va samarali harakat qilish qobiliyati zamonaviy insonning ijtimoiy mavqeining yangi tarkibiy qismidir.

Bugungi kunda o'sib kelayotgan yoshlarni o'ziga bo'lgan ishonchi, kuch-g'ayrati, keng dunyoqarashi bilan ajratib ham ko'rsatish zarur. Ushbu dunyoqarash va zakovatlar esa ularni atrof-muhitga, tabiatdagi va jamiyatdagi hodisalarga qiziqishlaridan kelib chiqadi albatta. Bu esa o'z navbatida kasb tanlovchining olayotgan bilimlaridan, ko'nikmalaridan, malakalaridan, psixofiziologik imkoniyatlaridan, individual psixologik jixatlaridan fazilatlaridan va boshqa shaxsiy qirralaridan kelib chiqadi. Bugungi kunda o'z imkoniyatini to'g'ri baholay olgan insongina to'g'ri yo'lni tanlay oladi. Bu yoshlardagi tirishqoqlik,

ilmga chanqoqlik, kuzatuvchanlik, o'zini sinab ko'rishga intilishi kabi jixatlarda yaqqol ko'zga tashlanadi.

Yoshlarda o'ziga xos ravishda ayrim kasblarga qiziqishlar shu kasb bilan bog'liq ayrim psixologik xususiyatlarda ko'rinadi. Misol tariqasida shuni aytish mumkinki, hozirda qaysi boladan so'rasangiz ko'proq men tadbirkor bo'laman, o'zimni ishimni yo'lga qo'yaman deb javob beradi. Tadbirkor va tadbirkorlik bu savdo sotiq, ishni tashkil etish, o'zini mehnati bilan kapital ishlash hisoblanadi. Lekin shunday ko'ringani bilan bolalarda ko'proq mashinaga ega bo'lish, puldor bo'lish, hamma narsani bemalol, xoxlagan vaqt sotib olish kabi tomonlar ko'zga tashlanadi. Buning ko'zga tashlanmas qiyinchiliklarini ular ko'ra olmaydilar va xayoliga xam keltirmaydilar. Shunday o'ziga xos bo'lgan tomonlar esa ularni qiziqtirib boradi. Yoshlarni shunday tomonlarga qiziqib borishi ular orasida tadbirkor bo'lishga havas uyg'otadi. Xuddi shuningdek, dasturchi kasbi yoki xisobchi bo'lish kabi tomonlar ham yoshlarni qiziqishlaridan kelib chiqadi. Har bir kasbni o'ziga xos bo'lgan psixologik tomonlari borki, bu yoshlarni doim o'ziga tortib turadi. Qiziqishini angelay olgan bolagina o'zi uchun kasbni to'g'ri tanlay oladi.

Yoshlardagi havas, qiziqish ularni shu kasbni egallashga intiltirib turadi. Zukko yoshlar shu kasbga tegishli bo'lgan bilimlarni eng avvalo kuzatishlar, so'rab bilishlar, kitoblardan o'qish orqali, hozirgi kunda esa internet orqali bilishga harakat qiladilar. O'zlari qiziqqan kasblari haqida ko'plab ma'lumotlar to'playdilar. Yoshlarni biror bir narsani yaratuvchanlik qiziqishi injenerlik yoki uni biror bir boshqa yo'nalishga yetaklaydi. Hozirda dunyoda ko'plab yangiliklar yaratilmoqdaki yoshlar va ularning diqqatlari doimo qiziqishlaridan kelib chiqqan holda shu obyektlarga qaratilmoqda. Har bir sohaning o'ziga xos bo'lgan qiziqarli tomonlari mavjuddir.

Pedagog ham bolalarga yetkazib berishi kerak bo'lgan bilimlarni sifatli, qiziqarli, yetib boradigan qilib darslarni o'tkazishga va o'sib kelayotgan yoshlar o'rtasidan yaxshi kadrlar yaratishni orzu qiladi. Pedagog tarbiyalagan bolalar o'z qiziqishlaridan kelib chiqqan holda jamiyatga ko'plab yangiliklar kiritishi mumkin bo'ladi. Pedagog esa shunday kadr yaratib bera olganidan faxrlanadi albatta. Demak, ko'rinib turibdiki, yoshlarni kasbga yetaklovchi ehtiyojlaridan biri uning qiziqishlari hisoblanar ekan. Bu esa insonni biror bir narsaga yetilib kelgan ehtiyojlaridan kelib chiqadi. Bolalar o'sib borgan sari ma'lum bir taraqqiyot yo'lini bosib o'tadilar. Pedagogik sotsiologiyada aytilganidek bola tarbiyasiga o'z ta'sirini o'tkazayotgan omillar uni o'ylashga, o'z manfaatlari yo'lida mehnat qilishga majburlaydi. Yetilib kelayotgan yoshlardagi o'zgarish ularni ijtimoiy jarayonlarga va bu jarayonlardagi o'z o'rnini bilishga chorlaydi. Katta bo'layotgan, aql - farosatga ega farzand kelajagi haqida bosh qotiradi, hayol suradi, kelajagini rejalashtiradi. Bular esa unda ko'plab ehtiyojlarni paydo qiladi. Bolalik davridan o'smirlilik va o'spirinlik davrlariga o'tib borayotgan farzandda psixologik va eng asosiysi anatomik-fiziologik o'zgarishlar yuz bera boshlaydi. Endi yoshlar asta-sekin o'zidagi tabiiy, ijtimoiy, iqtisodiy, huquqiy ehtiyojlar tizimini seza borishadi. Bu qator ehtiyojlardan yoshlarni kasb orqali o'zini ta'minlash ehtiyoji hisoblanadi. Bu ehtiyoj yoshlarni kasb tanlashga, o'z hayotini go'zal qilib yashashga majburlaydi. Aks holda ularni jamiyatga zid bo'lgan jarayonlar paydo bo'ladi.

Yoshlarni kasb egallashi nafaqat ulaming ehtiyoji balki jamiyatning ham ehtiyoji hisoblanadi. Shuning uchun jamiyat o'z ishlab chiqaruvchilarini yaratishi zarur jarayonga aylanadi. Jamiyat ishlab chiqarish orqali yashaydi va hayot kechiradi. Jamiyat ehtiyojlari har doim o'zgargan xolda o'sib boradi. Uni qondirishning yagona yo'li kasb egalarini tarbiyalash, ularning qiziqishlaridan kelib chiqqan holda yangidan-yangi kasblarni yaratish va takomillashtirish hisoblanadi. Shuning uchun ham boshqa rivojlangan davlatlarda ko'plab yangi kasblar paydo bo'ladi va jamiyat ehtiyojlarini to'laroq qondirishga intiladi.

Jamiyatdagi ko'plab ehtiyojlar shu kasbga kerak bo'lgan kadrlarni yaratishni talab qiladi. Bu esa yoshlarda, ularning qiziqishlarida va maqsadlarida o'z aksini topadi. Jamiyatda yaratuvchanlikka, ijodkorlikka xos bo'lgan mehnat qadrlanadi. Jamiyat uchun yaratilayotgan mahsulotlar va ulami ishlab chiqarish ko'plab kasblarni paydo qiladi. Demak, ko'rinib turibdiki, inson va jamiyat ehtiyojlari uzviy ravishda bog'liq jarayonlar bo'lib xisoblanadi.

Haqiqatdan, shaxsdan kasb talab qiladigan psixologik xususiyatlar mavjudki, insonda bu xususiyatlar bo'lmasa u bu kasbda o'z yutug'iga ega bo'la olmaydi. Tadqiqotchilar bu xususiyatlarni aniqlash uchun maxsus testlar o'tkazib insonni shu kasbga layoqatini tahlil qiladilar. Kasblar o'zidagi faoliyatlarni bajarish uchun insondan ma'lum bir psixologik xususiyatlarni egasi bo'lishlarini talab qiladilar. Shuni ta'kidlab o'tish lozimki xotirani yaxshi bo'lishini, diqqatni yaxshi bo'lishini, hayol jarayonlardagi qonunlarni o'zlashtirgan bo'lishini, sezgirlikni yaxshi rivojlanganligi, ayrim faoliyatlarda sabr-toqat, tartiblilik, intizom, ijodiy yondosha olish, har xil holatlardan chiqib keta olish, halollik, mehnatsevarlik, boshqalarni hurmat qilish va ulami haq-huquqlarini yaxshi bilish, bilimlilik darajasini yuksakligi, rahbarlik qilish uchun kerak bo'lgan xususiyatlarni bilish, tijorat uchun kerak bo'lgan psixologik xususiyatlarga ega bo'lish kabi ko'plab tomonlar bu jarayonlar uchun kerak bo'ladi.

Jamiyatda insonni qiziqtirgan ko'plab kasblar borki ular bir-biridan juda farqlanib turadi va insondan kasbga loyiq bo'lgan psixologik xususiyatlarni talab qiladi. Deylik pedagog uchun didaktik usul juda mos tushsa, aktiyor uchun xotiraning, hayolning va boshqa psixik jarayonlarning o'rni boshqacha hisoblanadi. Sanoatda ishlayotgan ishchi, injener, dizayner uchun o'ziga xos psixologik xususiyatlar kerak bo'ladi. Ya'ni dizayner uchun estetik did, hayol, tafakkurni egiluvchanligi, diqqat va juda nozik holdagi ranglarni ajrata olish kabi ko'plab xususiyatlar zarur bo'ladi. Xam og'ir, xam yengil sanoat uchun ko'plab xilma-xil kasb egalari kerak bo'ladi. Bular uchun ham kasb psixologiyasi o'ziga xos bo'lgan inson psixikasini qirralarini shu kasbga xos tomonlarini va shaxsda ularni rivojlantirish masalalarini ham o'rganib boradi.

Yoshlarning qiziqishi, maqsad va manfaatlari o'z dunyoqarashlariga kerak bo'lgan va mos tushadigan kasbni tanlashga, bu kasbga xos bo'lgan psixologik tomonlarni bilishga intilirib turadi.

Inson uchun eng zarur narsa — uning imidjiga, “o'ziga” ega bo'lish, uning barcha mumkin bo'lgan jismoniy va ma'naviy imkoniyatlarining zo'riqishi sharoitida sodir bo'ladi. Biz ta'lim olgandan so'ng, hayot uchun zarur bo'lgan hamma narsani deyarlik bilamiz.

Biroq, ko‘pincha odam o‘zi haqida, o‘zining ijodiy imkoniyatlari haqida kam ma’lumotga ega, sog‘lig‘ini qanday saqlashni bilmaydi, kayfiyatni, ruhiy holatni boshqarmaydi, hayot yo‘nalishini, qiymat ko‘rsatmalarini tanlashda ba’zan xato qiladi.

Ko‘rinib turibdiki, inson doimiy evolyutsiya, takomillashtirish uchun dasturlashtirilgan va agar uning biosotsial dasturi amalga oshirilmasa, muvaffaqiyatsizliklar yuzaga keladi: kasalliklar, stresslar, depressiv holatlar. Ta’lim olishda kasb va yo‘nalishni tanlash kelajak uchun ish bo‘lib, inson, jamiyat, sivilizatsiyaning ijodiy salohiyatini oldindan belgilab beradi, dunyoqarash, xulq-atvor, iqtisodiy va axloqiy ustuvorliklarni yaratadi.

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## SFERA SIRTIDA JOYLASHGAN FIGURALAR YUZINI TOPISH USULLARI

**B. A. Mardonov***SamDAQU “Ijtimoiy va tabiiy fanlar”  
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**Maqolada** sfera sirtida joylashgan ikkiburchak va uchburchak tushunchasi, uning yuzasini topish masalasi qaralgan. Sferada joylashgan geometrik figuralarning xarakterli munosabatlarini trigonometrik formulalar orqali izohlash astronomiya va geodeziya sohasida ahamiyatga ega.

**Kalit so’zlar:** sfera, sfera sirtida joylashgan ikkiburchak, sferada joylashga uchburchak, sferik ortiqlik, yuza.

**В статье** рассмотрено понятие двуугольника и треугольника в сфере, нахождение площади её поверхности. Изучение характерных отношений геометрических фигур в сфере с использованием тригонометрических формул важно в астрономии и геодезии.

**Ключевые слова:** сфера, двуугольник размещенная на сфере, треугольник размещенная на сфере, сферический избыток, площадь поверхности.

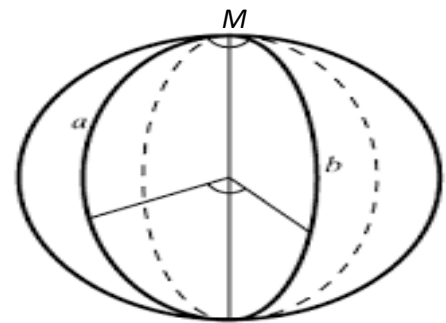
**In article** the concept of a two-square and a triangle of sphere, a finding of the area of its surface is considered. Studying of characteristic relations of geometrical figures in sphere with use of trigonometrical formulas important in astronomy and a geodesy.

**Keywords:** sphere, a two-square placed on sphere, a triangle placed on sphere, spherical surplus, the surface area.

Yangi O’zbekistonimizda aviasozlik, mashinasozlik, gidrotexnika, qurilish, yer tuzilishi, geodeziya, kartografiya, asrtonomiya va boshqa ko’plab fanlarning masalalarini yechishda matematikaning trigonometrik munosabatlariga murojaat qilinadi.

Bunda tekislikdagi trigonometrik munosabatlardan tashqari sferik sitrda joylashgan figuralarning xarakterli munosabatlarini trigonometrik formulalar orqali izohlashga zarurat tug’iladi. Bunday zaruriyatlarni “Oliy geodeziya”, “Astronomik geodeziya”, “Sferik geodeziya” kabi fanlarini o’rgatishda ko’rish mumkin. Ushbu maqola sfera sirtida joylashgan eng sodda sferik figura - sferik ikkiburchak va sferik uchburchaklar elementlari orasidagi geometrik va trigonometrik bo’g’lanishlar yordamida uning yuzasini topish formulasini keltirib chiqarish va xulosalar olish maqsadida tayyorlandi.

Sfera markazidan o’tuvchi istalgan tekislikning sfera bilan kesishishidan hosil bo’lgan aylanasi katta aylana, boshqa barcha aylanalar kichik aylanalardir. Sferada



$M_1$   
1-rasm

joylashgan ikkita turli nuqtalarni sfera bo'ylab yo'ylar bilan tutashtirish mumkin. Bunday yo'ylar cheksiz ko'p bo'ladiki, ularning ichidan eng qisqa uzunlikka ega bo'lgan yoy alohida xarakterlidir, chunki bunday yoy uzunligini qaralayotgan sfera radiusi va mos markaziy burchak orqali ifodalasa bo'ladi. Sferaning ikkita nuqtasi orasidagi qisqa masofa deganda ularni tutashtiruvchi katta aylana yoyi tushuniladi [2].

Sferaning ikkita katta aylanalari chegaralab turgan qismiga sferik ikki burchak deyiladi (1-rasm). Sferik ikki burchakning burchaklari o'zaro teng, tomonlari ham o'zaro tengdir. Radiusi  $R$  bo'lgan sferadagi sferik ikkiburchakning tomonlari katta aylana uzunligining yarmi bo'lgani uchun, sferik ikkiburchak tomoni uzunligining gradus o'lchovi  $180^0$  ga tengdir, yoki radian o'lchovi uchun ushbu tenglik o'rinli  $\cup MM_1 = \frac{2\pi R}{2} = \pi R$  bo'ladi.

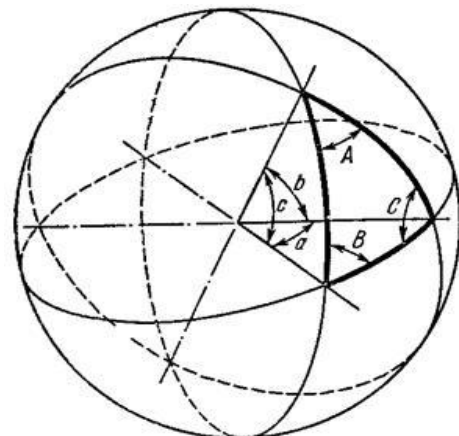
Sferik ikkiburchakning yuzisini hisoblash uchun uning burchagini  $M$ , yuzini  $S_{MM_1}$  deb

olib, ushbu proporsiyani tuzib mumkin:  $\frac{S_{MM_1}}{4\pi R^2} = \frac{M}{360^0}$ , bu yerda  $4\pi R^2$  – sfera sirtining yuzasi. Tuzilgan proporsiyadan sferik ikkiburchak yuzini hisoblash uchun quyidagi formulani hosil qilish mumkin

$$S_{MM_1} = \frac{M}{90^0} \cdot \pi R^2 \quad (1)$$

yoziqlan tenglikdan ko'rinadiki sferik ikkiburchak yuzi uning burchagini  $90^0$  ga bo'lishdan hosil bo'lgan sonni katta aylana chegaralab turgan doira yuziga ko'paytirishdan hosil bo'ladigan miqdorga teng ekan.

Sferaning bitta katta aylanasi ustida yotmaydigan uchta nuqtalarining har ikkitasidan o'tuvchi katta aylanalarning yo'ylari chegaralab turgan sferik sirt, sfera sirtida joylashga uchburchak yoki qisqacha sferik uchburchak deyiladi. Sferik uchburchakning uchlari va ularga mos burchaklarini bir xil bosh harflar bilan, burchaklar qarshisidagi tomonlarni (yo'ylarni) mos ravishda bir xil mos kichik harflar bilan belgilanadi. Masalan  $ABC$  - sferik uchburchak deganda  $A, B, C$  - sferik uchburchakning bir vaqtda uchlari va burchaklarini belgilanishini,  $a, b, c$  - sferik uchburchakning  $A, B, C$  burchaklari (uchlari) qarshisidagi tomonlari (mos katta aylana yo'ylari) belgilanishini bildiradi (2-rasm).



2-rasm

$ABC$  sferik uchburchak  $a, b, c$  tomonlari va  $A, B, C$  burchaklari uchun quyidagi munosabalar o'rinlidir: 1)  $a+b>c, a+c>b, b+c>a$ ; 2)  $a-b<c, a-c<b, b-c<a$ ; 3)  $0<a+b+c<360^0$ ; 4)  $180^0<A+B+C<360^0$ ; 5)  $A+B-C<180^0, A+C-B<180^0, B+C-A<180^0$ .

$ABC$  sferik uchburchak  $a, b, c$  tomonlari va  $A, B, C$  burchaklari uchun quyidagi munosabalar o'rinlidir: 1)  $a+b>c, a+c>b, b+c>a$ ; 2)  $a-b<c, a-c<b, b-c<a$ ; 3)  $0<a+b+c<360^0$ ; 4)  $180^0<A+B+C<360^0$ ; 5)  $A+B-C<180^0, A+C-B<180^0, B+C-A<180^0$ .

Sferik uchburchak ortiqligi (ekssessi) deganda  $A, B$  va  $C$  burchaklari orqali topiluvchi  $\varepsilon=A+B+C-180^0$  tenlik bilan aniqlanadigan, hamda  $a, b$  va  $c$  tomonlari orqali esa

$\operatorname{tg} \frac{\varepsilon}{4} = \sqrt{\operatorname{tg} \frac{p}{2} \cdot \operatorname{tg} \frac{p-a}{2} \cdot \operatorname{tg} \frac{p-b}{2} \cdot \operatorname{tg} \frac{p-c}{2}}$  tenglik (bunda  $2p=a+b+c$ ) bilan aniqlanadigan miqdor tushuniladi [1].

Radiusi  $R$  bo'lgan sferadagi  $ABC$  sferik uchburchakning  $S_{ABC}$  yuzasini hisoblash formulasini keltirib chiqaramiz. Qaralayotgan  $ABC$  sferik uchburchak uchun  $A_1B_1C_1$  simmetrik sferik uchburchak bo'lsin. U holda  $ABC$  sferik uchburchakning  $a, b, c$  tomonlari bo'yicha qo'shma bo'gan  $A_1BC, B_1AC, C_1AB$  sferik uchburchaklar paydo bo'ladi (3-rasm). Qo'shma sferik uchburchaklar yuzalarining yig'indisi ularning umumiy tomoniga mos burchakga to'g'ri keluvchi sferik ikkiburchakning yuziga teng bo'ladi. Bu tengliklarni belgilashga muvofiq quyidagicha yozib olamiz:  $S_{ABC} + S_{A_1BC} = S_{AA_1}$ ,  $S_{BAC} + S_{B_1AC} = S_{BB_1}$ ,  $S_{CBA} + S_{C_1BA} = S_{CC_1}$ . Yozilgan uchala tenglikning o'ng tomonida qaralayotgan sferik uchburchak burchaklariga mos sferik ikkiburchaklar yuzalarini topish formulalarini yozib, so'ngra uchala tenglikni o'zaro qo'shamiz

$$3S_{ABC} + S_{A_1BC} + S_{B_1AC} + S_{C_1BA} = \frac{\pi R^2}{90^0} \cdot A + \frac{\pi R^2}{90^0} \cdot B + \frac{\pi R^2}{90^0} \cdot C$$

bundan,

$$2S_{ABC} + S_{ABC} + S_{A_1BC} + S_{B_1AC} + S_{C_1BA} = \frac{A+B+C}{90^0} \cdot \pi R^2 \quad (2)$$

tenglikni hosil qilamiz. Keltirilgan 3-rasmga muvofiq  $C_1BA$  sferik uchburchak  $CB_1A_1$  sferik uchburchakka simmetrikdir. Simmetrik sferik uchburchaklarning yuzalari miqdor jihatdan o'zaro teng, ya'ni  $S_{C_1AB} = S_{CB_1A_1}$  shart bajariladi. Bu shartni (2) tenglikning chap tomonida inobatga olib va oxirgi to'rtta qo'shiluvchi qaralayotgan sfera sirti yuzasining yarmi ekanligidan,  $2S_{ABC} + 2\pi R^2 = \frac{A+B+C}{90^0} \cdot \pi R^2$  yoki, bundan

$$S_{ABC} = \frac{A+B+C-180^0}{180^0} \cdot \pi R^2$$

Oxirgi tenglikda  $A+B+C-180^0 = \varepsilon$  ekanini inobatga olib, sfera sirtida joylashgan uchburchak ya'ni sferik uchburchak yuzasini hisoblash formulasiga ega bo'lamiz:

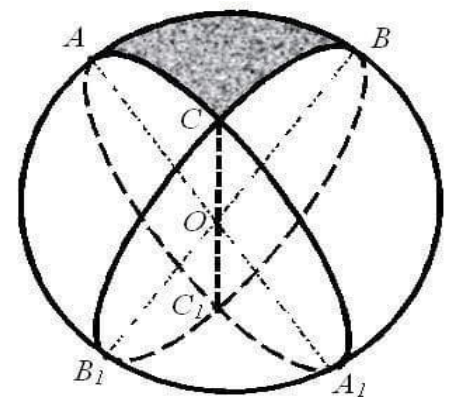
$$S_{ABC} = \frac{\pi R^2}{180^0} \cdot \varepsilon$$

(4)

Demak,  $R$  radiusli sfera sirtida joylashgan  $MM_1$  sferik ikkiburchakning yuzasi  $S_{MM_1} = \frac{M}{90^0} \cdot \pi R^2$  formula bilan,  $ABC$

sferik uchburchakning yuzasi  $S_{ABC} = \frac{\pi R^2}{180^0} \cdot \varepsilon$  formula bilan

topilar ekan.



3-rasm

Misol. Agar radiusi  $R = 6700000 \text{ m}$  bo'lgan sferada joylashgan  $ABC$  sferik uchburchakning burchaklari  $A = 79^{\circ}33'20''$ ,  $B = 65^{\circ}28'20''$ ,  $C = 37^{\circ}52'40''$  ga teng bo'lsa, sferik uchburchakning eksessini va yuzini toping.

$\Delta$  Sferik uchburchak eksessini topish formulasi  $\varepsilon = A + B + C - 180^{\circ}$  ga ko'ra  $\varepsilon = 79^{\circ}33'20'' + 65^{\circ}28'20'' + 37^{\circ}52'40'' - 180^{\circ} = 0^{\circ}03'03''$  demak,  $\varepsilon = 0^{\circ}03'03''$ .

$ABC$  sferik uchburchakning yuzini topish formulasi

$S_{ABC} = \frac{\pi R^2}{180^{\circ}} \cdot \varepsilon$  dan foydalanib, berilgan kattaliklarni inobarga olib, smartfon

kalkulyatorida hisoblaymiz:  $\varepsilon = 0^{\circ}03'03'' = \left(0 + \frac{3}{60} + \frac{3}{3600}\right)^{\circ} = 0,0508^{\circ}$ ,

$R = 6700000 \text{ m} = 6700 \text{ km}$ ,  $S_{ABC} = (\varepsilon \div 180) \times \pi \times R^2$ ,  $S_{ABC} = 39800,698 \text{ km}^2 \blacktriangle$ .

Sferada joylashgan ikkiburchak va uchburchak xossalariidan, ularning yuzasini topish formulalaridan foydalanib, geodezik va astronomik tadqiqotlarda foydalanish mumkin bo'ladi. Yer sharida joylashgan katta miqdordagi maydonlarning yuzalarini uni uchburchaklar shaklida qismlarga ajratib, uchlari joylashish koordinalari yordamida oson topish imkonini beradi.

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## XORIJLIKLARGA O‘ZBEK TILINI O‘QITISHDA OG‘ZAKI VA YOZMA NUTQ KO‘NIKMALARINI RIVOJLANTIRISH

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**Annotatsiya:** *Ushbu maqolada o‘zbek tilini chet tili sifatida o‘qitishda og‘zaki va yozma nutqni rivojlantirish bo‘yicha qilinayotgan amaliy ishlar va chet el fuqarolariga o‘zbek tilini o‘qitishda ayrim metodik jihatlar bayon etilgan.*

**Аннотация:** *В данной статье содержится информация о практической работе по развитию устной и письменной речи при обучении узбекскому языку как иностранному и методах, используемых при обучении узбекскому языку иностранных граждан.*

**Kalit so‘zlar:** *O‘zbek tili, og‘zaki nutq, yozma nutq, ta’lim jarayoni, lug‘at, yozish qobilyatlari, tinglash qobilyatlari, grammatika, to‘g‘ri talaffuz.*

**Ключевые слова:** *Узбекский язык, устная речь, письменная речь, учебный процесс, лексика, навыки письма, навыки аудирования, грамматика, правильное произношение.*

O‘zbek tilini chet tili sifatida o‘qitishda og‘zaki va yozma nutqni rivojlantirish omillari samarali muloqot til o‘rgatishning asosi bo‘ladi. O‘zbek tili darslarida asosiy vazifa bu o‘quvchilarning nutq madaniyati va nutqiy ko‘nikmalarini rivojlantirishdir.

2020-2030- yillarda o‘zbek tilini rivojlantirish va til siyosatini takomillashtirish bo‘yicha O‘zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev o‘sha yilning 20-oktabrida PF-6084-son Farmoni e‘lon qildi<sup>13</sup>.

O‘zbek tilining fonetikasi, leksikasi, grammatikasi bo‘yicha nutqning og‘zaki va yozma shakllaridan keng va to‘g‘ri foydalanib ilmiy-amaliy ma’lumot berish o‘zga tilli o‘quvchilarni o‘zbek tilida to‘g‘ri talaffuz qilishga o‘rgatish. Maktablarda o‘zbek tilining maqsadi o‘quvchilarni ijodiy fikrlash, fikrlarini nutq sharoitiga mos ravishda og‘zaki va yozma shakllarda to‘g‘ri bayon etish ko‘nikmalarini shakllanishiga qaratiladi.

Yozma nutq murakkab jarayon bo‘lib, u ko‘p vaqt va mehnat talab qiladi. Bunday nutq davomida inson o‘z o‘zini kuzatib boradi. Yozma nutqda savodxonlik va mazmun asosiy o‘rin tutadi. Yozma nutqni o‘stirish bevosita tilning grammatik qurilishi va lug‘at qatlamini mukammal o‘zlashtirish bilan bog‘liqdir.

### **YOZMA NUTQQA QO‘YILADIGAN TALABLAR:**

Yozma nutqdagi fikr qiziqarli, ifodali, uslub jihatidan sodda va ravon bayon etilishi kerak. Hamda adabiy til meyorlariga rioya qilish, til boyligidan keng va ijodiy foydalanish zarur.

<sup>13</sup> O‘zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev o‘sha yilning 20-oktabrida PF-6084-son Farmoni e‘lon qildi



“Yozma mashqlar nutqni silliqalaydi, nutqiy mashqlar esa yozish uslubini jonlantiradi” deydi- Mark Fabiy Kirintleon.<sup>14</sup> Xorijliklar o‘zbek tilidagi so‘zlarni to‘g‘ri yozishda muayyan tovushlarni to‘g‘ri talaffuz qilishda qiyinchiliklarga duch kelishi mumkin. Bu esa yozma nutqda hamda og‘zaki muloqatda yuzaga kelishi mumkin bo‘lgan tushunmovchiliklarga olib keladimi. Umumta’lim maktablarining yuqori bosqichidagi o‘quvchilarning og‘zaki nutqini rivojlanish muommosi tobora muhim ahamiyat kasb etmoqda. Bugungi kunda zamonaviy maktablarning maqsadi o‘quvchilarni madaniyatli shaxs sifatida shakllantirishdan iborat. Bu ularning chet tili haqida ma’lum bilimlarini egallashi va nafaqat tushunish balki unda erkin muloqat qilish qobilyatini shakllantirishdan iborat. O.A.Bryukova va D.V.Semenovalar takidlaganidek “Zamonaviy metodologiya fanida monolog va dialog shakllarida o‘z og‘zaki nutqini yaratish qobilyatini shakllantirish chet tilini o‘qitishning asosiy maqsadi sifatida belgilanadi va chet tili tushunchasi orqali ifodalanadi. Ma’lumki kommunikativ kompetensiya juda murakkab ko‘p komponentli tuzilishga ega”dir. Nutqni o‘rgatish umum ta’lim maktabining yuqori bosqichidagi o‘quvchilarining haqiqiy ehtiyojlari va qiziqishlariga javob beradigan mavzuga asoslanadi. O‘zbek tilida og‘zaki nutqni rivojlantirish omillari og‘zaki nutq tinglash va nutq ko‘nikmalarini o‘z ichiga oladi. O‘zbek tilini chet tili sifatida rivojlantirishiga yordam beradigan omillar:

**Lug‘atlar:** har qanday tilda samarali og‘zaki muloqat qilish uchun lug‘at zarur. O‘quvchilar o‘z so‘zlarini ifoda etish va boshqalarni tushunish uchun ham keng so‘z boyligini rivojlantirish kerak.

Talaffuz: to‘g‘ri talaffuz o‘zbek tilida aniq muloqat qilish uchun juda muhimdir. O‘quvchilar o‘zbek tilidagi talaffuz qoidalariga haqida tushunchaga ega bo‘lishlari va o‘z malakalarini oshirish uchun muntazam ravishda mashq qilishlari kerak.

**Tinglash qobilyati:** kuchli tinglash qobilyatlari samarali muloqat qilish uchun juda muhimdir va o‘quvchilar suhbatlarda qatnashish uchun og‘zaki o‘zbek tilini tushunishlari kerak.

**Grammatika:** O‘zbek tili grammatikasi murakkab bo‘lishi mumkin. Uning qoidalarini o‘rganib mustaqil jumlar tuzishda qanday qo‘llashni tushunishi kerak.

**Yozish qobilyatlari:** Yozish- bu takomillashtirish uchun amaliy va fikr mulohazalarini talab qiladigan murakkab mahorat. O‘quvchilar jumlar va tegishli so‘z birikmalaridan foydalanishni va o‘zbek tili grammatikasi qoidalarini tushunishni o‘rganish kerak.

Xulosa qilib aytganda, o‘zbek tilini chet sifatida o‘qitishda og‘zaki va yozma nutqni rivojlantirishda lug‘at bilan ishlash, tinglash qobilyatlari, grammatika, o‘qish, to‘g‘ri talaffuz qilish, yozish qobilyatlarini o‘z ichiga olgan. Ushbu omillarga e’tibor qaratish va o‘quvchilarga amaliyot o‘tash va fikr-mulohaza olish imkoniyatini berish orqali o‘qituvchilar o‘z o‘quvchilariga o‘zbek tilida kuchli muloqat qobilyatlarini rivojlantirishga yordam berishga qaratilgan. Xorijliklarga o‘zbek tilini ikkinchi til sifatida o‘rgatishda kerak bo‘lgan uchta jihatni ta’kidlash mumkin:

<sup>14</sup> <https://newjournal.org/index.php/01/article/download/9074/8781/14262>



- A) Olmoshlarni o'rgatish.
- B) Fe'llarni o'rgatish.
- C) Oddiydan murakkabga tomon usuli orqali o'rgatishga qaratilgan.

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## MAKTABGACHA TA'LIM TASHKILOTLARIDA STEAM TEXNOLOGIYASIDAN FOYDALANISH SAMARADORLIGI

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**Annotatsiya:** *Maktabgacha ta`lim tashkilotlarida ilg`or xorijiy tajribani hisobga olgan holda bolalarni har tomonlama intellektual, axloqiy, estetik va jismoniy rivojlantirish sharoitlarini yaratish, maktabgacha ta`lim sifatini oshirish, maktabgacha ta`lim tashkilotlarida bolalarni maktabga sifatli tayyorlashni tubdan yaxshilash, ta`lim-tarbiya jarayoniga jahon amaliyotida keng qo`llaniladigan zamonaviy ta`lim dasturlari va texnologiyalarini joriy etish hamda STEAM texnologiyasidan foydalanishning samaradorligi haqida so`z yuritilgan.*

**Kalit so`zlar:** *STEAM, estetik, lapbook, intellectual, ta`lim-tarbiya.*

**Аннотация:** *Принимая во внимание передовой зарубежный опыт в дошкольных образовательных организациях, создавая условия для интеллектуального, нравственного, эстетического и физического развития детей во всех аспектах, повышая качество дошкольного образования, коренным образом повышая качество подготовки детей к школе в дошкольных образовательных организациях, внедрение в образовательный процесс современных образовательных программ и технологий, широко используемых в мировой практике, и повышение эффективности использования технологии STEAM.*

**Ключевые слова:** *STEAM, эстетический, лэпбук, интеллектуальный, образовательный.*

**Abstract:** *Taking into account advanced foreign experience in preschool educational organizations, creating conditions for the intellectual, moral, aesthetic and physical development of children in all aspects, increasing the quality of preschool education, fundamentally improving the quality of preparing children for school in preschool educational organizations, introduction of modern educational programs and technologies widely used in the world practice into the educational process and the effectiveness of using STEAM technology.*

**Keywords:** *STEAM, aesthetic, lapbook, intellectual, education.*

Maktabgacha ta`lim uzluksiz ta`lim tizimining birlamchi bo`g`ini hisoblanib, bu soha har tomonlama sog`lom va barkamol bola shaxsini tarbiyalash va maktabga tayyorlashda g`oyat muhim ahamiyat kasb etadi. Zero, ushbu tizimda amalga oshirilayotgan o`zgarishlar, farmon va qarorlarda belgilangan vazifalarning ijrosi Davlatimiz rahbarining doimiy e`tiborida bo`layotganligini guvohi bo`lmoqdamiz. Jumladan, ilg`or xorijiy tajribani hisobga olgan holda bolalarni har tomonlama intellektual, axloqiy, estetik va jismoniy rivojlantirish sharoitlarini yaratish, maktabgacha ta`lim sifatini oshirish, maktabgacha ta`lim tashkilotlarida bolalarni maktabga sifatli tayyorlashni tubdan yaxshilash, ta`lim-tarbiya

jarayoniga jahon amaliyotida keng qo'llaniladigan zamonaviy ta'lim dasturlari va texnologiyalarini joriy etish, maktabgacha ta'lim tashkilotlariga pedagog kadrlarni tayyorlash va malakasini oshirish mexanizmini takomillashtirishdan iborat dolzarb vazifalar qo'yildi."

STEAM - hozirgi kunda dunyo ta'lim tizimining eng asosiy urf bo'lgan innovatsion metodlaridan biri hisoblanib, ushbu metod yordamida fanlar alohida tarmoqlarda emas, balki integratsiyalashgan holda, umumiy bog'liqligini ko'rsatib o'rgatiladi. Maktabgacha ta'limda steam texnologiyasi fanining vazifasi - talabalarga STEAM ta'lim texnologiyasidan foydalanish usullarini o'rgatish, STEAM ta'lim texnologiyasini ta'lim-tarbiya jarayonida qo'llashda turli xil faoliyatlarni integratsiyalash, maktabgacha yoshdagi bolalarni ilk tadqiqotchilik faoliyatiga tayyorlash vazifalarini bajaradi.

STEAM bolalarda muammolarni tushunish, ijodiy va tanqidiy fikrlash kabi xususiyatlar va ko'nikmalarni rivojlantirishga yordam beradi. Bu esa, kelajakda bolalarda hayotiy muammolarni hal etishda yordam beradi. Bugungi kunda STEAM - ta'lim dunyodagi asosiy tendentsiyalardan biri sifatida rivojlanmoqda va amaliyot yondashuvni qo'llashda beshta sohani yagona o'quv sxemasiga integratsiyalashga asoslangan. STEAM yondashuvi tufayli bolalar tabiatni tushunib, dunyoni muntazam o'rganishadi va shu bilan qiziqishlarini, muhandislik fikrlash uslubini, tanqidiy vaziyatlardan chiqish qobiliyatini, jamoaviy ish qobiliyatini rivojlantirish va liderlik, o'z-o'zini namoyon qilish asoslarini o'rganishadi, o'z navbatida, bolalar rivojlanishining tubdan yangi darajasini ta'minlaydi. STEAM texnologiyasida bolalar yaxshi bilim olishga intilishadi va uni darhol amalda qo'llashadi. Agar biz an'anaviy ta'limning asosiy maqsadi bilimlarni o'rgatish va bu bilimlardan fikrlash va ijod qilish uchun foydalanish deb aytsak, STEAM yondashuvi bizni olgan bilimlarni haqiqiy ko'nikmalar bilan birlashtirishga o'rgatadi. Bu maktab o'quvchilariga nafaqat ba'zi bir g'oyalarga ega bo'lish, balki ularni amalda qo'llash va amalga oshirish imkoniyatini beradi. Agar biz an'anaviy ta'limning asosiy maqsadi bilimlarni o'rgatish va bu bilimlardan fikrlash va ijod qilish uchun foydalanish deb aytsak, STEAM yondashuvi bizni olgan bilimlarni haqiqiy ko'nikmalar bilan birlashtirishga o'rgatadi.

Tadqiqotlarning ko'rsatishicha, STEM ta'lim tizimi orqali bolada kreativlik, qunt, qiziquvchalik va hozirgi kunda eng muhim bo'lgan xususiyat - muammoni hal qilish (problem-solving skills) qobiliyati shakllanadi. O'zbekiston Respublikasida STEM ta'lim tizimini davlat ta'lim tizimiga kiritish bo'yicha o'tgan 2 yil mobaynida ishlar amalga oshirilmogda. Lekin xususiy maktablarda buning imkoni osonroq bo'lsa, umumiy ta'lim tizimiga STEM ta'lim tizimini kiritishda bir qator muammolar borligi ta'kidlanmogda. 2019-yilning dekabr oyida Xalq ta'limi vazirligi Xitoyda bo'lib o'tgan Shanghai International STEM Education Expo (STEAMEX) ko'rgazmasida ishtirok etdi.

O'zbekistonda STEM ta'lim tizimini umumiy xalq ta'limiga tadbiiq etish borasida AQSH mutaxassisi jalb qilindi. Undan tashqari Prezidentimiz Sh.Mirziyoyev tashabbuslari bilan yurtizmida tashkil etilgan prezident maktablarida STEM ta'lim tizimi orqali ta'lim beriladi. Zamonaviy tadqiqotlar STEM tizimi maktab ta'lim tizimiga oid bo'lgani bilan, uni eng kichik yoshdan, maktabgacha davrdan boshlab tadbiiq etish muhim ekanligini

ta'kidlamoqda. Bolaning eng kichik yoshidan boshlab STEM tizimiga olib kirishning ahamiyati, muvaffaqiyat ildizidir. Aslida STEM fikrlash bolalikdan boshlanadi. Bola yurishni bilmagan paytida ham jarayonlarning bog'liqligi, ketmaketligi va ehtimollikni tushuna oladi. Ushbu xususiyatlar har tomonlama rag'batlantirilishi lozim. Maktabgacha ta'lim tizimida STEM tizimi bo'yicha faoliyat kundalik ish rejasi asosida olib borilishi mumkin. STEM ta'lim tamoyillarga asoslanadigan faoliyatlarni ishlab chiqish va amalga tadbiq etish muhim hisoblanadi.

**Misol.** STEM ta'lim tizimini kitoblar orqali kichik yoshdagi bolaning hayotiga olib kirish samarali mexanizmlardan biri hisoblanadi. Bunda tarbiyachi tomonidan amaliy tarzda tayyorlangan **'Lap book'** ya'ni cho'ntak kitobini misol tariqasida keltirsak bo'ladi. **Lapbook** nisbatan yangi o'quv vositasidir. Birinchi marta amerikaliklar lapbuklarni yaratishni boshladilar. Lapbook - cho'ntaklari, eshiklari, derazalari, yorliqlari va harakatlanuvchi qismlari bo'lgan yig'ma kitob bo'lib, unda bitta mavzu bo'yicha materiallar mavjud. Laptop nimadan yasalgan? Noutbuk A3 jildidan iborat bo'lib, unga cho'ntaklar, yig'ma kitoblar, derazalar va noutbuk mavzusi bo'yicha vizual ma'lumotlar joylashtirilgan boshqa tafsilotlar: qiziqarli o'yinlardan tortib lug'at va taqdim etilgan ko'plab mazali ma'lumotlarga qadar.

Zamonaviy talablarga javob berish uchun maktabgacha ta'lim tashkiloti o'qituvchilari doimiy ravishda o'qishlari, o'z-o'zini tarbiyalashlari va kasbiy mahorat darajasini oshirishlari kerak. Demak, ular uchun ta'lim sohasida ro'y berayotgan o'zgarishlarga munosib munosabatda bo'lishni, hamfikrlar jamoasida ishlashni, o'quvchilar bilan o'quv-tarbiyaviy ishlarni malakali va samarali tashkil etishni, hamkorlik aloqalarini samarali yo'lga qo'yishni o'rganish muhimdir. ota-onalari bilan ta'lim muammolarini hal qilish, ta'lim mazmunini mustaqil ravishda tanlash va uni moslashtirish, ma'lum bir guruhdagi bolalarning yoshi va individual xususiyatlarini hisobga olgan holda, maktabgacha ta'lim bo'yicha Federal davlat ta'lim standarti talablariga e'tibor qaratish.

Maktabgacha ta'limning Federal davlat ta'lim standarti joriy etilishi munosabati bilan har bir o'qituvchi o'zining pedagogik faoliyatida yangi yondashuvlar, g'oyalarni izlaydi. Shunday qilib, biz mutlaqo yangi, qiziqarli, ajralmas o'quv quroli – noutbukni o'rgana boshladik va o'z ishimizda foydalana boshladik. U bolalar bog'chasida ham, uyda ham qo'llanilishi mumkin. Laptop qiziqarli va foydali, chunki u kattalar va bolalar tomonidan birgalikda yaratilgan. dolzarbligi Ushbu mavzuning mohiyati shundaki, lapbook loyiha yoki mavzu haftasi materiallarini birlashtirish va takrorlashning ajoyib usuli hisoblanadi. Laptop bolaga o'rganilayotgan mavzu bo'yicha ma'lumotni tartibga solishga va materialni yaxshiroq tushunishga va eslab qolishga yordam beradi (ayniqsa, bola ingl.)

Kelajakda bola mustaqil ravishda ma'lumot to'plash va tartibga solishni o'rganadi - insholar va kurs ishlarini yozish uchun yaxshi tayyorgarlik <sup>37</sup>.

Kichik yoshdagi bolalar uchun tayyorlanadigan kitoblarni STEM ta'lim tizimi doirasida qanday strukturalashtirish mumkin:

**S-Science** Kichik yoshdagi bolalarni fan olamiga olib kirishda hayvonot olami, dengiz hayvonlari, o'simlik va hashoratlarni turli xil rasmlar ,applikatsiyalar yordamida,tabiiy maxsulotlar yordamida yasab yoki chizib ular haqida malumot berishimiz mumkin bo'ladi



**T-Technology** Atrofimizda, bolalar xonasida, kundalik faoliyatimizda uchraydigan texnologiya buyumlari aks etgan qiziqarli kitoblar bolani texnologiya olamiga olib kiradi. Qaychi, g`ildirak, mashina, oyisining kir yuvish mashinasi, telefon va hokazolarni kitobda ichini ko`rsatgan holda namoyon qilish, buyumlar haqida hikoyalar o`qish mumkin. Qiziqarli hikoya bilan namoyon bo`lgan texnologik buyumlar illyustrasiyasi bolani miyasida savollar paydo bo`lishiga, tahliliy o`ylashiga turtki bo`lishi mumkin.

**E-Engineering** Injinerlik sohasiga bolalarni olib kirishni shakllarni o`rganishdan boshlasa bo`ladi. Shakllar, ularning atrofimizdagi buyumlarda aksi, shakllarning birbiri bilan munosabatini haqidagi biron shaklga ega bo`lgan kitob foydali vosita bo`ladi.

**A – Art** Bolani san`at olamiga olib kirishni bolaligidan boshlash zarur. Milliy va dunyo miqyosida buyuk san`at arboblari asarlari, san`at namunalaridan tashkil topgan kitoblar, bolalar ko`ziga yosh psixologiyasini inobatga olgan illyustrasiyalar STEM ta`limi tamoyiliga munosib bo`ladi. mashg`ulot o`tilayotganda o`rganilgan obyektning rasmlarini chizish orqali bolada tasavvurida uni yanada jonlantirish imkoni oshadi.

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## PARDOZBOP QURILISH MATERIALLARI HAQIDA UMUMIY TUSHUNCHALAR, ULARNING AFZALLIKLARI VA KAMCHILIKLARI

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**Annotatsiya.** *Ushbu maqolada pardozbop qurilish materiallari va ularning turlari, ishlatilishi, afzalliklari va kamchiliklari haqida ma'lumot berilgan. Bundan tashqari pardozbop qurilish materiallar sanoati haqida ma'lumotlar ham keltrilgan.*

**Kalit so'zlar.** *Pardozbop qurilish materiallari, fasadbop materiallar, travertinlar, silicon, penoplastlar, marmar chiqindilar.*

### KIRISH

Bugungi kunda har bir soha singari qurilish sohasi ham jadal rivojlanib bormoqda. Yangidan - yangi zamonaviy qurilish materiallari ishlab chiqarilmoqda. Ishlab chiqarilayotgan ushbu qurilish materiallari tufayli bugungi kunda bir-biridan hashamdor va zamonaviy bino va inshootlar qurilmoqda. Bu bino va inshootlarning mustahkamligi albatta qurilish materialini to'g'ri tanlashga bog'liqdir. Hozirgi kunda mustahkam hamda zamonaviy bino va inshootlar qurish davr talabi hisoblanadi. Bino va inshootlarni qurishda ularni qurish uchun ishlatilayotgan har bir qurilish materialini o'z vazifasi bor. Bino chiroyli va hashamdor ko'rinishi uchun pardozbop qurilish materiallaridan foydalaniladi. Pardozbop qurilish materiallari bu bino va inshootlarni tashqi fasadini bezashda foydalaniladigan materiallar hisoblanadi. Turar joy, jamoat va sanoat binolarini qurishda pardozlovchi materiallarni to'g'ri tanlash muhim ahamiyatga ega. Asosan pardozlovchi material sifatida tabiiy pardozbop toshlardan qayta ishlangan plitalar, me'moriy mahsulotlar keng qo'llanib kelinmoqda. Tabiiy pardozbop tosh maxsulotlaridan binolarni bezatish uchun turli xil fasad tizimlarida faol foydalanilmoqda. Tabiiy pardozbop tosh maxsulotlariga marmar, granit, gabbro va boshqa materiallarni misol qilishimiz mumkin. Hozirgi kunda O'zbekistonda 101 ta tabiiy pardozbop tosh konlari davlat zaxirasiga kiritilgan bo'lib 51 ta kondan hozirda foydalanilmoqda. 2018 yilda tabiiy pardozbop tosh konlaridan jami 209,0 mln.m<sup>3</sup> marmar, granit, gabbro va boshqalar qazib olingan. Bu 2017 yilga (131,5 mln.m<sup>3</sup>) nisbatan 37% ga ortganligini ko'rsatadi. 2018 yilda tabiiy pardozbop toshlarni qayta ishlashga ixtisoslashgan 155 ta korxonadan 4,5 mln.m.kv dan ortiq marmar, granit, gabbro va boshqalardan plitalar, me'moriy mahsulotlar (yo'l va yo'lak bordyurlari, arxitekturaviy mahsulotlar va boshqalar) ishlab chiqarilgan bo'lsa, bugungi kunda "O'zsanoatqurilishmateriallari" uyushmasi va viloyatlar hokimliklari tomonidan amalga oshirilgan yirik investitsiya loyihalarning ishga tushirilishi natijasida respublika hududida tabiiy pardozbop toshlarni qayta ishlashga ixtisoslashgan 200 dan ortiq korxonalar faoliyat yuritmoqda.

**PARDOZBOP QURILISH MATERIALNI TANLASH VA UNI BAHOLASH.**

- ✓ Mustahkamlik , ishonchlilik (uy fasad qism iog'ir yuklarga, shu jumladan mexanik shikastlanishga duchor bo'ladi, shuning uchun qoplama ularga bardosh berishi kerak);
- ✓ Namlikka chidamlilik;
- ✓ Yong'inga chidamlilik (o'z o'zidan yonish va yonish paytida toksinlarning chiqishmasligi kerak);
- ✓ Ob-havoga qarshilik (ya'ni, atrof-muhit omillariga, birinchi navbatda ultra binafsha nurlariga qarshilik);
- ✓ Materialning shamolga chidamliligi;
- ✓ Sovuqqa chidamliligi;
- ✓ Bio-qarshilik (hasharotlar zararkunandalari, kemiruvchilar, mog'or va qo'ziqorin yuzasida yo'qligi);
- ✓ Ekologik tozaligi;
- ✓ Uzoq muddat xizmat qilishi;
- ✓ Oddiy parvarishlash;

**FASADBOP MATERIALLAR TURLARI, AFZALLIKLARI VA KAMCHILIKLARI. TRAVERTIN.**

Travertin (fransuzcha travertin) – kaltsiy karbonat minerallari (asosan kalsitning ozroq qismi bo'lgan aragonit) natijasida hosil bo'lgan chukindi tog' jinslaridan hosil bo'lgan.

**ASOSIY XOSSALARI**

Suv o'tkazuvchanligining nisbatan yuqori foiziga qaramay, tabiiy traverten sovuqqa chidamli xususiyatlarga ega va bardoshlidir, ovoz o'tqazish xususiyatlarga ega Travertenning asosiy xususiyatlari:

zichlik - 2,5 - 2,74 g/sm<sup>3</sup>;

issiqlik o'tkazuvchanligi koeffitsiyenti 2 - 2,5W/mC<sup>0</sup> teng;

g'ovaklilik - 8,2%;

og'irligi bo'yicha suvni yutish - 1,7%;

mustahkamligi- 47 Mpa.

**TRAVERTINLAR.****SILIKON.**

Issiq va sovuqqa bardoshli;

Namlik va to'g'ridan-to'g'ri ultra binafsha nurlanishiga bardoshli;

Ekologik toza;

Bug' o'tkazuvchan;

Yong'inga yuqori qarshiligi;

Barcha turdagi yuzalarda qo‘llash mumkin;

Kamchilik – buyuqori narx, ammo bu aralashmaning texnik xususiyatlarining oshishi bilan qoplanadi.



## SILIKONLAR.

### Fasad penoplastlar.

- Zichligi  $15-40 \text{ kg/m}^3$ ;
- Issiqlik o‘tkazuvchanligi  $0,038-0,042 \text{ vat/m}^2\text{K}$ ;
- Suv shimuvchanligi  $0,02$ ;
- Bug‘ o‘tkazuvchanligi  $0,05$ ;
- Ishlash harorati  $(-)-50-(+)75$  gradus;
- Eksplyuatatsion davri 20-40 yil;
- Mustahkamligi past;
- G‘ovakligi 74%;





**Marmar qirindilar**- marmar chiqindilari va parchalari qurilish materiali. U dekorativ, to‘ldirish, montaj qilish uchun ishlatiladi. Ezilgan holatda va bo‘yoqlar uchun eritmalarda ishlatiladi.

- Yemirilishga chidamli;
- Quyosh nuriga so‘nmaydi;
- Har qanday ob-havoga qarshilik (issiqlik, sovuq va suvdan qo‘rqmaslik);
- Har qanday sirtga qo‘llaniladi: gipsokarton, beton, gips, sement va boshqalar;jozibali ko‘rinish;
- Bug‘ o‘tkazuvchanligi;
- Uzoq umr ko‘rish;devorga “nafas olish” imkonini beradi;
- Tozalash oson;



❖ Metall taglik tabiiy yuklarni (yog‘ingarchilik, shamol, quyosh nurlari) va harorat o‘zgarishiga osongina toqat qiladi.

❖ Yuqori namlik muhofazasi. Polimer qatlami namlikning kirib kelishidan yuz foiz to‘siqdir. Uning ostida galvanizli po‘lat korroziyaga uchramas.

❖ 100% yong‘in xavfsizligi. Metall-yonuvchan bo‘lmagan material.

❖ Uyning tabiiy qisqarishi jarayonida deyarli metal buyumlar deformatsiyaga duch kelmaydi.

❖ Kemiruvchilar va hasharotlar metal bilan oziqlanmaydi, shuning uchun bu tomonda hech qanday tahdid yo‘q.

❖ Yilning istalgan vaqtida amalga oshirilishi mumkin bo‘lgan oddiy o‘rnatish.

❖ Tozalash oson.

❖ Xizmat muddati – 50 yil, agar ramka to‘g‘ri yg‘ilgan va o‘zining materiali o‘rnatilishi kafolatlangan bo‘lsa.

❖ Kamchiliklarga kelsak, himoya bo‘yoqlari va polimerqoplamasi – bu oson bo‘lgan qatlamlarni ta‘kidlash kerak. Va texnik va operatsion xususiyatlarining pasayishi. Shu bilan birga, ingichka po‘latdan yasalgan materialni deformatsiyalash oson.





### AFZALLIKLARI

- ❖ Fibrosement sidingning afzalliklari quyidagilardir:
- ❖ Hajmi barqarorligi;
- ❖ Termal kengayish mavjud, ammo u kichik;
- ❖ Fibrosement plitalari va taxtalar bo'shliqsiz emas;
- ❖ Burchaklar va bo'g'inlar vinil siding bilan bezashda bo'lgani kabi, qo'shimcha elementlardan foydalanmasdan qilish mumkin;
- ❖ Yonmaydi. Materiallar zich, qattiq;
- ❖ To'g'ri yig'ilgan ramka deyarli "o'ynamaydi", bosilmaydi, siz suyanishingiz mumkin, sindirish qiyin;
- ❖ Yilning istalgan vaqtida o'rnatishingiz mumkin.

### Kamchiliklari:

- ❖ Yuqori narx. Bu nafaqat panellarning yoki saydingning narxidan iborat. Yana bir xarajat, bularning barchasi birlashtiriladigan qurilishga, shuningdek, korroziyaga moyil bo'lmagan qimmatbaho birlashtirgichlarga o'tadi.

Xulosa qilib shuni aytib o'tish mumkinki hozirgi kunda ishlab chiqarilayotgan zamonaviy pardobop qurilish materiallari bir qancha afzalliklarga egadir. Bunday qurilish materiallaridan foydalanish natijasida bugungi kunda zamonaviy, mustahkam va hozirgi zamon talablariga to'liq javob bera oladigan yuqori sifatli dekorativ bino va inshootlar qurishimiz mumkin. Hozirgi kunda fasadbop qurilish materiallariga bo'lgan talab ortib bormoqda. Ularning zamonaviy turlari ishlab chiqarilmoqda. Fasadbop qurilish materiallari juda ko'p sohalarda keng qo'llanilmoqda.

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## BADIIY ADABIYOT - MA'NAVIY YUKSAKLIKNING ASOSI

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**Annotatsiya:** *Ushbu maqolada badiiy adabiyotning inson ma'naviy kamolotga yetishida tutgan o'rni haqida Chingiz Aytmatovning "Asrga tatigulik kun" nomli asari asosida yoritishga harakat qilingan. Asar ko'plab tillarga tarjima qilinganligi bois, ko'plab kitobxonlarning qalbidan joy olgan.*

**Kalit so'zlar:** *badiiy adabiyot, ma'naviyat, kamolot, ruhiy barkamollik, ong, kitobxon, kitob.*

Inson dunyoga kelibdiki, to dunyodan ko'z yumgunga qadar ilm olishga, o'zidan yaxshi nom qoldirib ketishga harakat qiladi. U o'zining aql-u zakovati ila zamin va zamoni o'zgartishga, yangilik kashf qilishga urinadi. U o'z hayollarida jonsiz bo'lgan buyumlarni jonli tarzda harakatlantirishga, tutqich bermas, yetib bo'lmas shamol-u to'lqinlarni jilovlashga, zaminni go'zal qiyofaga keltirishni xoxlaydi. Ushbu istaklar orqali u hayollarini ro'yobga chiqaradi. Lekin hayol va hayot o'rtasidagi muayyan holatlarni yana da o'zida mujassam etgan, zamin va zamonning ko'plab hodisalariga guvoh bo'la oladigan, yuzlab avlodlarning qismatini va sir-asrorlarini o'zida jamlagan, makon va zamondan yuqorida turadigan adabiyot degan mo'jizaning borligi esa hayol etmas imkoniyatlarning ulug'i hisoblanadi. Shu tufayli adabiyot deganimizda, azal-azaldan e'tirof etib kelinadigan fikrlar ko'z oldimizda gavdalanadi. Adabiyot inson faoliyatining barcha jabhalarida o'ziga xos bo'lgan poydevor vazifasini ham vazifasini bajaradi. Chunki so'z orqali bayon qilingan fikrlarni eshitib yoki yozma berilgan ma'lumotlarni o'qib ilhomlangan holda u inson o'zidan yangilik kashf qilishni istaydi. Insonlarning mo'jizalar bunyodkoriga aylantirgan so'zning imkoniyatlari ayniqsa adabiyot asarlarida yaqqol namoyon bo'ladi.

Katta adabiyotda umrboqiy mavzular aks etishi kerak. Chinakam o'quvchi kitobni qo'lga olgach, o'zini kashf etadi, o'zidagi ilohiy iste'dodni – hamdardlik, odamiylik iste'dodini yuzaga chiqaradi. Agar ba'zi-ba'zida shu hol yuz beradigan bo'lsa, demak, kitob o'z ishini bajaribdi – boshqalarning fikri, tuyg'usi, orzusi va xatti-harakatiga aylanibdi. Demak, u o'quvchilarning intilish va irodasi bilan nimalardir qila oladi – xalq, hayot va dunyoni yaxshi tomonga siljita oladi. Ayniqsa badiiy adabiyotlar kishining ruhiyatiga katta ta'sir ko'rsatuvchi, ma'naviy ozuqa beruvchi vositadir. Badiiy asarlar voqelikni xuddi o'ziday aniq, ishonarli va ta'sirchan qilibgina qolmay, balki insonning qalbi, ruhiyati ichki his-tuyg'ularidagi "men" degan o'zlikni ochib berdigan, ana shu "men" ini qanchalik teng darajada tadqiq etib, yoritib bera olishligi bilan ahamiyat kasb etadi. Badiiy adabiyot, badiiy asarlar insonlarga juda kuchli ta'sir ko'rsata oladigan ilohiy bir kuchdir. U inson his tuyg'ularini va ongini



tarbiyalashda ulkan ro‘l o‘ynaydi. Badiiy asarlarning mualliflari bilan birgalikda kitobxon hayotning turli tomonlari, xarakterlar va hodisalar mohiyatiga kirib boradi hamda o‘zida ularga bo‘lgan munosabatni shakllantiradi. Insonni o‘ylashga, fikrlashga va kechayotgan voqealarni tahlil qilishga chorlaydi. Badiiy adabiyot bitmas-tuganmas g‘oyalar manbayi hisoblanadi. Badiiy adabiyotning inson hayotida ahamiyati juda yuqori. Inson ardoqlab keladigan eng noyob hislar insonparvarlik, adolat, shafqat, o‘zaro hamjihatlik, do‘stlik, mehr va muruvvat, sevgi-muhabbat singari o‘lmas insoniy tuyg‘ular kishi ongida, shuurida, ruhiyatida mujassamlashadi va bu hislar adabiyotga oshno insonlar qalbiga ko‘chib o‘tadi. Ma’naviy barkamollikni, insonlarni ogohlikka da’vat etgan, qirg‘iz adabiyotini dunyoga tanitgan va G‘arb va Sharqda o‘zining millionlab kitobxonlariga ega bo‘lgan hamda ularning muhabbatini qozongan yozuvchilardan biri Chingiz Aytmatovdir. Uning asarlari insonlarni ulug‘lashga, ularning zahmatkashligi, milliy ruhi, insonlarning g‘oyalari, kelajakka umid va ishonch bilan qarash ufurib turadi. U asarlarini milliylik xususiyatlari bilan yaratar ekan, nafaqat o‘zining millati taqdirigina emas, balki xalqaro miqyosda yuz berayotgan va yuz berish ehtimoli bo‘lgan muammolar o‘rtaga tashladi, uning yechimlarini asarlarida qidira boshladi. Adib oddiylikdan muammo yechimini topishga harakat qildi. Shunig uchun ham yozuvchi qahramonlari oddiy insonlar bo‘lib, umuminsoniy qadriyatlar haqida so‘z yuritdi. Qahramonlarnig mashaqqatli umr yo‘llari, bosib o‘tgan zahmatlari, quvonch-u iztiroblarini ko‘rsatish orqali insonlarning ma’naviyatini yuksaltirish, ularning inson sifatida o‘zini anglashga turtki bo‘ladigan mushoxadaga ega bo‘lgan bunday asarlar bugungi kunda ham o‘z qadr-qimmatini yo‘qotmaganmi yoki bugungi kun kitobxonalari aynan shunday kitoblarga ehtiyoj sezmoqdami? Keling ushbu asarlar yuzasidan fikrlarni bo‘lishsak. Mutolaa jarayonida fan-texnika yuksak taraqqiy etgan axborot asrida ham odamzot ajdodlarini azoblagan, qirg‘in-barot urushlarni keltirib chiqargan shuhratparastlik, boylikka ruju qo‘yish kabi zararli illatlardan xalos bo‘lomagani xudbinlik, zo‘ravonlik, kishilarning qon-qoniga singib ketgani barhayot zamonlardagi muammolar mana shunday ma’naviy qashshoqlikdan, ruhiy kasallikdan iborat ekanligi esa haqiqatdir. Yozuvchi yaratgan asarlar ichida "Asrga tatigulik kun" romani bugungi kun zamon uchun, ma’naviy-ruhiy poklanish davrida insonga o‘z-o‘zini anglash darsidan saboq bera bera oldigan, dolzarb bo‘lgan mavzuni o‘zida mujassam eta olgan shox asardir. Ushbu asarda gavdalantirilgan ikki obraz- Sobitjon va Jo‘lomon dunyoqarashi va karakteri jihatdan bir-biriga yaqin bo‘lgan insonlar. Chunki o‘z onasini ayovsiz otib o‘ldirgan- Jo‘lomon, otasining janozasida so‘nggi istagi bo‘lgan marhumning vasiyatini nazar-pisand qilmagan, urf-odat, qadriyatlarni oyoq osti qilmoqchi bo‘lgan- Sobitjonning Jo‘lomondan hech qanday farqi yo‘qdir. Biri- o‘tmishdagi manqurt bo‘lsa, ikkinchisi- zamonaviy. Birgina "Ona bayit" qabristoniga ko‘milishini, avlod- ajdodlari oldida bo‘lishni xoxlagan Kazangap, obro‘-e‘tiborini barcha narsadan ustun qo‘yadigan, xatto jasadni ko‘mishni ham minnat qiladigan o‘g‘ildan butun umr shuni kutganmidi? Shuning uchun umri davomida o‘zi- yemay yedirib, boshqalardan kam bo‘lmasin degan holda shahar internat maktablarida o‘qitgan otaning qadri shunday bo‘lishi mumkinmi? Yo‘q! U shunday Mana shu joyiga ahamiyat beradigan



bo'lsak: Shu lahzada ma'lum bo'lib qoldiki, arzanda, bilog'on o'g'il otasini izzat-ikrom bilan ko'ngildagidek dafn etishga emas, balki qarzdan qutulish uchun naridan beri ustiga tuproq tortib, tezroq qaytib ketishga kelgan ekan. U g'alati-g'alati gaplarni ayta boshladi: marhumni uzundan-uzoq Ona Bayitga olib borib nima qilamiz, shunday ulkan Sario'zak cho'lida bir qabrga joy topilmadimi? Ostonadan boshlab dunyoning narigi chekkasigacha joy degan narsa to'lib-toshib yotgan bo'lsa? Qabrni shu yaqin o'rtadan, o'zi umr bo'yi ishlab kelgan temir yo'l bo'yidagi biror do'nglikdan qazish kerak. Marhum o'tgan-ketgan poyezdlarning taraqa-turuqini eshitib yotadi... Sobitjon, hatto, shu xususda aytiladigan qadimiy maqolni ham eslab qo'ydi: o'ladigan odamning o'lgani yaxshi, ketadigan odamning ketgani yaxshi. Bunchalik cho'zib, bosh qotirib o'tirishning kimga keragi bor? O'lgan odamga qayerga ko'milishining nima ahamiyati bor? Bunday mahalda ish qancha tez bitirilsa, shuncha yaxshi! Otasining o'ligi ortiqcha yuk bo'lib tuyulgan, undan tezroq qutulishni xoxlagan, ustiga naridan-beri tuproq tashlab ketishni ko'nglidan o'tkazgan o'g'ilning faqat o'z manfaati yo'lida otasiga bo'lgan hurmat-e'tibori zarracha ham yo'q bo'lgani uchun ham uning atrofdagi insonlar orasida ma'nau qashshoq inson sifatida gavgdalanishi esa tabiiy hol. O'z o'g'lidan ko'rmagan otaning, o'zgarlar qo'lida qo'lida qolishi, jonsiz tananing ko'milishi birgina Sobitjon uchun og'irlik qilishi achinarli holatdir. Bunday farzandning shunday qilgandan ko'ra o'lgani yaxshi emasmi? Uning xotinichi? Tukiyl xalqlar qavmiga kiruvchi qozoq xalqi biz o'zbeklarga qardosh xalq, uning urf-odatlarini ham bizga yaqin sanaladi. Oila, ota-ona, farzand kabi qaynata-qaynonaga nisbatan kelinlik burchi degan tushuncha bo'lsa kerak. Bular qanday insoniylikga kiradi. Qaynonatasining so'nggi manzilga kuzatar chog'ida janozaga kelmaganligi, nabiralarning bobosi bilan oxirgi bor ko'rishishlarini ham qizg'ongandan ayolning qalbida bemehrlikdan boshqa hech qanday his yo'q. Nahot, u vijdoning oldida o'zini aybdordek his qilmasa? U uchun davlat manfaati, ishining dolzarbligi birinchi o'rinda, insonning qadr-qimati esa xuddi pista po'choq singari. O'limdan boshqa hamma narsa-muhim! Bular manqurtlikning alomatlari emasmi? O'zlikni unutish katta xato. Bunday og'ir xatoga yo'l qo'ygandan ko'ra inson bundan ko'ra o'lgani ma'qul. Nima uchun inson shunday tubanlik va yozuvlikka duchor bo'lishi mumkin? Ma'nau bilimi bo'lmagan, o'zining shaxsiy fikrlash qobiliyatiga ega bo'lmagan insongina shunday yo'llardan borishi turgan gap, albatta. Odam qanday fikrlasa, shu tarzda harakat qiladi. Kishi intilishi uning fikri, o'y-hayollariga muvofiq keladi. Adib ham asar qahramonlari obrazi orqali ana shunday haqiqatni ochib berishga harakat qilgan. Ulug' donishmandlardan biri: Dushmaningdan qo'rqma, zo'r bo'lsa, seni o'ldiradi. Do'stingdan qo'rqma. Manfaat to'g'ri kelganda sotqinlik qiladi. Befarqlikdan, loqaydlikdan qo'rq. Chunki bu ikki narsa bor ekan har qanday tajovuz senga tahdid qilaveradi degan ekan. Befarq, ma'naviyati yo'q insonar bir millat taqdiri uchun taraqqiyot dushmani. Ular jamiyat qonini so'rib yashaydigan hasharot singaridir. Ma'rifatli inson har qanday sharoitda o'zining o'zi himoya qila oladi, asray biladi. Hozirgi qaltis davrda esa ma'naviyati yetuk insongina jamiyat taraqqiyoti uchun manfaatli xizmat qiladi, avval o'zini asray oladi. Turli tashqi tajovuzlardan, siyosiy-ijtimoiy tahdidlarga munosib javob qaytara oladi. Badiiy asar kishilarning dunyoqarashi,

ijtimoiy-siyosiy salohiyatini ma'naviy barkamolligini ta'minlashi lozim. Mutafakkir-allomalarimiz johillikning birinchi belgisi go'zallikni ko'rmaslikdir, deydilar. Haqiqatdan ham shunday. Atrofimizda shuncha yangiliklar, yangilanishlar, islohatlar sodir bo'lmoqda, odamlarimiz tafakkur tarzi o'zgarmoqda. Ana shu ijobiy holatlarni badiiy jihatdan pishiq asarlar orqali xalqimizga, ayniqsa yoshlarimizga yetkazish juda to'g'ri bo'lar edi. Xalqimiz aynan ana shunday kitoblarni kutmoqda. Ayrim vatandoshlarimiz "hozirgi yoshlarga jiddiy badiiy asarlarni tavsiya etgan bilan, ular bunday kitoblarni o'qimaydilar, chunki zamon o'zgardi", deyishmoqda. To'g'ri, zamon o'zgardi. Ammo bizning o'zbekligimiz o'zgargani yo'q. Shunday paytda, yoshlarimizning kitobxonlik madaniyatini oshirish, ular ma'naviy ehtiyojini shakllantirish uchun nimanidir tavsiya etishni ba'zan unutayotganga o'xshaymiz. Yoshlar ma'naviy ehtiyojini shakllantirish uchun ularga ma'noli asarlar tavsiya etishimiz lozim. Bu borada oila maktab, kutubxona tizimlarining hamkorligi, birgalikda ish olib borishi, kutilgan natijani qo'lga kiritishga yordam beradi.

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## FEATURES OF HEART RATE VARIABILITY IN CHILDREN WITH NEUROCVLATORY CARDIAC DYSTONIA

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**Annotation.** *The article evaluates circadian rhythms and heart rate variability in urban and suburban adolescents with similar neurocirculatory dystonia. In children with neurocirculatory dystonia (NCD), a decrease in parasympathetic effects was found using the heart rate variability method. In children with NCD, the overall influence of regulatory factors on heart rate and overall variability of cardiac intervals during orthostatic examination, activity and reactivity of the parasympathetic division of the autonomic nervous system were lower than control values with increasing stress. index. The observed changes in circadian rhythm and rhythm variability in urban adolescents compared to rural adolescents are associated with living in an industrial area, environmental criteria, diet and additional information load, which is essential for further research.*

**Key words:** *schoolchildren, neurocirculatory dystonia, cardiac rhythm and conduction disorders.*

## ОСОБЕННОСТИ ВАРИАБЕЛЬНОСТИ СЕРДЕЧНОГО РИТМА У ДЕТЕЙ С НЕЙРОКУЛЯТОРНОЙ СЕРДЕЧНОЙ ДИСТОНИЕЙ

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**Аннотация.** *В статье оценены циркадные ритмы и вариабельность сердечного ритма у городских и пригородных подростков со сходной нейроциркуляторной дистонией. У детей с нейроциркуляторной дистонией (НЦД) методом вариабельности сердечного ритма обнаружено снижение парасимпатических эффектов. Дети с НЦД общее влияние регуляторных факторов на частоту сердечных сокращений и общую вариабельность сердечных интервалов при ортостатическом исследовании, активность и реактивность парасимпатического отдела вегетативной нервной системы были ниже контрольных значений при нарастании стресса. индекс. Наблюдаемые изменения циркадного ритма и вариабельности ритма у городских подростков по сравнению с сельскими подростками связаны с проживанием в промышленной зоне, экологическими критериями, рационом питания и дополнительной информационной нагрузкой, что крайне необходимо для дальнейших исследований.*

**Ключевые слова:** *школьники, нейроциркуляторная дистония, нарушения ритма и проводимости сердца.*

Introduction. The autonomic nervous system controls all organs, which allows them to control their autonomous functioning and metabolism [5, 13]. Such regulation ensures adaptation to changing environmental conditions. The ever-increasing flow of information and the unfavorable environment affect the health of the entire population, especially the most vulnerable categories of the population, such as children [4, 6, 7].

Chronic stress and emotional overload increase the demand on all organ systems and lead to an overload of adaptive mechanisms at an early age. Among the non-infectious diseases of childhood and adolescence, vegetative-vascular dystonia is the most common pathology from 4.8 to 29.1% [1, 3, 12].

It is known that vegetative-vascular dystonia or its variant neurocirculatory dystonia is a predictor of arterial hypertension, atherosclerosis and cardiovascular diseases in youth [2, 4, 5]. The development of autonomic dysfunction in the pubertal period is facilitated by the inherent incompleteness of the morphological and active formation of the autonomic nervous system (ANS) and hormonal changes [5, 6, 7]. Neurocirculatory dystonia is considered a multifactorial disease, in the development of which genetic and acquired factors play a role, including climatic-geographical, socio-economic and household factors. It occurs in various clinical signs and syndromes, occurring in most cases under stress [8, 9, 10, 11].

The role of the autonomic nervous system in the occurrence of many types of arrhythmias, including life-threatening ones, has been convincingly confirmed in experiments with stimulation of the posterior lobe of the hypothalamus, stellate ganglia, reproduction of psychological stress, and stimulation of intracardiac parasympathetic nerves. and others.

The implementation device is associated with the influence of efferent vagal and sympathetic fibers on the electrophysiological qualities of the myocardium and the conduction system of the heart [8, 9, 11, 12]. Currently, the majority of creators have come to a single view, namely, that one of the main pathophysiological mechanisms for the development of arrhythmias in adolescence is considered to be non-compliance with the neurogenic regulation of heart rate, leading to embodied electronic instability and myocardial instability.

In real time, determination of heart rate variability (HRV) is recognized as a more informative non-invasive way to quantify the autonomic regulation of heart rate [2, 7, 10, 11]. It is, in fact, that a decrease in HRV characteristics indicates non-compliance with the autonomic control of cardiac work, and also about the electronic instability of the myocardium. The highest HRV characteristics are recorded in healthy young people, athletes, interim - in people with various organic heart diseases, including ventricular arrhythmias, low - in people who have suffered episodes of ventricular fibrillation. The use of HRV analysis as a way to assess the adaptive probabilities of the body or the current value of stress provides practical attention for various areas of applied physiology,

occupational and sports medicine. The development of prenosological diagnostics has made it possible to distinguish among literally healthy people wide groups of people with the highest and rather high tension of regulatory systems, with an increased risk of failure of addiction and the occurrence of pathological abnormalities and diseases.

**The purpose** of this study was a comparative assessment of the daily rhythm and heart rate variability in adolescents with similar neurocirculatory dystonia, living in urban and rural areas.

**Materials and methods.** We examined 77 adolescents aged from 12 to 17 years (average age  $14.5 \pm 0.35$  years, boys -31, girls -46), who were hospitalized with a diagnosis of somatoform autonomic dysfunction, cardiac-type NCD, with January 2022 to February 2023. The information was classified according to age and area of residence (city, rural area). Taking into account the mechanisms of development of the autonomic nervous system, 2 age groups were focused. 1st age group - children 12-14 years old  $49.5 \pm 4.99\%$  (average age  $13.4 \pm 0.24$ ), of which  $62.5 \pm 8.83\%$  lived in Andijan (group IA),  $37.5 \pm 11.74\%$  of adolescents - in rural areas of Andijan region (group IB). 2nd age group - teenagers 15-17 years old  $50.5 \pm 4.99\%$  (average age  $16.5 \pm 0.29$ ), in which  $61.2 \pm 8.89\%$  of young people lived in Andijan (IIA group),  $38.8 \pm 11.49\%$  - in rural areas (IIB group). All teenagers live in the Andijan region every day.

The diagnosis of NCD was based on the aspects proposed by [6], which can be divided into personal signs and impartial data. The instrumental study included: electrocardiography (ECG) using a generally accepted method, echocardiography (ECHO-CG) with color Doppler mapping on the "Vivid 3" installation, Holter ECG monitoring with determination of heart rate variability with registration of 3 altered leads.

During daytime ECG monitoring, the characteristics of daytime dispersion of heart rate (HR) and heart rhythm disturbances were taken into account. The circadian index (CI) was calculated as the ratio of the average daytime to average nighttime heart rate (normal 1.24-1.44 a.u., average  $1.32 \pm 0.08$ ).

Heart rate variability was perceived according to the characteristics of time analysis, including these indicators, such as SDANN (standard anomaly from the average value of R-R intervals in another 5-minute fragments), SDNN (standard anomaly from the arithmetic mean), RMSSD (square root of the average sum squared differences between other R-R intervals). The frequency test was carried out on the following spectra: 1) ultra-low frequencies, ULF up to 0.003 Hz; 2) rather low frequencies, VLF -0.003-0.04 Hz; 3) low frequencies, LF 0.04-0.15 Hz; 4) the highest high frequencies, HF -0.15-0.4 Hz. The ULF and VLF spectra depend, in a key way, on the sympathetic system, HF - on the parasympathetic system, and others - on two systems at the same time. The ratio of LF to HF was interpreted as an indicator of dynamic equilibrium between two independent systems.

**Results.** Among the examined adolescents with cardiac NCD, complaints of pain in the heart area were similar (in age group I - in  $70.8 \pm 6.56\%$ , in age group II - in  $83.7 \pm 5.28\%$  of those examined). The pain, in general, had a temporary (lasting a few seconds), stabbing



character. Interruptions in heart function were noticed by  $43.8 \pm 7.16\%$  of young people in group I and  $55.1 \pm 7.11\%$  of young people in age group II.

In addition,  $31.3 \pm 6.69\%$  of adolescents in age group I and  $36.7 \pm 6.89\%$  of young people in group II complained of headache, dizziness, impotence, and excessive fatigue.

In all individuals included in the study, the contractility and thickness of the walls of the ventricles of the heart, the dimensions of the ventricles and atria, the structure and function of the valve apparatus were determined using echocardiographic techniques. More often ( $50.0 \pm 7.22\%$  of those examined in age group I and  $63.3 \pm 6.89\%$  of young people in age group II), echocardiographic examination revealed slight dilatation of the heart cavities (leading to an increase in the end-diastolic volume of the left ventricle by an average of  $4.1 \pm 0.5$  mm).

12 ( $25.0 \pm 6.25\%$ ) adolescents of the 1st age group were diagnosed with mitral valve prolapse (MVP) of the 1st degree without regurgitation, a similar diagnosis was made to 11 schoolchildren ( $22.5 \pm 5.97\%$ ) of the 2nd age group. Abnormal left ventricular trabeculae were observed in 29 ( $60.2 \pm 7.07\%$ ) subjects of group I and in 30 ( $60.2 \pm 6.99\%$ ) subjects of group II. In other adolescents, no pathology was detected during echocardiographic examination.

**Table 1**

**Frequency of occurrence of cardiac arrhythmias and conduction disturbances in the study groups according to a normal ECG at rest (in%)**

Index	Groups			
	IA	IIA	IB	IIB
Bradyarrhythmia	26,7 $\pm 8,08$	43,3 $\pm 9,05$	16,7 $\pm 9,05$	15,8 $\pm 8,62$
Tachycardia	33,3 $\pm 8,6$	11,1 $\pm 7,62$	33,3 $\pm 8,61$	15,8 $\pm 8,62$
Load on the left ventricle	33,3 $\pm 8,6$	5,6± 5,58	30,0 $\pm 8,37$	2 1,1±9,62

As you can see from Table 1, in adolescents of the first age group living in a metropolis, sinus tachycardia and symptoms of stress on the left ventricle were recorded more often on a normal ECG. However, in age group II, young people living in a metropolis were diagnosed with bradyarrhythmia more often than young people living in rural areas.

table 2

**Frequency of occurrence of heart rhythm and conduction disturbances in the study groups according to Holter ECG monitoring (in%)**

Index	Groups			
	IA	IIA	IB	IIB
Tendency to tachycardia throughout the day	63,3 $\pm 8,79$	22,2± 10,08	36,7 $\pm 8,79$	15,8 $\pm 8,58$
Autonomic dysfunction of the sinus node	36,7 $\pm 8,79$	61,1± 11,82	43,3 $\pm 9,05$	15,8 $\pm 8,58$

Holter monitoring data (Table 2) showed that the predisposition to sinus tachycardia in the direction of day and night in age group I was more often observed in adolescents living in a metropolis (average heart rate  $> 90$  beats/min). Among urban young people 15-17 years old, autonomic dysfunction of the sinus node was detected more often per day. The concept of dysfunction of the sinus node includes these electrocardiographic configurations, such as sinus bradyarrhythmia (during the day and night, the average heart rate is below the age norm), pieces of movement of the pacemaker, slipping decreases, atrial rhythm throughout the day and night, slowing down of atrioventricular conduction to incomplete atrioventricular block I degree both during the day and at night, for example. In  $10.2 \pm 4.32\%$  of young people of the second age group, atrioventricular dissociation and incomplete atrioventricular block of the second degree with Samoilov-Wenckebach times were registered per day.

The circadian index in urban and rural adolescents of the first age group was on average  $1.33 \pm 0.09$ , in the second age group -  $1.38 \pm 0.08$ , which actually fits into the norm. The maximum average rhythm pause in children of age group I was  $1.5 \pm 0.05$  seconds, which actually corresponds to the upper limit of generally accepted standards; in age group II it was  $1.7 \pm 0.05$  seconds, i.e. older than generally accepted standards. Supraventricular extrasystole was recorded in  $66.7 \pm 6.8\%$  of urban adolescents aged 12-14 years, in rural adolescents - in  $44.4 \pm 12.05\%$  of cases. In age group II, supraventricular extrasystole was detected in  $20.0 \pm 7.3\%$  of urban young people and in  $15.8 \pm 8.58\%$  of rural ones. The largest number of extrasystoles per day is 6331, the smallest is 1. In adolescents with frequent supraventricular extrasystoles, couplets, massive extrasystoles, allorhythmia (bigeminy, trigeminy), as well as polytopic and interpolated extrasystoles were recorded. Ventricular extrasystole was observed in  $26.7 \pm 8.08\%$  of urban children aged 12-14 years and  $16.7 \pm 9.05\%$  of rural children, with the largest number per day-1429, the smallest-1. In age group II (15-17 years), ventricular extrasystole was recorded in  $26.7 \pm 8.08\%$  of urban young people and  $15.8 \pm 8.59\%$  rural ones. The maximum ventricular ectopic energy per day is -7609, the lowest is -1.

In  $45.8 \pm 7.19\%$  of children in the first age group, a clear circadian pattern of ectopic energy was noted (as in supraventricular, for example, ventricular extrasystoles), mainly in the daytime (i.e., sympathodependent ectopia), in  $25.0 \pm 6.25\%$  extrasystole was recorded, for the most part, at night (vago-dependent ectopia), in others - both during the day, for example, at night. In the older age group, a reverse desire was noted:  $51.0 \pm 7.14\%$  of young people had a vagal-dependent arrhythmia,  $20.4 \pm 5.76$  had a sympathodependent arrhythmia, and others had a mixed type of ectopia. These configurations can be associated with the steps in the development of the function of the autonomic nervous system.

According to the SDANN and SDNN indicators, the scatter function was considered (with a sinus tempo they reflect the energy of the parasympathetic nervous system), and RMSSD is responsible for the concentration function (with a sinus tempo they reflect the energy of the sympathetic nervous system) systems).

Confinement In adolescents 12-14 years old with neurocirculatory dystonia of the cardiac type, living in a metropolis, sinus tachycardia and symptoms of stress on the left

ventricle were detected more often on a normal ECG of calmness compared with adolescents of the same age living in rural areas. In the group of young people aged 15-17 years living in a metropolis, bradycardia and arrhythmia were recorded more often than in rural areas. When conducting Holter ECG monitoring in adolescents 12-14 years old living in a metropolis, a predisposition to tachycardia during the day and night was determined more often than in rural children, while in age group II, in urban young people, sinus dysfunction was diagnosed more often. node.

In adolescents aged 12-14 years with neurocirculatory dystonia of the cardiac type, living in a metropolis, compared with rural adolescents, the time SDANN indicator is truly reduced, which actually indicates a decrease in vagal energy. When assessing the spectral characteristics of the HRV, it was revealed that in urban adolescents aged 12-14 years, the indicator of sympathetic-parasympathetic tone is truly higher than generally accepted standards, which indicates the dominance of the sympathetic division of the ANS. In the older age group, a similar indicator among urban young people was truly lower than generally accepted standards, which actually indicates the dominant influence of the vagus in these adolescents.

Summary. The observed changes in heart rate variability reflect the circadian dynamics of octopi: most of the 12-14-year-olds had sympathostatic arrhythmias, and most of the 15-17-year-olds had vagal-related arrhythmias.

When examining adolescents with neurocirculatory dystonia, it is necessary to conduct not only a simple ECG at rest, but also a Holter ECG monitoring with detection of heart rate variability; examination ensures adequate treatment and monitoring of this group of patients.

The observed changes in circadian rhythm and rhythm variability in urban adolescents compared to rural adolescents are probably related to living in an industrial area, environmental criteria, nutrition and more information load. this urgently requires further research.

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## AVTOMOBILDAN CHIQUADIGAN TURLI ZARARLI VA ZAHARLI MODDALARNING EKOLOGIYAGA TA'SIRI

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**Annotasiya:** *Shuni takidlash lozimki Transport-yo'l majmuasi atrof-muhitni ifloslantiruvchi kuchli manba hisoblanadi. 35 million tonna zararli chiqindilarning 89 foizi avtomobil transporti va yo'l qilishi korxonalarida chiqindilari hisoblanadi. Suv havzalarining ifloslanishida transportning roli katta. Bundan tashqari, transport shaharlardagi shovginning asosiy manbalaridan biri bo atrof-muhitning termal ifloslanishiga sezilarli hissa qo'shadi. Rossiyada avtomobil transportidan chiqadigan chiqindilar viliga 22 million tonnani tashkil qiladi. Ichki yonuv dvigatellarining chiqindi gazlari 200 dan ortiq turdagi zararli moddalarni o'z ichiga oladi. Neft mahsulotlari, shinalar va tormoz prokladkalarining eskirgan mahsulotlari, quyma va changli yuklar, muzdan tozalash vositasi sifatida ishlatiladigan xloridlar yo'l chetlari va suv havzalarini ifloslantiradi kunda insoniyat sivilizatsiyasini mashinasiz tasavvur qilish qiyin. Rivojlangan mamlakatlarda u nafagat asosiy vosita, balki kundalik hayotning bir qismiga aylandi. Insonning harakat erkinligiga bo'lgan tabiiy istagi, ishlab chiqarish Jaoliyat va xizmat korsatish sohasidagi Junkisiyalarning murakkablashishi va nihoyat, katta shaharlarda, shahar aglomeratsiyalarida hayotning o'zi - bularning barchasi shasty foydalanish uchun avtomobillar sonining ko'payishiga olib keladi yuk tashish hajmini oshirish.*

**Kalit so'zlar:** *Transport, avtomobil yo'llari, og'ir metallar, neft mahsulotlari, atrof muhit, chiqindi gazlar ozon qatlami, is gazlari, ekologiya, dvigatellarining chiqindilari, chang zarrachalari.*

Ma'lumki, hisob-kitoblarga qaraganda, bitta mashinadan chiqadigan zaharli moddalar miqdori bir yilda 537 kg ni tashkil qiladi ekan. Agar har to'rt shahar aholisiga bitta (50000 ta) mashina to'g'ri kelsa, bu miqdor 26850000 kg ni tashkil qiladi. Bu ko'rsatkichlardan ko'rinib turibdiki, asosan atmosfera havosiga hamda atrof muhitga eng katta ta'sir transport vositalardan chiqadigan chiqindi gazlar miqdorlari hisoblanadi. Shu bilan birga, motorizatsiya tushunchasi harakatni ta'minlaydigan texnik vositalar to'plamini o'z ichiga oladi avtomobil va yo'l. Biroq, fan-texnika taraqqiyoti yutuqlari odamlarga nafaqat foyda, balki zarar ham keltiradi. Siz hamma narsa uchun to'lashingiz kerak deydi qadimgi donolik. Avtomobil uchun to'lov - bu bizning sog'ligimiz, hayotimiz. Bu yo'l-transport hodisalari, baxtsiz hodisalar ehtimoli. Bu chiqindi gazlar, transport shovinlari va boshqa jismoniy ta'sirlar bilan atrof-muhit ifloslanishidan zararining mugarrarligi. Ulardan hamma odamlar, hatto hech qachon mashina ishlatmaydiganlar ham azob chekishini kerak. Va nafaqat odamlarga - butun tabiatga. Atrof-muhitga bu zararli ta'sirlarni yaratadi, albatta, yo'l emas, balki avtomobil. Yo'l atrof-muhitni avtomobildan himoya qiladi. Hozirgi



vaqtda ekspluatatsiya qilinayotgan avtomashinalar atmosferani juda ifloslantirmoqda, masalan: bitta avtomobil 10-12 litr benzin iste'mol qilsa, undan 25 kg turli xil zararli kimyoviy birikmalar ajralib chiqadi, demak, bir avtomobil yiliga 4 tonnaga yaqin kislorod iste'mol qiladi. Dvigatelning chiqindi gazlari uglerod oksidi (CO), karbonat angidrid (CO<sub>2</sub>), uchuvchi organik birikmalar (VOC) yoki uglevodorodlar (HC), azot oksidi (NO) kabi 500 dan ortiq zararli organik birikmalarni o'z ichiga oladi. Svetoforda to'xtagan avtomobillar chiqaradigan gazlar global isishga hissa qo'shmoqda. Dizayn muhandisi, quruvchi, operatorning vazifasi bu himoyani yanada samarali va arzonroq qilishdir. Biz mashinasiz yashashga undamaymiz. Biz faqat 20-asming ushbu yutugi uchun to'lashimiz uning foydasiga ko'proq mos kelishini xohlaymiz. Bugungi kunda O'zbekiston ko'chalarida 4 milliondan ziyod mashina harakatlanmoqda. Bugungi kunda O'zbekistonda har yetti kishiga bittadan avtomobil to'g'ri keladi. Ya'ni, O'zbekiston ko'chalarida 4 milliondan ziyod mashina harakatlanayapti. Bundan tashqari, avtomobil shovqini zararli tovushdir. O'zbekistondagi yirik shaharlar aholisining 60 foizdan ortigi Bugungi kunda xuddi shunday zararli shovindan aziyat chekadi, Biz nafas oladigan havo - atmosferani tashkil etadigan gatlamlar har qaysisi o'zining muayyan vazifasiga ega. Masalan, ozon qatlami barcha tirik organizmlarni nurlanishdan saqlaydi. Quyosh nurlari ta'sirida kislorod, azot oksidi va boshqa gazlar ishtirokida hosil bo'lgan ozon kuchli ultrabinafsha nurlarni o'ziga yutib, tirik organizmlarni uning salbiy ta'siridan himoya qiladi. Avtomobillardan havoga chiqariladigan is gazisi esa ozonning yemirilishiga sabab bo'ladi. Mutaxassislarining hisob-kitobiga ko'ra, havoni ifloslantiradigan asosiy antropogen omillar ro'yxatida avtomobil transporti birinchi orinni egallaydi. Ya'ni umumiy zararning 40 foizi Yer yuzida harakatlanayotgan avtomobillar hissasiga to'g'ri keladi. Qolgan zararning 20 foizi energetika sanoati, 14 foizi korxonalar va tashkilot ishlab chiqarishi, 26 foizi qishloq xo'jaligi ishlab chiqarishi, maishiy kommunal xo'jaligi va boshqa sohalardan yetkaziladi. Mana shuning uchun mutaxassislar avtomobilni "g'ildirakli kimyoviy fabrika" deb atashadi.

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## JISMLARNING ISSIQLIKDAN KENGAYISHI

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**Annotatsiya:** Ushbu maqolada issiqlik kengayishi, hajm va chiziqli kengayish ko'effitsiyentlari bilan ifodalanadi. Ma'lum hajmdagi jism bir daraja isitilganda uning hajmi ortishi hajm kengayish ko'effitsiyenti, ma'lum uzunlikdagi jism bir daraja isitilganda uning uzunligi ortishi chiziqli kengayish ko'effitsiyenti deb ataladi. Bu ko'effitsiyent temperatura o'zgarishi bilan o'zgarib turadi.

**Kalit so'zlar:** Issiqlik kengayishi, quyosh, jismlar, relslar, simyog'och, issiqlik ta'sir, o'lchov.

**Аннотация:** В данной статье тепловое расширение выражается через объем и коэффициенты линейного расширения. Увеличение объема тела определенного объема при нагревании его на один градус называется коэффициентом объемного расширения, а увеличение длины тела определенной длины при нагревании его на один градус - коэффициентом линейного расширения. Этот коэффициент меняется при изменении температуры.

**Ключевые слова:** Тепловое расширение, солнце, тела, рельсы, ртуть, тепловое воздействие, измерение.

**Abstract:** In this article, thermal expansion is expressed in terms of volume and linear expansion coefficients. The increase in volume of a body of a certain volume when it is heated by one degree is called the coefficient of volume expansion, and the increase in length of a body of a certain length when it is heated by one degree is called the coefficient of linear expansion. This coefficient changes with temperature changes.

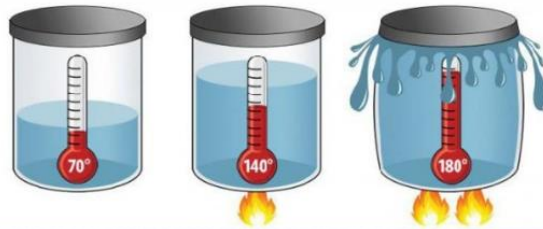
**Key words:** Thermal expansion, sun, bodies, rails, mercury, heat effect, measurement.

Biz issiqlik hodisalariga kundalik hayotimizda har doim duch kelamiz. Misol uchun: ovqat pishirilishi, quyosh yerni isitishi, choynakdagi suvni qaynashi va hakozi. Issiqlik faqat issiq issiq jismdan sovuq jismga o'tadi, sovuq jismdan issiq jismga issiqlik o'tmaydi. Chunki, quyosh issiq bo'lgani uchungina yerni isitadi, yer quyoshni isita olmaydi, bunga sabab quyoshdan issiqlik chiqadi yerdan esa yo'q. Issiqlikdan kengayish hodisasi sabab jismlar isitganda ularning chiziqli o'lchovi o'zgaradi. Turli jismlar issiqlikdan turlicha kengayadi: qattiq jismlarda molekula va atom (ion) lar orasidagi o'zaro ta'sir juda kuchli bo'ladi, shuning uchun issiqlikdan qattiq jismlar kamroq, suyuqliklar ko'proq, gazlar esa yanada ko'proq kengayadi. Qattiq jism moddaning shakli turg'un agregat holatidir. Bu holatda modda atomlarining issiqlik harakati ularning muvozanat vaziyatlari atrofida kichik tebranishlaridan iborat bo'ladi. Kristall va amorf qattiq jismlar mavjud. Kristallarda atomlarning muvozanat vaziyatlari fazoda davriy joylashadi. Amorf jismlarda atomlar tartibsiz joylashgan nuqtalar atrofida tebranadi. Qattiq jismning turg'un (eng kichik ichki energiyali) holati kristall holatdir. Termodinamik nuqtai nazardan amorf jism metaturg'un holatda bo'ladi va vaqt o'tishi bilan kristallanishi kerak.

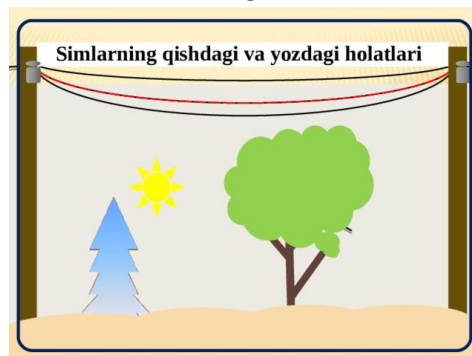
Jismlarni issiqlikdan kengayishini bilish turmushda va texnikada juda muhim ahamiyatga ega. Quruvchi-arxitektorlar, temir yo‘l quruvchilari qurilayotgan inshootlarda bu muhim ahamiyat kasb etadi. Masalan, temir yo‘l relslarini uchlari bir-biriga jips qilib ulanmaydi, ulanish joylarida ozgina kenglik qoldiriladi. Agar unday qilinmasa yozning issiq kunlarida relslar uzayib, bir-biriga qadalib, buklanishga majbur bo‘ladi. Bu ochiq joylariga mashina shinalari tushmasligi uchun maxsus temir panjaralar yopib qo‘yiladi. Katta ko‘priklar ustidan o‘tganimizda ham bunday holatlarni ko‘rishimiz mumkin.

Simyog‘ochlarga tortilgan elektr o‘tkazuvchi simlar yozda osilgan, qishda esa tarang tortilgan holatda bo‘lishini hammamiz kuzatganmiz va buni sababini tushuntiring. Nima sababdan jismlar issiqlikdan kengayadi?, nima sababdan sovuq shisha idishga qaynoq suv quyilganida u sinib ketadi?

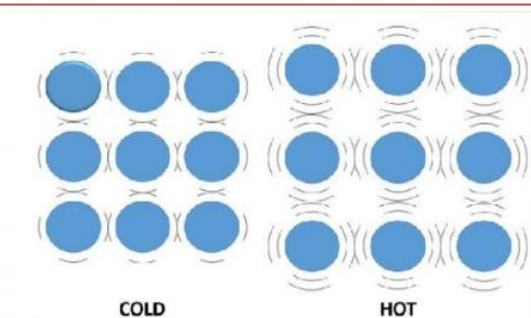
Endi bu savolarni javobini birma bir ko‘rib chiqamiz. Bilamizki hamma jismlar tabiatda zarralarda tashkil topgan bo‘ladi. Zarralar esa har doim to‘xtovsiz va tartibsiz harakat qiladi. Ularga esa issiqlik ta‘sir qildirsak zarralarni harakati tezlashadi va shu holatda jismlarda issiqlik kengayishi kuzatiladi, sovuqda esa zarralar harakati sekinlashadi va jismlar torayadi.



Yuqoridagi ma‘limotlardan foydalangan holatda elektr simyog‘ochlar nima sababdan cho‘zilib ketishi va shisha nima sababdan sinib ketishini bilsak bo‘ladi. Elektr simyog‘ochlar ham zarralardan tashkil topgan bo‘ladi va issiqlik ta‘sirini hisobiga simlar yozda cho‘zilib ketadi. Qishda esa aksincha taranglashadi.



Endi shishada ham shunga o‘xshash jarayon bo‘ladi. Yani shisha idishga issiqlik ta‘sir qildirganimizda shisha idish kengayadi va unga sovuq suv quysak sinib ketadi yani shisha idish kengayishga ulgurmay birdaniga sinib ketadi.



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**POMIDORNING O'ZIGA XOS XUSUSIYATLARI****Ahmedov Baxtiyor Mahammadjonovich***Qishloq xo'jalik fanlari bo'yicha falsafa doktori. Oltiko'l tuman Green Valley Seeds urug'chilik xususiy korxonasi rahbari*

**Annotatsiya.** *Ushbu maqolada pomidor o'simligi hamda uning o'ziga xos xususiyatlari haqida so'z boradi.*

**Kalit so'zlar.** *Pomidor, ituzumdoshlar, tropik, sabzavot, meva, pamildori, Janubiy amerika, bir yillik, o'simlik.*

Pomidor – ituzumdoshlar oilasiga mansub bir yillik, tropik iqlimlarda ko'p yillik o't o'simlikdir. Sabzavot sifatida keng ekiladi. Ilmiy terminologiyada tomat nomi ishlatilsa-da, O'zbekistonda o'simligi ham, mevasi ham, “pamildori” (xalq orasida) deb yuritiladi.

Pomidorning tug'ilgan joyi Janubiy Amerika bo'lib, ular hali ham o'sadigan yovvoyi navlar hisoblanadi. Kolumb Amerikani kashf etishidan ancha oldin, pomidorning birinchi yetishtirilgan navlari allaqachon Meksika bo'ylab tarqalgan. Bu shubhasiz, yevropaliklar tatab ko'rish imkoniyatiga ega bo'lgan birinchi pomidorlar edi. 1554- yilda Italiyada pomidorning tavsiflari paydo bo'ldi, u italyan tilidan “oltin olma” deb tarjima qilingan pomid “oro” deb nomlangan. Bu nomdan xulosa qilishimiz mumkinki, yevropaliklar birinchi ko'rgan pomidor sariq rangda bo'lgan. 16- asrda pomidor Angliya, Ispaniya, Italiya, Fransiya, va boshqa ko'plab Markaziy Yevropa mamlakatlarida yetishtirilgan. Pomidorning madaniy turlarining kelib chiqishi haqida ishonchli arxeologik ma'lumotlar yo'q. Ushbu botanika turining yovvoyi va yarim yovvoyi turlari va navlari hali ham Ekvador, Galapagos orollari, Peru va Chilida o'sadi. Bir qator tadqiqotchilar Peruni pomidorning vatani deb hisoblashadi, nemis tabiatshunosi Aleksandr Gumboldt Meksika deb atagan va sovet o'simlikshunosi Nikolay Ivanovich vavilov Janubiy Amerika mintaqasini pomidorning ibtidoiy shaklining kelib chiqish gen markazi sifatida ko'rsatgan.

Pomidor issiqsevar o'simlik. Uning urug'i 10-12C haroratda una boshlaydi. O'simlikning normal o'sib rivojlanishi uchun xarorat 25C atrofida bo'lishi kerak. Harorat 15C dan pasayganda ko'pchilik navlarning gullashi to'xtab, harorat 10C pasayib ketganda esa vegetativ organlari ham o'sishdan to'xtaydi. Harorat – 0,5C pasaysa pomidor gullarga halokatli ta'sir ko'rsatadi – mevalarda sovuq urgan dog'lar paydo bo'ladi. Harorat – 1-2C tushsa, o'simliklar butunlay nobud bo'ladi. Pomidorni hozirgi vaqtda yaratilgan duragay navlari bundan mustasnodir, chunki ular –3 – 4C sovuqqa bardosh bera oladi. O'ta yuqori harorat ham pomidor o'simligining o'sish va rivojlanishiga salbiy ta'sir ko'rsatadi. Harorat 32C dan oshganda ularning o'sishi sekinlashadi, harorat 35C ga yetganda esa o'simlik o'sishdan butunlay to'xtaydi. Pomidor – yorug'sevar o'simlik. Yorug'likning yetarli bo'lmasligi o'simlikning o'sish va rivojlanishini sekinlashtiradi. Pomidorni ko'pchilik navlari yorug'lik 10-12 soat davom etadigan kunlarda yaxshi rivojlanadi, lekin ba'zi navlar kun uzunligi qisqarganda, ayrimlari esa aksincha bir muncha uzayga yaxshi o'sadi. Pomidor barglarning suv bug'latish satxi katta bo'lib, baquvvat yer ustki massasi hosil qiladi, bunday

massaning vujudga kelishi uchun esa ko'p miqdorda suv talab qilinadi. Shuning uchun ham pomidor o'simligi, ayniqsa yoppasiga meva tugish davrida tuproq namga talabchan bo'ladi. (tuproqni dala nam sig'imi 70 % bo'lishi kerak). Bu davrda suv yetishmasa, o'simlikning tuguncha va mevalari to'kila boshlaydi. Shu bilan birga pomidor o'simligi havo namligi mo'tadil 45-60 % bo'lishini xohlaydi. Havo namligi bundan oshib ketsa, tugunchalar yaxshi urug'lanmay qoladi va to'kilib ketadi hamda zamburug' kasalliklari paydo bo'ladi. Pomidor o'simligining namga bo'lgan talabi parvarishlash usullariga bog'liq. Ko'chatdan yetishtirilgan va ildiz sistemasi yuzaroq taralgan pomidor o'simligi, bevosita urug'i ekib o'stirilgan va ildiz sistemasi ancha chuqur joylashgan pomidorga nisbatan namni ko'p talab qiladi. Pomidor o'simligining o'suv davri uzoq davom etadi. O'suv davrining davomiyligi dalaga ko'chat o'tqazilgandan keyin muayyan sharoitda sovuqsiz davrining qancha davom etishiga qarab belgilanadi. Harorat va namlik sharoitlari qulay bo'lganda urug'i ekilgandan 4-5 kun o'tgach, maysalari ko'rina boshlaydi, 3-5 kun o'tgandan keyin esa birinchi chinbarg chiqaradi. Shundan keyingi paydo bo'ladigan barglar tobora murakkablasha boradi va yettinchi yoki sakkizinchi bargdan boshlab yetuk o'simlik barglarining hamma belgilari shakllanadi. O'simlikda 5-7, kechpishar navlari esa 10-11 ta barg chiqargandan keyin dastlabki tupgul – shingil paydo bo'ladi. bundan keyingi gul shingillari har uchinchi, ayrim hollarda har ikkinchi bargdan keyin paydo buladi. Pomidor o'simligi naviga va parvarishlash sharoitiga qarab maysa ko'ringandan keyin 50-70 kun o'tgach gulga kiradi. Gullashdan keyin 40-55 kun mevalari yetila boshlaydi. Pomidor ko'chatidan o'stirilganda, parnikka sepilgan urug' unib maysalari ko'ringandan to hosili pishguncha o'simlikning naviga va o'stirish texnologiyasiga qarab 100-120 kun o'tadi. Urug'i bevosita dalaga ekilganda o'simlikning o'suv davri 70-90 kun davom etadi. Odatda, kuzgi dastlabki sovuq tushishi bilanoq pomidorning o'suv davri to'xtaydi.

Pomidorning sog'liq uchun foydalari haqida gapirganda, pomidor juda to'yimli ekanligini e'tibordan chetda qoldirib bo'lmaydi. Qizil, pishgan pomidorning bir porsiyasi A, C, K vitaminlari va kaliyning ajoyib manbayidir. Ular tabiiy ravishda natriy va kaloriyalarda past bo'lib, niatsin, vitamin B6, mis va tiaminni o'z ichiga oladi. Pomidorning qo'shimcha afzalligi ularning yuqori tolali tarkibidir.

Qadim zamonlarda odamlar pomidorni zaharli mahsulot deb o'ylab undan istemol qilishmagan. Mana ko'p yillar o'tib, bu fikrning noto'riligi isbotlandi. Pomidor shu qadar foydali mahsulotki, jumladan u quyidagilarga yordam beradi. -Pomidorlar serotonin manbai bo'lib xuddi shokolad dek u kayfiyatni ko'taradi; -Moddalar almashinuvi normallasadi; -Pomidorlar ozish va yoshlikni saqlab qolishga yordam beradi; -Ular yurak-qon tomirlarini faoliyatini yaxshilaydi; -Kasallikka qarshi kurashga yordam beradi; -Ko'rish qobilyatini yaxshilaydi.

Pomidor shunchaki mazali emas. Ular ichki organlar uchun ham juda muhimdir. Pomidor buyraklarni sog'lom saqlashga yordam beradi va toshlardan saqlaydi. O't pufagidagi toshlardan himoya qilishga yordam beradi. Ba'zi tadqiqotlar shuni ko'rsatadiki, pomidor iste'mol qiladigan odamlarda buyrak va o't pufagida tosh paydo bo'lish ehtimoli kamroq. Ko'p miqdorda pomidor iste'mol qilish terining holatini yaxshilashga yordam beradi. Pomidor beta-karotinga boy bo'lib, u sabzi va kartoshka kabi apelsin sabzavotlarida

ham mavjud. Betakarotin terini quyosh ta'siridan himoya qiladi. Pomidorning ya'na bir mazali komponenti – likopen. Likopen terini ultrabinafsha nurlanishidan himoya qiladi. Pomidorda K vitamin va kaltsiy ko'p. ushbu ikki komponent suyaklarni mustahkamlash uchun idealdir. Ha, pomidorda kaltsiy bor va sut mahsulotlari uning yagona manbai emas. Pomidordagi likopen ham suyak kuchiga katta ta'sir qiladi. Pomidorlar qon shakar darajasini tartibga solishga yordam beradi va yaxshi xrom manbai hisoblanadi. Agar siz gazak qilishni xohlasangiz, bir nechta pomidorni iste'mol qiling va darhol o'zingizni ancha yaxshi his qilasiz... Maksimal natijaga erishish uchun ularni yangi iste'mol qilish kerak. Pomidorning afzalliklari sog'lom sochlarga ham taalluqlidir. Pomidorlar A vitaminining yaxshi manbai bo'lib, sochni porloq va kuchli qiladi. Ularni yeyish yoki sochlar uchun niqob qilish mumkin. Ikkita pomidorni blenderdan chiqarib bir choy qoshiq limon sharbati va zaytun moyini qo'shib aralashtiriladi va nam sochga surtiladi. Sochni shunday bir soatga qoldiriladi, keyin shampun bilan yuviladi. Pomidor saraton kasalligining oldini olishda foydali ekanligi isbotlangan. Likopen eng muhim antikanserogen stimulyatoridir. Bachadon bo'ni, og'iz bo'shlig'i prostata va tuxumdonlar saratoni kabi bir qancha saraton turlari havfini kamaytiradi. Pomidorlar hujayralarga zarar yetkazadigan erkin radikallarga qarshi kurashadigan antioksidantlarga boy.

O'zbekistonda sabzavot ekinlari ichida pomidor eng ko'p ekiladi va jami sabzavot yetishtiriladigan maydonlarning 40 % dan ortig'ini egallaydi. Sabzavot ekinlari, jumladan pomidor yetishtirishning yangi innovatsion texnologiyalari joriy etilmoqda. Hozirda respublikamizda 200 ming gektardan ortiq maydonga sabzavot ekinlari yetishtirilayotgan bo'lsa, shundan 45,8 foiziga pomidor ekini ekilib, o'rtacha hosildorlik 24 tonnani tashkil etmoqda shuningdek, issiqxona sharoitida yetishtirilayotgan pomidorlar eksport qilinayotgan agromahsulotlar orasida yetakchi. Mamlakatimiz hududida barcha viloyatlarda pomidorning 258 (120 ta ochiq usulda + 138 ta yopiq usulda) ta navi ekiladi.

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## ISLAMIC FINANCE AND THE SHADOW ECONOMY: A POTENTIAL SOLUTION?

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**Abstract:** *This article explores the potential of Islamic finance as a tool to mitigate the effects of the shadow economy. Islamic finance, grounded in Sharia principles, offers an ethical alternative to conventional financial systems by prohibiting interest and promoting risk-sharing and asset-backed financing. The shadow economy, characterized by unregulated economic activities, poses significant challenges to economic stability and governance. By providing access to formal financial services, Islamic finance could reduce the prevalence of informal economic activities, especially in Muslim-majority countries where such systems are underdeveloped. This article discusses the challenges and opportunities of Islamic finance, its regulatory landscape, and its potential to enhance economic turnover by mobilizing idle funds into productive investments. It argues that while Islamic finance alone cannot address all the complexities of the shadow economy, it can play a crucial role within a broader strategy aimed at legal reform, financial education, and stakeholder collaboration.*

**Key words:** *Islamic Finance, Shadow Economy, Sharia Principles, Financial Inclusion, Economic Development, Regulatory Challenges, Sustainable Investment, Informal Economy, Ethical Banking, Muslim-majority Countries.*

Islamic finance is a financial system based on Sharia, or Islamic law, principles. It prohibits interest, speculation, gambling, and unethical activities, promoting risk-sharing, asset-backed financing, and social welfare. Conversely, the shadow economy includes unregulated, untaxed, or unmonitored economic activities like tax evasion and illegal trade. This article examines the interplay between Islamic finance and the shadow economy, assessing Islamic finance's potential to mitigate the shadow economy's effects.

The shadow economy presents challenges worldwide, with the International Monetary Fund (IMF) estimating its average size at 31.9% of GDP across 158 countries in 2015. It can erode tax bases, weaken legal frameworks, exacerbate inequality, and destabilize governance. Countries combat these effects through improved tax systems, transparency, accountability, and financial inclusion initiatives.

Islamic finance offers a promising avenue for addressing the shadow economy. It can enhance access to formal financial services, especially for underserved populations, potentially reducing reliance on informal economic activities. Its emphasis on transparency and social responsibility aligns with efforts to curb illicit activities. Moreover, Islamic finance aligns with the Sustainable Development Goals (SDGs), supporting economic growth, sustainability, and social equity.

However, Islamic finance isn't a cure-all. It faces regulatory, standardization, innovation, and awareness challenges that may impede its effectiveness. Additionally,

complexities in Islamic financial transactions and the risk of creating a dual financial system are potential drawbacks.

For Muslim-majority countries like Uzbekistan, where Islamic finance is underdeveloped, the transition from keeping investments as cash or gold at home to utilizing Islamic financial services could significantly benefit the economy. It would not only formalize a portion of the shadow economy but also enhance the country's turnover. Funds that were previously idle could now be mobilized into productive investments, fostering economic activity and generating employment. This shift could lead to a more robust, inclusive financial system that aligns with Islamic values and promotes overall economic well-being.

### CONCLUSION

In conclusion, while Islamic finance has the potential to positively impact the shadow economy, it should be part of a broader strategy that includes legal reforms, public service enhancements, financial education, and stakeholder collaboration. As a Sharia-compliant alternative to conventional finance, Islamic finance must embody Sharia's spirit and objectives, beyond mere form and structure.

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## NYUTON KO'PYOQLIKLARI VA DARAJALI ALMASHTIRISHLAR

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**Annotatsiya:** Nyuton ko'pyoqligi, Nyuton diagrammalari tushunchalari keltirilgan. Qatorning Nyuton ko'pyoqligi, qatorning Nyuton diagrammasi ta'riflari berilgan. Darajali almashtirishlarning ta'riflari va ularning ayrim xossalari keltirib o'tilgan. Shuningdek, Nyuton ko'pyoqliklariga doir misollar ham qaralgan.

**Annotation:** Concepts of Newton's multiplicity, Newton's diagrams are presented. Definitions of Newton's multiplicity of series and Newton's diagram of series are given. Definitions of level substitutions and some of their properties are given. Examples of Newton's polynomials are also considered.

**Kalit so'zlar:** Nyuton ko'pyoqligi, Nyuton diagrammasi, qatorning Nyuton ko'pyoqligi, qatorning Nyuton diagrammasi, darajali almashtirishlar.

Biz  $\mathbb{N}$ ,  $\mathbb{R}_+$ ,  $\mathbb{R}$  bilan mos ravishda natural sonlar to'plamini, musbat haqiqiy sonlar to'plamini va haqiqiy sonlar to'plamini belgilaylik. Faraz qilamiz  $K \subset \mathbb{N}^k$  bo'lib, bu yerda

$$K = \{n: n = (n_1, n_2, \dots, n_k) \in \mathbb{N}^k\}, N_0 = \{0, 1, 2, 3, \dots, n, \dots\}, n_i \in N_0$$

$$i = 1, 2, \dots, k.$$

**1-tarif.**  $K$  to'plamning Nyuton ko'pyoqligi deb

$$\bigcup_{n \in K} (n + \mathbb{R}_+^k)$$

to'plamning  $\mathbb{R}_+^k$  dagi qavariq qobig'iga aytiladi.

**2-tarif.**  $K$  to'plamning Nyuton diagrammasi deb,  $K$  to'plamning Nyuton ko'pyoqligining barcha kompakt yoqlarining birlashmasiga aytiladi.

$K$  to'plamning Nyuton ko'pyoqligi odatda  $\Gamma_+(K)$  orqali,  $K$  to'plamning Nyuton diagrammasi esa  $\Gamma(K)$  orqali belgilanadi.

Ikki o'zgaruvchili  $f(x)$  funksiyaning Teylor qatorini qaraymiz:

$$f(x) = \sum_{n \in \mathbb{N}_0^2} a_n x^n,$$

bu yerda  $a_n = a_{n_1 n_2} \in \mathbb{C}$ ,  $n = (n_1, n_2)$  bo'lib,  $n_1, n_2 \in N_0$  daraja ko'rsatkichlari,  $x = (x_1, x_2)$  noma'lum.  $x^n$  monom  $x^n = x_1^{n_1} x_2^{n_2}$  kabi aniqlanadi. Bu qator uchun  $\text{suppf}$  bilan  $f$  funksiyaning tashuvchisini belgilaylik.  $\text{suppf}$  quyidagicha aniqlaniladi:

$$\text{suppf} = \{(n_1, n_2) \in N_0^2: a_{n_1 n_2} \neq 0, n_1, n_2 \in N_0\}.$$

yoki qisqaroq

$$\text{suppf} = \{n \in N_0^2: a_n \neq 0\}.$$

kabi aniqlanadi.

**3-tarif.**  $f$  qatorning Nyuton ko'pyoqligi deb  $\text{suppf}$  to'plamning Nyuton ko'pyoqligiga aytiladi va  $\Gamma_+(f)$  kabi belgilanadi.

**4-tarif.**  $f$  qatorning Nyuton diagrammasi deb  $suppf$  to'planning Nyuton diagrammasiga aytiladi va  $\Gamma(f)$  yoki  $N(f)$  kabi belgilanadi.

**5-tarif.**  $f$  qatorning asosiy qismi deb

$$f(\Gamma) = \sum_{n \in \Gamma(f)} a_n x^n$$

ko'phadga aytiladi.

**1-misol.** Ushbu ikki o'zgaruvchili funksiyaning Nyuton ko'pyoqligini topamiz:

$$f(x_1, x_2) = x_1^3 + 3x_1^2x_2 + 4x_2^2 + 5x_1^2x_2^2 + 0x_1^5 + 0x_2^{13} + \dots$$

Bu funksiyaning Nyuton ko'pyoqligi

$$suppf = \{n \in N^2: a_n \neq 0\} = \{(3,0), (2,1), (0,2), (2,2)\}.$$

to'planning Nyuton ko'pyoqligiga teng.

**2-misol.** Quyida keltirilgan misolning Nyuton diagrammasini toping.

$$f(x_1, x_2) = 5x_1^2 + 13x_1^3x_2 + 4x_2^4 + 6x_1^3x_2^2 + x_1^{15} + 0x_2^{100} + \dots$$

Endi biz tashuvchining ta'rifi ko'ra

$$suppf = \{n \in N^2: a_n \neq 0\} = \{(2,0), (3,1), (0,4), (3,2), (15,0)\}.$$

to'plamga ega bo'lamiz. Ushbu to'planning Nyuton diagrammasi  $f(x_1, x_2)$  funksiyaning Nyuton diagrammasini beradi.

Quyidagi shakldagi almashtirishga darajali almashtirish deyiladi.

$$\begin{cases} w_1 = v_1^{a_1} v_2^{a_2} \\ w_2 = v_1^{b_1} v_2^{b_2} \end{cases}$$

bu yerda,  $v_1, v_2, w_1, w_2$  – musbat haqiqiy qiymatlar qabul qiladi.  $a_1, a_2, b_1, b_2$ -daraja ko'rsatkichlari musbat ratsional qiymatlar qabul qiladi.

Ushbu  $\begin{cases} w_1 = v_1^{a_1} v_2^{a_2} \\ w_2 = v_1^{b_1} v_2^{b_2} \end{cases}$  sistema  $a_1 b_2 - a_2 b_1 \neq 0$  bo'lsa, quyidagi ko'rinishdagi yagona yechimga ega bo'ladi.

$$\begin{cases} v_1 = w_1^{\frac{b_2}{B}} w_2^{\frac{-a_2}{B}} \\ v_2 = w_1^{\frac{-b_1}{B}} w_2^{\frac{a_1}{B}} \end{cases}$$

Haqiqatan ham,  $\begin{cases} w_1 = v_1^{a_1} v_2^{a_2} \\ w_2 = v_1^{b_1} v_2^{b_2} \end{cases}$  ushbu sistemani o'rniga qo'yish usuli yordamida yechaylik, sistemani birinchi ifodasidan  $v_1$  ni topib ikkinchi ifodaga qo'yamiz,  $v_1 = \frac{1}{w_1^{a_1} v_2^{a_1}} \frac{-a_2}{a_1}$

$$w_2 = \left( w_1^{\frac{1}{a_1} v_2^{\frac{-a_2}{a_1}}} \right)^{b_1} \cdot v_2^{b_2} = w_1^{\frac{b_1}{a_1} v_2^{\frac{-a_2 b_1}{a_1}}} v_2^{b_2} = w_1^{\frac{b_1}{a_1} v_2^{\frac{-a_2 b_1 + a_1 b_2}{a_1}}}$$

Bu ifodadan  $v_2$  ni topsak,

$$v_2 = \left( w_2 w_1^{\frac{-b_1}{a_1}} \right)^{\frac{a_1}{-a_2 b_1 + a_1 b_2}} = w_2^{\frac{a_1}{-a_2 b_1 + a_1 b_2}} w_1^{\frac{-b_1}{-a_2 b_1 + a_1 b_2}} = w_1^{\frac{-b_1}{B}} w_2^{\frac{a_1}{B}}$$

Shu metodni yana bir bor qo'llab  $v_1$  ni ham topamiz,  $v_2 = w_1^{\frac{1}{a_2} v_1^{\frac{-a_1}{a_2}}}$

$$w_2 = v_1^{b_1} \cdot \left( w_1^{\frac{1}{a_2} v_1^{\frac{-a_1}{a_2}}} \right)^{b_2} = v_1^{b_1} w_1^{\frac{b_2}{a_2} v_1^{\frac{-a_1 b_2}{a_2}}} = w_1^{\frac{b_2}{a_2} v_1^{\frac{a_2 b_1 - a_1 b_2}{a_2}}}$$

Bu ifodadan  $v_1$  ni topsak

$$v_1 = \left( w_2 w_1 \frac{-b_2}{a_2} \right)^{\frac{a_2}{a_2 b_1 - a_1 b_2}} = w_2 \frac{a_2}{a_2 b_1 - a_1 b_2} w_1 \frac{-b_2}{a_2 b_1 - a_1 b_2} = w_1 \frac{-b_2}{B} w_2 \frac{-a_2}{B}$$

tenglikka ega bo'lamiz.

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## SPECIFIC FEATURES OF VIRTUAL DISCOURSE

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**Annotation:** *The following article discusses the problems of virtual discourse, one of the most important problems of modern speech. Since the approach to virtual speech is not clear in the theoretical linguistics literature, examining this issue stands out as having a special importance in language education today. This study also discusses virtual discourse and its features today.*

**Annotatsiya:** *Ushbu maqolada zamonaviy nutqning eng muhim muammolaridan biri bo'lgan virtual nutq muammosi muhokama qilinadi. Nazariy tilshunoslik adabiyotlarida virtual nutqqa yondashuv aniq bo'lmaganligi sababli, bu masalani o'rganish bugungi kunda til ta'limida alohida ahamiyat kasb etishi bilan ajralib turadi. Bu tadqiqotda virtual nutq va uning bugungi kundagi xususiyatlari ham muhokama qilinadi.*

**Аннотация:** *В данной статье рассматривается проблема виртуального дискурса, одна из важнейших проблем современной речи. Поскольку в теоретической лингвистической литературе подход к виртуальной речи неясен, рассмотрение этого вопроса приобретает особое значение в современном языковом образовании. В исследовании также обсуждается виртуальный дискурс и его особенности сегодня.*

**Key words:** *extra linguistic factors, communicative speech, virtual discourse, antinomy, verbal and non-verbal, interlocutor.*

**Kalit so'zlar:** *ekstralingvistik omillar, kommunikativ nutq, virtual nutq, antinomiya, og'zaki va og'zaki bo'lmagan, suhbatdosh.*

**Ключевые слова:** *экстралингвистические факторы, коммуникативная речь, виртуальный дискурс, антиномия, вербальное и невербальное, собеседник.*

In the «Linguistic Encyclopedic Dictionary» discourse is explained as «a coherent text in conjunction with extra linguistic factors: pragmatic, socio-cultural, psychological and others; a text taken in a communicative situation; speech which is considered to be a purposeful, social action; a component involved in the interaction of people and being a mechanism of cognitive processes. Therefore, virtual discourse can be called a virtual text in the frame of a communicative situation.<sup>15</sup>

Virtual communication is of a hybrid nature. It combines the advantages of two types of communication: oral and written. In this case, there are many contradictions in virtual speech:

**Firstly**, time is high and continuous. This means that written speech is slow than spoken speech, but this is done in high time mode. Spontaneity and accuracy. We often feel

<sup>15</sup> Карасик В. И. Языковой круг: личность, концепций, дискурс, Волгоград, Перемена, 2002,стр.477

confused when responding to message in a conversation, but we can also reread the message and correct it. Depending on the situation and connection between weak points. The time when words are written and the time when words are read can be clearly separated in time, so that the events written and the events related to its content, and therefore the meaning, will change for people who read the words. The interpretation of words may also vary.<sup>16</sup>

**Secondly**, unlike verbal communication and virtual communication does not involve contact. Visual communication in a virtual meeting is usually done by way of email. In this case, dual sign system is associated: verbal and nonverbal. Email characters cannot change intonation, gestures, facial expressions in communication, but their influence on the interpretation of speech is more pronounced than on the face, for example, we do not need to interpret the intonation or imitation of the interlocutor, email signs are clear what do we mean by the speaker?

**Thirdly**, unlike ordinary written texts, virtual speech is often filled with short and imperceptible letters. Comparison: 2DAY=today; 2U=to you; 4U=for you; ASAP=as soon as possible. This makes them multimodal.

**Fourth**, omissions and abbreviations can lead to misinterpretation of the text by the addressees and prevent them from understanding the sender's thoughts. Sometimes contradictory situations may arise. Lack of understanding and the need to repair the defect causes the buyer to seek additional support. Assuming that the explanation is intellectual, emotional and emotional, the lack of understanding will be covered by emotions and feelings.<sup>17</sup>

Interpretation of virtual conversation is often very specific. These are: the hybrid nature of speech. A combination of two forms of communication, written and oral, using two verbal and non-verbal symbols, such as email symbols, non-contact and noncontact short symbols. The content of new words can vary greatly from word to word, and as a result, there is no unity and integrity in the words.

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## THE FEATURES OF A POLIPHONIC NOVEL AS A LITERARY WORK

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**Abstract:** *In this article highlights a polyphonic novel as a literary work that contains numerous unique voices, views, and tales. Several researchers have investigated polyphonic novels. Mikhail Bakhtin, Gerard Genette, and Patricia Waugh are among the most well-known scholars. These researchers have all investigated the use of several voices, viewpoints, and storylines in polyphonic novels and how it impacts the reader's comprehension of the book.*

**Keywords:** *A novel, polyphonic novel, genres, Mikhail Bakhtin, narrative technique.*

A novel is a long work of fiction that tells a story and typically has a complex plot, well-developed characters, and themes that explore the human experience. Novels can be written in a variety of genres, such as:

*Mystery:* Novels that focus on solving a crime or mystery, often featuring a detective or amateur sleuth as the protagonist.

*Romance:* Novels that center around romantic relationships and love stories.

*Science fiction:* Novels that explore speculative or futuristic concepts, often set in outer space or featuring advanced technology.

*Fantasy:* Novels set in imaginary worlds with magical or supernatural elements, often featuring mythical creatures or epic quests.

*Historical fiction:* Novels that are set in a specific time period in history, often featuring real-life historical events or figures.

*Thriller:* Novels that are fast-paced and suspenseful, often involving danger, intrigue, and high stakes.

*Young adult:* Novels targeted towards younger readers, typically featuring teenage protagonists and themes relevant to that age group.

*Literary fiction:* Novels that are characterized by their focus on character development, style, and thematic depth, often seen as more serious or profound works of literature.

The emergence of the polyphonic novel can be traced back to literary movements such as Modernism and Postmodernism, which sought to challenge traditional narrative structures and explore innovative ways of storytelling. Authors like William Faulkner, Virginia Woolf, and James Joyce experimented with multiple perspectives and voices in their works, paving the way for the development of the polyphonic novel.

A polyphonic novel is a literary work that incorporates multiple, distinct voices, perspectives, and narratives. This narrative technique allows for a rich and complex storytelling experience, as the reader is presented with a variety of viewpoints and interpretations of events. The term "polyphony" comes from music theory, where it refers to the harmonious interplay of multiple independent melodies. Similarly, in a polyphonic

novel, different characters or narrators may have their own unique voices, stories, and motives that blend together to create a multifaceted and nuanced narrative.

There have been several researchers who have studied polyphonic novels. Some notable scholars include Mikhail Bakhtin, Gerard Genette, and Patricia Waugh. These researchers have all examined the use of multiple voices, perspectives, and narratives in polyphonic novels and how it affects the reader's understanding of the text.

According to Bakhtin, Dostoevsky was the creator of the polyphonic novel, and it was a fundamentally new genre that could not be analysed according to preconceived frameworks and schema that might be useful for other manifestations of the European novel. Dostoevsky does not describe characters and contrive plot within the context of a unified, author-imposed reality: rather his function as author is to illuminate the *self-consciousness* of the characters so that each participates on their own terms, in their own voice, according to their own ideas about themselves and the world. The author's worldview is not absent, but this worldview does not define, limit or qualify the other voices, and hence cannot directly control how events will unfold. It is present only as another participant in "the great dialogue", with no more capacity for direct signification than any other voice. Bakhtin calls this multi-voiced, dialogic reality "polyphony".<sup>18</sup>

In a polyphonic novel, the narrative is often fragmented and non-linear, with different characters or narrative voices offering their own perspectives on the story. This can provide a more nuanced and layered understanding of the characters and their motivations, as well as the larger social or political context of the novel.

Polyphonic novels can challenge traditional notions of authorship and authority, as the voices of the characters are given equal weight in shaping the narrative. This can create a sense of ambiguity and uncertainty for the reader, as different perspectives may conflict or offer contrasting interpretations of events.

In conclusion, polyphonic novels offer a compelling and immersive reading experience that challenges traditional narrative structures and encourages readers to engage with a multiplicity of voices, perspectives, and truths. By incorporating diverse viewpoints and narratives, polyphonic novels provide a rich and complex portrayal of the human experience, reflecting the multifaceted nature of reality and the intricacies of interpersonal relationships.

Overall, polyphonic novels exemplify the dynamic and ever-evolving nature of literature, demonstrating the power of storytelling to capture the complexities of human existence. As readers navigate the intersecting voices and narratives within a polyphonic novel, they are not only entertained but also challenged to explore the depths of character, relationships, and society. Polyphonic novels stand as a testament to the depth and breadth of human storytelling and invite readers to engage with narratives that are as diverse and intricate as the world itself.

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## BUDJET TASHKILOTLARIDA DAVLAT XARIDINI SAMARALI TASHKIL ETISH PRINTSIPLARI VA RIVOJLANGAN DAVLATLARDAGI STATISTIKA HOLATI

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**Kalit so'zlar:** *davlat xaridi, asosiy printsiplar, shaffoflik, korrupsiya, hisobdorlik, xizmatlar, moliya bozori*

### KIRISH

Davlat xaridlari har doim byudjet mablag'lari orqali resurslarni taqsimlashda muhim jihat bo'lib kelgan. Bu tashkilot tomonidan belgilangan maqsadlarni sifat, narx va vaqtning eng yaxshi kombinatsiyasida amalga oshirish uchun tovarlar, ishlar va xizmatlarni sotib olish jarayonidir. Davlat xaridlari davlat hisobdorligi va shaffofligi bilan bevosita bog'liqdir, chunki u davlat mablag'laridan foydalanadi va har doim jamoat manfaatlari bilan bog'liq. Sog'lom davlat xaridlari resurslarni samarali taqsimlashga olib keladi va shu bilan yaxshi boshqaruvni qo'llab-quvvatlaydi. Shu sababli, davlat xaridlari tashkilotning ishlashida juda strategik rol o'ynaydi va uning ahamiyati Birlashgan Millatlar Tashkilotining taraqqiyot dasturi (BMTTD) hisobotida (1999) e'tirof etilgan bo'lib, unda "hech bir davlat funktsiyasi milliy rivojlanish va barqarorlik uchun davlat xaridlari kabi juda muhim emas. Milliy hukumat muvaffaqiyatli davlat xaridlari tizimini ishlab chiqish va amalga oshirishdan ko'ra muhimroq narsa bo'lmaydi" deya ta'kidlanadi.

Resurslarni taqsimlash jarayonidagi strategik roli tufayli, davlat xaridlari har doim davlat mablag'larini isrof qilish va suiiste'mol qilish nuqtai nazaridan yuqori xavfni o'z ichiga olishi hammaga ma'lum. Davlat xaridlarining yuqori xavfi menejmentning zaif tomonlari va xaridlar jarayonida professionallikning yetishmasligi sababidir. Xarid qilishda bu holat ijobiy bo'lmaydi, chunki kam boshqaruv qobiliyati kamomadni qoplash uchun resurslarni qayta taqsimlashni talab qiladi. Natijada rahbariyat turli xil xususiyatlarga ega bo'lgan tovarlar yoki xizmatlarning bir xil sifatini topishi kerak bo'lgan vaqt uning tashkilotiga qimmatga tushadi. Shuning uchun xaridlar jarayonida iqtisodiy xavfni kamaytirish uchun boshqaruv qobiliyatini yaxshilash kerak. Davlat xaridlari ham murakkab va uzoq davom etadigan jarayondir. Har qanday xarid jarayoni tashkiliy ehtiyojlarni rejalashtirish va belgilash, yetkazib beruvchilar bilan munosabatlarni aniqlash va boshqarish, to'lov va tovarlar yoki xizmatlar o'rtasidagi almashinuvni o'z ichiga oladi.

Uzoq muddatli xarid jarayonlari boshqaruv siyosati va tashkiliy tarkibiy o'zgarishlarning o'zgarishiga ko'proq moyil bo'ladi. Shu sababli, bugungi stsenariyda davlat sektorida uning samaradorligini oshirishga qaratilgan sa'y-harakatlar doirasida sodir bo'lgan tashkiliy o'zgarishlar xaridlar funktsiyasiga ta'sir qiladi. Bu shuni ko'rsatadiki, xaridlar jarayoni va tashkiliy o'zgarishlar o'rtasida bog'liqlik mavjud. Ushbu holat davlat idoralardan

resurslarni taqsimlashda yuqori samaradorlikka erishish uchun o'zgarishlarning minimal ta'siri bilan xaridlarni yaxshiroq boshqarish yo'llarini topishni talab qiladi.

Davlat xaridlari hajmi juda katta. Yaponiyada uning Markaziy hukumati umumiy hisob 2002 yil moliya yili uchun yillik byudjet 83,63 trillion iyenni tashkil etadi va davlat xaridlarining ushbu byudjetga nisbati taxminan 20-25% atrofida baholanadi. Qo'shma Shtatlar har yili davlat xaridlari uchun 200 milliard dollardan ortiq mablag' ajratadi. Davlat xaridlari qurilish, tovarlar ishlab chiqarish, axborot texnologiyalari va xizmatlar kabi ko'plab sohalarda amalga oshiriladi. Davlat xizmatlarining millatlararo, milliy va mintaqaviy hokimiyat organlari o'rtasida vertikal bo'linishiga ega bo'lgan Evropa davlatlari kabi mamlakatlar uchun xaridlar nafaqat tovarlar va xizmatlar, balki ishlar hamdir va Yevropa Ittifoqi uchun yalpi Milliy mahsulotning taxminan 14% davlat shartnomalari bilan bog'liqligi aytilgan. Davlat xizmatlarini ko'rsatish va xo'jalik faoliyati uchun davlat xaridlarining ta'siri va ahamiyati juda katta.

Davlat xaridlari deganda davlat mablag'lari ishonib topshirilgan jamoat tashkilotlari yoki xususiy tashkilotlar tomonidan tovarlar yoki xizmatlarni olish jarayoni tushuniladi. Bu davlat mablag'laridan foydalanish samaradorligi va tengligi bilan juda bog'liq va davlat xizmatlarini ko'rsatishning asosi hisoblanadi. "Davlat xaridlari" Markaziy hukumat yoki mahalliy hukumat va davlat muassasalari kabi davlat organlari tomonidan amalga oshiriladi. "Davlat xaridlari" va davlat mablag'lari ishonib topshirilgan xususiy tashkilotlar tomonidan amalga oshiriladigan xaridlardan iborat. Ma'muriy islohotlar va davlat boshqaruvi tadqiqotlarining so'nggi tendentsiyasi davlat sektorida samaradorlik va maqsadga yo'naltirilgan boshqaruvni ta'kidlaydi va xususiy sektor boshqaruviga taqlid qiluvchi yangi davlat boshqaruvini (NPM) amalga oshiradi. NPM davlat xaridlarini pul uchun eng yaxshi qiymatni olish vositasi deb biladi va xususiy sektor tomonidan raqobatbardosh xaridlarni rag'batlantiradi.

Davlat xaridlarini samarali tashkil etish barcha mamlakatlarda davlat xizmatlarini ko'rsatish va rivojlantirish uchun katta ahamiyatga ega. Iqtisodiy hamkorlik va taraqqiyot tashkiloti (OECD) 1995 yilda "muvaffaqiyatli Davlat xaridlari bo'yicha ko'rsatma" ni e'lon qildi, u a'zo mamlakatlarda xaridlar bilan bog'liq bir nechta umumiy muammolarga ishora qildi: bir xil xaridlar bo'yicha narxlarning keng o'zgarishi, cheklovlardan juda tez-tez foydalanish. Ushbu muammolar Birlashgan Millatlar tashkiloti tomonidan qo'llab-quvvatlanadigan davlat xarajatlariga nisbatan shaffoflik, hisobdorlik, mas'uliyat va kafolatning yo'qligi natijasidir va davlat mablag'larining isrof bo'lishiga va milliy farovonlikning turg'unligiga olib kelishi mumkin.

### XULOSA

Xulosa qilib aytganda, byudjet tashkilotlarida davlat xaridlarini samarali tashkil etish uchun shaffoflik, hisobdorlik va pulning qiymati tamoyillari muhim ahamiyatga ega. Ushbu tamoyillarga rioya qilgan holda, byudjet tashkilotlari xarid qilish jarayonlari adolatli, samarali va iqtisodiy jihatdan samarali bo'lishini va ular xizmat ko'rsatayotgan fuqarolarga yuqori sifatli davlat xizmatlarini taqdim etish imkoniyatini ta'minlashi mumkin. Byudjet tashkilotlari manfaatdor tomonlar o'rtasida ishonchni mustahkamlash, tashkilot va



jamoatchilik uchun eng yaxshi natijalarga erishish uchun xarid qilish faoliyatida ushbu tamoyillarga ustuvor ahamiyat berishlari shart.

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## ПРОФИЛАКТИКА РАЗВИТИЯ САХАРНОГО ДИАБЕТА 2 ТИПА

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**Аннотация:** *Профилактика сахарного диабета 2 типа и осложнений актуальные проблемы современной медицины. У пациентов с индексом массы тела (ИМТ) выше 25 кг/м<sup>2</sup> показатели маркеров углеводного обмена (глюкоза сыворотки крови - на тощак и постпрандиальная гликемия, гликозилированный гемоглобин и глюкоза мочи) и липидного обмена - общий холестерин (ОХ), триглицериды (ТГ), липидограмма (холестерина липопротеидов низкой плотности - ХС ЛПНП, индекс атерогенности - ИА достоверно выше, а ХС липопротеидов высокой плотности - ХС ЛПВП значимо ниже, чем у пациентов с нормальными показателями индекса массы тела (ИМТ) и абдоминальным индексом (АИ). Выявлена достоверная положительная связь между возрастом, абдоминальным индексом, ИМТ, ИА, уровнем глюкозы в сыворотке крови. Оценка маркеров углеводного и липидного обмена должны входить в перечень обязательных обследований пациентов в возрасте старше 30 лет, быть строго индивидуальными. Имеется взаимосвязь прогрессирования нарушений углеводного обмена и изменения показателей липидного обмена у обследованных женщин. Население должно быть широко проинформировано о развитии сахарного диабета 2 типа и прогрессирования осложнений.*

**Ключевые слова :** *сахарный диабет 2 типа, индекс атерогенности, липидный обмен, абдоминальный индекс, глюкоза, гликированный гемоглобин, инсулин, индекс массы тела, углеводный обмен*

### АКТУАЛЬНОСТЬ

Термин “ Сахарный диабет ” по определению Всемирной Организацией Здравоохранения (ВОЗ) означает нарушение обмена веществ множественной этиологии для которого характерна хроническая гипергликемия с нарушениями метаболизма углеводов, жиров и белков в результате нарушений секреции инсулина и / действия инсулин. Диабет - единственное неинфекционное заболевание (имеется

ввиду особо опасные инфекции – чума, оспа и др) взятое под контроль Организацией Объединенных Наций (ООН). Сахарный диабет (СД) - 2 типа самое распространенное эндокринное заболевание, представляет серьезную медико-социальную проблему в связи с повсеместным прогрессирующим ростом заболеваемости, хроническим течением и высокой частотой инвалидизирующих осложнений [1; 4]. По прогнозам, © 2011–2019 Science for Education Today (до 2018: Вестник Новосибирского государственного педагогического университета) Science for Education Today 2019, том 9, № 1 <http://sciforedu.ru> ISSN 2658-6762 210 к 2040 г. их общее число достигнет 642 млн<sup>1</sup> [4]. Каждые 6 сек. в мире умирает один человек от сахарного диабета и его осложнений<sup>2</sup>.

1 Атлас диабета IDF. 7-е изд. 2015 [Электронный ресурс]. URL: <http://www.diabetesatlas.org> (дата обращения: 09.12.2018) 2 Там же. 3 Petri C., Stefani L., Bini V., Mascherini G., Francini L., De Angelis M., Galanti G. Life style and nutrition habits in type 2 diabetes [Электронный ресурс]. URL: <https://www.researchgate.net/publication/278024473> (дата обращения: 09.12.2018)

Огромное влияние оказывает на углеводный обмен нарушение липидного обмена, изменение массы тела и абдоминального индекса. В настоящее время среди ведущих причин, вызывающих нарушение углеводного обмена, выделяют нездоровый образ жизни, в частности неправильное питание, низкую двигательную активность, эмоциональные стрессы и т. д.<sup>3</sup> [27; 33; 36]. Это побудило разработать правила поведенческой терапии для людей, имеющих нарушения углеводного обмена, которые включают 7 основных принципов: 1) здоровое питание; 2) физическая активность; 3) мониторинг глюкозы в крови; 4) прием медикаментов 5) предупреждение стрессов; 6) уменьшение рисков; 7) правильное поведение при болезни [17; 21; 23; 28]. Наиболее распространенным нарушением углеводного обмена является гипергликемия, которая характеризуется стойким повышением уровня глюкозы в крови ( выше 6,1 ммоль/л натощак по крови венозной ) и является одним из симптомов сахарного диабета 2 типа.

**Цель:** оценить осведомленность пациентов о значении нарушения углеводного и липидного обмена как фактора риска развития и прогрессирования осложнений сахарного диабета

**Материалы и методы:** В исследование включены 280 женщины, проживающих в Андижанской области, в возрасте от 30 до 65 лет, средний возраст составил 47,0±2,26 [Me 45,5; 95%ДИ 41,6-46,5] лет.

В контрольную группу вошли 40 женщины аналогичного возраста без нарушений углеводного . жирового обмена . Средний возраст 47,4±3,69 [Me 45,5; 95%ДИ 45,1- 47,6] лет.

У обследуемых женщин провели собеседование и анкетировании на основе специального опросника составленный эндокринологами нашей кафедры, определяли ИМТ ( по классификации избыточной массы у взрослых в зависимости от ИМТ по ВОЗ . 1997г .; **16- 18.5** кг/м<sup>2</sup> недостаточная масса тела , норма **18,5-24,9** м/кг<sup>2</sup>. избыточная масса тела **25- 29.9** кг/м<sup>2</sup>, ожирение 1 степени **30- 34.9** кг/м<sup>2</sup> , ожирение 2

степени 35- 40 кг/м<sup>2</sup> , 40 кг/м<sup>2</sup> и более ожирение 3 степени ) , абдоминальное ожирение по ВОЗ с расчетом соотношения окружности талии (ОТ) к бедер (ОБ) измеренное в сантиметрах .

В соответствии с протоколом сбора данных [Всемирной организации здравоохранения](#) (ВОЗ),<sup>[6]</sup> окружность талии следует измерять в средней точке между нижним краем последнего прощупываемого ребра и верхней части гребня [подвздошной кости](#). Измерение проводится устойчивой к растяжению лентой при обеспечении постоянного натяжения 100 г. Окружность таза измеряется вокруг самой широкой части ягодиц, лента удерживается параллельно полу. Для обоих измерений, человек должен иметь на себе минимум одежды и стоять, поставив ступни вместе, руки в стороны, и равномерно распределив вес тела. Пациент должен быть расслаблен, измерения следует проводить в фазе выдоха при нормальном дыхании. Каждое измерение следует повторить дважды; если измерения находятся в пределах 1 см друг от друга, следует рассчитать среднюю величину. Если разница между двумя измерениями превышает 1 см, два измерения должны быть повторены.<sup>[7]</sup>

ОТ и ИМТ ( более 0,85 и 30 кг/ м<sup>2</sup> соответственно у женщин считается абдоминальным ожирением) , Определяли уровни глюкозы на тощак, инсулина, гликированный гемоглобин , ОХС, ТГ, ХСЛПВП, ХСЛПНП , в крови . Был рассчитан индекс атерогенности (ИА),

по формуле  $КА = \frac{\text{общий холестерин} - \text{ЛПВП/ЛПВП}}{\text{норма коэффициента}} - 3.0$

**Результаты и обсуждение :** Анализ результатов обследования женщин показал: 65 % женщин не были осведомлены, что повышение показателя абдоминального индекса, ИМТ, нарушений углеводного и липидного обмена приводит к развитию сахарного диабета 2 типа и прогрессированию его осложнений. 70 % опрошенных не соблюдали режим правильного питания. Среди женщин, избыточная масса тела выявлена у 90 женщин (32%), ожирением страдали 42 (15%), дефицит массы тела отмечался у 20 (8 %). Среди женщин с избыточной массой тела, у 75 уровни глюкозы в крови натощак были 5.2 - 5.9 ммоль/л, у 9 женщин 6.0 – 6.9 ммоль/л (гликированный гемоглобин 6.5 – 6.7%, 6.8- 7.0 соответственно), у 63 % обследованных женщин на липидограмме показатели ЛПВП были ниже нормативных значений. Из 42 пациентов с ожирением 1 ст (ИМТ 30- 34.9 кг/м<sup>2</sup> ) страдали 27 женщин (64%). Пациенты с высокими показателями индекса атерогенности и ИМТ, в сравнении с контрольной группой, имели статистически значимо высокие уровни ХС ЛПНП и значимо более высокие уровни инсулина ( норма 3- 25 мкед/л у взрослых ) и гликированного гемоглобина в крови, также сравнительно высокие показатели общего холестерина (4,97±0,43ммоль/л vs 3,38±0,32ммоль/л; P=0,05) и ТГ (2,03±0,30ммоль/л vs 0,94±0,10ммоль/л; P=0,05), а также более высокий ИА (3,33±0,27 против 1,91±0,35; P=0,01). Тогда как уровни ХСЛПВП (1,13±0,03ммоль/л) были значимо ниже, чем в группе без нарушения углеводного обмена.

### ВЫВОДЫ:

1. Пациенты должны быть осведомлены о влиянии нарушений углеводного и липидного обмена на развитие и прогрессирование сахарного диабета 2 типа и обучены мерам профилактики.

2. Повышение абдоминального индекса и ИМТ коррелировало с показателем нарушения гликемии натощак, уровнем гликированного гемоглобина, также значениями ОХС, ТГ, ХСЛПНП. ИА достоверно выше, а ХСЛПВП значимо ниже, чем у женщин с нормальным ИМТ и абдоминальным индексом.

3. Выявлено положительная связь между возрастом, ИМТ и АИ.

4. Оценка показателей липидного обмена, ИМТ, абдоминального индекса должны входить в перечень обязательных обследований пациентов с нарушением углеводного обмена.

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## TIJORAT BANKLARIDA KREDIT PORTFELINI BOSHQARISHNI TAKOMILLASHTIRISH YO'LLARI

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“Kredit portfeli” tijorat banklarining kredit berish imkoniyatlarini ko‘rsatadigan omillardandir. Kredit portfeli to‘g‘ri tashkil etilishi tijorat banklarining samarali faoliyat yuritishi uchun asos hisoblanadi. Xususan, kredit berish va uni belgilangan muddatda qaytarib olish, u bilan bog‘liq xatarlar, sudalar, muddati o‘tgan yoki uzaytirilgan kreditlar buyicha xisob-kitob operatsiyalari, sudalar buyicha zararlarni qoplash zaxira miqdori, banklararo kredit va markazlashtirilgan kreditlar buyicha operatsiyalar shular sirasiga kiradi. Demak, kredit portfeli - bu turli xil risklarga asoslangan muayyan mezonlarga qarab turkumlangan kreditlar miqyosidagi bank talablarining yig‘indisidir. Tijorat banklari tomonidan berilgan barcha kreditlar uning kredit portfelida o‘z ifodasini topadi.

Huerta de Soto fikricha, birinchi navbatda, tijorat banklari tomonidan kengaytirilgan kreditlar uchun foiz stavkalari kamaytirish daromad keltiruvchi investitsiya loyihalarini kirib foydasiz investitsiya loyihalarini o‘zgartiradi. Ikkinchidan, ixtiyoriy jamg‘arma orqali banklar tomonidan ta‘minlanmagan kreditlar hisobiga investitsiya loyihalarini moliyalashtirish, albatta, investitsiya loyihalarining bajarilmasligiga va kreditlarning qaytarilmasligiga olib keladi

Bunda bank uzining kaysi tarmokka kuproq etibor berishiga karab, u eki bu kredit ulushi kredit portfelida kuprok buladi. Bu uning kredit siesatidan kelib chiqadi. Bank aktiv operatsiyalari ichida kredit asosiy va bank daromadini katta qismi ham ayni shu kredit operatsiyalari orqali keladi. SHu sababli bank kredit portfelining qanday shakllanishi bank faoliyatiga bevosita ta’sir ko‘rsatadi. Bank yaxshi kredit portfelini shakllantirish niyatida ekan, kreditlash jaraenini tug‘ri tashkil qilishi zarur buladi.

Biz yuqorida turli ko‘rinishdagi kreditlarni ko‘rdik, biroq konkret banklarning kredit portfelining tarkibi o‘ziga xos xususiyatlarga ega bo‘ladi. Bank kredit portfelining tarkibini aniqlovchi muhim omillardan biri bu ayni bank xizmat kursatadigan bozor sektorining spetsifikasidir.

Har bir bank o‘z bozor segmenti mijozlarining qarz mablag‘lariga bulgan ehtiejini hisobga olishi kerak. Masalan, bank shahar chekkasidagi uylar va kichik do‘konlarga ega tumanda joylashgan balsa, asosiy uy binolari garovi ostida, ipoteka krediti, avtomobil, uy jixozlari, umuman uy xujaligini yuritish uchun xarajatlarni qoplashga kredit beradi, aksincha katta shaharda ofislar, katta univermaglar, sanoat korxonolari orasidagi banklar, odatda uz kreditlarini asosan tijorat firmalariga tovar materiallar zahiralarni to‘ldirishga, jihozlar sotib olishga va ish haqiga yo‘naltiradilar. E'tibor bering, muammoli kreditlarning sabablaridan biri bu qarz oluvchilar kredit olish uchun murojaat qilishda qaror qabul qilishlari va ularning moliyaviy ahvolini har doim ham to'g'ri baholamasliklari. Natijada, bu

qarz oluvchilarni oylik to'lov va kredit foizlarini to'lashga qodir emasligiga olib keladi. To'lovlarni kechiktirishga sezilarli ta'sir ko'rsatadigan yana bir omil-bu kredit olish uchun bankka soxta daromad sertifikatlarini taqdim etish. Yuqorida aytilganlarning barchasiga qo'shimcha ravishda, salbiy omil-bu bankning yangi mijozlari uchun kredit tarixining yo'qligi, buning natijasida bank kredit berish to'g'risida qaror qabul qilishga tayanadigan hech narsaga ega emas.

Shuni ta'kidlash kerakki, bank o'z mijozlari portfelini faol va passiv operatsiyalar o'rtasidagi maqbul nisbatni ta'minlaydigan tarzda shakllantirishi, shuningdek, uning likvidligi va rentabellik ko'rsatkichlarini uzluksiz faoliyat uchun zarur bo'lgan darajada ushlab turishi kerak. Ushbu maqsadga erishish uchun bank barcha turdagi xatarlar darajasini muntazam ravishda tahlil qilishi, ularni boshqarishning barcha usullaridan foydalanishi va har bir aniq moment uchun ularning qiymatlarini hisoblashi kerak.

Bankning kredit portfelini boshqarishning muhim jihati uning sifatini baholash uchun ma'lum mezonlarni tanlashdir. Baholash bosqichida kreditlarning asosiy guruhlarini ular bilan bog'liq bo'lgan xavf foizlarini ko'rsatish orqali shakllanadi.

Muayyan boshqaruv qarorlarini qabul qilish va to'g'ridan-to'g'ri amalga oshirish paytida foydalaniladigan bank kreditlash portfelini boshqarishning turli xil usullari mavjud. Eng keng tarqalgan usullardan biri bu kredit portfelini diversifikatsiya qilishdir, chunki bu kreditni to'lamaslik xavfini himoya qilishning nisbatan arzon va oddiy usuli. Ushbu usulning mohiyati shundaki, kredit portfeli qarz oluvchilarning keng doirasiga taqsimlanadi. Bundan tashqari, qarz oluvchilar bir-biridan bir necha jihatdan farq qiladi: kapital miqdori, faoliyat shartlari va mulkchilik shakli bo'yicha.

Albatta, banklar kredit beraetganlarida o'zlarining xizmat ko'rsataetgan regionlarga to'liq bog'liq bulmaydilar. Kerakli kredit mablag'larini to'liq eki qisman ular boshqa banklardan olishlari mumkin. Bu adolat agar bank xizmat qilaetgan region iqtisodiy qiyinchiliklarga duch kelsa, zarar kurish riskini pasaytiradi.

Bank miqiyosi ham uning kredit portfeliga ta'sir etuvchi omillardan biri xisoblanadi, ayniksa, bir qarz oluvchiga beriladigan kreditning maksimal miqdorini belgilovchi kapitalning xajmi muhimdir. Katta banklar, odatda ulgurji kreditorlar hisoblanadilar, ular o'zlarining kreditlari asosiy mikdorini korporatsiyalar va boshka firmalarga beradilar. Kichikroq banklarning faoliyati esa fuqarolarga kichik sudalar, uy garovi ostida xususiy shaxslarga kreditlar, firma va rancho egalariga kichik kreditlar shaklidagi yakka holdagi kreditlarni berishga yo'naltirilganlar.

Bundan tashqari, kredit portfeli tarkibiga ko'ra kreditlashning turli kurinishlari sohasida menejerlarning tajriba va malakasi hamda uz kredit inspektorlariga ma'lum kurinishdagi kreditlarni bermasligi ko'rsatilgan bank kredit siesati ham ta'sir ko'rsatadi.

Kredit portfelining tarkibi ma'lum darajada bankning kutilaetgan daromadiga ham bog'liq. Chunki bank, odatda kutilaetgan daromadi maksimal bulgan sudalarni berishni ma'qul ko'radi.





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## ФТОР, БРОМ И ЙОД

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**Аннотация:** в организме человека хлор (0,15%) относится к макроэлементам, остальные элементы этой группы (содержание 10-5%) являются микроэлементами. Хлор и йод-незаменимые элементы, остальные-постоянные компоненты тканей. Бром-тяжелая красно-коричневая жидкость. Бромный бугари ядовит. Бром вызывает сильные ожоги при попадании на кожу. Йод-черно-фиолетовое твердое вещество. При нагревании гуафора образует бугари, которые при охлаждении снова превращаются в кристаллы. Происходит сублимация йода, т. е. переход твердого вещества в жидкое состояние и образование кристаллов из йода. Молекулы брома и йода неполярны, ковалентны, двухатомны:  $Br_2$  и  $I_2$ . Плохо растворим в воде, при этом образует бромистую и йодистую воду (аналог хлорированной воды) соответственно. Хорошо растворяется в органических растворителях — спирте, бензоле, бензине, хлороформе. В бrome валентные электроны  $5s^25p^5$ , в йоде  $6s^26p^5$ . Отсюда следует вывод, что йод с бромом по химическим свойствам схож с хлором, только свойство вступать в реакцию меньше, чем у хлора. Сравнение характера (активности) их реакции.

**Ключевые слова:** фтор, йод, галогены, фторид

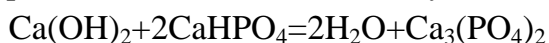
В организме все галогены находятся в степени окисления -1, хлор и бром – в виде гидратированных ионов, а фтор и йод в основном входят в состав некоторых биоорганических соединений в связанной форме. Из-за пониженной электроотрицательности в ряду F-Cl-Br-I связь углерода с йодом является наименее полярной, поэтому йод присутствует в живых организмах в виде соединений элементов-органойдов (со связью C-I).

Фтор. Масса фтора в организме человека составляет около 7 мг (10-5%). Соединения фтора накапливаются в костной ткани, ногтях, зубах.

Недостаток фтора в организме приводит к кариесу. Зубная эмаль содержит нерастворимый фторапатит  $Ca_3(PO_4)_2 \cdot CaF_2$ . Минеральная основа дентина-гидроксиапатит  $3Ca_3(PO_4)_2 + Ca(OH)_2$ , хлорапатит  $3Ca_3(PO_4)_2 + CaCl_2$  и фторапатит  $3Ca_3(PO_4)_2 + CaF_2$ .

Фтор ионы способствуют отложению фосфата кальция и образуют защитный слой на поверхности зуба.

Под действием кислот, вырабатываемых бактериями, растворяется одно из минеральных оснований тканей зуба – гидроксиапатит:



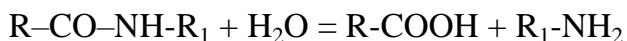
Кроме того, часто разрушаются внутренние части дентина, а не внешняя поверхность зуба, покрытая слоем эмали. Хотя эмаль слегка повреждена (есть

предположения), введение NaF способствует образованию фторапатита, что облегчает реминерализацию начавшегося повреждения.

Хлор. Ионы хлора играют важную биологическую роль. Они активируют некоторые ферменты, создают благоприятную среду для действия протеолитических ферментов желудочного сока. Для выработки соляной кислоты в желудке необходимо потомство. Помимо важной роли соляной кислоты в процессе пищеварения, нас убивает различные болезнетворные бактерии (холера, тиф). В форме соляной кислоты хлорид-Ион является необходимым компонентом желудочного сока. Выведение соляной кислоты из клеток слизистой оболочки желудка можно описать следующим уравнением:



Соляная кислота желудочного сока необходима для перехода фермента пепсина в активную форму. Пепсин обеспечивает переваривание белков за счет гидролитического расщепления пептидных связей:



Хлорид-ионы участвуют в создании электрического мембранного потенциала, который регулирует потоки ионов через клеточные мембраны, образуя ионные слои по обе стороны от клеточных мембран, в то время как прохождение неорганических и органических веществ через мембраны участвует в поддержании осмотического баланса. Ионы хлора, имеющие оптимальный радиус проникновения в клеточную мембрану, совместно с ионами калия и натрия участвуют в создании определенного осмотического давления и регуляции водно-солевого обмена.

Бром локализуется преимущественно в железах внутренней секреции, прежде всего в гипофизе. Биологическая роль соединений брома в нормальном функционировании организма еще недостаточно выяснена. Экспериментально установлено, что соединения брома угнетают функцию щитовидной железы и повышают активность коры надпочечников.

Йод является одним из незаменимых биогенных элементов, а его соединения играют важную роль в обменных процессах. Влияет на синтез некоторых белков, жиров, гормонов. В организме человека йода 25 мг (410-5%), причем большая его половина находится в щитовидной железе (в виде гормонов). Щитовидная железа выделяет гормоны тироксин и трийодтиронин. Низкая активность щитовидной железы (гипотиреоз) может быть связана со снижением ее способности накапливать ионы йода, а также с дефицитом йода в пище (эндемический зоб).

Таким образом, все Р-элементы VII группы физиологически активны, хлор и йод незаменимы для нормального функционирования организма. В организме галогены взаимозаменяемы, наблюдаются случаи синергизма и антагонизма. Антагонисты йода-фтор и бром. Конкурируя с йодом, фтор может вытеснять его из органических соединений йода и подавлять транспорт йода в организме. Всасыванию йода щитовидной железой препятствует бром. К синергистам йода относится селен-при недостатке селена йод не усваивается.



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## TA'LIM METODLARINING DARS SAMARADORLIGINI OSHIRISHDAGI AHAMIYATI

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**Annotatsiya:** *Innovatsion ta'lim texnologiyasi o'quvchining ehtiyoji, qiziqishi, maqsadi, qobiliyati, faolligi va boshqa individual-psixologik xususiyatlarini hisobga olishni taqozo etadi.*

**Kalit so'zlar:** *metod, interfaol ta'lim, texnologiya, an'anaviy ta'lim, kasbiy ta'lim, zamonaviy dars, ta'lim maqsadlari, ta'lim metodlari, interfaol metodlar.*

**Аннотация:** *Инновационная образовательная технология требует учета потребностей, интересов, целей, способностей, активности и других индивидуально-психологических особенностей обучающегося.*

**Ключевые слова:** *метод, интерактивное обучение, технология, традиционное образование, профессиональное образование, современный урок, образовательные цели, методы обучения, интерактивные методы.*

**Annotation:** *Innovative educational technology requires taking into account the needs, interests, goals, abilities, activity and other individual psychological characteristics of the student.*

**Keywords:** *method, interactive learning, technology, traditional education, vocational education, modern lesson, educational goals, teaching methods, interactive methods.*

So'nggi paytda pedagogik amaliyot va nashriy ishlarda an'anaviy - nofaol, faol va interfaol ta'lim metodlari haqida ko'plab fikrlar bildirilib, bahs-munozaralarga sabab bo'lmoqda.

Olimlar va amaliyotchilar tomonidan an'anaviy ta'limga muqobil ta'lim texnologiyalarini ishlab chiqish, ularni amalga keng joriy etish haqida tavsiyalar berilmoqda.

Kimlardir an'anaviy ta'limdan butunlay xalos bo'lib, yangi tizimga o'tishni taklif etsa, boshqalar esa an'anaviy ta'lim bilan noan'anaviy ta'limni qo'shib olib borish zarurligini o'qtiradilar. Bu qarashlar turli-tuman bo'lishiga qaramay, interfaol ta'lim yuqori sifat va samaradorlikni ta'minlashga qaratilishiga shubha yo'q.

Kimlar an'anaviy ta'lim jarayoni markazida o'qituvchi, noana'anaviy ta'lim jarayoni markazida o'quvchi bo'ladi deb talqin etadilar. Bu har ikki holat ham bizning fikrimizcha bir tomonlamalikka olib keladi. Ta'lim jarayoni markazida har doim uning ishtirokchilari



o'qituvchi va o'quvchilar bo'lgan hamda bo'lishi shart hisoblanadi, lekin ularning biri faol, ikkinchisi esa nafaol faoliyat ko'rsatishlari mumkin. Interfaol ta'lim jarayonida uning barcha ishtirokchilari faol faoliyat ko'rsatadi, bu holat o'zaro muloqot va munosabat natijasida vujudga keladi. Chunki interfaol ta'limda o'quvchining rivojlanishi va ularning tabiiy imkoniyatlarini ro'yobga chiqarishga qulay shart-sharoit yaratadi. Buning uchun o'qituvchi izlanish, ta'limning turli samarali shakllari, metodlari va vositalaridan o'z o'rnida foydalana olish talab etiladi. Ana shundagina yuqori sifat va samaradorlik ta'minlanadi. [1]

- interfaol ta'lim texnologiyalari sharoitida o'quvchi nafaol kuzatuvchi, eshituvchi yoki ijrochi emas, balki ongli faol ishtirokchi bo'lib, ijodiy fikr yuritib mustaqil faoliyat ko'rsatadi;

- har bir o'quvchi iste'dod, qobiliyat sohibi sifatida qaraladi;

- yuksak etik qadriyatlar o'quvchilarning ustuvor fazilatlari hisoblanadi;

- ta'lim-tarbiya jarayoni ishtirokchilari teng huquqli, hamkorlik faoliyatida bo'ladi;

- o'quvchilarning tanlash, xatolarga yo'l qo'yishi mumkinligi, o'z nuqtai nazarini erkin bayon etish huquqi ta'minlanadi;

- o'quvchi va ta'lim beruvchi munosabati ta'qiqlamaslik; yolg'iz holda emas, birgalikda boshqarish; majburlash emas, ishontrish; buyurish emas, tashkil etish; chegaralash emas, erkin tanlab olishga imkon beriladi.

Interfaol ta'lim texnologiyalarining yana bir xususiyati – ularning o'quvchilarga berilgan bilimni yodlatib, so'ng aytib bera olishga erishishlariga emas, balki ta'lim va tarbiya jarayoni yakunida o'quvchilarning davlat ta'lim standartlari darajasida aniq ma'lum amaliy ishlarni bajara olishga erishishlariga; “nimani o'rgatish kerak?” degan savolga emas, balki “qanday o'rgatish kerak?” degan savolga ko'proq javob izlashga yo'naltirilganligidadir. Shu bois bo'lajak kichik mutaxassis kadrlar shaxsini shakllantirishga yo'naltirilgan interfaol ta'lim texnologiyalarini loyihalashning tashkiliy-pedagogik asoslarini aniqlash muhimdir. [1]

Innovatsion ta'lim texnologiyasi o'quvchining ehtiyoji, qiziqishi, maqsadi, qobiliyati, faolligi va boshqa individual-psixologik xususiyatlarini hisobga olishni taqozo etadi. Bunday ta'lim sharoitida o'qituvchi va o'quvchilarning o'zaro ta'siri prinsipial jihatdan o'zgaradi, ya'ni ular o'quv jarayonining teng huquqli sub'ektlari hisoblanadilar.

Interfaol ta'lim texnologiyalarining asosiy qoidalari rossiyalik psixolog E.F. Zeer tomonidan quyidagicha talqin etiladi:

- maqsad – o'quvchilarning kasbiy va shaxsiy sifatlarini rivojlantirish;

- kasbiy ta'limning samaradorligini bo'lajak mutaxassisning kasbiy va shaxsiy rivojlanish ko'rsatkichlari orqali aniqlash;

- pedagogning ijtimoiy kasbiy xususiyatlarini namoyon etish, ta'lim mazmuni va texnologiyasi orqali o'quvchini amaliy faoliyatga o'rgatish;

- o'quvchi shaxsi rivojining individual traektoriyasini aniqlash;

- o'qituvchi va o'quvchi hamkorligi asosida kasbiy ta'limni to'la qonli tashkil etish.

Yuqorida zikr etilgan va shu kabi fikrlarni e'tiborga olib, biz interfaol ta'lim texnologiyasi tushunchasi mazmunini quyidagicha ifodaladik. Interfaol ta'lim bu – ta'lim sub'ektlari (ta'lim beruvchi va ta'lim oluvchi)ning o'zaro ta'sirini tashkil etish va bo'lajak

mutaxassisni o'zining kasbiy va shaxsiy sifatlarini maksimal darajada rivojlantirishga yo'naltirish jarayonidir.

Ma'lumki, o'quv mashg'ulotlarini tashkil etishning asosiy shakli dars hisoblanadi. Dars interfaol ta'lim texnologiyalari asosida tashkil etilsa, nafaqat o'qituvchi va o'quvchi maqsadga yo'naltirilgan munosabatlari, ya'ni jarayonni tashkil etishning dinamik va variativ shakli, balki ta'lim muhiti, eng birinchi navbatda, axborot tarmoqlari bilan bog'liq rivojlanuvchi tizim ishlaydi. Tashqi ta'sirlar va ichki ziddiyatlar tufayli dars rivojlanadi.

Zamonaviy darsning maqsadi tashhislanuvchan (tekshirib ko'riladigan) va amalga oshiriladigan (erishiladigan) bo'lishi lozim. Amalda dars maqsadlari quyidagicha ikki tarzda ifodalani b kelinadi: o'qituvchi faoliyatida ifodalangan maqsadlar va o'quvchi faoliyatida ifodalangan maqsadlar.

O'qituvchi faoliyatida ifodalangan maqsadlar, eng avvalo, o'quvchi shaxsini rivojlantirishga qaratilgan bo'lib, u o'z ichiga quyidagilarni qamrab olgan:

- o'quvchilarda layoqat, qiziqish, moyillik kabi individual ijobiy xususiyatlarni rivojlantirish;
- o'quvchida intellektual, tadqiqotchilik, axborot olish va ulardan foydalanish, muloqot o'rnatish, refleksiv faoliyat bilan bog'liq madaniyatni rivojlantirish;
- o'quvchilarning o'rganilayotgan o'quv predmet, tanlagan kasbi va ixtisosligiga nisbatan shaxsiy ijobiy munosabatlarini rivojlantirish;
- o'quvchilarning atrof-borliqqa munosabatini rivojlantirish.

Hozirgi kunda pedagoglar tomonidan "shakllantirish" tarzida ifoda etilayotgan ta'lim maqsadlari o'z mohiyat-mazmunida o'qituvchi va o'quvchilarning darsdagi o'zaro munosabatlarini to'la aks ettira olmaydi.

Bizning nazarimizda:

- tahsil olovchilarning yangi mavzu o'quv materialini mazmuni, mohiyatini tasavvur qila olishiga yordamlashish;
- tahsil olovchilarning dalillar, tushunchalar, qoidalar, qonunlar va shu kabilarni o'zlashtirishi va o'rganganlarini mustahkamlash bo'yicha dastlabki kasbiy xatti-harakat usullarini o'rganish ishlarini tashkil etish;
- o'quvchilarni o'rgangan bilim va malakasini turli shart-sharoitlarda mustaqil holda iloji boricha ijobiy qo'llay bilishga o'rgatish bo'yicha amaliy faoliyatlar;
- o'quvchilarning o'zlashtirgan bilimlarini umumlashtirish va tizimlashtirish bo'yicha amaliy faoliyat;
- o'quvchilarning o'zlashtirgan bilim, ko'nikmasi, malakasini oshirish, mustahkamlash va nazorat qilish kabilarga imkon yaratadi. [2]

Interfaol ta'lim texnologiyalariga asoslangan darsning real natijasi o'quvchilarning dars davomida o'zlashtirgan bilim, ko'nikma va malakasi hamda shaxsiy fazilatlarida namoyon bo'ladi. O'quvchilarning qadriyatlar bilan bog'liq munosabatlari dinamikasini oldindan ko'ra bilish ancha mushkul. Biroq darsni tahlil qila turib, o'quvchilarni tarbiyalash imkoniyatlaridan foydalanish mumkunligini ham yoddan chiqarmaslik lozim.

Zamonaviy darsning texnologik xususiyatlari deyilganda o'quv jarayonini loyixalash bo'yicha texnologik tadbirlarning berilgan ketma-ketligi hamda maqsadga suyanish bilan

xarakterlanuvchi yaxlit ta'lim-tarbiyaviy va rivojlantiruvchi murakkab tizim tushuniladi. Ushbu jarayon o'qituvchilar tomonidan rejalashtiriladi, amalga oshiriladi hamda natijalarini nazorat qilish yo'li bilan istiqbolda amalga oshirilishi kerak bo'lgan faoliyat ob'ektlari belgilanib, shu yo'l bilan tizim rivojlantiriladi.

Interfaol ta'lim texnologiyalariga asoslangan dars o'quvchilarni kamol taptirishga yo'naltirilgan o'quv jarayonidir. U avvaldan loyihalaniib, ma'lum texnologik tadbirlar orqali amalga oshiriladi.

Shu o'rinda aytib o'tish zarurki, interfaol ta'lim texnologiyalari asosida tashkil etilgan darslarda quyidagi shartlar bajarilishi zarur:

- o'quvchi o'qishga va o'z-o'zini rivojlantirishga qiziquvchi sub'ektga aylanishi uchun shart-sharoitlar yaratib berish;

- o'qituvchi darsda asosiy shaxsgina bo'lib qolmasdan, o'quvchining o'quv bilish faoliyatni boshqaruvchi va uning ko'makchisi bo'lishi;

- o'qitish sur'atini o'quvchilarning erkin tanlashi;

- o'quv jarayonini dialog yoki polilog tarzda tashkil etish kabilar.

Ko'p yillik tajribalarga asoslanib shuni alohida qayd etish zarurki, o'quvchilar bilan dialogik va polilogik muloqot va munosabatlarida bo'lish ko'zlangan natijani kafolatlaydi.

Ta'lim metodlarini tanlashda har bir darsning didaktik vazifalaridan kelib chiqqan holda tanlash maqsadga muvofiq sanaladi. Buning uchun ta'lim-tarbiya jarayoni oqilona tashkil qilinishi, ta'lim beruvchi tomonidan o'quvchilarning qiziqishi, faolligini oshirib muttasil ravishda rag'batlantirilib turilishi, o'quv materialini kichik-kichik bo'laklarga bo'lib, o'quv muammolari tarzida ilgari surilishi, bu muammolarning mazmunini yoritishda aqliy hujum, kichik guruhlarda ishlash, bahs-munozara, yo'naltiruvchi matn, loyiha, mashq, rolli o'yinlar kabi metodlarni qo'llash talab etiladi. [3]

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## DORIVOR O'SIMLIKLAR TAHLILI

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**Annotatsiya:** *Dorivor o'simliklarni tahlil qilish uzoq tarixga ega, ayniqsa o'simliklar sifatini baholashda. Birinchi usullar ta'm, hid va tashqi ko'rinishning jismoniy sezgilaridan foydalangan holda organoleptik edi. Keyin asta-sekin ular yanada takomillashtirilgan instrumental usullarga olib keldi. Turli mamlakatlarda o'zlarining an'anaviy dori-darmonlari mavjud bo'lsa-da, Xitoy hozirda dorivor o'simliklarni tahlil qilish bo'yicha nashrlar soni va ularning farmakopeyasiga kiritilganlar soni bo'yicha yetakchilik qilmoqda. Ushbu nashrlardagi monografiyalarda amalga oshiriladigan tahlil turiga oid ko'rsatmalar berilgan va ishlab chiqaruvchilar uchun bu odatda tobora takomillashib borayotgan asboblarga kirishni talab qiladi. Biz analitik tahlilning ko'plab sohalarida, xususan xromatografik va spektroskopik usullarning rivojlanishi va ushbu usullar orasidagi o'tkazmalarining rivojlanishiga guvoh bo'lamiz. Ko'p o'lchovli tahlil dasturi yordamida ma'lumotlarni qayta ishlash qobiliyati metabolomikaga eshiklarni ochdi va bizga dorivor o'simliklarda uchraydigan kimyoviy birikmalarning ko'p navlarini tushunish uchun ko'proq imkoniyatlar yaratdi, bu bizga nafaqat o'simliklar va dorilar sifatiga, balki ularning klinik tadqiqotlar uchun yaroqliligiga ham ko'proq ishonch hosil qilish imkonini beradi. Texnologiyani takomillashtirish o'simliklarni samarali tahlil qilish va tasniflash, ifloslantiruvchi moddalar va iflosliklarni juda past konsentratsiyalarda aniqlash imkonini berdi. Biroq, texnologik taraqqiyot bizga o'simlik tarkibiy qismlariga asoslangan yuqori sifatli dori-darmonlarni yaratish uchun zarur bo'lgan barcha savollarga javob bera olmaydi va sifatni baholashning an'anaviy usullari bugungi kunda ham muhim bo'lib qolmoqda.*

**Kalit so'zlar:** *yutuqlar; tahlil; murakkablik; o'simlik tibbiyoti; dorivor o'simlik; farmakopeya; sifat.*

Dorivor o'simliklar ming yillar davomida butun dunyo bo'ylab mahalliy jamoalarda shifo manbai bo'lib kelgan. Shunga qaramay, u dunyo aholisining taxminan 85% uchun birlamchi tibbiy yordam vositasi sifatida (Peshich, 2015) va dori-darmonlarni qidirish manbai sifatida dolzarb bo'lib qolmoqda, chunki barcha sintetik dorilarning 80% undan olinadi (Bauer va Brennstrup, 2014). Shu bilan birga, so'nggi bir necha yuz yil ichida o'simlik moddalarini tahlil qilish usullarini joriy etish, rivojlantirish va takomillashtirishda sezilarli o'sish kuzatildi. Ming yillar davomida odamlar dorivor o'simliklar va oziq-ovqat mahsulotlarini ularning yaroqliligi va sifatini organoleptik baholash asosida aniqladilar va tanladilar, ammo so'nggi etti o'n yillikda, masalan, qog'oz xromatografiyasi kabi asosiy analitik usullar ixtiro qilinganidan beri, ko'rish, teginish va hidga asoslangan tahlil usullarining jadal rivojlanishi boshlandi. murakkab asboblardan foydalanish. Ushbu sezgi mexanizatsiyasi nisbatan yaqinda paydo bo'lgan bo'lsa - da, tarixiy jihatdan ilmiy inqilob davomida koinotning tashqi va ichki qismida kontseptual kengayish inson ko'ziga etib

bo'lmaydigan darajada sodir bo'ldi, bu esa sezgi organlariga yordam beradigan eng qadimgi analitik vositalar-teleskop va mikroskopning rivojlanishiga olib keldi. Strukturaviy, kimyoviy va atom darajalarida yangi mikroskopik olamlarning dastlabki kashfiyotidan beri inson idrokining sezgirligi va diapazoni kengaytirildi va mustahkamlandi.

Laboratoriya kontsepsiyasi Evropada faqat 1600-yillarning boshlarida rasmiy ravishda shakllanganligini hisobga olsak, tezkor taraqqiyot ayniqsa yaqqol namoyon bo'ladi. Dastlab faylasuflar, shifokorlar va olimlarning ish xonalariga qo'shimcha sifatida u tabiatni o'rganish va empirik ma'lumotlarni to'plash uchun maydonga aylanadi (Uilson, 1997), bu erda tadqiqotlar kunduzgi yorug'lik yoki ob-havo imkon beradigan ma'lum vaqtlarda emas, balki tahlilchiga qulay vaqtda o'tkazilishi mumkin. Bu yanada rasmiylashtirilgan analitik tadqiqotlar yo'lidagi kichik, ammo muhim qadam edi.

Zamonaviy tahlilda qog'oz xromatografiyasi va ancha oldingi kolorimetriya kabi alohida usullar paydo bo'ldi. Buning ortidan LC-UV kabi erta o'tkazmalar paydo bo'lgunga qadar ushbu usullarning kengroq doirasi va qo'llanilishi kuzatildi, ular so'nggi paytlarda har bir alohida usulga xos analitik afzalliklardan foydalangan holda ko'plab ko'p o'tkazmali asboblarni klasterlari bilan yakunlandi. Defis bilan tavsiflangan analitik usullarning paydo bo'lishi ko'p jihatdan dorivor o'simlikni tanlashda sodir bo'ladigan organoleptik sintezga o'xshaydi; uni ko'rib chiqish, hidlash va tatib ko'rish orqali siz uning sifatini to'g'ri aniqlash va baholash ehtimolini oshirish uchun turli xil sezgilarning kombinatsiyalaridan foydalanasiz, erkinlik ko'rsatkichlarini/statistik darajalarini oshirasiz. Defis bilan tavsiflangan ushbu usullarning paydo bo'lishi va qo'llanilishi faqat kompyuter tizimlari va ma'lumotlarni boshqarish vositalarining rivojlanishi bilan mumkin va foydali bo'ldi, bu esa yaratilgan katta hajmdagi instrumental va analitik ma'lumotlardan ma'lumotlarni tez va tanlab sintez qilish imkonini beradi.

Biroq, so'nggi paytlarda o'simlik materiallarini tahlil qilish (va umuman tahlil qilish) rivojlanishiga eng katta ta'sir katta hajmdagi ma'lumotlarni to'plash, o'zlashtirish va inson tomonidan o'qiladigan shakllarda yanada mazmunli foydalanish mumkinligi bilan bog'liq. Transferlar yordamida kombinatorial asboblarni to'plamidagi tarixiy yutuqlar singari, barmoq izlari, metabolomik profillash va naqshni aniqlash algoritmlari kabi kombinatorial ma'lumotlarni qayta ishlash usullari paydo bo'ldi, bu esa operator vaqtini va talab qilinadigan bilimlarni qisqartirish bilan birga analitik imkoniyatlarni yanada kengaytiradi. Ushbu tendentsiya analitik usullarning rivojlanish sur'atlarini yanada tezlashtirdi va ular bilan bog'liq tadqiqotlar tezligi va imkoniyatlarini oshirdi. Ushbu maqolada biz analitik usullarning roli va rivojlanishini yaxshiroq tushunish uchun nashr tendentsiyalari va farmakopeyadagi o'zgarishlarni tahlil qilamiz. Dastlabki kashfiyot va rivojlanishdan boshlab, o'simlik tibbiyotida chuqur madaniy va uzoq muddatli tarixiy ildizlarga ega bo'lgan Osiyo mamlakati bo'lgan Xitoyga alohida e'tibor qaralib, zamonaviy rivojlanish va qo'llanilishgacha.

So'nggi paytlarda CHP dorivor o'simliklarni tahlil qilishda tobora ko'proq rol o'ynayotgan bo'lsa-da, CHP rivojlanishiga G'arb farmakopeyalari katta ta'sir ko'rsatdi. Tarixiy jihatdan dorivor o'simliklarni aniqlash, tayyorlash va tahlil qilish "Shengnong Benzao Jing" (Shengnong Materia Medica, milodiy 25-220) kabi klassik matnlarga



asoslangan bo'lib, unda 365 o'simlik va 113 retseptning toifasi va sifati ta'mga qarab baholangan. Achchiqlanish, shirinlik, sho'rlik va hatto neytral ta'mning organoleptik hissiyotlari preparatning maqsadi va qo'llanilishini ko'rsatadi, deb ishonilgan. Ehtimol, Xitoyning eng nufuzli farmatsevtika monografiyasi "Benzao Gangmu" (tibbiyot materiallari to'plami, milodiy 1368-1644) bo'lib, unda 1892 ta o'simlik tavsifi va 11 096 ta retsept mavjud bo'lib, ular 16 bo'lim va 60 ta buyurtma bo'yicha saralangan bo'lib, tashqi ko'rinish, ta'm va hid autentifikatsiya va sifatning kalitidir.

Biroq, hozirgi Xitoy farmakopeyasining zamonaviy formatining asosiy kashshofi 1930-yillarda 670 ta dori bilan bosilgan. Ushbu dastlabki bosqichda ham Buyuk Britaniya, Germaniya, Amerika va Yaponiya kabi o'sha paytdagi hukmron G'arb davlatlari Xitoy tibbiy materiallarini tan olish, tasniflash va sifatini ta'minlash bo'yicha konsensusni tushunish va shakllantirishda qiyinchiliklarga duch kelishdi. Shu vaqt ichida g'arbiy uslubda "ilmiy jihatdan boshqariladigan" kasalxonalarini materiallar bilan ta'minlashda qiyinchiliklar yuzaga keldi. Dastlab, Yaponiya 1886 yilda nemis farmakopeyasining tarjimasini qabul qilganligi sababli, xitoyliklar 1927 yilda London va Britaniya savdo palatalarining birgalikdagi sa'y-harakatlari bilan Xitoy tiliga tarjima qilingan Britaniya farmakopeyasidan foydalanib, unga ergashishlari mumkin edi. Biroq, birinchi navbatda, to'rtta ijarachi o'rtasidagi ba'zi kelishmovchiliklarni bartaraf etish kerak edi.

O'sha paytda amerikaliklar tomonidan o'rnatilgan farmakopeya standartlarini ishlab chiqarish va saqlash uchun zarur bo'lgan ko'plab texnologik talablar xitoyliklarning imkoniyatlari va texnologik jihozlaridan tashqarida edi. Yaqinda Amerikada 1926 yilda nashr etilgan Amerika Qo'shma Shtatlari farmakopeyasining xitoycha tarjimasini nashr etildi. Akonit, digitalis, epinefrin va insulin uchun qat'iy Amerika standartlari yangi farmatsevtlar tomonidan ishlab chiqilishi kerak edi yoki chet elda o'qitilgan farmatsevt (Read, 1930). Xitoy versiyasiga Buyuk Britaniya va AQSh farmakopeyalarida tasvirlangan malhamlar kabi dorilar kiritilgan. Kodein va glyukoza kabi siroplar, shuningdek, nasha damlamalari inglizlarning ta'siri tufayli paydo bo'ldi. Xitoydagi chet el fuqarolari mahalliy oziq-ovqat mahsulotlarini o'zlashtirishda qiynalmoqda va "ichakni davolash uchun o'tkir ehtiyoj"ni da'vo qilmoqda. Shuning uchun o'sha davrdagi dorilar - albumin, aspidium va emetin kiritilgan. Difteriya, qoqshol va chechakka qarshi vaksinalar AQSh sog'liqni saqlash vazirligining ko'rsatmalariga muvofiq saqlanib qoldi.

Nemis kimyogarlari allaqachon kimyoviy birikmalarning chiqarilishi bilan obro' - e'tibor qozonishgan, ularning aksariyati tibbiyotda ishlatilgan va oksalat kislotasi, pirogal kislotasi va brom kabi yapon farmakopeyasiga kiritilgan. Shunday qilib, yangi Xitoy farmakopeyasining taxminan 25 foizini tashkil etadigan ushbu sohalar uchun asosan mavjud nemis-yapon analitik usullari ishlatilgan. O'simlik va hayvonot materiallari uchun Buyuk Britaniya va Amerikadan olingan ko'proq analitik usullar va dorilar kiritilgan.

Kimyoviy birikmalarning to'g'ri tarjimasini va nomini kelishish ham muammoli bo'lib chiqdi, masalan, "natrium chloratum" va "sodii chloridum" kabi nemis-latin va ingliz-Amerika tavsiflari o'rtasidagi kelishmovchiliklarni hal qilishga urinishda. Lotin tilining umumiy elementlari evropaliklar va amerikaliklar o'rtasida o'zaro tushunishga yordam berdi, ammo Xitoy tiliga tarjima qilish qiyin edi. Yapon farmakopeyasidan nomlar va

tavsiflarni qabul qilish osonroq bo'lishi mumkin, ko'pincha Xitoyda bo'lgani kabi Osiyo xarakteriga ega (xanzi), ammo o'sha paytda materik Xitoyda kuchli millatchilik kayfiyati tufayli bunga qarshilik ko'rsatildi (Rid, 1930).

Yaponiyaliklar to'g'ridan-to'g'ri xorijiy fonetik transliteratsiya qilingan dori nomlarini afzal ko'rishsa-da, Yaponiya farmakopeyasida kamfara, zanjabil, aloe, kardamon va yulduzli qizilmiya nomlarini o'z ichiga olgan 60 ga yaqin Xitoy materia medica nomlari saqlanib qolgan.

O'simliklarni aniqlash va umumiy nomlar bilan bog'liq qiyinchiliklar nafaqat Osiyoga xos edi. 1900-yillarning boshlarida, Evropa va Amerika siyosiy kengayishi davrida Evropada o'xshash o'simliklar uchun ko'p tilli atamalarni kataloglashtirishga urinishlar bo'lgan, masalan, lotin, Arab, arman, ingliz, frantsuz, nemis, italyan va turk tillarida "o'simlik nomlarining rasmi poliglot lug'ati" nashr etilgan (bedevian, 1936), sakkizta tilda 3657 o'simlikni kataloglash.

Dorivor o'simliklar — odam va hayvonlarni davolash, kasalliklarning oldini olish uchun, shuningdek, oziq-ovqat, atir-upa va kosmetika sanoatida ishlatiladigan o'simliklar — giyohlar. Yer yuzida dorivor o'simliklarning 10—12 ming turi borligi aniqlangan. 1000 dan ortiq o'simlik turining kimyoviy, farmakologik va is xossalari tekshirilgan. O'zbekistonda dorivor o'simliklarning 700 dan ortiq turi mavjud. Shulardan tabiiy sharoitda o'sadigan va madaniylashtirilgan 120 ga yaqin o'simlik turlaridan ilmiy va xalq tabobatida foydalaniladi. Hozirgi davrda tibbiyotda qo'llaniladigan dori-darmonlarning qariyb 40—47% o'simlik xom ashyolaridan olinadi. O'simliklar murakkab tuzilishiga ega bo'lgan jonli tabiiy kimyoviy laboratoriya bo'lib, oddiy noorganik moddalardan murakkab organik moddalar yoki birikmalarni yaratish qobiliyatiga ega. Dorivor o'simliklarning quritilgan o'ti, kurtagi, ildizi, ildizpoyasi, tunganagi, piyozi, po'stlog'i, bargi, guli, g'unchasi, mevasi (ur'ugi), danagi, sharbati, qiyomi, toshchoyi, efir moyi va boshqalardan doridarmon tarzida foydalaniladi.

### **DORIVOR O'SIMLIKLAR**

Dorivor o'simliklarni 2 xil tasniflash qabul qilingan: 1) ta'sir qiluvchi moddalarning tarkibiga qarab — alkaloidli, glikozidli, efir moyli, vitaminli va boshqalar, 2) farmakologik ko'rsatkichlariga qarab — tinchlantiruvchi, og'riqqoldiruvchi, uxlatuvchi, yurak-tomir tizimiga ta'sir qiluvchi, markaziy nerv sistemasini qo'zg'atuvchi, qon bosimini pasaytiruvchi va boshqalar. Dorivor o'simliklarning ta'sir etuvchi moddalari alkaloidlar, turli glikozidlar (antraglikozidlar, yurakka ta'sir etuvchi glikozidlar, saponinlar va boshqalar), flavonoidlar, kumarinlar, oshlovchi va shilliq moddalar, efir moylari, vitaminlar, bo'yoq moddalar, fermentlar, fitonsidlar, kraxmal, oqsillar, polisaharidlar, azotli moddalar, moy hamda moy kislotalari va boshqa birikmalar bo'lishi mumkin.

Dorivor o'simliklarning organizmga ta'siri ular tarkibidagi kimyoviy birikmalar miqdoriga bog'liq. Ushbu birikmalar o'simlik qismlarida turli miqdorda to'planadi. Preparatning yuqori sezuvchanligi va sifati davri ularning gullash va urug'lanish davri boshlangan vaqtga to'g'ri keladi. Dorivor moddalar buyraklarda, ba'zi o'simliklarning barglari yoki poyalarida, ba'zi o'simliklarning gullari yoki mevalarida, ba'zi o'simliklarning ildizlari yoki qobig'ida to'planadi. Shuning uchun ular asosan ko'p miqdordagi biologik faol moddalarni o'z ichiga olgan o'simliklarning qismlarini yig'adilar. O'simliklarning ildizlari,

ildizpoyalari, lampochkalari va ildiz mevalari odatda o'simlikning harakatsiz davrida — kech kuzda yoki o'simlik uyg'onishidan oldin — erta bahorda tayyorlanadi. O'simlikning mevalari va urug'lari etuklashganda yig'ib olinadi, chunki bu vaqtda ular dorivor moddalarga boy. Yangi yig'ilgan dorivor o'simlik mahsulotida namlik mavjud (er usti organlarida 85% gacha, ildizlarda 45% gacha). Agar bu namlik yo'qolmasa (quritish paytida), o'simlik chirydi va dorivor moddalar parchalanadi va yaroqsiz holga keladi.

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**ОСОБЕННОСТИ ИННОВАЦИОННОЙ ПОЛИТИКИ ИРАНА****Салихова А.М.***старший преподаватель кафедры «Экономика стран Востока»  
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**Аннотация.** Данная статья посвящена национальной политике Исламской республики Иран в области науки, технологий и инноваций. Несмотря на экономические санкции, наложенные на Иран, страна демонстрирует удивительные результаты достижения нанотехнологий в приоритетных областях, включая здравоохранение, водные ресурсы и окружающую среду, энергетику и строительство.

**Ключевые слова:** инновация, инновационная система, технопарк, бизнес-инкубатор, Кремниевая долина, наукоемкая и технологическая продукция, нанотехнология, стартап.

**FEATURES OF IRAN'S INNOVATION POLICY****Salikhova A.M***Senior Lecturer of the Department "Economics of the East"  
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**Abstract.** This article is devoted to the national policy of the Islamic Republic of Iran in the field of science, technology and innovation. Despite the economic sanctions imposed on Iran, the country is demonstrating amazing progress in nanotechnology in priority areas including healthcare, water resources and environment, energy and construction.

**Keywords:** innovation, innovation system, technology park, business incubator, Silicon Valley, knowledge-intensive and technological products, nanotechnology, startup.

Экономика Ирана занимает 19-е место среди стран мира по объёму ВВП по ППС, который оценивался в 1,81 трлн долларов. Иран — один из самых многообещающих рынков мира в сфере IT и мобильных коммуникаций. Иран активно ориентирован на инновации и наукоемкие отрасли промышленности. Налицо активное развитие медицины — 21-е место в мире, нанотехнологий — 14-е место в мире, лазерных технологий, генной инженерии, есть успехи в освоении космоса — запуски спутников, включая военный «Нур» в феврале 2020 года .

Политику Ирана в области науки, технологий и инноваций можно подразделить на три этапа:

1. Развитие высшего образования и рост научных публикаций (с 1990 года).
2. Развитие исследований и новых технологий (с 2000 года).
3. Переход к инновациям и экономике, основанной на знаниях (с 2010 года).

Модель управления инновационной системой Ирана опирается на документы, формирующие национальную политику в области науки, технологий и инноваций (НТИ). К основным относятся такие документы, как принятый в 2005 г. «Видение 2025», который разработан Советом по определению политической целесообразности (Expanding Discernment Council of the System – EDCS), и «Национальный генеральный план по науке и образованию» (National Master Plan for Science and Education – NMPSE), одобренный в 2011 г. Эти два документа также называют Всеобъемлющей научной дорожной картой. Всего в 2002–2018 гг. было принято 13 важных государственных документов. Вместе они служат руководством для национальной программы в области НТИ, в котором прописаны цели, этапы и процессы реализации.

С 2005 года иранские власти активно поддерживают создание разнообразных технопарков и бизнес-инкубаторов. Самый крупный и известный из них, технопарк «Пардис», называют иранской Кремниевой долиной.

В 2010-х годах, на фоне разрядки отношений с Западом и хороших нефтяных поступлений в бюджет, в стране случился бум высокотехнологичных компаний и IT-стартапов. В 2013 году всего две компании были зарегистрированы как наукоёмкие. В 2015 их уже было 1610, а сегодня — более 5000.

В 2014 г. Верховный лидер обнародовал четыре ключевые цели национальной политики в области науки и технологий.

1. Непрерывное стремление завоевать авторитет в области науки и техники в мире с акцентом на следующие задачи:

- развитие науки, инноваций и теоретических исследований;
- продвижение глобальных позиций в науке и технологиях и становление в качестве лидирующего научно-технического центра в мусульманском мире;
- развитие фундаментальной науки и фундаментальных исследований;
- достижение результатов в передовых областях науки и техники за счет специальных мер в политике и планировании.

2. Оптимизация структуры системы образования и исследований для достижения целей, указанных в документе «Видение 2025», в соответствии с развитием науки с акцентом на следующие задачи:

- управление знаниями и интеграция разработки стратегической политики, планирования и мониторинга в области науки и техники, а также постоянное продвижение показателей науки и технологий и обновление комплексной научной дорожной карты с учетом глобальных и региональных научно-технических разработок;
- поддержка в создании и расширении научных и технологических парков;
- выявление элиты, развитие исключительных специалистов, сохранение и привлечение человеческого капитала;
- увеличение расходов на исследования как минимум до 4% ВВП к концу 1404 г. с упором на оптимальное использование ресурсов и повышение производительности.



3. Улучшение взаимосвязи между высшим образованием, исследовательскими и технологическими системами и другими стратегическими секторами с акцентом на следующие задачи:

- увеличение доли науки и технологий в национальном доходе и экономике, повышение национальной мощи и эффективности;
- предоставление денежной и нефинансовой поддержки процессов, которые позволяют трансформировать идеи в продукт, и увеличение до 50% доли высокотехнологичной продукции и услуг и отечественных технологий в ВВП;
- развитие и укрепление национальных и международных коммуникационных сетей между университетами, исследовательскими центрами и отечественными и зарубежными предприятиями по развитию технологий и инноваций, а также улучшение сотрудничества на уровне государственных институтов с учетом приоритетов исламских стран.

4. Развитие конструктивного сотрудничества в области науки и технологий с другими странами и аккредитованными научно-техническими центрами во всем мире и регионе, особенно в исламском мире, наряду с усилением независимости страны с акцентом на следующие задачи:

- развитие отраслей и услуг, основанных на современной науке и технологиях, и оказание поддержки производству и экспорту наукоемкой и отечественной технологической продукции, особенно в приоритетных областях, за счет улучшения показателей экспорта и импорта в стране;
- принятие необходимых мер по передаче технологий и приобретению знаний для разработки и производства продукции в стране с использованием емкости национального рынка в отношении импортируемой продукции;
- использование научно-технологических возможностей иранских экспатриантов и привлечение видных исследователей и экспертов из других, особенно из исламских, стран;
- достижение признания в оценке научного вклада и предоставление возможностей для использования результатов национальных и международных исследований, особенно в странах исламского мира.

Государственная политика для устойчивой экономики ставит технологии и инновации во главу угла как ключевые факторы экономического роста. Этот документ был обнародован Верховным лидером в феврале 2014 г. для продвижения политической повестки в отношении местных возможностей путем принятия более ориентированного на внешний мир подхода к политике развития.

Иранские власти активно поддерживают нанотехнологии, предоставляя помощь стартапам на каждом этапе их развития. При этом они направляют исследования на решение сугубо прикладных проблем: разработку лекарств, промышленные нужды — например, производство пластика и стройматериалов, очистку воды. Эту деятельность координирует Совет по инновациям в области нанотехнологий, который объединяет бизнесменов и госструктуры.

В 2015 году был утвержден новый «План стратегии будущего» на 2015-2025 годы. Благодаря реализации данной стратегии и его трех дополнительных этапов до 2018 года, Иран занял четвертое место в мире по производству нанотехнологий. В настоящее время в этой отрасли работают более 29 тысяч исследователей, более 460 тысяч студентов обучаются в университетах на специальностях по направлению нанотехнологий. Кроме того, 181 компания производит 447 позиций продуктов и оборудования, а 65 компаний также предоставляют услуги по развитию бизнеса для распространения нанотехнологий в промышленности. На сегодняшний день уже есть достижения нанотехнологий в приоритетных областях, включая здравоохранение, водные ресурсы и окружающую среду, энергетику и строительство:

1. Очистка воды реки Карун для получения питьевой воды.
2. Удаление тяжелых металлов из питьевой воды.
3. Очистные сооружения для производства сахарного тростника.
4. Производство фильтров для промышленных электростанций для повышения производительности в электроэнергетике.
5. Производство наномедицинских препаратов.
6. Производство материалов и оборудования, используемых в строительной промышленности, таких как бетон, краски, трубы и химические стойкие пластмассы.

Активное участие иранских нанотехнологических компаний в международных выставках проложило им путь к развитию технологических и коммерческих взаимодействий с международными партнерами.

Государство активно поддерживает наукоёмкие компании множеством льгот. Среди них: освобождение от налогов на 15 лет; выделение беспроцентных ссуд и льготных кредитов от множества структур — банков, государственных фондов и частных инвестиционных организаций; предоставление служебных помещений — офисов и лабораторий; страховые услуги для покрытия рисков; разрешены консорциумы с вузами и иностранными компаниями — при условии, что большинство акций будет принадлежать иранцам.

Нанотехнологические продукты из Ирана экспортируются в 45 стран мира, включая развитые страны, такие как: Великобритания, Германия, Испания, Франция, Южная Корея, Австралия, Китай, Малайзия, Индонезия, Россия, Турция, а также в страны Латинской Америки и в Канаду.

Несмотря на экономические санкции, наложенные на Иран, страна демонстрирует удивительные результаты в научно-технологическом развитии. Только за восемь лет, с 2013 по 2020 г., Исламская Республика Иран увеличила численность исследователей почти в два раза – с 72 до 138 тыс. человек, а число выполняемых научно-исследовательских проектов выросло в полтора раза – с 84 до 125 тыс. При этом ежегодные затраты на исследования и разработки в текущих ценах увеличились в пять раз. В структуре этих затрат более чем пятую часть стабильно занимают капитальные вложения в науку.

В Иране насчитывается 42 научно-технологических парка и 186 инкубаторов. Среди них особо известны такие как Научно-технический городок Исфохана,

Хорасанский научно-технический парк, Научно-технический парк Восточного Азербайджана, Научно-технический парк Фарс и Научно-технический парк Йезд.

Технопарк Пардис также является основателем и организатором международных проектов, включающих INOTEX, крупнейшее технологическое и инновационное мероприятие в Иране; премию Мустафы (мир ему и благословение Аллаха), крупнейшую исламскую научную премию в мире, и D-8 TTEN, сеть передачи и обмена технологиями между государствами-членами D-8 («Исламская восьмерка», организация, в которой состоят Бангладеш, Египет, Индонезия, Иран, Малайзия, Нигерия, Пакистан и Турция).

Президент технопарка Пардис Мехди Саффари-Ния заявил, что в 2021 году компании, зарегистрированные в Пардисе, экспортировали продукцию на сумму более 8 млн евро, а продажи, в целом, выросли на 38%. В качестве примеров экспортируемых товаров он привел медицинское, электронное, телекоммуникационное и фармацевтическое оборудование. По словам Мехди Саффари-Ния, самыми крупными импортерами стали Ирак, Турция, Россия, Индия и Китай соответственно .

Иран стремится занять первое место на Ближнем Востоке и войти в десятку лучших стран мира к 2025 г. – именно такие цели ставит перед собой Совет по развитию биотехнологий.

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## GAVHARSHODBEGIM MAJMUASINING TARIXIY VA MADANIY AHAMIYATI

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**Annotatsiya:** *Mazkur maqolada Temuriylar avlodining malikalaridan hisoblanmish Gavharshodbegimga atab Eronning Mashhad shahrida barpo etilgan majmuaning tarixiy va madaniy ahamiyati haqida so'z boradi.*

**Kalit so'zlar:** *Gavharshodbegim, temuriylar davri siyosati, gumbaz, majmua, masjid, maqbara, Boysung'ur dahmasi, minora, YUNESKO, koshin.*

**Аннотация:** *В данной статье говорится об историческом и культурном значении комплекса, построенного в городе Мешхед (Иран) в честь Гавхаршодбегим, одной из цариц поколения Тимуридов.*

**Ключевые слова:** *Гавхаршадбегим, политика эпохи Тимуридов, купол, комплекс, мечеть, мавзолей, храм Байсунгур, минарет, ЮНЕСКО, изразец.*

**Annotation:** *This article talks about the historical and cultural significance of the complex built in the city of Mashhad, Iran, in honor of Gavharshodbegim, one of the queens of the Timurid generation.*

**Key words:** *Gavharshadbegim, politics of the Timurid era, dome, complex, mosque, mausoleum, Baysungur temple, minaret, UNESCO, tile.*

Bugungi kunda tarixiy obidalarni tiklash va ularni o'rganishga juda katta e'tibor qaratilmoqda. Xususan, Erondagi Gavharshodbegim majmuasi ham hozirda ilmiy tadqiqot markazlaridan hisoblanadi. Inshoot Gavharshodbegimga atab bunyod etilgan bo'lib, dastlab Gavharshodbegim haqida to'xtalib o'tsak. Gavharshodbegim (Gavharshod og'a) (1379—1457) — temuriylar avlodidan bo'lmish Shohruxning xotini. Janglardan birida Chingizxonni o'limdan saqlab qolgan mulozim Qishlik avlodi — chig'atoy zodagon G'iyosuddin tarxonning qizi. 1393-yil Shohruxga turmushga chiqqan va undan uch o'g'il Ulug'bek, Boysung'ur, Muhammad Jo'giy va ikki qiz ko'rgan. Shohrux davlatni idora qilishdan ko'ra ko'proq toat-ibodat, diniy kitoblar mutolaasi bilan mashg'ul bo'lmoqni afzal ko'rganidan, avval unga devon ishlarini boshqarishni, so'ng viloyat hokimlari va qo'shin sarkardalarini tayinlash, hatto kimga qanday in'om-u, kimga qanday jazo berish huquqini ham topshirib qo'ygan. Masalan, 1440-yil mashhur tarixchi — Fasih Ahmad Xavofiy Gavharshod begimning buyrug'i bilan ikki marta zindonga tashlangan .

Gavharshod begim saltanat taxtiga valiahd tayinlash borasida ham o'z ixtiyori bo'yicha ish tutib, Shohruxning Muhammad Jo'qini taxt vorisi qilib tayinlash niyatida ekanligiga qaramay, nabirasi Alouddavlani valiahdlikka munosib ko'radi. Chunonchi, u 1444-yil, Shohrux og'ir betob bo'lib qolganda maxfiy farmon bilan Alouddavlani

valiahdlikka tayinlaydi. Ammo, Shohrux tez kunda shifo topib, uning bu rejasi amalga oshmay qoladi. Gavharshod begim Qazvin, Ray, Qum viloyatlari hokimi — nabirasi Sulton Muhammad Hamadon va Isfahonni egallab, Sherozni qamal qilganda (1446) Shohrux bilan birgalikda unga qarshi qo'shin tortadida, Sulton Muhammadni isyonga undagan amaldorlar qatorida bir necha sayyidlarni ham qatl etmoqni Shohruxdan qattiq talab qiladi. Shunda Shohrux uning so'ziga kirib, hatto Amir Temur ham qatl etmoqqa jur'at qilmagan sayyidlarni o'limga buyuradi. Sayyidlar dor ostida turib Shohruxni duoi bad qiladilar. Keyin, Shohrux Sherozdan Hirotga qaytayotib yo'lda 1447-yil 12 mart kuni to'satdan vafot etadi. Ushbu hodisani ba'zilar qarg'ish bilan bog'lashadi. Shundan so'ng Gavharshodbegim qo'shin qo'mondonligini nabiralaridan biri — Abdullatifga topshirib, Alouddavla Mirzoga Hirot mudofaa inshootlarini mustahkamlash zarurligi haqida maxfiy maktub yo'llaydi. Bundan ogoh bo'lgan Abdullatif buvisi Gavharshod begimni hibsga olib, otasi — Ulug'bekka bobosi Shohruxning vafot etgani xususida xabar jo'natadi. Natijada temuriylar o'rtasida taxt uchun kurash boshlanib, 1458-yilda Sulton Abu Said Hirotni egallaydida, Gavharshodbegimni qatl qiladi. Gavharshodbegim Boysung'ur daxmasiga dafn qilingan. Ushbu dahma hozirgi kunda Gavharshodbegim maqbarasiga aylantirilgan .

Eronda joylashgan katta me'moriy yodgorlik 1418-1438 yillarda Gavharshodbegim buyrug'i bilan 20yil davomida barpo etiladi. Majmua masjid, madrasa va temuriylar avlodi maqbarasidan iborat tarzda qurilgan. Bosh me'mor — Shohruxning saroy me'mori Qavomiddin Sheroziy. Maqbara yoniga keyinchalik Husayn Boyqaro mahobatli Madrasa va xonaqoh qurdirgan. Katta kismi, jumladan madrasaning o'zi ham saqlanmagan, maqbara, 8 minoradan 1 tasi, masjid va madrasaning harobalarigina saqlanib qolgan. Musalloning bosh binosi — masjid 106x64 m maydonni egallaydi. Baland peshtoqdan masjid hovli (52x49 m) siga kiriladi. Hovlining atrofi 4 ayvon va ikki qavatli turli xonalar bilan o'ralgan, u qurbon va ro'za hayitlari, juma namozlarini o'qishga mo'ljallangan. Gavharshod begim madrasasi hovlining shimolida bo'lib, masjidning ham, madrasaning ham burchaklarida minoralar bo'lgan, ular marmar va koshin qoplab bezatilgan. Murabba tarhli maqbara 1432-yilda qurib tugallangan, ayniqsa, uning qovurg'ali gumbazi o'ziga xos jozibali. Gumbaz sirkor g'isht terib naqshlangan, uning qurilishida me'mor Imomiddin, hirotlik ustalar — Xoja Mirali Hiraviy va Xoja Mirak Hiraviylar qatnashgan. Ichkaridagi nozik va nafis naqqoshlik bezaklarini Boysung'ur Mirzo yaratgan. Minoralar tepasi qafasa bilan bezatilgan .

Mashhad (Eron) markazida Hirot hukmdori Shohrux Mirzoning xotini Gavharshod begim sharafiga me'mor Qavomiddin Sheroziy tomonidan qurilgan 1405-1419 yillarda masjid barpo etiladi. Atrofi ayvonli katta hovlining to'rt tarafida to'rt xona bo'lib, umumiy maydoni 55x45 metrni tashkil etadi. Ularning janubdagisi katta va gumbazli inshootdir. Unga minorali ulkan peshtoq orqali kirilgan. Minoralar tepasi qafasa bilan bezatilgan. Masjidga rangli koshinlardan nafis va go'zal bezaklar ishlangan. Masjidning shimoliy tomonida Imom Rizo maqbarasi, sharq tomonida Madrasa, g'arbida esa shahar karvonsaroyi joylashgan bo'lib, bular masjid bilan yo'lakcha orqali o'zaro bog'langan. Masjidga rangli koshinlardan nafis va go'zal bezaklar ishlangan. Masjid Safaviylar va Qojarlar davrida bir qator ta'mirlangan. Masjid va uning hovlisi ichidagi mozaik plitkalarda topilgan turli xil yozuvlar Safaviy shahzodalarining ismlari, masalan, Abbas, Shoh Sulton Xusayn, Shoh



Suleyman Safaviy va ularning maqbaraga bo'lgan sadoqatlari va masjidga qo'shgan hissalarini tasvirlaydi. Masjidning ikki qavatli gumbazi 1911 yilda Rossiya imperiyasi qo'shinlari tomonidan portlashlar natijasida jiddiy shikastlangan .

1935-yilgi qo'zg'olon gumbazni qayta qurishni talab qildi. Muhammad Rizo Pahlaviyning buyrug'iga binoan, 1960-yillarda qadimiy gumbazdan plitkalar olib tashlangan va tashqi qobiq demontaj qilingan. Strukturaviy xavflarni bartaraf etish uchun temir ramka va sement qoplamali yangi tashqi qobiq qurildi. Keyin gumbaz asl nusxaga o'xshash tarzda qayta taxlandi .

Maqbara dastlab Temuriylar hukmdori Shohruxning o'g'li, shahzoda Boysung'urning qabri uchun qurilgan. Maqbara gumbazsimon shaklga ega bo'lib, gumbazi o'rtasini qoplaydi. Bu gumbaz strukturaning eng ta'sirchan xususiyati bo'lib, aslida u bir-birining ustiga o'rnatilgan gumbazlardan iborat: past ichki gumbaz, tashqi gumbaz va ular orasidagi strukturaviy gumbaz. Tashqi gumbaz gulli och-moviy-yashil mozaikalar bilan bezatilgan. Ichki gumbaz oltin barglar va murakkab naqshlarni hosil qiluvchi boshqa ranglar bilan bezatilgan. Qabrning ichki qismi eksa bo'shliqlari bo'lgan to'rtburchak xonadir. Maqbarada Gavharshod begimning o'zi va uning akasi Amir So'fi Tarxon, o'g'lillari Boysung'ur, Muhammad Juqi, Boysung'urning o'g'illari Sulton Muhammad va Ala uddavla, shuningdek, uning o'g'li Ibrohim qabrlari bor.

Maqbaraning hozirgi holati afsus bilan qayd etish kerakki, qoniqarli emas. Gumbazning shikast yetgan joylari bor, minora naqshlari to'kilgan.

YUNESKO homiyligida 2014-yildan boshlab italyan arxitektorlari loyiha ustida ishladilar, lekin ayrim sabablar tufayli loyiha oxiriga yetmadi, shunday bo'lishiga qaramay, maqbara hali hamon sayyohlar diqqat e'tiborida. Afg'oniston va Erondagi aksar mahalliy aholi Gavharshod begimni, garchi malikaning kelib chiqishi eroniylarga aloqasi bo'lmasa ham, "fors qirolchasi" deya e'tirof etishadi.

Hozirda Afg'oniston hukumati inshootni YUNESKOning butun jahon yodgorliklari ro'yxatiga kiritish ustida ish olib bormoqda. Bundan tashqari, 2003-yildan Afg'oniston poytaxti Qobul shahrida maxsus ayollar uchun Gavharshod begim nomidagi Universitet faoliyatini boshlagan.

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## MATEMATIKA FANIGA O'QUVCHILARNING QIZIQISHINI ORTTIRISH

**Boltayeva Qumriniso**  
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*Buxoro shahar kasb –hunar maktabi matematika fani o'qituvchisi*

**Annotatsiya:** *Ushbu maqolada matematika fanida axborot texnologiyalarining ahamiyati haqida ilmiy fikrlar bayon etiladi. Ilmiy fikrlar faktlarga asoslanib xulosalanadi.*

**Kalit so'zlar:** *matematika, fan, texnik vositalar mantiq, tur, jins, kompyuter, axborot.*

Matematikaning chegarasiz mamlakat degan iborasini bir necha bor eshitganman. Uning taqiqlanganligiga qaramay, matematikaga oid iboraning juda yaxshi sabablari bor. Inson hayotida matematika alohida o'rin tutadi. Mutaxassislarning ta'kidlashlaricha, matematikani yaxshi o'zlashtirgan o'quvchining tahliliy va mantiqiy fikrlash darajasi yuqori bo'ladi. U nafaqat misol va masalalar yechishda, balki hayotdagi turli vaziyatlarda ham tezkorlik bilan qaror qabul qilish, muhokama va muzokara olib borish, ishlarni bosqichma-bosqich bajarish qobiliyatlarini o'zida shakllantiradi. Shuningdek, matematiklarga xos fikrlash uni kelajakda amalga oshirmoqchi bo'lgan ishlar, tevarak-atrofdagi sodir bo'layotgan voqea-hodisalar rivojini bashorat qilish darajasiga olib chiqadi. Matematika fani insonning intellektini, diqqatini rivojlantirishda, ko'zlangan maqsadga erishish uchun qat'iyat va irodani tarbiyalashda, algoritmik tarzda tartibintizomlilikni ta'minlashda va tafakkurini kengaytirishda katta o'rin tutadi. Matematika olamni bilishning asosi bo'lib, tevarak-atrofdagi voqea va hodisalarning o'ziga xos qonuniyatlarini ochib berish, ishlab chiqarish, fan-texnika va texnologiyaning rivojlanishida muhim ahamiyatga ega. Shuning uchun matematik madaniyat — umuminsoniy madaniyatning tarkibiy qismi hisoblanadi. Matematika fanini nazariylashtirgan holda o'qitishga yondashishdan voz kechib, o'quvchining kundalik hayotida matematik bilimlarni tatbiq eta olish salohiyatini shakllantirish va rivojlantirishga erishish, o'quvchilarning mustaqil fikrlash ko'nikmalarini namoyon qilish va faollashtirishga e'tiborni kuchaytirish – davr talabi. Matematik ta'limga kompetensiyaviy yondashuv o'quvchilarda kasbiy, shaxsiy va kundalik hayotda uchraydigan holatlarda samarali harakat qilishga imkon beradigan amaliy ko'nikmalarni shakllantirish va rivojlantirishni hamda matematik ta'limning amaliy, tatbiqiy yo'nalishlarini kuchaytirishni nazarda tutadi. Mamlakatimizning dunyo hamjamiyatiga integratsiyalashuvi, fan-texnika va texnologiyalarning rivojlanishi yosh avlodning o'zgaruvchan dunyo mehnat bozorida raqobatbardosh bo'lishi, fanlarni mukammal egallashini taqozo etadi. Bu esa ta'lim tizimiga, jumladan, matematikani o'rgatishga ilg'or milliy va xalqaro tajribalar asosida standartlarni joriy etish orqali ta'minlanadi. Matematikaning hayotimizda tutgan beqiyos o'rni inobatga olingan holda mazkur fan birinchi sinfdanoq maktab darsliklariga kiritilgan bo'lib, yurtimizda barcha aniq fanlar qatori matematika ta'limini zamon talablari asosida takomillashtirib borish, uni o'qitishda eng so'nggi pedagogik va innovatsion usullar, multimedia vositalari hamda axborot-kommunikatsiya texnologiyalarini joriy etishga katta e'tibor qaratilmoqda. Ayniqsa, o'quv

fanini akademik bilim berishdan ko'ra ko'proq hayot bilan bog'lash, amaliy misol va masalalarni yechish, o'quvchilarni mustaqil izlanish, o'qibo'rganishga jalb etishning ahamiyati beqiyos. Dars jarayonida o'quvchi o'zini majburan partaga mixlab qo'yilgandek his etmasligi, aksincha, mashg'ulotlarda katta ishtiyoq, kuchli xohish bilan qatnashishiga erilishi lozim. Matematik bilimlar nafaqat baho olish uchun savol-javoblar yoki imtihonlarda, balki uyda, ish jarayonida, sport va san'at bilan shug'ullanishda, savdo-sotiq, oldiberdi – hayotning har bir lazasida o'quvchiga naf berishini u chuqur anglab yetishi muhim. Buning uchun esa mazkur fan o'qituvchisi o'tayotgan mavzularini bevosita hayot bilan bog'lab, biror misol yoki masala, topshiriqlarni turmushdagi oddiy vaziyatlar yordamida yechishga o'rgatishi zarur. Matematika fanlarini o'qitishga yangi texnik vositalar, shu jumladan, kompyuter va boshqa axborot texnologiyalarining jadal kirib kelayotgan hozirgi davrida fanlararo uzviylikni ta'minlash maqsadida informatika fani yutuqlaridan foydalanish dolzarb masalalardan biridir. Pedagogik, kompyuter va axborot texnologiyalar ta'lim jarayonini tashkil etish, tayyorlash, ilmiy-metodik materiallar bilan ta'minlash, ta'lim jarayonini amalga oshirish, ta'lim natijalarining sifatini baholashdan iborat bo'lgan yaxlit tizimda o'z ifodasini topadi. Kompyuter texnikalarini ta'lim muassasalariga tatbiq etish, o'qitish jarayonini optimallashtirishga keng yo'l ochib beradi. Keyingi o'n yillikda matematika fanini o'qitishda kompyuterlardan foydalanish bir necha asosiy yo'nalishlarda olib borildi. Bularga kompyuter yordamida bilimni baholash, turli tipdagi o'rgatuvchi dasturlarni ishlab chiqish va rivojlantirish, bilishga oid matematikaviy o'yinlarni ishlab chiqish va boshqalar kiradi.[1] Matematika o'qitishda kompyuterlarni qulayligini yana bir yo'nalishi ayrim o'quv holatlarini modellashtirishdir. Modellashtirilgan dasturlardan foydalanishning maqsadi, o'qitishning boshqa usullari qo'llanganda tasavvur qilish, ko'z oldiga keltirilishi qiyin bo'lgan materiallarni tushunarlibo'lishini ta'minlashdan iborat. Modellashtirish yordamida o'quvchilarga ma'lumotlarni grafik rejimda kompyuter multimediasida ko'rinishida taqdim qilish mumkin. Shu boisdan ular matematikani chuqur o'rganish va o'quv jarayonida sezilarli darajada mustaqillik namoyon etishga moyil bo'ladilar. Ko'p holatlarda vujudga keladigan matematik muammoni tez va berilgan aniqlikda hal etish uchun professional matematikdan o'z kasbi bilan bir vaqtda ma'lum bir algoritmik til va dasturlashni bilishi talab qilinadi.[2] Shu maqsadda XX asrning 90-yillarida matematiklar uchun ancha qulayliklarga ega bo'lgan matematik sistemalar yaratilgan. Bu maxsus sistemalar yordamida turli sonli va analitik matematik hisoblarni, oddiy arifmetik hisoblashlardan boshlab, to'xususiy hosilali differensial tenglamalarni yechishdan tashqari grafiklarni yasashni ham amalga oshirish mumkin. Matematika fanlarini o'qitishda zamonaviy axborot texnologiyalaridan foydalanish metodikasi. Matematika fanlarini o'qitishga yangi texnik vositalar, shu jumladan, kompyuter va boshqa axborot texnologiyalarining jadal kirib kelayotgan hozirgi davrida fanlararo uzviylikni ta'minlash maqsadida informatika fani yutuqlaridan foydalanish dolzarb masalalardan biridir.[3] Kompyuter texnikalarini ta'lim muassasalariga tatbiq etish, o'qitish jarayonini optimallashtirishga keng yo'l ochib beradi. Keyingi o'n yillikda matematika fanini o'qitishda kompyuterlardan foydalanish bir necha asosiy yo'nalishlarda olib borildi. Bularga kompyuter yordamida bilimni baholash, turli tipdagi o'rgatuvchi dasturlarni ishlab chiqish

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**ERRORS AND MISTAKES IN LANGUAGE LEARNING****Zulfizar Khudoyberdievna Saidova***Teacher (PhD) of Bukhara state university**English linguistics department\ z.x.saidova@.Buxdu.uz***Omonova Laylo Odiljon Kizi***Student of 11-6 ING-20*

**Abstract:** *Recent research in applied linguistics emphasizes the significance of learners' errors in second language learning. In this article, major types of errors in second language learning are first briefly mentioned. This is followed by tracing the sources of second language learning errors to both interlingual and intralingual or developmental factors. While interlingual errors are caused mainly by mother tongue interference, intralingual or developmental errors originate in the following factors: simplification, overgeneralization, hypercorrection, faulty teaching, fossilization, avoidance, inadequate learning, and false concepts hypothesized. The article concludes with some general guidelines for teachers in correcting errors in second language learning.*

**Key words:** *errors, mistakes, language learning, second language, self-correction*

Errors and mistakes are a normal part of learning a second language. In fact, they can be seen as positive signs that the learner is trying to use the new language. However, it is useful for both learners and teachers to understand where these errors come from, so that they can be corrected. A mistake refers to a performance error that is either a random guess or a “slip”, in that is a failure to utilize a noun system correctly. All people make a mistake, in both native and second language situations. Native speakers are normally capable of recognizing and correcting such “lapses” or mistakes, which are not the result of a deficiency in competence but the result of some sort of temporary breakdown or imperfection in the process of producing speech. These hesitations, slips of the tongue, random ungrammaticalities, and other performance lapses in native-speaker production also occur in second language speech. An error, a noticeable deviation from the adult grammar of a native speaker, reflects the competence of the learner. An error is most likely not a mistake, and error that reveals a portion of the learner’s competence in the target language.

From the explanation above, what is the difference between both of them? An error cannot be self-corrected, according to James, while mistakes can be corrected if the deviation is pointed out to the speaker. Thus, students who make a mistake can correct it by themselves because they know the correct one.

**Intralingual Errors.** These are errors which are not related to the learner's L1. They are caused by the way the learner is processing the new language. For example, a learner might say 'I'm agree with you' instead of 'I agree with you'. This is because the learner has learned the word 'agree' but has not yet learned that it is not normally used with the verb 'be'.

**Developmental Errors.** These are errors which are typical of a particular stage in the learner's development of the language. For example, many learners of English at an early



stage of learning say things like 'I like swimming' but not 'I like to swim'. This is probably because they have learned that after the verb 'like', we usually use the -ing form of the verb.

**Overgeneralisation.** This is when learners apply a rule or pattern too widely. For example, a learner might say 'I goed to the shops yesterday' instead of 'I went to the shops yesterday'. This is because the learner has learned that regular past tense verbs end in -ed and has applied this rule to the irregular verb 'go'.

**Avoidance.** This is when learners avoid using language which they think is difficult. For example, a learner might say 'I go to the cinema' instead of 'I went to the cinema', because he or she is not sure how to use the past simple tense.

**Fossilisation.** This is when learners continue to make the same error, even at an advanced level. For example, a learner might say 'I have 20 years' instead of 'I am 20 years old', even after many years of learning English.

What can teachers do? Correcting errors is an important part of teaching writing and speaking skills. However, it is also important not to correct every single mistake, as this can be demotivating for learners. Here are some tips for correcting errors in the classroom:

1. Focus on meaning, not form. When you are listening to your students, try to focus on what they are trying to say, rather than the mistakes they are making. This will help them feel more confident about speaking.

2. Be selective. Choose one or two areas to focus on in each lesson, for example, verb tenses or prepositions. Correct mistakes in these areas, but ignore other mistakes for the moment.

3. Use different techniques. There are many ways to correct errors, for example:

- Echo correction: repeat what the student has said with rising intonation, to show that you are not sure if it is correct.

- Recast: repeat what the student has said, but in the correct way.

- Text correction: write the student's sentence on the board and ask the class to correct it.

- Peer correction: ask another student to correct the mistake.

- Self-correction: give the student time to correct the mistake themselves.

4. Give positive feedback. Try to give more positive feedback than negative feedback. For example, praise your students for good ideas, interesting vocabulary or clear pronunciation.

5. Encourage self-correction. When a student makes a mistake, ask them to correct it themselves. If they can't, give them some help, for example, by asking a question or giving them the first letter of the correct word.

6. Correct mistakes immediately. Correcting mistakes as soon as possible is usually more effective than correcting them later. However, there may be times when it is better to wait until the end of an activity, so that students are not interrupted in the middle of speaking or writing.

7. Be sensitive. Some students may be very sensitive to correction, and may feel embarrassed or demotivated if you correct them in front of the whole class. In these cases, it may be better to correct the mistake quietly, after the lesson.

8. Set realistic goals. Help your students set achievable goals for their learning, and encourage them to focus on progress, rather than perfection. Explain that making mistakes is a natural part of learning, and that everyone makes mistakes - even native speakers!

Conclusion. Language learning does not have to be based on speaking, mistakes, and repeated correction. Indeed, if your goal is good English — that is, if you want to be able to speak and write in English with few mistakes and understand English-language television — the feedback-based method is the wrong way to do it. It builds your knowledge very slowly and depends on a good instructor. As a result, only intensive, long-term courses with competent teachers can give satisfactory results, but these are very expensive and very impractical.

The alternative — input-based learning (more specifically, the Antimoon Method) — does not rely on mistakes and corrections. It gives you more information in less time and enables you to build your English whenever you want to, for as long as you want. On the other hand, it requires that you enjoy reading books in English or watching English-language programs, and that you apply the principles of careful reading and writing.

Errors are an important part of second language learning, and they can provide useful information about how learners are developing. By understanding where these errors come from, teachers can help learners to correct them and to become more confident and accurate users of the new language.

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## PSYCHOLOGICAL FACTORS IN LANGUAGE LEARNING

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**Abstract:** *Psychological factor is a factor that is mentally or spiritually concerned with the aspects in students' acquisition. At least, four of many factors, such as anxiety, attitude, aptitude, and motivation influence the students' process of language acquisition*

**Key words:** *language learning, learning style, factors, self-image, psychological factor.*

There are many factors that influence language learning, and while some of them are external (such as the learning environment or access to resources), others are internal. These internal factors are often psychological in nature and can have a significant impact on a learner's progress and success. In this article, we will explore some of these psychological factors and discuss how they can affect language acquisition. One of the most important psychological factors in language learning is self-respect. Learners who have a positive self-image and believe in their own abilities are more likely to take risks and be open to new experiences. On the other hand, those with low self-esteem may be hesitant to speak in front of others and may avoid situations where they might make mistakes. To help learners develop a sense of self-respect, it is important for teachers to provide a supportive and encouraging learning environment and to give students plenty of opportunities to succeed. Shyness is another psychological factor that can affect language learning. Shy learners may feel uncomfortable speaking in a group setting and may prefer to work alone. They may also be more sensitive to criticism and may become discouraged easily. To help shy learners overcome their fears, teachers can provide activities that allow for individual practice and gradually increase the level of interaction as the learners become more comfortable. It is also important for teachers to be patient and understanding and to provide positive feedback and encouragement. Risk taking is an important aspect of language learning, as it involves stepping out of one's comfort zone and trying new things. Learners who are willing to take risks are more likely to experiment with the language and to learn from their mistakes. They are also more likely to seek out opportunities for communication and to engage with native speakers. Teachers can encourage risk taking by creating a safe and supportive learning environment, where learners feel comfortable making mistakes and are not afraid of being judged. Excitement and enthusiasm are powerful motivators in language learning. When learners are interested in the language and culture, they are more likely to be engaged and motivated to learn. They may also be more willing to put in the necessary time and effort to achieve their goals. To foster excitement and enthusiasm, teachers can incorporate authentic materials into their lessons, such as songs, videos, and literature. They can also encourage

learners to pursue their own interests and to explore topics that are meaningful to them. Finally, attitude is a key factor in language learning. Learners who have a positive attitude towards the language and the learning process are more likely to succeed. They are also more likely to persevere in the face of challenges and setbacks. On the other hand, learners with a negative attitude may become frustrated easily and may give up when things get difficult. To help learners develop a positive attitude, teachers can highlight the benefits of language learning and show how it can be relevant to their personal and professional lives. They can also provide regular feedback and praise, and celebrate the progress and achievements of their students. In conclusion, there are many psychological factors that can influence language learning. By understanding these factors and taking them into account, teachers can create a supportive and motivating learning environment that encourages learners to take risks, develop a positive attitude, and reach their full potential.

Teacher's focus during the teaching process is generally set towards the emotional state of the learners along with their success in the acquisition of the foreign language. As part of the process, the answer of the question why some students are more successful than others, appears to be due to many factors that directly affect the learning and acquisition of foreign languages. Hence, the authors will single out only the affective variables that are included in the Affective Filter Hypothesis, namely: anxiety, motivation, and self-confidence.

Anxiety is a psychological concept explored by a lot of researchers. Spielberger (1966) and McIntyre and Gardner (1994) implied that anxiety is subjective, consciously perceived feelings of tension, apprehension nervousness, and worry, accompanied by or associated with activation or arousal of the autonomic nervous system. According to Scovel (as cited in Todorova & Koceva, 2015), anxiety is a condition of a person when he or she feels restlessness, frustration, self-doubt, anxiety or worry. In terms of foreign language learning it is called "language anxiety" which is actually a new area of research that deserves special attention. MacIntyre (1998) defined the language anxiety as "the worry and negative emotional reaction aroused when learning or using a second language" (p. 27). Horwitz et al. (1986) define foreign language anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom learning arising from the uniqueness of the language learning process" (p. 128).

Motivation and anxiety are two opposite sides of the same dimension as proposed by Gardner et al. (1992). Motivation is closely related to the desire and "urge" to achieve a goal, however, what is the effect of motivation for language learning and how it can be measured, is a rather delicate concept. Gardner and Lambert (1972) distinguish between integrative motivation and instrumental motivation. Integrative motivation is based on an interest in the second language

and its culture and refers to the intention to become part of that culture. Instrumental motivation is based on a more practical need to communicate in the second language. In its purest form, this type of motivation is sometimes referred to as the "Carrot and Stick" type: the learner wants to learn the second language to gain something "now" from it (De Bot et al., 2005, p. 72). Even though that there are different types of motivation, yet it's impossible

to be singled out as separate types, due to the fact that when students learn foreign languages in the classroom, they might be integratively motivated, but at the same time instrumentally motivated for getting high grades. In addition to these so-called external types of motivation, a learner may also be intrinsically motivated. Many studies have shown that, whatever the nature of motivation is, there is a connection and a significant impact on the success in foreign language learning and acquisition. Therefore, motivation is an inevitable segment of the affective factors i.e. variables that affect second / foreign language acquisition and are generally responsible for individual variations and learning preferences of the learners.

Self-confidence is an affective factor that also influences foreign language learning. There is a significant correlation between self-confidence and both motivation and anxiety. The concept of self-confidence is conceptually related to that of language anxiety, except that it emphasizes a positive as opposed to a negative component. Clément (1980) proposed that self-confidence was an important determinant of the motivation to learn a L2, and that this self-confidence develops in multicultural contexts as a function of the frequency and quality of the contact with members of the L2 community.

Motivation, anxiety and self-confidence show strong correlation with language achievement. Low anxiety and high self-confidence increase student motivation to learn and to make it more likely that they will use the FL outside of the classroom setting. It is therefore not clear whether more successful learning is directly due to lower anxiety, or to a higher level of motivation and more social interaction (Saville-Troike, 2006, p. 90). This paper assesses and determines the degree of anxiety, motivation and self-confidence, which may affect the students' achievement, i.e. their success in learning English and Spanish as foreign languages.

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## MOLECULAR BASIS OF THE FUNCTIONING OF THE CYTOKINE SYSTEM AND ANTICYTOKINE THERAPY FOR RHEUMATOID ARTHRITIS

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**Annotation :** *The cytokine system is a universal, polymorphic, regulatory network of mediators designed to control the processes of proliferation, differentiation and functional activity of cellular elements in the hematopoietic, immune and other homeostatic systems of the body. One of the important issues in the pathogenesis of rheumatoid arthritis (RA) is the role of innate immune mechanisms in the development of autoimmune inflammation. The purpose of the study is to highlight the role of cytokines in the pathogenesis and improve anti-cytokine therapy. The material for the study was DNA samples from RA patients and healthy individuals of the therapeutic department No. 1 of the multidisciplinary clinic No. 1 of Samara State Medical University. The patient group consisted of 49 people aged 25-45 years and the control group, 71 practically healthy individuals. It has been established that the cytokine system is a polymorphic structure and in the formation of its polymorphism such a mechanism as allelic polymorphism is important. The presented results of clinical and laboratory studies show the development of torpidity to methotrexate therapy in subgroups of patients in both groups. Thus, the use of anti-cytokine therapy is a major advance in the treatment of rheumatoid arthritis.*

**Key words:** *rheumatoid arthritis, cytokines, gene polymorphism, interleukins, tumor necrosis factor (TNF $\alpha$ ), monoclonal antibodies.*

### INTRODUCTION

The cytokine system is a universal, polymorphic, regulatory network of mediators designed to control the processes of proliferation, differentiation and functional activity of cellular elements in the hematopoietic, immune and other homeostatic systems of the body. Numerous studies carried out over the past 10 years have demonstrated the existence of new mechanisms for the formation of the polymorphic structure of the cytokine system [1-2, 4-5]. These are allelic polymorphism of cytokine genes and alternative splicing of cytokine genes. On the one hand, these mechanisms form an even more complex polymorphic cytokine network in the body, but on the other hand, they allow us to look at its organization from a new perspective.

the action of cytokines as participants in a complex network complicates the analysis of the functions of individual cytokines and the influence of their gene polymorphism on the

development of the immune response [8, 11, 19, 20]. There are significant individual differences in cytokine production [6, 7]. Differences between the maximum and minimum levels of production of some cytokines are often tenfold, and these values are constant over different periods of time. Through the study of allelic gene polymorphism, attempts are made to determine the genetic basis of interindividual differences in immune response by determining the relationship between individual polymorphic alleles, or haplotypes, of cytokine genes and protein product production in vitro [12, 15, 23].

By examining a sufficient number of candidate genes, specific genetic profiles of polymorphic cytokine genes can be identified. For example, individuals with gene variants responsible for high production of IFN $\gamma$ , high TNF $\alpha$  and low IL-10 are associated with inflammatory processes. Such genotypes are of functional importance because make it possible to explain individual susceptibility to many autoimmune diseases

Rheumatoid arthritis is a chronic systemic inflammatory disease of connective tissue affecting predominantly peripheral joints in the form of progressive symmetrical erosive-destructive polyarthritis [3], as well as characteristic extra-articular manifestations. Despite great achievements in the study of the pathogenesis of rheumatoid arthritis (RA), which made it possible to create a fundamentally new class of fundamentally sound therapeutic agents, many immunological aspects remain incompletely studied. One of the important issues in the pathogenesis of not only RA but also all rheumatic diseases is the role of innate immune mechanisms in the development of autoimmune inflammation.

Rheumatoid arthritis (RA) is the most common inflammatory disease of the joints, the prevalence of which in the population is about 1%, and the economic losses from RA for society are comparable to coronary heart disease. Despite ongoing research, RA still remains a disease of unknown etiology. Moreover, there are good reasons to assume that even if it is possible to prove the role of any infectious agent in the development of some forms of RA, its elimination with the help of antibacterial or Antiviral drugs are unlikely to “cure” the disease. the chronic inflammatory process leads to excessive synovial hyperplasia with proliferation of synovial lineage cells, generation of new vessels, and diffuse or nodular infiltration of mononuclear cells [1,4,5]. The hyperplastic synovial membrane in cancer is infiltrated mainly by plasma cells, dendritic cells, and macrophages, which, along with synoviocytes, turned out to be the main source of “pro-inflammatory” cytokines. in addition, these cells may play a role in presenting local antigen to T cells in the synovium. A large number of putative autoantigens have been described using autoantibodies present in the serum of patients with cancer. Despite this, there is little evidence of their involvement in the pathogenesis of cancer. Antigens in RA include antigens associated with joint tissues, such as collagen type 2, human chondrocyte glycoprotein 39, as well as those not associated with joint tissues, for example, citrullinated peptides, glucose-6-phosphate isomerase, heat shock proteins [13 ]. During the immune response in RA, two closely interrelated processes occur: Activation of CD4+ T lymphocytes by Th1 type, characterized by excessive synthesis of interleukin (IL)-2, interferon- $\gamma$  and IL-17; 2). Imbalance between the hyperproduction of pro-inflammatory cytokines predominantly of macrophage nature, such as tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ),

IL-1, IL-6, IL-8 and anti-inflammatory cytokines (IL-4, IL-10, soluble IL-1 antagonist, soluble TNF- $\alpha$  receptors), with a predominance of production of the former over the latter [17]. An important role in the induction and maintenance of inflammation in the joint in RA has been proven for the pro-inflammatory cytokine IL-17, which is produced by CD4+ activated memory cells (CD45RO+) [24]. IL-17 stimulates the production of MMP-1 and MMP-9 and the degradation of proteoglycans, increases the expression of IL-6 and leukemia inhibitory factor in fibroblast-like synovial cells [9,10,14,20].

A more complete understanding of the mechanisms involved in the development and maintenance of rheumatoid inflammation has recently allowed the development of numerous new therapeutic approaches to its treatment. The main therapeutic goal is to control the production and activity of factors involved in pathogenesis. A small part of this problem has been solved by drugs from the group of biological agents. For the treatment of RA, the currently approved drugs are Infliximab, Etanercept and Anakinra. Etanercept is a complex drug that contains two copies of the soluble recombinant TNF receptor (gp75) associated with the Fc fragment of immunoglobulin G1; etanercept blocks the biological activity of TNF through its binding, while competing with receptors on target cells.

The purpose of this study is to highlight the role of cytokines in the pathogenesis of RA and to improve anti-cytokine therapy.

#### **MATERIAL AND RESEARCH METHODS**

The material for the study was DNA samples from patients with RA and healthy individuals from the Samarkand region of the Republic of Uzbekistan. The collection of material was carried out on the basis of the therapeutic department No. 1 of the multidisciplinary clinic No. 1 of SamSMU. Molecular genetic analysis was carried out in the laboratory of the Republican Scientific Research and Medical Center of Hematology of the Ministry of Health of the Republic of Uzbekistan (Tashkent). The group of patients consisted of 49 people aged 25-45 years. The comparison group consisted of 71 practically healthy individuals aged 25-46 years.

#### **RESULTS AND DISCUSSIONS**

As mentioned above, the synovium of joints in cancer is infiltrated by a wide range of cells that support the immune response in the affected joint. The severity and progression of synovitis depends largely on the local interaction, activation of these cells and their release of cytokines, which in turn regulate the growth, differentiation and activation of other cells involved in inflammation and the immune response in the affected joint. Local and systemic production of these cytokines is responsible for many of the clinical and laboratory manifestations of RA. An important place among the mechanisms of joint damage in RA is given to the so-called "pro-inflammatory" cytokines: tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ), interleukin-6 (IL-6) and (IL-17A). Using a variety of methodological approaches, including the use of appropriate DNA probes to assess the RNA expression of cytokines, as well as biological and immunochemical methods, it has been shown that all of these cytokines are synthesized in excess by synovial cells and are contained in high concentrations in synovial fluid. Studies have revealed that in the group of RA patients the level of TNF- $\alpha$  was significantly increased, although to a lesser extent, it also has the ability to stimulate

chondrocytes, thereby causing degradation of cartilage tissue, and also takes part in bone resorption. Of fundamental importance is the fact that TNF- $\alpha$  is synthesized by cells found in excess at the junction between the pannus and articular cartilage, that is, in the zone from which joint destruction begins. Hyper production of the pro-inflammatory cytokine IL-17 was determined in patients with RA in comparison with CG. TNF- $\alpha$  are powerful inducers of the synthesis of another pro-inflammatory cytokine - IL-6, the concentration of which closely correlates with clinical and laboratory parameters of the activity of the inflammatory process in RA. IL-6 is actually the only cytokine that directly induces the synthesis of acute-phase proteins by hepatocytes (Table 1).

**Table 1**

Levels of cytokines in patients with RA and CH, pg/ml

Cytokines	Group with RA ( n = 49 )	Control group ( n = 71 )	p valve
TNF – a	49,1 % [ 7,8 ; 23,4 ]	17,2 % [ 5,5 , 12.6 ]	0,037
IL	33,4 % 7,7 ; 15,8	51,2 % [ 2.3 % ; 9.2 ]	0,03
IL17A	16,6 % 2,1 ; 3,2	12,2% [ 1.7 , 2,6 ]	0,039

The inflammatory process occurring in the joint cavity and the local release of proinflammatory cytokines are accompanied by extra-articular manifestations, which are a consequence of systemic inflammation in RA. The most common extra-articular manifestation of RA is anemia, which is caused by excessive production of proinflammatory cytokines. According to the study, it was found that the conditioned medium from peripheral blood mononuclear cells of RA patients suppressed the development of erythroid burst-forming and colony-forming units. When monoclonal antibodies to various cytokines were added to the media, it was shown that the main cytokine suppressing erythropoiesis in vitro is TNF- $\alpha$  (Table 2).

**table 2**

Indicators of general blood count and iron metabolism in RA patients, (M $\pm$ m)

Indicators	Control ( n = 71 )	Patient with RA ( n = 49 )
Nv , g/l	128,3 $\pm$ 1,8	94.5 $\pm$ 2.8
RBC ( 1 * 106/ ml )	4,51 $\pm$ 0,31	4.08 $\pm$ 0.24
MSV ( fl )	88,4 $\pm$ 3,56	80.91 $\pm$ 5.73
MSN ( pg )	29,01 $\pm$ 0,89	24.96 $\pm$ 2.01
MSNS (pg )	331,86 $\pm$ 6,78	318.0 $\pm$ 11.23
Morphology Red blood cells	11,9 $\pm$ 0,51	15.6 $\pm$ 0.43*



Serum iron	Normal	Moderate hypochromia
OZHSS	24,7±2,01	20.21±1.47
Ferritin	66,91±5,05	74.56±4.78
Soluble transferrin Receptor	87,6±4,78	

Clinical and laboratory activity of RA correlates with the serum level of proinflammatory cytokines. It was shown that patients with a high level of ESR had a higher concentration of TNF- $\alpha$  in the blood serum (Table 3).

Table 3

Indicators of the degree of activity of RA and TNF- $\alpha$

Activity levels	ESR mm/hour	TNF-a pg/ml
I	Up to 20 – 9.7%	5,8
II	20-40 – 52.4%	6,2
III	Above 40 – 37.86%	8,4

Thus, proinflammatory cytokines play an important role in the pathogenesis of RA. The maintenance and chronicity of inflammation largely depends on the ability of cells to produce high levels of inflammation. This may be largely due to the presence of certain genetic profiles characterized by the inheritance of combinations of allelic variants of cytokine genes.

It has been established that the cytokine system is a polymorphic structure and in the formation of its polymorphism such a mechanism as allelic polymorphism is important. Polymorphism of the TNF- $\alpha$  gene at points such as -238 and + 489 relative to the transcription site was studied in two different subgroups of RA patients. Subgroup A, patients with a severe course, unresponsive to standard therapy, having more than six swollen joints and maintaining high activity despite treatment for 6 months and subgroup B, patients with a mild course, having less than 3 swollen joints and a good response to Methotrexate and other traditional therapy. Healthy donors were studied as a control group.

As a result, it was revealed that in the first group, the 238 G/G genotype was present in 100% of cases, the same genotype was present in 95.5% of the second group of patients and in 91.2% of healthy individuals. Thus, the genotype – 238 A/G- was absent in patients with severe RA. The + 489 G/G – genotype had a slight tendency to prevail in individuals with severe RA, but this was not statistically significant [16]. From other data, it was also noted that the 238 G/A genotype is associated with low progression of RA and fewer erosions in patients [23]. Thus, the –238G/G genotype indicates a predisposition to more severe RA. Also, many studies have been conducted to study the polymorphism of the TNF- $\alpha$  gene at the –308(G→A) point, as a result, it was revealed that patients with the –308G/A genotype have a more severe course of RA than those carrying the G/G genotype, in patients with G/A- there was an earlier onset of the disease, higher activity, and a greater number of erosions.

It has been shown that the C allele of the polymorphism in the 5'-flanking region of the IL-6 gene (174G→C) in patients with RA is associated with a reduced level of IL-6 in plasma, and the C/C genotype is significantly lower in the group of patients and can play a protective role against development of this disease. IL-10 is known as an important endogenous regulator of the production of inflammatory cytokines by macrophages and T lymphocytes in the inflamed joint in RA [21,24].

In addition, this cytokine is highly polymorphic, has single nucleotide substitutions in the gene promoter and two microsatellite loci IL10.R and IL10.G. At the same time, it was found that the allele associated with high production was much more common in patients with RA compared to controls. Thus, when studying the polymorphism of IL-10 (-2849A→G), it was revealed that the genotype associated with high production of IL-10, namely the presence of the G allele, was more common in individuals with severe joint destruction and high titers of rheumatoid factor. When studying IL17A polymorphisms (C-590T and 2 or 3 repeats of 70 bp in the third intron), it was revealed that the RP1 allele (2 repeats of 70 bp in the third intron) statistically significantly prevails in patients with RA. A hypothesis has been put forward about the possible influence of the VNTR copy number on the transcriptional activity of the IL17A gene.

Thus, when studying the polymorphism of cytokine genes in patients with RA, associations of certain allelic variants with susceptibility to the development of the disease, with the nature of the course and with sensitivity to therapy were identified. The identification of alleles associated with high levels of production of pro-inflammatory cytokines in patients explains the prospects of using anti-cytokine therapy and a more selective approach to it.

After completion of therapy, we again assessed clinical and laboratory changes in the examined groups of RA patients. Our studies provide compelling data demonstrating the effectiveness of new biological agents in reducing the progression of RA. Etanercept showed a decrease in the inflammatory symptoms of RA and a slowdown in radiological progression; in addition, a comparative study proved the higher effectiveness of etanercept monotherapy than taking Methotrexate, also as monotherapy for 2 years [1,2]. The higher effectiveness of TNF-inhibiting agents is also confirmed by the fact that neutralization of TNF- $\alpha$  suppresses the production of IL-17A and IL-6 in the culture of synovial cells of RA patients. Considering the features of the pathogenesis of RA, including the predominance of pro-inflammatory cytokines over anti-inflammatory ones,

the use of the latter as therapeutic agents appears to be effective.

The most promising is the use of IL-6; various studies have proven that it is a powerful anti-inflammatory agent that significantly suppresses the production of TNF- $\alpha$  and IL-17A by activated monocytes and synovial cells *ex vivo* in patients with RA (Table 4).

**Table 4**

Gene polymorphisms	Allels	Genotypes
IL-6 (rs202078)	A: $\chi^2 = 0.979$ ; p=0.331; OR=0.638; 95%	G/A: $\chi^2 = 0.123$ ; p=0.730; OR=0.833; 95%

	CI: 0.262 - 1.554	CI: 0.3 - 2.313
IL17A (rs2275913)	A: $\chi^2 = 1.147$ ; p=0.287; OR=1.554; 95% CI: 0.694 - 3.482	G/A: $\chi^2 = 1.203$ ; p=0.277; OR=1.714; 95% CI: 0.654 - 4.489
TNF- $\alpha$ (rs206983 )	G: $\chi^2 = 0.78$ ; p=0.40; OR=1.498; 95% CI: 0.611 - 3.675	G/A: $\chi^2 = 1.29$ ; p=0.26; OR=1.865; 95% CI

Analysis of the relationship between genetic polymorphisms IL-6 (rs202078), IL17A (rs2275913) and TNF- $\alpha$  (rs206983) with the effectiveness of methotrexate therapy in patients with RA. The presented results of clinical and laboratory studies show the development of torpidity to methotrexate therapy in A subgroups of patients in both groups.

The development of torpidity to methotrexate is explained by the influence of genetic markers on the mechanism of action of the drug.

In particular, when assessing the influence of pro-inflammatory cytokine genes on the effectiveness of methotrexate therapy, a tendency was established to reduce the protective role of the A allele by 1.6 times and the G/A genotype by 1.7 times for the polymorphism of the IL17A gene (rs2275913), the G/A genotype by 1.9 times variant in the polymorphism of the TNF- $\alpha$  gene (rs206983) in relation to the effectiveness of methotrexate therapy.

Thus, the use of anti-cytokine therapy is a great achievement in the treatment of rheumatoid arthritis. Blocking cytokines, which play a decisive role in the pathogenesis of RA, makes it possible to slow down the inflammatory process, while significantly reducing the progression of the disease and improving the quality of life of patients.

### CONCLUSIONS

Proinflammatory cytokines play a leading role in the initiation and maintenance of the inflammatory process in the joint in RA. Their increased production by synoviocytes, mononuclear cells of the peripheral blood of patients with RA, has been proven by many researchers. In addition, high concentrations of the latter were found in synovial fluid and blood serum. Their main action is aimed at potentiating bone destruction, degradation of cartilage tissue by activating synovial cells, monocytes, macrophages, T- and B-lymphocytes, endothelial cells and granulocytes and their release of mediators of the inflammatory process. A predisposition to high production of proinflammatory cytokines may be associated with the inheritance of certain combinations of allelic variants of their genes. In addition, allelic polymorphism of cytokine genes influences susceptibility to the development of RA, its severity and sensitivity to treatment. The use of anticytokine therapy is a major advance in the treatment of rheumatoid arthritis.

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## CROSS-LINGUISTIC PERSPECTIVES ON COLOUR TERMINOLOGY

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**Abstract:** *This article explores the diversity and universality of colour terminology across different languages and cultures. Drawing from a wide range of cross-linguistic studies, it examines how various communities name and categorize colours, revealing deep insights into human perception, cognition, and cultural significance attached to colours. The study begins by outlining the historical evolution of colour naming, referencing Brent Berlin and Paul Kay's seminal work on basic colour terms, and expands on it by incorporating recent research from linguistics, anthropology, and cognitive science. The core of the analysis focuses on the variability of colour terms, highlighting how some languages have numerous words for colours that might be encompassed by a single term in another language. This linguistic diversity is contextualized within each culture's unique environment, traditions, and needs, showing that colour terminology extends beyond mere perception to encapsulate cultural identity and worldview.*

*Moreover, the article delves into the cognitive processes underlying colour perception and naming, discussing whether language shapes colour cognition or vice versa. It debates the Sapir-Whorf hypothesis in the context of colour, presenting evidence from comparative studies that suggest a bidirectional relationship between linguistic categorization and colour perception. "Cross-Linguistic Perspectives on Colour Terminology" underscores the complexity and richness of colour naming across languages. It argues for a more nuanced understanding of the interplay between language, thought, and culture in shaping our perception of the colourful world around us. The findings have implications for the fields of linguistics, anthropology, psychology, and artificial intelligence, offering avenues for further research on the universal and culture-specific aspects of colour and language.*

**Keywords:** *cross-linguistic perspectives, colour terminology, human perception, cognition, cultural significance, linguistic diversity, environmental influence, traditional impact, sapir-whorf hypothesis, cognitive processes, colour perception, cultural identity, linguistic categorization, anthropology, psychology, artificial intelligence.*

### INTRODUCTION

In the realm of linguistic anthropology and cognitive linguistics, the study of colour terminology stands as a pivotal area of investigation, offering profound insights into the interplay between language, perception, and culture. The topicality of this research lies in its capacity to bridge diverse disciplinary fields, revealing the underlying cognitive mechanisms that govern human interaction with the chromatic aspects of their environment. This article, "Cross-Linguistic Perspectives on Colour Terminology," aims to expand the current understanding of how different languages and cultures conceptualize and categorize the colour spectrum, highlighting the intricate relationship between linguistic structures and perceptual experiences.

The novelty of this study emerges from its comparative approach, which encompasses a broad spectrum of languages and cultures, extending beyond the well-trodden path of Indo-European linguistic traditions to include underrepresented indigenous and regional languages. By doing so, it unveils the rich tapestry of colour naming systems worldwide, challenging and refining the universalist and relativist theories that have dominated the discourse since the seminal work of Berlin and Kay in the 1960s. Furthermore, this article introduces a novel methodological framework that integrates quantitative linguistic analysis with qualitative ethnographic insights, providing a more holistic understanding of the socio-cultural factors that influence colour terminology.

Methodologically, this study employs a multi-faceted approach to dissect the complexities of colour terminology across languages. Firstly, it utilizes a corpus-based linguistic analysis to identify and compare colour terms across a diverse set of languages, examining their semantic boundaries and categorizational principles. Secondly, through ethnographic fieldwork, it gathers contextual data on the use and significance of colour terms within specific cultural settings, paying special attention to the ways in which environmental factors and material culture shape colour concepts. Lastly, cognitive experiments are conducted to explore the perceptual dimensions of colour naming, assessing how linguistic categories might affect colour discrimination tasks among speakers of different languages.

By weaving together these strands of inquiry, "Cross-Linguistic Perspectives on Colour Terminology" endeavors to shed light on the dynamic relationship between language, culture, and cognition. It posits that a deeper understanding of colour terminology across languages can offer invaluable insights into human cognitive architecture and its interaction with the socio-cultural environment, thereby contributing to the broader field of cognitive science and the study of human diversity.

### **THEORETICAL FOUNDATIONS**

The investigation into how languages categorize colours dates back to the work of anthropologists Brent Berlin and Paul Kay in the 1960s. Their seminal study, "Basic Color Terms: Their Universality and Evolution" (1969), laid the groundwork for understanding the universality and variation in colour naming across cultures. Berlin and Kay proposed that there are universal patterns in colour naming across languages, with all languages developing colour terms within a fixed sequence. This hypothesis challenged the strong version of the linguistic relativity principle, suggesting instead that there are universal aspects of human cognition that guide the development of colour terms.

### **UNIVERSALISM VS. RELATIVISM**

The debate between universalism and relativism represents a foundational and ongoing discussion within anthropology, linguistics, philosophy, and psychology, among other fields. It centers on the nature of concepts, values, human rights, and the extent to which these are influenced by cultural, linguistic, and individual differences.

Universalism posits that certain ideas, principles, or norms are universally applicable and can be universally understood across cultures. In the context of human rights, for example, universalism suggests that there are certain rights that every human being

inherently possesses, regardless of their cultural or societal background. In linguistics and cognitive science, the universalist perspective argues that there are certain cognitive structures and linguistic patterns that are common to all human beings. This view is often linked to the idea of an innate human nature or universal grammar, as proposed by Noam Chomsky, suggesting that the capacity for language and certain basic cognitive structures are hard-wired into the human brain.

Relativism, on the other hand, emphasizes the importance of cultural, societal, and linguistic context in shaping beliefs, values, and practices. It argues that what is considered true, moral, or just can vary greatly between different cultures and that no single perspective holds a monopoly on truth. Cultural relativism, a subset of relativism, posits that one should understand a culture's beliefs and practices within their own cultural context, rather than judging them by the standards of another culture. In linguistics, the Sapir-Whorf hypothesis or linguistic relativity suggests that the language one speaks influences one's perception and categorization of the world, although the extent of this influence is debated. The debate between universalism and relativism is complex and multifaceted. Universalists argue that recognizing universal principles is essential for promoting global justice, human rights, and ethical standards. Relativists, however, caution against imposing one culture's norms on others, advocating for respect of cultural diversity and the understanding of different perspectives based on their own merits.

In practice, most scholars and practitioners recognize the need for a nuanced approach that acknowledges both universal human tendencies and the profound impact of cultural and linguistic context on human thought and behavior. The interplay between universalism and relativism enriches our understanding of the human condition, encouraging a more inclusive and comprehensive view of humanity's diversity and commonality.

### CROSS-CULTURAL VARIATION IN COLOUR NAMING

Cross-cultural variation in color naming is a subject of considerable interest in the fields of linguistics, psychology, and anthropology, providing insights into how different cultures perceive and categorize colors. This interest is largely based on the hypothesis that the way people name colors is not purely a result of their biological makeup but is also shaped by cultural and environmental factors. A seminal work in this area is the study by **Berlin and Kay (1969)**<sup>19</sup>, which suggested the existence of universal patterns in color naming across languages and cultures, proposing that there are certain basic color terms that are common across cultures, with more specific terms developing as a society becomes more technologically advanced and its language evolves.

Basic Color Terms: Their Universality and Further research has expanded upon Berlin and Kay's initial findings, exploring the nuances and exceptions to their universalist theory. **Lucy and Shweder (1979)**<sup>20</sup> critiqued the universality of color terms, arguing that cultural differences do play a significant role in color categorization. They demonstrated that in

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<sup>19</sup> Berlin, B., & Kay, P. (1969). *Basic Color Terms: Their Universality and Evolution*. Berkeley: University of California Press.

<sup>20</sup> Lucy, J. A., & Shweder, R. A. (1979). Whorf and his critics: Linguistic and nonlinguistic influences on color memory. *American Anthropologist*, 81(3), 581-615.

some cultures, color terms are influenced by social and symbolic meanings rather than solely by visual perception.

The work of **Kay and McDaniel (1978)**<sup>21</sup> introduced the concept of the "linguistic relativity of color naming," suggesting that the language a person speaks influences their perception of color. This theory was supported by experiments showing that speakers of different languages perceive colors in ways that are influenced by the color terms available in their language. More recent studies have used advanced methodologies to explore cross-cultural variations in color naming. **Regier, Kay, and Cook (2005)**<sup>22</sup> employed computational models to examine the influence of culture on color naming and found that while there is a degree of universality in basic color terms, significant variations exist that can be attributed to cultural factors. The influence of environment on color perception and naming has also been a focus of recent research. **Roberson, Davies, and Davidoff (2000)**<sup>23</sup> explored color naming in the Himba tribe of Namibia, who have more terms for types of green than in English, related to their environment. This study highlighted the importance of ecological factors in shaping color vocabulary. In conclusion, cross-cultural variation in color naming is a multifaceted phenomenon that reveals the complex interplay between linguistic, cognitive, and environmental factors. While there is evidence supporting both universalist and relativist perspectives, the consensus in current research suggests that while basic color terms exhibit a degree of universality, the full spectrum of color naming and perception is profoundly influenced by cultural and environmental contexts. This ongoing debate continues to fuel research in the fields of linguistics, psychology, anthropology, and beyond, highlighting the richness of human perceptual and linguistic diversity.

### CONCLUSION

In concluding the discussion on universalism versus relativism, it is essential to recognize that the dichotomy between these perspectives is not a matter of selecting one exclusive viewpoint over the other. Instead, the debate highlights the rich complexity of human thought, culture, and language, underscoring the necessity of integrating insights from both perspectives to grasp the multifaceted nature of human existence fully. Universalism, with its emphasis on commonalities and shared human experiences, provides a foundation for establishing universal principles and rights that transcend cultural and linguistic boundaries. This approach is crucial in fostering global solidarity, promoting human rights, and advocating for ethical standards that safeguard human dignity and well-being across diverse societies.

Conversely, relativism illuminates the significance of cultural context and the profound impact of linguistic and societal factors on shaping individual and collective identities, beliefs, and practices. By valuing diversity and encouraging the appreciation of different cultural perspectives, relativism enhances our understanding of the human

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<sup>21</sup> Kay, P., & McDaniel, C. K. (1978). The linguistic significance of the meanings of basic color terms. *Language*, 54(3), 610-646.

<sup>22</sup> Regier, T., Kay, P., & Cook, R. S. (2005). Focal colors are universal after all. *Proceedings of the National Academy of Sciences*, 102(23), 8386-8391.

<sup>23</sup> Roberson, D., Davies, I., & Davidoff, J. (2000). Color categories are not universal: Replications and new evidence from a stone-age culture. *Journal of Experimental Psychology: General*, 129(3), 369-398.

condition, enriching our global tapestry with a multitude of voices and viewpoints. The interplay between universalism and relativism invites an ongoing dialogue that respects and celebrates human diversity while seeking common ground in shared values and principles. It challenges us to be mindful of cultural nuances and to approach global issues with empathy, open-mindedness, and a willingness to learn from one another. In doing so, we can navigate the complexities of our interconnected world with a more informed, compassionate, and holistic perspective.

Ultimately, the universalism versus relativism debate is not a binary choice but a dynamic continuum that encourages a more nuanced and sophisticated approach to understanding human rights, language, cognition, and culture. By embracing the strengths of both perspectives, we can work towards a more inclusive, equitable, and understanding world that honors both our shared humanity and our diverse cultural landscapes.

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## ANDIJON SHAHRI HUDUDIGA KIRIB KELUVCHI OQIMLARNI METODOLOGIK TAHLILI

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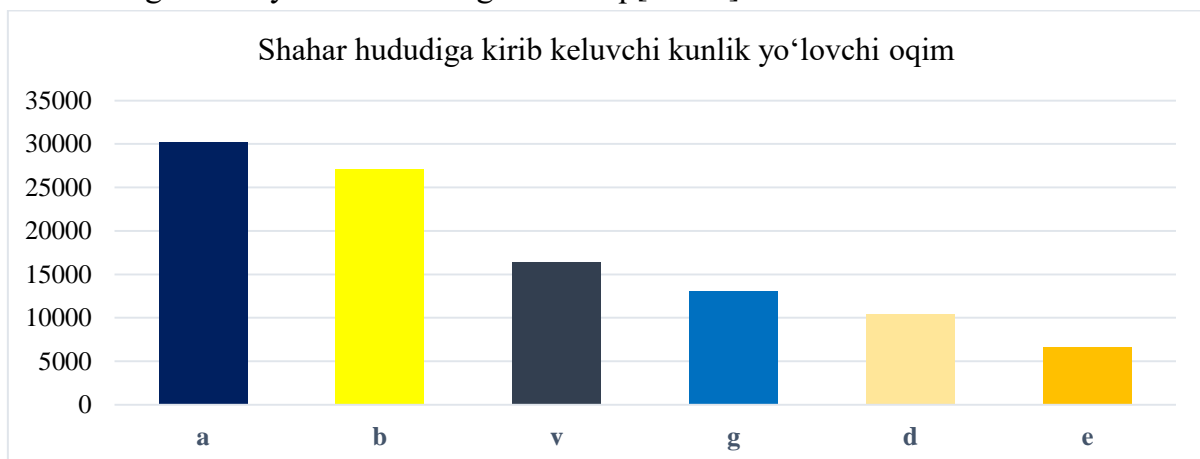
**Nasirov Ilxam Zakirovich**

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Andijon viloyatdagi avtotransportlar soni 2018-2023 yillar mobaynida 42 % ortgan (1-rasm). Bu albatta shahar hududidagi transportlar oqimiga to'g'ridan to'g'ri ta'sir etib, shahar ekologiyasini yomonlashtirishga olib keladi. Shu bilan birgalida jamoat transportlarining erkin harakatiga, ekspluatatsion tezligiga yo'nalishlardagi chorraxalardagi tirbandlilarni keltirib chiqaradi. Rivojlangan mamlakatlarda avtotransportlar sosini ortishi bilan bog'liq bo'lgan jarayonlar tizimli ravishda o'z yechimlarini bosqichma – boshqich zarur choralar ko'rish bilan bartaraf etilib boriladi [1-5].

Shuningdek, Andijon shahrida o'rganishlar davomida shahar hududiga kirib keluvchi oqimlar shaharning markaziy ko'chalari orqali to'g'ridan to'g'ri kirib kelmoqda. Andijon shahar hududiga kirib oqimlar 6 ta yo'nalishlarda kirib keladi (a, b, v, g, d, e) [6-10].

Yo'nalish **a**-Andijon, Izboskan va Paxtaobod tumanlari orqali, **b**-Oltinko'l va Baliqchi tumanlari, **v**-Xo'jaobod, Buloqboshi, Qo'rg'ontepa tumanlari hamda Xonobod shahri orqali, **g**-Asaka va Marhamat tumanlari orqali, **d**-Andijon tumanining bir qismi Soy orqali, **e**-viloyatning Jahon bozori orqali kirib keladi. Shahar hududga kirib keluvchilar bir kunlik yo'lovchilarning umumiy soni 100 ming.dan ortiq [11-15].



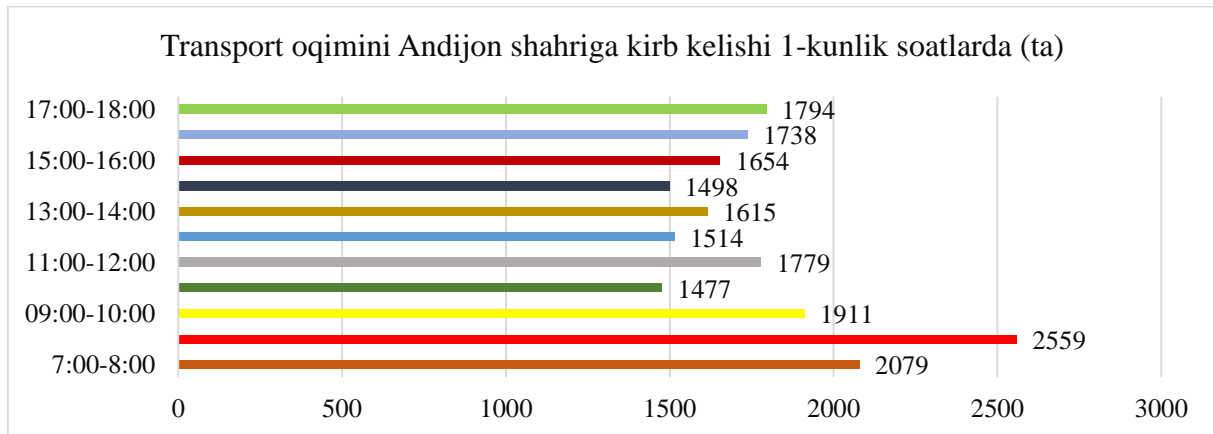
**1-rasm**

Yo'lovchilar qisman jamoat transporti, yo'nalishli taksi (Damas), yo'nalishsiz va shaxsiy avtotransport vositalarida kirib keladi.

Bugungi kundagi shahar hududidagi mavjud yo'l-infratuzilma inshootlari shahar hududida kundan kunga ko'payib borayotgan transportlar oqimini ko'tara olmasligi ayon bo'lib bormoqda [16-20].

O'rganish ishlari natijasida shahar hududiga kirib keluvchi oqim soatlar miqdoridagi kirib keluvchi transport vositalari soni aniqlangan, 2-rasm. Kunning 8:00dan 9:00 gacha

bo'lgan vaqtlarda 2559 transport vositasi shahar hududiga 1soat mobaynida kirib kelgan [21-25].



2-rasm

Yo'nalishli, shaxsiy transport vositalarini maxsus qismlardagi jamoat transport bilan tahlili qilinganda kunning soatlarida jamoat transporti umumiy transportning 3% ni tashkil etgan [26-32].

#### ADABIYOTLAR RO'YXATI:

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## TOVAR ISHLAB CHIQUARISH MANBALARI VA TOVARLAR BOZORINING KENGAYISHI

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Hozirgi vaqtda iqtisodiy jihatdan rivojlangan mamlakatlarda sifat, ichki va tashqi bozorga chiqariladigan mahsulot hajmini ko'paytirish garovi va foyda olishning asosiy manbaya hisoblanadi. Ma'lumki, mamlakatda sifatli mahsulot qancha ko'p ishlab chiqarilsa, shuncha sifatsiz mahsulotlar miqdori kamayishiga, uning hisobiga xomashyo va yarimfabrikatlarning tejalishiga, me'yoriy-texnik hujjatlarda belgilangan talablarga rioya qilish hisobiga tayyor mahsulot realizatsiyasining oshishiga olib keladi [1-4].

Hozirgi kunda Respublikamiz birgina Mustaqil Davlatlar Hamdo'stligi (MDH) davlatlari bilangina emas, balki dunyoning ko'pgina rivojlangan mamlakatlari bilan iqtisodiy aloqalarning rivojlanishida, tashqi bozorga chiqarish uchun mo'ljallangan mahsulot sifati hal qiluvchi omillardan biri bo'lib hisoblanadi va iqtisodiy islohotlarni yanada chuqurlashtirish, davlat siyosatini mustahkamlashda muhim omil bo'lib xizmat qiladi. Ma'lumki, mahsulot sifati uning asosiy ko'rsatkichlari orqali xarakterlanadi. Shuning uchun ham mahsulot sifatiga qo'yiladigan talablar va me'yoriy hujjatlarga kiritiladigan sifat ko'rsatkichlari ilg'or fan va texnika, texnologiya va xalqaro tajribalarning talablariga javob beradigan bo'lishi kerak [5-9].

Raqobat kuchli bo'lgan bozorda ishlab chiqarilayotgan mahsulot qancha sifatli bo'lsa, u shuncha jahon bozorida o'z o'rnini topadi va mamlakat iqtisodiyotiga ma'lum darajada ijobiy ta'sir ko'rsatadi. Tashqi bozorga chiqariladigan mahsulot hajmi mamlakatda ishlab chiqarilayotgan mahsulot sifatiga bog'liq bo'ladi. O'zbekiston iqtisodiyoti rivojlanib borar ekan, iste'mol bozorini aholi talabiga javob beradigan sifatli tovarlar bilan to'ldirish asosiy vazifalardan biri bo'lib hisoblanadi. Bunday vazifani bajarish uchun bir tomondan aholi ehtiyojini o'rganish zarur bo'lsa, ikkinchi tomondan, xalq iste'mol tovarlarini aholi talabiga mos ravishda ishlab chiqarish zarur. "Nooziq-ovqat tovarlari ekspertizasi obyektlari fani" tovarlar iste'mol qiymatining shakllanishi, sotilishi va ishlatilishi davridagi o'zgarish qonuniyatlarini o'rganadi [10-14].

Tovar deb sotish uchun mo'ljallangan mehnat mahsuliga aytiladi. Tovar almashuv va iste'mol qiymatlarga ega. Almashuv qiymatni mavhum (abstrakt) mehnat va iste'mol qiymatni muayyan (konkret) mehnat yaratadi [15-19].

Iste'mol qiymati deb tovarlar xaridorning muayyan ehtiyojini qondira oladigan ijobiy xususiyatlari va tarkibi hamda tuzilishini ifodalovchi konstruktiv ko'rsatkichlari yig'indisiga aytiladi. Iste'mol xususiyatlarga iste'mol davrida namoyon bo'ladigan xususiyatlar kiradi. Konstruktiv ko'rsatkichlarga o'icham, hajm, quvvat va zichliklar misol bo'la oladi.

Xususiyat deb material zarrachalarining tashqi muhit bilan o'zaro ta'siri natijasida hosil bo'ladigan hodisaga aytiladi. Tovarlarining iste'mol xususiyatlari ularning sifatini va

konstruktiv ko'rsatkichlar esa ularning assortimentini shakllantiradi. Sifat deb tovarlarni me'yor (nominal) sharoitda ishlatishda iste'molchilar ehtiyojini qondira olish qobiliyatining darajasiga aytiladi [20-25].

Tovarlar sifati bo'yicha sortlarga bo'linadi. Standartlarda sifat ko'rsatkichlari me'yorlab qo'yiladi. Sifat ko'rsatkichlari deb tovarlarning iste'mol xususiyatlarini miqdor jihatdan belgilaydigan ko'rsatkichlarga aytiladi. Assortiment deb iste'mol xususiyatlari bir xil bo'lib, bir-biridan konstruktiv ko'rsatkichlari bilan farq qiladigan tovarlar yig'indisiga aytiladi. Sifat va assortiment iste'mol qiymatning tarkibiy qismlari bo'lib hisoblanadi [26-29].

Tovarlar bozori kichik biznesning rivojlanishi tufayli kengayishi bilan bir qatorda, tovar ishlab chiqarish manbalari ham nihoyatda kengayib bormoqda. Shuning bilan birgalikda tovarlar assortimenti va sifat ko'rsatkichlari turlicha bo'lib, ularning iste'mol xususiyatlari, tamg'alanishi, o'rab-bog'lanishi, saqlanishi, tashilishi firma (korxon)ning imkoniyatlari va ishlab chiqaruvchining malakasiga bogliq bo'lib qolmoqda. Lekin, tovar ishlab chiqaruvchilar, tadbirkorlar, tijoratchilar va boshqa bozor ishtirokchilari hozirgi kunda tovar, uni standartlashtirish va sertifikatlashtirish, ularning iste'mol xususiyatlari, parametrik tavsiflari, ishlatilishi, ijtimoiy muvofiqligi, tovar belgilari, tovar haqidagi axborotlar va boshqa tavsiflarini bilmasdan turib tovarlar savdosini olib bormoqdalar [30-32].

Yuqoridagilarni inobatga oigan holda "Xizmatlar sohasi (Tovar ekspertizasi xizmatlarini tashkil etish)" ta'lim yo'nalishining o'quv rejasiga "Nooziq-ovqat tovarlari ekspertizasi asoslari", "Nooziq-ovqat tovarlari ekspertizasi obyektlari", "Nooziq-ovqat tovarlari ekspertizasi xizmatini tashkil etish", "Standartlashtirish, sertifikatlashtirish va metrologiya xizmati" fanlari kiritilgan bo'lib, xalq iste'mol tovarlari sifatini ekspertiza qilish va xavfsizligini ta'minlash ishlarini tashkil etishning muhim jihatlari, tovar ekspertizasi obyektlari, subyektlari, usullari, tovar axboroti vositalari kabi mavzular bo'yicha bakalavriat talabalariga takomillashgan davlat standartlari asosida yetkazilishi shart bo'lgan asosiy bilimlar va ko'nikmalar berishni qamrab olingan.

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## XALQARO YUKLARNING TASHILISHINI AXBOROT BILAN TA'MINLASH

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Demokratik jamiyatda transport siyosati bir-biridan farq qiladigan manfaatlar ta'sirida bo'ladi. Shuning uchun jamiyatdagi mavjud tendensiyalarni o'z vaqtida anglab olib, o'rta muddatli va istiqbolli rejalarni belgilash, juda muhim hisoblanadi. Globallashtirish jarayonlarini kuchayishi o'z navbatida tashqi iqtisodiy faoliyatda transport siyosatini muvofiqlashtirish, raqobat strukturasi o'zgartirish va tashish ishini baynalminallashtirish masalalarining tadqiqoti, transport harakatini, tashish jarayonini, xalqaro transport tizimini va transport bozorini tadqiq etish, o'zgaruvchan sharoitlarda transport tizimining ahamiyatini ilg'ab olish, xalqaro yuklar va yo'lovchilarning harakati to'g'risida hamda transport va savdo hujjatlari to'g'risida bilim va malakaga ega bo'lishni, shuningdek amalda qo'llay olishni taqazo etmoqda [1-5].

Ushbu tezisda tashqi iqtisodiy faoliyatni amalga oshirishda transport va uning ahamiyati, transport ta'minoti, xalqaro yuk tashuv ishlarini optimal tashkil etish va boshqarish, yuklarning tasniflanishini amalga oshirish, transport koridorlarining yo'nalishlarini belgilash, optimal marshrutlarni tanlash, xalqaro transport turlarining iqtisodiy-texnik ko'rsatkichlarini rejalashtirish, xalqaro yo'nalishlarda yuk avtomobillarining harakatini tashkil etish, transport tizimi, transport zanjiri, transport siyosati hamda yuklarni va yo'lovchilarni tashish bozori, tashqi iqtisodiy faoliyatda transport ta'minotining o'rni, transportning ijtimoiy-iqtisodiy va siyosiy ahamiyati, logistika tizimining ishtirokchilari faoliyatini muvofiqlashtirish uslublari kabi masalalar ko'rib chiqilgan [6-12].

Davlat iqtisodiy taraqqiyotining muhim shartlaridan biri tovar va xizmatlarni izchillik bilan jahon bozoriga kirib borishdan iboratdir. Bu jarayonni amalga oshirishda esa, transport muhim omil hisoblanadi.

O'zbekiston mintaqada qulay geografik o'rinni egallab turgan bo'lsada, dunyoni qit'alarini o'zaro bog'lovchi eng yaqin dengiz bandargohiga chirish uchun kamida ikkita mamlakatdan o'tib borishi kerak bo'ladi. Bu hol esa bu sohadagi iqtisodiy, xuquqiy-siyosiy masalalarni echishni taqozo etadi [13-19].

Davlat iqtisodiy taraqqiyotining muhim shartlaridan biri tovar va xizmatlarning jahon bozoriga izchillik bilan kirishidan iboratdir. Rivojlangan mamlakatlar tajribasi shuni ko'rsatadiki, transport aloqalari jahon bozoriga kirib borishni jadallashtirishning muhim omilidir [20-24].

O'zbekiston Respublikasi mustaqilligi e'lon kilinganidan so'ng, avvalambor, transport majmuasi aloqalariga e'tibor kuchaytiradi. O'zbekiston geografik o'rnini dengizlar, bandargohlar va yirik transport tarmoqlarga bevosita chiqish yo'llarining yo'qligini e'tiborga

oladigan bo'lsak, transport chiqish tizimlari va aloqalarini rivojlantirish bilan bog'liq muammolar va masalalarni hal etish ustivor strategik ahamiyat kasb etishi ma'lum bo'ladi. O'zbekiston Evropa va Sharqiy Osiyoning quruqlikdagi va havo orqali o'tadigan muhim chorrahalarda joylashganligi tufayli tranzit tashishda istiqbolli xalqaro transport punkti hisoblanadi.

O'zbekiston mintaqada qulay geografik o'rinni egallab turgan bo'lsa-da, shu xususiyati bilan ham ajralib turadiki, u dunyoning qit'alarini o'zaro bog'lovchi eng yaqin dengiz bandargohiga chiqishi uchun kamida ikki mamlakatdan o'tib borish kerak bo'lgan ozchillikni tashkil etuvchi davlatlardan biridir. Ikkinchi tomondan, xalqaro yuklarni avtomobil tpancoptlari orqali tashishda O'zbekiston haydovchilari yo'lida turli xil moddiy va nomoddiy to'siqlar mavjuddir [25-29].

Qadimdan insoniyat madaniyatining taraqqiyoti transport koridorlarini shakllantirish bilan bog'liq bo'lgan. Ko'p asrlar mobaynida Sharq va G'arbni o'zaro bog'lagan qadimgi Ipak yo'lini eslaylik. Aynan shu yo'l ilm, fan, texnika, texnologiya, millatlararo va xududlararo munosabatlarning jadal rivojlanishiga, madaniy qimmatliklar ayirboshlanishiga yordam bergan. Hozirgi paytda uning tarixiy ahamiyati tiklanmoqda. Ming yillar ilgari bo'lganidek, u Sharq va G'arb o'rtasidagi ko'pri bo'ladi. Dunyoning ko'plab mamlakatlari ushbu yo'lga tutashgan. O'zbekiston qadimda ham ushbu ulkan yo'lning asosiy savdo va transport tarmoqlaridan biri bo'lgan. Bugungi kunda O'zbekiston Buyuk ipak yo'lini tiklash tashabbuskori va Evropa Ittifoqining Evropa - Kavkaz - Osiyo transport koridorini Kavkaz va Markaziy Osiyoning yangi mustaqil davlatlari bilan birgalikda rivojlantirishga texnik yordam ko'rsatishga oid TRASEKA dasturining faol ishtirokchisi sifatida o'zining noyob geografik ahamiyatini saqlab qoldi [30-32].

Hozirgi paytda XX asrning oxirida Xitoyni TRASEKA koridori orqali Evropa bilan tutashtiruvchi Yangi ipak yulini tiklash g'oyasi, avvalambor, ishtirokchi-mamlakatlar, shuningdek, jahon hamjamiyati, Evropa Ittifoqi xatti-harakatlari yordamida amalga oshmoqda.

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## TAQSIMOT LOGISTIKASINING MAQSADI VA VAZIFALARI

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Jahon savdosining doimiy rivojlanishi transport bozorlarida, shu jumladan mamlakatimiz transport tizimida tub o'zgarishlarni talab qiladi. Xorij tajribasi transportli xizmat ko'rsatish muammolariga bo'lgan etiborni dolzarbligini ko'rsatadi. Bozor iqtisodiyoti sharoitida rivojlangan mamlakatlarda transport xizmat ko'rsatishni rivojlantirish quyidagilarga asoslanadi: yuk tashish hajmini kengaytirish; yetkazishni o'rtacha masofasini ko'paytirish va xalqaro tashishni hissasini o'sishi; sifat javobgarligini oshirish; tashkilotlar o'rtasida tashish hajmini o'sishi; ommaviy yuklar hajmini kamaytirish va konteynerlarda donali yuklarni hajmini ko'paytirish; yuk ko'tarish koeffitsiyentini oshirish; maxsus tarkibdagi yuklarni tashish hajmini oshirish; transport jarayonlarini boshqarish va tashishni tashkillashtirishda logistik yondoshuvlarga ega bo'lish [1-4].

Taqsimot logistikasining asosiy maqsadi- kerakli mahsulotlarni kerakli joyga, kerakli vaqtda va kerakli sifatini ta'minlagan holda yeng kam xarajatlar bilan yuklarni yetkazib berish jarayonini boshqarish va tashkil etishga yangi yondashuvlarni shakllantirishdan iborat.

Logistik vazifalar. Logistika funksiyalari nimadan iborat, vazifalar uchun bu nimani anglatadi- batafsilroq ko'rib chiqamiz [5-8]:

Integratsiyalash- birlashtirilgan mahsulotlarni ayirboshlash tizimini shakllantirish. Tovarlarning harakatlanish bosqichlarining birortasi alohida hisobga olinmasligi kerak, ularning barchasi tovar ayirboshlashning yagona jarayonining bir qismidir. Logistika ta'minot, ishlab chiqarish, marketing bosqichlarini yagona, bo'linmas jarayonlar bilan birlashtiradi.

Tashkilot- tovar ayirboshlash jarayonida ishtirokchilar o'rtasidagi o'zaro aloqalar va harakatlarni muvofiqlashtirish.

Boshqarish- tovar ayirboshlash jarayonini ta'minlash. Logistika va menejmentning bo'linmasligi, mahsulot yoki xizmatlarning barcha harakatlari vakolatli boshqaruv jarayonidir [9-12].

Logistika muhim ahamiyat kasib etadi. logistika- A nuqtadan B nuqtasiga qadar ma'lum tovarlarni yetkazib berishning minimal chiqindilari va yetkazib berish vaqtini etkazib berishni tashkil qilishdan iborat bo'lib, mijozning, ishlab chiqaruvchining, sotuvchining, haydovchilarning manfaatlarini inobatga olgan holda ishlaydi. Logistikchi kim? Oddiy so'z bilan aytganda, to'g'ri mahsulotni o'z vaqtida va minimal vaqt va kuch bilan yetkazib bera oladigan kishi. Faqat birinchi qarashda bu ish oddiy, aslida quyidagi ko'nikmalar va qobiliyatlarni talab qiladi [13-16]:

- e'tibor;
- katta mas'uliyatga tayyor bo'lish;

- ijodiy fikrlash qobiliyati;
- doimiy sayohat va tez-tez tashrif buyurishga tayyor bo'lish.

Logistika asosiy tushunchalari oqimdir: moddiy va axborot. Ular turli yo'llar bilan tasniflanishi mumkin:

- materiallar- tovarlarni boshqarishga yo'naltirilgan: moddiy oqimlar;
- axborot- axborot oqimini nazorat qiladi, aloqa tarmoqlarini qurishga qaratilgan;
- moliyaviy-pul boshqarish kompaniyasi;
- xodimlar- inson oqimlarining harakatlanishi, xodimlarni qabul qilish va ishdan bo'shatish, mehnat qonunlariga rioya etilishini nazorat qilish.

Bundan tashqari, tadbirkorlik sohasida tasniflash mumkin. Funktsional xususiyatga ko'ra, ushbu fanning bir necha asosiy turlari mavjud [17-21]:

- transport (tovarlarni tashish turini tanlash, harakat yo'nalishini aniqlash);
- yuk (katta hajmdagi mahsulotlarning harakatlanishi);
- marketing (tovarlarni taqsimlash, tarqatish kanallarini rivojlantirish);
- ta'minot (etkazib beruvchilarni izlash va baholash);
- ma'lumotlar (sheriklar bilan ma'lumot almashish, xodimlar o'rtasida korxonada axborot uzatishni optimallashtirish);
- ombor (ombor operatsiyalarini amalga oshirishni tashkil etish, masalan, yuklash, tushirish kabi);
- bojxona (import-eksport tovar oqimlarining harakatlari) [22-25].

Logistika tushunchasi ishlab chiqarish jarayonlarini optimallashtirish yo'li bilan korxonaning iqtisodiy faoliyatini ratsionalizatsiya qilishdan iborat, biroq har qanday kompaniyaning ishi kadrlar resurslarini va axborotni vakolatli boshqarishni amalga oshirish mumkin emas. Logistik- bu mahsulotni etkazib berish va tarqatish bilan shug'ullanadigan shaxs emas, balki vakolatli menejer. Uning vazifalari tovar ayirboshlash tizimida, logistika jarayoniga qatnashgan va korxonada xodimlariga tarqatilgan xabarlarini o'z vaqtida etkazib berishni o'z ichiga oladi [26-29].

Ombor logistikasi- omborlarni boshqarish, saqlash uchun materiallarni qabul qilish tartibi, bevosita bunday saqlash va keyinchalik sotish uchun tovarlarni etkazib berish. Ushbu sub-sektorning vazifalari qatorida: omborxonada iqtisodiyotining vakolatli tashkiloti, saqlash uchun saqlanadigan tovarlarni joylashtirish. Omborda ishlash jarayoni uch bosqichga bo'linadi [30-32]:

- tovarlarning zaxiralarini ta'minlash, bunday zaxiralarni hisobga olish va ularni nazorat qilish;
- yuklarni qayta ishlash va to'plash, zarur hujjatlarni rasmiylashtirish, ichki omborxonani tashish, tovarlarni saqlash;
- buyurtma yig'ish, tovarni iste'molchilarga yetkazib berish, buyurtmachilarning buyurtmalarini to'g'ri to'ldirish, mijozlarga xizmat ko'rsatish va omborni nazorat qilish.

Bojxona rasmiylashtiruvi. Chet eldan va chet eldan keladigan tovar oqimining logistik boshqaruvi bojxona deb ataladi. Bojxonachilar mutaxassisleri quyidagi vazifalarni hal qilishda qudagilardan iborat:

- yuklarni baholash;
- bojxona deklaratsiyasini ro'yxatdan o'tkazish;
- yuklarning muvofiqligini tekshirish, yuzaga kelishi mumkin bo'lgan muammolarni hal qilish;
- tovarlarni tashish;
- agar zarur bo'lsa, keyingi sertifikatlash;
- qonun hujjatlariga rioya etilishini nazorat qilish;
- bojxona rasmiylashtirilgandan so'ng tovarlar bilan birga ishlash.

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## LOGISTIKA YANGILIKLARINING KORXONALARDA IQTISODIY USTUVORLIKNI TA'MINLASHDAGI O'RNI

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Korxonaning logistika tizimi turli elementlarni birlashtiradigan eng murakkab va ayni paytda yaxshi ishlaydigan mexanizmlardan biridir. Ushbu mexanizmning uzluksiz ishlashi, asosan, uning tarkibiy qismlarining har birining aniq ishlashi bilan belgilanadi, unda ishlatiladigan usul va texnologiyalarning mukammalligi bo'lib, shuning uchun har bir korxonada logistikani o'rganish zarurligini bujudga keladi. Zamonaviy dunyoda ishlab chiqarishning jadal o'sishi, turli korxonalar tomonidan ishlab chiqarilgan tovarlar nomenklaturasining kengayishi, omborlar tashkil etilishi, bu esa o'z navbatida korxonaning tovar aylanmasining o'sishiga ta'sir qiladi. Bularning barchasi korxonani boshqarishda logistika rolini oshiradi [1-4].

Logistika zanjirining barcha qismlarida sanoat ishlab chiqarish samaradorligini oshirish va xarajatlarni kamaytirish asosan tarqatish tarmog'ini oqilona tashkil etishga, xususan, xarid qilish, saqlash, qadoqlash va transport vositalari kabi tovar harakatining muhim elementlariga bog'liq. Transport logistikasi ham har qanday korxonaning iqtisodiy siyosati sohasiga kiradi, uning asosiy vazifasi yukni ishlab chiqaruvchidan ketgan paytdan boshlab va iste'molchiga topshirishgacha hamrohlik qilishdir. Yirik ishlab chiqarish korxonalari, odatda. Kichik firmalar avtomobillarni ijaraga olishga yoki transport kompaniyalari bilan shartnomalar tuzishga majbur bo'ladilar [5-8].

Yuqori sifatli transport logistikasi yukni o'z vaqtida yetkazib berishni va uning xavfsizligini nazarda tutadi. Shuning uchun logistika va transport menejerlari yukni minimal zarar bilan eng oqilona tashish jarayonini tashkil qilishlari, uning harakatini doimo nazorat qilishlari, joyni bir vaqtning o'zida bilishlari va kompaniyaga o'z vaqtida kelishlarini ta'minlashlari kerak. Ushbu ikki asosiy qoidaga rioya qilish orqali korxonalar o'z xarajatlarini sezilarli darajada kamaytirishga muvaffaq bo'ladilar. Hozirda hech qanday qattiq korxonalar transport logistikasisiz ishlay olmaydi, aks holda bankrot bo'lish xavfi mavjud [9-12].

Korxonalarda "logistika bo'limlari" ning paydo bo'lishi bilan xom ashyo va tayyor mahsulotlarni yetkazib berish jarayoni yanada tizimli bo'lib, bu esa yo'l zaxirasini oqilona tanlashga olib keldi, yuklash, tushirish, transportni samarali boshqarish va natijada transport xarajatlarini kamaytirdi.

Ayni paytda logistika muammolarini hal qilishda ishtirok etmayotgan har qanday savdo yoki ishlab chiqarish korxonasini tasavvur qilish qiyin. Ushbu muammoning kengligi va ko'p jihatlari bilan bog'liq holda, korxonada logistika tizimidan foydalanishning funktsiyalari va maqsadlarini har bir alohida holatda kompleks o'rganish kerak, bu esa tadqiqot muammosining dolzarbligini keltirib chiqaradi [13-16].

Logistika inson va moddiy resurslardan foydalanish uchun keng imkoniyatlarni ochib beruvchi muhim ishdir, bu esa o'z navbatida milliy ishlab chiqarishga ta'sir ko'rsatadi. Logistika boshqaruvi zamonaviy bozor iqtisodiyoti sharoitida moliyaviy iqtisodiy, shuningdek, Qonunchilik ta'minoti holatiga sezilarli ta'sir ko'rsatmoqda. Bu holat, birinchi navbatda, avtotransport xizmatlari bozoriga, omborxonalar xo'jaligi muassasalariga, vositachilik tashkilotlarida avtotransport xizmatlarini shakllantirishga taalluqli bo'lishi kerak. Shunga qaramay, logistika sohasidagi ishlar faqat ushbu tendentsiyalar bilan chegaralanmaydi, bu juda ko'p qirrali. Bundan tashqari, logistika ishlari korxonaning kadrlar ta'minoti, savdo faoliyati, axborot tizimlarini tashkil etish va h. k. larni boshqarish bo'yicha faoliyatni o'z ichiga oladi [5,17,18].

Korxonalar boshqaruvida logistika yondashuvining o'ziga xos yangiligi, bu faoliyatning barcha sohalaridagi cheklangan munosabatlar bilan bog'liq bo'lib, ular birgalikda tovar-o'tkazuvchan tashkiliy tizimlarni shakllantirish, boshqaruvda oson va ish samaradorligini yuqori darajada namoyon etishdir. Iqtisodiy sohada yuqori rivojlangan mamlakatlar va Rossiyaning yirik korxonalari amaliyoti shuni ko'rsatadiki, logistika zamonaviy korxonalarining biznes jarayonlarida muhim o'rin tutadi. Turli biznes-jarayonlarni samarali rivojlantirish, ularning tashqi va ichki bozorlarda raqobat qilish qobiliyati asosan korxonaning logistika tizimi va umuman korxonaning logistika menejmenti rivojlanishi bilan belgilanadi [19,20].

Transport logistikasining samaradorligi asosan kompaniyaning strategiyasi va taktikasiga bog'liq. Xuddi shu paytni o'zida, rahbarlari kompleks marketing tadqiqotlar o'tkazish kerak (yuk, narxlar, xom ashyo yetkazib beruvchilar, tayyor mahsulotlar iste'molchilar, raqobatchilar), muqobil transport usullari va yuk tashish usullarini ko'rib, yozuvlarni ushlab qolish va ularning ish eng yaxshi natija va uni erishish uchun minimal xarajatlarni olish uchun xarajatlarini tahlil etish zarur. Ko'rsatiladigan xizmatlar siyosatiga transport jarayonini kompleks amalga oshirishga qaratilgan qarorlar va harakatlar kiradi. Demak, yuk tashishni tashkil etish, ularni tashish masofasini, miqdorini va yetkazib berish vaqtini hisobga olgan holda, mijozlarga qo'shimcha xizmatlar ko'rsatish bilan birga rejalashtiriladi.

Transport kompaniyalari o'z faoliyatini diversifikatsiya kengaytirish uchun juda tayyor bo'lishi bu mijozlarni jalb qilish salohiyatini oshiradi, foydani oshiradi, eng yangi transport texnologiyalarini joriy etishni tezlashtiradi, transport xizmatlari bozoridagi o'rini mustahkamlaydi. Ishlab chiqarish korxonalari umumiy xarajatlarni kamaytirish va ish haqini kamaytirish maqsadida o'zlariga xos bo'lmagan ko'plab logistik funksiyalardan xalos bo'lish va asosiy faoliyatiga e'tibor qaratishdan kam emas.

Logistika mutaxassislarining fikriga ko'ra, logistika sohasida sanoat va transport kompaniyalari o'rtasida hamkorlikni kengaytirishga to'sqinlik qiluvchi muhim sabab yuk egasining xom ashyo va tayyor mahsulotlar harakati ustidan nazoratni yo'qotish xavfi hisoblanadi. Bu sabab, qoida tariqasida, subektiv xarakterga ega bo'lib, birgalikda ishlash tajribasi to'planib, o'zaro ishonch mustahkamlanib borishi bilan bartaraf etilishi mumkin. Buni hozirgi vaqtda logistika funksiyalarini ishlab chiqarish firmalaridan transport firmalariga o'tkazish jarayoni jadal rivojlanayotgani tasdiqlaydi [21,22].

Bunga axborot texnologiyalarining jadal rivojlanishi ham yordam beradi, buning natijasida transport kompaniyalari elektron ma'lumot almashish orqali jo'natuvchilar bilan o'zaro aloqalarni kengaytiradi va yaxshilaydi. Afsuski, bugungi kunda ikkala yo'l ham bir-biridan alohida rivojlanmoqda, ularning afzalliklari va kamchiliklari mavjud. Bu vaziyatdan chiqish yo'li ularning birlashuvida va shu tufayli sinergetik samara olishida ko'rinadi, bu esa transport kompaniyalarining yanada rivojlanishiga yordam beradi hamda ishlab chiqarish korxonalarining transport xarajatlarini kamaytiradi.

Logistika korxonaning asosiy bosqichlarini samarali rejalashtirish, amalga oshirish va nazorat qilish, shuningdek, korxonadan ishlab chiqarilgan tovarlar va mahsulotlarning saqlanishini va harakatini o'z ichiga olgan korxonaning ta'minot tizimining bir qismidir. Bundan tashqari, korxonaning logistika tizimi mijozning barcha talablarini bajarish bilan birga etkazib berish joyidan yakuniy iste'molchiga tegishli xizmatlar va axborot oqimlarining yo'nalishini o'z ichiga oladi [23-25].

Transport-bu korxonaning logistika tizimining asosiy tarkibiy qismlaridan biri, chunki hech bir tashkilot iste'molchilarga tayyor tovarlar va ishlab chiqarilayotgan mahsulotlarni yetkazib berish xizmatidagi to'g'ri ishlashi mumkin emas. Resurslarni boshqarish logistikasi faoliyati korxonaning yuqori darajadagi moslashuvini va tashqi ta'sir etuvchi omillarga muvofiq qayta tashkil etish jarayoni yoki ishlab chiqarish jarayoniga vaqt sarflashni ta'minlaydi. Korxonaning logistika tizimining turli tarkibiy qismlarining o'zaro ta'siri bir vaqtning o'zida bir nechta darajalarda amalga oshiriladi: moliyaviy, iqtisodiy, sanoat va boshqalar. Logistika tizimidan foydalanish axborot ma'lumotlarini olish jarayonini tezlashtiradi va ishlab chiqarish siklining xizmat darajasini oshiradi.

Korxonadan boshqaruvining logistika jarayoniga "o'z vaqtida" tamoyilini joriy etish, bu tejamkor ishlab chiqarishda faol qo'llaniladi, birinchi navbatda, ishlab chiqarish bosqichida yo'qotishlarni bartaraf etish, ishlab chiqarish zaxiralarining ortiqcha bo'lishi va kutish vaqti, ikkinchidan, tovarlarning qiymati va narxini sezilarli darajada kamaytirish va nihoyat, uchinchidan, korxonaning logistika xizmati sifatini oshirish imkonini beradi. Ayni paytda, korxonalar, logistika tamoyillariga muvofiq ishlab chiqarish tsikli tizimini tashkil qilish ko'chib, oqilona, kompaniya ishlab chiqarish sikli tashkil etkazib beruvchilar tanlash va mustaqil ishlab chiqarish jarayonlarini tashkil qilish, materiallar va xom ashyo xarid qilish mumkin [24].

Logistika nisbatan yosh ilmdir, shuning uchun kontseptual qurilma va terminologiya bilan bog'liq ko'plab masalalar bozor munosabatlarining rivojlanishi bilan doimo yangilanib, o'zgarib, yangi mazmun bilan to'ldiriladi. Misol uchun, bugungi kunda o'zbek, rus adabiyotida o'nlab turli xil logistika ta'riflari mavjud. Biroq, uning asosida logistika butunlay yangi va amalda ma'lum bo'lmagan hodisa emas. Ratsionalizatsiya muammosi doimo diqqat markazida bo'lgan. Logistika yangiliklari, birinchi navbatda, korxonalarining iqtisodiy amaliyotida ustuvorliklarni o'zgartirishdan iborat. Ikkinchidan, yangilik qayta tiklash jarayonida moddiy qadriyatlar harakati masalalariga har tomonlama kompleks yondashishdan iborat [25-29].

Logistika moddiy va axborot oqimlari, ishlab chiqarish, boshqarish va marketing bilan bog'liq jarayonlarni muvofiqlashtirishni o'z ichiga oladi [30-32], shuningdek, iqtisodiy

amaliyotda kelishuvlardan foydalanishni nazarda tutadi. Natijada, oqimlarning harakatlanishi ko'pincha logistika zanjiri ishtirokchilarining to'g'ridan-to'g'ri qarama-qarshi maqsadlariga erishadi, bu esa logistikaning turli xil munosabatlarni muvozanatlash, optimallashtirish va muvofiqlashtirish funksiyasining bajarilishini ko'rsatadi. Bu sizga mol-mulkning turli funksiyalarini alohida boshqarishdan uzoqlashishga va ularni integratsiya qilishga imkon beradi. Bu faoliyatning umumiy natijasiga olib keladi, bu esa shaxsiy ta'sirlar miqdoridan bir necha barobar ko'pdir.

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## KLASTER TIZIMLARINI TAHLIL VA SINTEZ QILISHGA TIZIMLI YONDASHUV

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Savdo-iqtisodiy bloklarni shakllantirishga qaratilgan birinchi qadam erkin savdo hududlarini yaratishdir. Jahon banki ma'lumotlariga ko'ra, 90- yillarning boshida bu hududlarda jahon savdosining taxminan 42 foizi amalga oshirilgan. Eng mashhur hududlar orasida Evropa erkin savdo uyushmasi (EFTA), evropa Ittifoqi (EI), Shimoliy Amerika erkin savdo hududi (NAFTA), Osiyo-Tinch okeani iqtisodiy hamkorlik (APEC) va boshqalar mavjud [1-4].

GATT davlatlarning shartnoma paytda, bojxona to'lovlarini kamaytirish, ularni qoplash, tarifsiz to'siqlardan iborat. Bu milliy ishlab chiqarish uchun subsidiyalar, turli andozalar va qoidalarga, mahsulotlarni sertifikatlashni joriy tartibda o'z ichiga oladi. Intellektual mulkni himoya qilish haqida GATT savollarga Urugvay Round, shuningdek, erkin savdo uchun asos bo'lishi mumkin. Tibbiy va fitosanitariya nazorati masalalari ko'tarilib uning echimi birmuncha xal etildi. Bu barcha masalalar endi jahon savdo tashkilotida qaror topishi kerak [5-9].

Mehnat va hamkorlik xalqaro bo'limi, ayniqsa tovarlarni taqsimlash, xalqaro biznes, klaster zanjirlarni va kanallari orqali ko'p millatli, ko'p sonli xalqlarni birlashishiga olib keldi. Investitsiyalar bo'yicha ortgan mablag'larni qaytarish bilan bog'liq xalqaro klaster kanallarini rivojlantirish istiqbollari, boshqa mamlakatlarda kam tariflar orqali klaster vositachilari, eng yaxshi moliyaviy va boshqa shartlar asosida kelishuvlar. Davlatlararo klaster kanallarini yaratish, ilgari aytib o'tilganidek, yirik xalqaro yuk tashish kompaniyalari, sug'urta kompaniyalari va global telekommunikatsiya tarmoqlari tomonidan osonlashtirildi [10-12].

Xalqaro klasterning mintaqaviy jihati "Maklador operatsiyalari" deb ataladi. AQSHda joylashgan kompaniyalar orasida, Meksikada ishlab chiqarilgan ishlab chiqarish ob'ektlaridan foydalanish, yarim tayyor mahsulotlar, komponentlar ishlab chiqarish, shuningdek elektron qurilma va televizorlarning yakuniy yig'ilishi uchun tushunchalar tobora ommalashmoqda. Aslida, "Maklador operatsiyalari" ostida AQSHda ishlab chiqaruvchi kompaniya Meksikada ishlab chiqarish va montaj ishlarini boshqarish uchun to'g'ridan-to'g'ri shartnomalar tuzadi yoki shartnomalar qiladi [4,13].

Meksikada ishlab chiqarish qiymati Amerikadagi shunga o'xshash xarajatlardan pastdir. Qo'shma Shtatlardagi kompaniyalar, odatda, yakuniy yig'ilish uchun Meksikaga tarkibiy qismlar va yarim tayyor mahsulotlarni yuboradilar, so'ngra tayyor mahsulotlarni AQSHga ko'chirishadi. Ushbu yondashuv ko'pgina kompaniyalar tomonidan qo'llaniladi. Global biznesdagi "Maklador operatsiyalari" tarkibida Amerika Qo'shma Shtatlari ishlab chiqaruvchilari Meksikada 1000 dan ziyod o'simliklardan foydalanadilar. Shunga o'xshash yondashuvlarni amalga oshirishga imkon beradigan muhim element bojxona to'lovlarini to'lamasdan yoki import to'lovlarini to'lamasdan mahsulotni olib kirish, saqlash, ishlab

chiqarish va keyinchalik eksport qilishni nazarda tutadigan soliq tushunchasi. Bu holat "Macladean operatsiyalari" kabi klaster alternativlarning iqtisodiy jozibadorligini oshiradi. Meksikadagi Maksarid operatsiyalarining muvaffaqiyatli amalga oshirilishi Markaziy va Janubiy Amerikada mavjud bo'lgan o'xshash imkoniyatlardan foydalangan holda namuna bo'lib xizmat qildi. Qo'shma Shtatlar bilan Meksika o'rtasidagi savdo aloqalarini o'rnatish istiqboliga qo'shimcha ravishda, ushbu alternativlardan foydalanish muhim afzalliklarni ta'minlaydi [14-18].

Xalqaro klaster faoliyatini amalga oshirish uchun samarali aloqa va boshqaruv tizimlaridan foydalanish kerak. Tovarlar hujjatlar, eksport va import nazorat va to'g'ridan-to'g'ri harakatini tegishli masalalarni, bugungi mijoz uchun alohida ahamiyat kasb etadi. Natijada barcha talablarni qondira oladigan yetkazib beruvchi eng raqobatbardosh hisoblanadi.

Xalqaro klaster strategiyasi valyuta kurslari qisqa muddatli va uzoq muddatli, ham tendensiyalarni ta'sir qiladi. Bu o'zgarishlar omborlar, zavod va tarqatish markazlari joylashgan, shuningdek, transport va tashuvchining rejimida tanlash kabi moddiy-texnik echimlarni qabul qilish haqida muhim ta'sir ko'rsatishi mumkin.

Xalqaro savdoda klaster xususiyatlari [19-22]:

- ichki bozorlarga buyurtma berish buyurtmalariga qaraganda ularning miqdori ancha katta. Odatda bu logistik xarajatlarni kamaytirish uchun amalga oshiriladi (masalan, maxsulotning miqdori uchun transport tariflaridan chegirmalar)

- xalqaro bozorlarda har xil bo'ladi. Ularni yetkazib berishning o'zgarishi, yetkazib berish uchun ko'proq imkoniyatlarni ko'rib chiqish, ko'plab vositachilar bilan shug'ullanish va hokazo .;

- xalqaro bozorlarda ko'p tajribaga ega bo'lmagan korxonalar uchun bu muayyan qiyinchiliklarni tug'diradi;

- tovarlarni yetkazib berishda yangi logistik vositachilar (yuk agentlari, bojxona brokerlik kompaniyalari);

- yetkazib berishning masofalari va vositachilarning ko'pligi korxonalar va uning mahsuloti iste'molchilari o'rtasida bevosita aloqa o'rnatishga to'sqinlik qiladi;

- savdo shartlari, yetkazib berish asoslari, to'lov shartlari korxonaning normal ishlashi uchun mutlaqo noma'lum va odatiy bo'lishi mumkin;

- Xalqaro transport hujjatlari va hujjatli protsedura yanada murakkab va xilma-xildir;

- Klaster ta'minoti tizimining ishtirokchilari o'rtasida axborot almashinuvini tashkil etish juda qiyin, ayniqsa, ko'plab mamlakatlar chegaralarini engib o'tish va shunga muvofiq turli xil axborot tizimlaridan foydalanish zarur [23,24].

Yuqorida keltirilgan muammolarni muvaffaqiyatli hal etish uchun korxonalar ular yuzaga keladigan operatsiyalarning murakkabligi va xilmaxilligini yaxshi bilishlari kerak.

Klaster faolliklari- qo'yilgan maqsadlarni amalga oshirayotgan to'laqonli klaster tizimida moddiy oqimga nisbatan qo'llanadigan harakatlar. Bunda quyidagilar ajratib ko'rsatiladi:

- klaster operatsiyalari, yoki elementar klaster faolliklari (ordinary logistics activity);
- klaster funktsiyalari, yoki kompleksli klaster faolliklari (complex logistics activity).



Klaster tizimlariga, qoidaga ko'ra, ularni tahlil va sintez qilishga tizimli yondashuvni qo'llash imkonini beradigan murakkab (katta) asosiy jihatlar xos bo'ladi. Ularning asosiylari quyidagilardan iborat [25-29]:

- ko'p sonli elementlar (bo'g'inlar) mavjudligi, alohida elementlar o'rtasida o'zaro aloqalar jarayoni ko'p omilliligi, ko'p pog'onali ma'murchilik tizimi, stoxastika kuchlari va omillarining tashqi muhitga ta'siri kabi belgilar bilan tavsiflanadigan murakkablik;
- strukturalanganlik- berilgan maqsadni amalga oshirayotgan boshqaruv ob'ektlari va sub'ektlaridan iborat bo'lgan ma'lum bir tashkiliy struktura mavjudligi;
- ierarxiklik-chiziqli yoki funktsional klaster boshqaruvi doirasida quyiroq pog'onadagi elementlarning yuqori pog'onadagi elementlarga bo'ysunishi;
- emerjentlik- berilgan maqsadli funktsiyaning alohida element yoki quyitizimlar bilan emas, balki butun tizim tomonidan amalga oshirilishi.

Klaster chiqishda berilgan ko'rsatkichlar bilan moddiy oqimlarga ega bo'lgan uyg'unlashtirilgan, muvofiqlashtirilgan klaster tizimlarini loyihalashtirish vazifasini qo'yadi va hal etadi. Bunday tizimlarning asosiy farqi ular tarkibidagi ishlab chiqarish kuchlarining muvofiqlik darajasi yuqori ekanligida bo'lib, bu boshdan-oxir moddiy oqimlarni boshqarish imkonini beradi. Klaster tizimlarini makroklaster va mikroklaster turlariga ajratish mumkin [30-32].

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## TRANSPORT TIZIMIDA QO‘LLANILADIGAN TELEMATIK ILOVALAR

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Zamonaviy telekommunikatsiya tizimlari har qanday masofaga, berilgan sifat parametrlari bilan, turli xabarlarini uzatishni ta'minlovchi har xil texnik vositalarning murakkab majmyasidan iborat [1,2,3]. Telekommunikatsiya tizimlarining asosini, namynaviy kanallar va traktlarni shakllantirish uchun mo'ljallangan, elektrik, tolali optik va radio liniyalari bo'yicha ishlovchi ko'p kanalli uzatish tizimlari tashkil etadi. Umymiy foydalanyvchilarning, idoraviy va mamlakat territoriyasidagi telekommunikatsiya aloqa tarmoqlari, texnologik moslashtiruvchi majmyalar ko'rinishida qo'llanilyvchi telekommunikatsiya uzatish tizimlari asosida ko'riladi [4,5,6]. O'zaro bog'langan aloqa tarmoqlari odatdagi xabarlarini uzatish tarmoqlaridan tashqari, standartlashtirilgan ko'p funktsiyali interfeyslarning chegaralangan majmyasi orqali amalga oshadigan, abonentlarga telefon xabarlarini uzatish bo'yicha keng spektrdagi xizmatlarni yetkazish uchun oxirgi qyrimlar (terminallar) orasida to'liq raqamli ulanishni ta'minlaydigan, integratsiya xizmatlariga ega bo'lgan raqamli aloqa tarmoqlarining ulanishi, abonentlarga belgilangan vaqtda, belgilangan joyga kengaytirilgan xizmatlar majmyasini yetkazib berishi mumkin bo'lgan intellektual tarmoq, masalan, chaqirayotgan abonentning haq to'lashi hisobiga telefon ulanishlarini amalga oshirish, kredit kartasi bo'yicha chaqiriq, qisqartirilgan raqamlar majmyasi bo'yicha murojaat etish, televoz berish va boshqalar, harakatda bo'lgan abonentlarga har qanday joyda aloqa xizmatini olish imkonini beruvchi mobil aloqa tarmoqlari, axborot almashish tezligi yuqori bo'lgan integratsiya xizmatli, keng polosali raqamli tarmoqlar; asinxron rejimda uzatish (Asynchronous Transfer Mode- ATM) va boshqa texnologiyalar yordamida axborotni transportlashtirish asosidagi yuqori tezlikli tarmoqlarni yaratish imkonini beradi [7,8,9]. [www.ziyouz.com](http://www.ziyouz.com) kutubxonasi yuqoridagilarni nazarda tutgan holda ushby darslik kitobi, telekommunikatsiya sohasi bo'yicha asosiy ta'rif va tushunchalar, kanallari chastota bo'yicha ajratilgan telekommunikatsiya uzatish tizimlarining tuzilish printsiplari, kanal va traktlarda hosil bo'luvchi shovqinlar va ularni sozlash, kanallari vaqt bo'yicha ajratilgan telekommunikatsiya uzatish tizimlarining tuzilishi, signallarni regeneratsiyalash, raqamli uzatish tizimlarida sinxronizatsiya, IKMli raqamli uzatish tizimlarining ierarxiyasi, raqamli oqimlarni birlashtirish va ajratish savollarini o'z ichiga olgan [10,11]. Shyningdek, SDH tizimlari asosidagi telekommunikatsiya tarmoqlarining tuzilishi, signallarni shakllanishi, SDH ning bazaviy elementlari va topologiyalari, sinxronizatsiya va tarmoqni boshqarish masalalari, tolali optik uzatish tizimlarini tashkil etish, to'lqinlarni zichlashtiruvchi texnologiyalar, multiservisli telekommunikatsiya tarmoqlari tuzilishining texnologik asoslari, abonentlar ulanuvchi tarmoqlarning telekommunikatsiya uzatish tizimlari, telekommunikatsiya uzatish tizimlarining texnikasidan foydalanish haqida ma'lumotlar berilgan.



Telekommunikatsiya tarmoqlarida ro‘y bergan hodisalar oqibatlarini bartaraf etish. Telekommunikatsiya tarmoqlarida ro‘y bergan hodisalar (avariyalar, shikastlanishlar) oqibatlarini bartaraf etish ushbu tarmoqlarning operatorlari tomonidan amalga oshiriladi.

Xulosa qilib aytganda Telekommunikatsiya tarmoqlarida ro‘y bergan hodisalarning oqibatlarini bartaraf etish ishlarini bajarish telekommunikatsiya vositalari joylashgan yer uchastkasi, bino yoki inshoot mulkdori egasi, ijarachisining roziligi olinishini talab etmaydi. Hodisalar oqibatlarini bartaraf etish natijasida mulkdorga egasiga, ijarachiga yetkazilgan zararlar tegishli operator tomonidan qoplanishi kerak.

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## TIJORAT BANKLARI FAOLIYATIDA RISKLARNI TARTIBGA SOLISH VA ULARNI KAMAYTIRISHDA MARKAZIY BANKNING O'RNI

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**Annotatsiya:** Ushbu maqolada tijorat banlari risklarini tartibga solish hamda ularni kamaytirishda Markaziy bankning o'rni qandayligi haqida hamda bank riskining tobora kuchayib boryotganda, ayniqsa global moliyaviy-iqtisodiy inqirozlarini oldini olishda Markaziy bank o'rni haqida keltirib o'tilgan. Markaziy bankning tijorat banklar muammosi, faoliyatidagi risklarni boshqarishdagi o'rni.

**Kalit so'zlar:** Bank aktivlari, likvidlilik riski, iqtisodiy meyorlar, Markaziy bank, kredit riski, kreditlar.

Bank faoliyati deyarli barcha mamlakatlarda qat'iy ravishda tartibga solinadi va nazorat qilinadi. Zero, banklar mamlakatdagi kapitalni safarbar qilish va kreditlar taqdim etish bilan mamlakat moliya tizimida faol ishtirok etadi. Va albatta, nazoratning asosiy maqsadi aholini qolaversa, mamlakat manfaatlarini himoya qilishdir. Bank nazoratini amalga oshirishning bir qator sabablari manfaatlar nuqtainazaridan kelib chiqadi va ular qo'yidagilardan iborat bo'lishi mumkin:

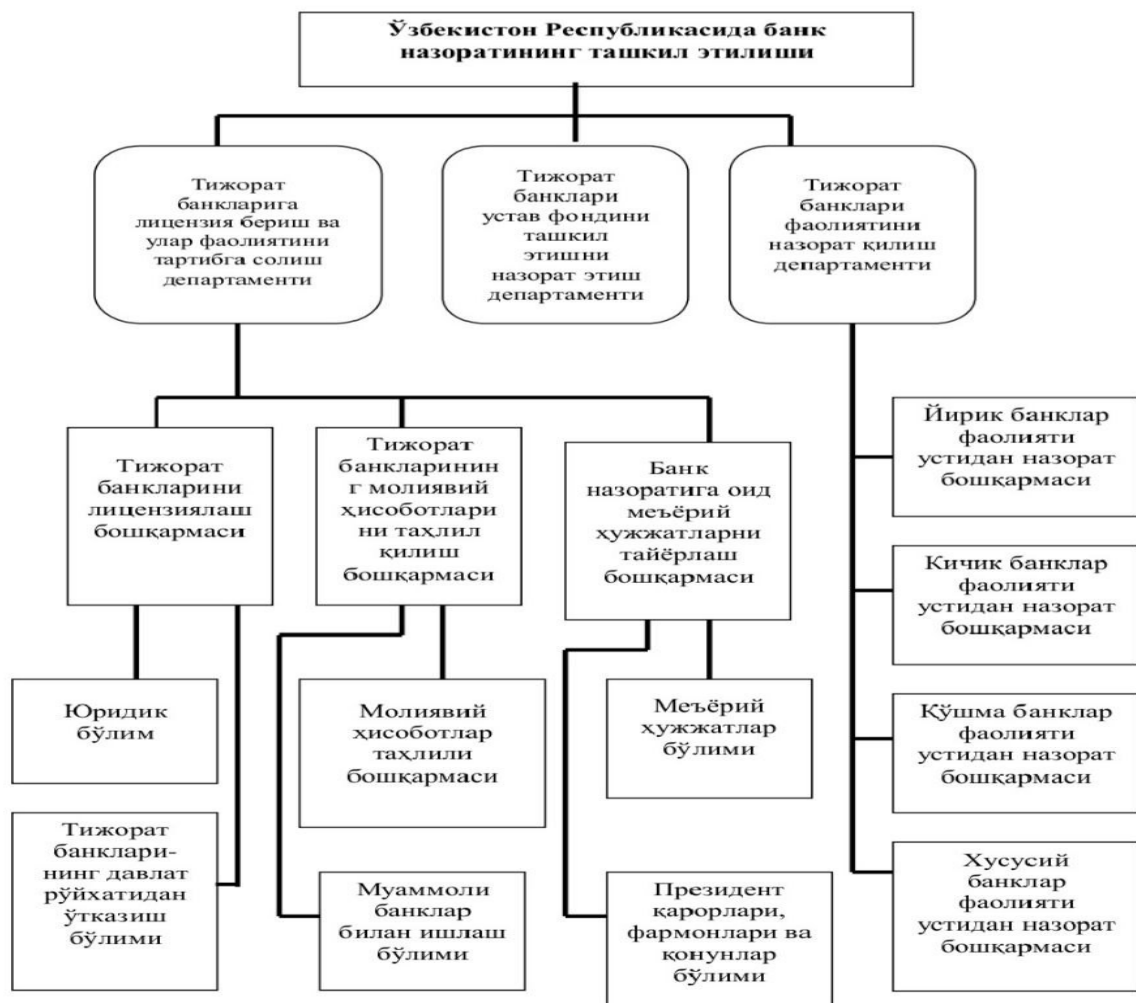
Birinchidan, banklar mamlakat aholisining jamg'armasini asosiy saqlovchisi hisoblanadi. Banklar faoliyatini nazorat qilish mamlakat aholisini moddiy zarar ko'rishdan saqlash uchun tashkil etiladi. Chunki banklarning asosiy maqsadi daromad olishga qaratilgan bo'lib, bank daromadlilik uning likvidligi bilan teskari mutanosiblikda bo'lgan holda risk bilan to'g'ri mutanosiblikdadir. Bu esa ba'zi hollarda banklarning investitsion va kredit portfelining yomonlashuviga olib kelishi mumkin.

Ikkinchidan, bank kreditorlari manfaatlarini himoya qilish maqsadida banklar faoliyatini nazorat qilish, tartibga solish amaliyotlari qo'llaniladi. Xo'jalik yurituvchi sube'ktlar va individual shaxslar o'z faoliyatlarini rivojlantirish, turmush faravonliklarini oshirish uchun tijorat banklarining turli xil kreditlaridan foydalanishadi. Ushbu kreditlar keng omma uchun yo'naltirilishini hamda bank xizmatlarining narxini oshib ketmasligini ta'minlash maqsadida hukumat, bank nazoratining bilvosita vositasi bo'lgan banklar o'rtasidagi kuchli raqobatni ta'minlab erishadi.

Uchinchidan, hukumat o'z iqtisodiy manfaatlarini himoya qilish uchun samarali bank nazoratini tashkil qilishga harakat qiladi. Banklar hukumatning fiskal agenti bo'lish bilan birga ularning o'zlari ham mamlakat byudjetiga soliq to'lovlarini amalga oshirishlari bilan hukumat tomonidan ularning yuqori daromadlilik qo'llab-quvvatlanadi va shu bilan birga, yuqori daromadlilik past darajadagi likvidlilikni keltirib chiqarib, o'z navbatida yuqori risk tufayli mamlakatda tizimli riskni keltirib chiqaradi.

To'rtinchidan, bank aktsiyadorlari va ishchi-xodimlar manfaatlarini himoya qilish uchun ham bank nazorati tashkil etiladi. To'g'ri, bank faoliyatini tartibga solishda haddan tashqari nazorat qilish va raqobatning rivojlanishiga xalaqit beradigan omilga aylanadigan

chegarani belgilash oson emas. Shuning uchun, jahonda umumiy qabul qilingan tamoyillar va qoidalar har bir mamlakatda aniq vaziyat tahlilini hisobga olgan holda qo'llaniladi.



1-jadval. O'zbekiston Respublikasida bank nazoratining tashkil etilishi.<sup>24</sup>

<sup>24</sup> S.S.Tog'ayev.Bank risklari.O'quv qo'llanma.Samarqand 2019

Davlatlar	Bank nazoratini tashkil etuvchi organ	Boshqa nazorat organi bormi?	Nazorat organining hisobdorligi
Avstriya	Moliya Vazirligi	Yo'q	Parlament
Bahrayn	Bahrayn Monetar Agentligi	Yo'q	Direktorlar Kengashi
Bangladesh	Bangladesh Banki	Yo'q	Davlat
Belorussiya	Belorussiya Milliy Banki	Bor	Prezident
Belgiya	Bank va Moliya Komissiyasi	Yo'q	Iqtisodiyot Vazirligi va Moliya Vazirligi
Bostvana	Moliyaviy Institutlar Departamenti, Botsvana Banki	Yo'q	Moliya va Rivojlanishni Rejalashtirish vazirligi
Braziliya	Braziliya Markaziy Banki	Yo'q	Moliya vazirligi
Burundi	Markaziy Bank Inspeksiyasi	Yo'q	Markaziy Bank raisi
Xitoy	Xitoy Xalq Banki	Yo'q	Davlat Konsuli
Chexiya Respublikasi	Milliy Bank, Bank nazorati, qimmatli qog'ozlar komissiyasi	Bor	Milliy Bank Direktorlar Kengashi
Daniya	Daniya Moliyaviy nazorati	Yo'q	Iqtisodiyot Vazirligi
Misr	Misr Markaziy Banki	Yo'q	Markaziy bank mustaqil organ
Estoniya	Bank nazorati Departamenti	Yo'q	Parlament
Finlandiya	Moliyaviy nazorat	Yo'q	Parlament
Gresiya	Gresiya Banki	Yo'q	Parlament
Vengriya	Bank va Kapital Bozorini Nazorat qilish; Vengriya Markaziy Banki	Bor	Moliya Vazirligi
Hindiston	Moliyaviy Nazorat Boshqarmasi	Yo'q	Hindiston Rezerv Banki
Isroil	Markaziy Bankning Bank nazorati Departamenti	Yo'q	Markaziy Bank raisi
Quvayt	Quvayt Markaziy Banki	Yo'q	Moliya

			vazirligi
Latviya	Latviya Banki; Kredit Institutlarini nazorat qilish Departamenti	Bor	Ma'lumot yo'q
Koreya Respublikasi	Bank Nazorati Organi va Moliyaviy Nazorat Komissiyasi; Moliya Vazirligi va maxsusbanklarni iqtisodiy nazorat	Bor	Hukumat
Makedoniya	Makedoniya Respublikasi Milliy Banki, Nazorat Departamenti	Yo'q	Parlament
Malayziya	Malayziya Markaziy Banki	Yo'q	Moliya Vazirligi
Rossiya	Rossiya Federatsiyasi Markaziy Banki		Davlat Dumasi
Singapur	Singapur Monetar Ograni	Yo'q	Hukumat
Sloveniya	Sloveniya Banki	Yo'q	Parlament
Shvesiya	Finansinspektionen (Moliyaviy nazorat)	Yo'q	Hukumat
Shveysariya	Banklarning Federal Komissiyasi	Yo'q	Parlament va Hukumat
Tayvan	Markaziy Bank, Moliya Vazirligi, Markaziy Depozitlarni Sug'urtalash Korporatsiyasi	Bor	Premier-Ministr
Tojikiston	Tojikiston Milliy Banki Bank Nazorati Departamenti	Yo'q	Tojikiston Markaziy Banki

2-jadval.<sup>25</sup> Bank nazorati.

O'zbekiston Respublikasi Markaziy Banki tijorat banklari faoliyatidagi risklarni nazorat qilishda iqtisodiy meyorlar o'rnatish usulidan va inspeksion tekshiruvdan foydalaniladi. Hozorgi davrda O'zbekiston Respublikasi Markaziy banki tomonidan tijorat banklari faoliyatidagi risklarni nazorat qilish maqsadida 14ta iqtisodiy me'yordan foydalanilmoqda. Shundan 7ta iqtisodiy mayor kredit riski bo'yicha, 3ta iqtisodiy me'yor portfel riski bo'yicha, 2ta iqtisodiy me'yor- valyuta riski bo'yicha, 2ta iqtisodiy me'yor likvidlilik riski bo'yicha o'rnatilgan.

<sup>25</sup> Bank nazoratini tashkil etuvchi organ. S.S.Tog'ayev.Bank risklari.O'quv qo'llanma.Samarqand 2019



Tijorat banklarida korporativ boshqaruv asoslarini mustahkamlash maqsadida Respublikamiz Markaziy banki taklifi bilan har bir tijorat banki tarkibida ichki nazorat boshqarmasi tashkilqilingan bosh bankda boshqarma va uning har bir bank filialida bittadan xodimi bo‘lib, filialda o‘tayotgan barcha bank operatsiyalarini tahlil qilib, bosh bank tarkibidagi nazorat boshqarmasiga hisobotlarini taqdim qiladi. Ushbu nazorat tizimining tashkilqilinganiga ko‘p vaqt bo‘lmasa-da, uning samarasi yaqqol ko‘rinmoqda.<sup>26</sup>

Banklar asosiy hamda regulyativ kapitalining minimal darajasiga hamda bir qarzdor yoki o‘zaro dahldor qarzdorlar guruhiga to‘g‘ri keluvchi tavakkalchilikning eng yuqori darajasiga nisbatan talablarning joriy qilinishi banklar kapitalini zarur miqdorda ta‘minlash va aktivlarning tavakkalchilik darajasini boshqarish uchun samarali mexanizm bo‘lib xizmat qilayotgan bo‘lsa, banklarning likvidlik holati bo‘yicha minimal talablarning belgilanishi avtivar va majburiyatlarning o‘zaro mutanosib ravishda boshqarilishini ta‘minlamoqda.

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<sup>26</sup> Bank axborotnomasi №16

## THE USE OF THE STYLISTIC DEVICE OF SIMILE IN THE ENGLISH LITERATURE

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**Abstract:** *In linguistics, there are theoretical assumptions about the use of cliché similes that focus on their role in language production, comprehension, and cultural significance. Some theoretical perspectives suggest that cliché similes serve as cognitive shortcuts that help speakers convey complex ideas quickly and efficiently. They are seen as linguistic formulas that have become ingrained in a language community's collective knowledge and are easily recognized and understood by speakers.*

**Key words:** *simile, comparison, concept, utilize, imagery,*

Similes can be found in any type of writing, from classic literature to contemporary marketing. They are frequently utilized to generate imagery that allows readers to visualize a scenario or character. For example, "Her hair was as black as coal" (*Qizning sochlari tunde qop-qora edi*) is a simile that paints a vivid mental picture of the character being described. Similes can also be used to express emotions, for example, "I wandered lonely as a cloud" (*W. Wordsworth*) or "She's as cute as a button" (*musjukchadek yoqimtoy*). It can be seen from examples that the simile is not only a linguistic or stylistic phenomenon but also, it is a case of cognition, communication, expression of thought, translation and literary studies as well.

From a sociolinguistic perspective, cliché similes can also be viewed as markers of social identity and group membership. They may reflect shared cultural experiences, values, and beliefs within a community. Additionally, the study of cliché similes can provide insights into the evolution of language, the transmission of cultural knowledge, and the ways in which language is used to create meaning and establish connections between individuals.

As V.G. Belinsky wrote the things are best of all learned by simile<sup>27</sup>. The intensification of some features of the concept in question is realized in a device called simile. Ordinary comparison and simile must not be confused. They represent two diverse processes. Comparison means weighing two objects belonging to one class of things with the purpose of establishing the degree of their sameness or difference. To use a simile is to characterize one object by bringing it into contact with another object belonging to an entirely different class of things. Comparison takes into consideration all the properties of the two objects, stressing the one that is compared.

Simile excludes all properties of the two items save one, which is made common to both. For example, "This little boy appears to be as clever as his father" is a standard comparison. 'Boy' and his father are both human beings, therefore this is not a simile, but rather an ordinary comparison. But in the sentence: "*Maidens, like moths, are ever caught*

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<sup>27</sup> Galperin I. A. *Stylistics*.pdf p.150 <https://studfile.net/preview/5116113/>

by glare" (Byron), we have a simile. 'Maidens' and 'moths' belong to different groups of objects, and Byron discovered that the idea moth represents one of the secondary characteristics of the concept maiden, namely, being readily persuaded. Of the two notions combined in the simile—one characterized (maidens) and the other characterizing (moths), the amplified feature will be more inherent in the latter than in the former.

Furthermore, the characterized object is regarded in a fresh and unexpected way, as if the writer imposes this feature on it. Similes force one object to be compared to another, even if they are utterly different. And, unconsciously, the analogy leads to a new knowledge of both the object characterizing and the thing characterized. The properties of an object can be viewed from several perspectives, such as its condition, activities, manners, and so on.

As a result, similes can be based on adjectives, adverb modifiers, verb predicates, and so on. Similes have formal aspects in their construction, such as connective words like *like as, as, as if, and seem*. Here are some instances of similes drawn from diverse sources, demonstrating the range of structural designs of this stylistic device. "His mind was restless, but it worked perversely and thoughts Jerked through his brain like the misfiring of a defective carburetor" (S. Maugham)<sup>28</sup>.

The structure of this simile is noteworthy since it is consistent. Let us analyze it. The term 'jerked' in the 'micro-context, i.e. in connection with 'thoughts' is a metaphor, which led to the simile 'like the misfiring of a damaged carburetor', where the verb to jerk carries its direct logical meaning. So the linking idea is the movement jerking, which reminds the author of a parallel between the workings of the man's brain and a poorly functioning, i.e. misfiring, carburetor. To put it another way, a simile is used to describe activity. Another example: "*It was that moment of the year when the countryside seems to faint from its own loveliness, from the intoxication of its scents and sounds.*" (J. Galsworthy)<sup>29</sup>

This is an example of a half-metaphoric simile. If not for the structural word 'seems', we'd term it a metaphor. Indeed, if we exclude the word 'seems\*' and add, "the countryside faints from...", the clue-word 'faint' becomes metaphorical. But the word 'seems' distinguishes between the concepts of immobility and fainting. It is a simile in which the second member—the human being—is only implied by the term faint. The semantic character of the simile-forming parts appears and as if is such that they only indirectly convey resemblance. The connectives 'like' and 'as' are noticeably different.

These are more categorical and establish quite straightforwardly the analogy between the two objects in question. Sometimes the simile-forming like is placed at the end of the phrase almost merging with it and becoming half-suffix, for example: "Emily Barton was very pink, very Dresden-china-shepherdess like."

<sup>28</sup> [https://www.yaneuch.ru/cat\\_23/stilistika-anglijskogo-yazyka/306223.2390151.page2.html](https://www.yaneuch.ru/cat_23/stilistika-anglijskogo-yazyka/306223.2390151.page2.html)

<sup>29</sup> <https://books.google.co.uz/books?id=tchcCwAAQBAJ&pg=PT101&lpg=PT101&dq=%22It+was+that+moment+of+the+year+when+the+countryside+seems+to+faint+from+its+own+loveliness,+from+the+intoxication+of+its+scents+and+sounds&source=bl&ots=FilwlcS87&sig=ACfU3U10FUix4iWEtZWxmdsv5hs42VaBQg&hl=ru&sa=X&ved=2ahUKEwibwODDvIWFAxU6ExAIHTSPDoYQ6AF6BAGXEAM#v=onepage&q=%22It%20was%20that%20moment%20of%20the%20year%20when%20the%20countryside%20seems%20to%20faint%20from%20its%20own%20loveliness%2C%20from%20the%20intoxication%20of%20its%20scents%20and%20sounds&f=false>

In simple non-figurative language, it will assume the following form: "Emily Barton was very pink, and looked like a Dresden-china-shepherdess"

Similes can reveal similarities in the nature of acts performed. In this situation, the two components of the simile's structural design will resemble each other based on their activities. Thus: "The Liberals have plunged for entry without considering its effects, while, the Labor leaders like cautious bathers have put a timorous toe into the water and promptly withdrawn it"

The comparison in this excerpt from a newspaper story 'like cautious bathers' is predicated on the simultaneous realization of the word plunge's two meanings. The fundamental meaning 'to throw oneself into the water' produced the figurative periphrasis 'having inserted a timorous toe into the water and swiftly withdrawn it' standing for 'have abstained from taking action.'

In the English language, there is a large list of overused similes pointing out the connection between the many attributes, states, or activities of a human being and the animals thought to be the bearers of the given quality, such as: *treacherous as a snake*(*ilondek xiyonatkor*), *sly as a fox*(*tulkidek ayyor*), *busy as a bee*(*asalaridek band*), *industrious as an ant*(*chumolidek mehnatkash*), *faithful as a dog*(*it kabi sodiq*), *to work like a horse*(*ho`kizdek ishlamoq*), *to be led like a sheep*(*qo`ydek yuvosh*), *to fly like a bird*(*qushdek parvoz qilmoq*), *to swim like a duck*(*o`rdakdek suzmoq*), *stubborn as a mule*(*buqadek qaysar*), *hungry as a bear*(*och ayqdek*), *thirsty as a camel*(*chanqagan tuyadek*), *to act like a puppy*(*kuchukdek yugurmoq*), *playful as a kitten*(*o`ynoqi mushukchadek*), *vain (proud) as a peacock*(*tovusdek kekkaygan*), *slow as a tortoise*(*toshbaqadek sekin*) and many others of the same type.

These combinations, however, have ceased to be genuine similes and have become clichés<sup>30</sup> (see p. 177) in which the second component has become merely an adverbial intensifier. The logical meaning is only faintly understood. The stylistic use of clichés as similes entails employing well-known phrases or idioms to draw inventive or familiar parallels. Clichés can bring familiarity or humor to a sentence, but they can also be overused and unoriginal. It's crucial to use clichés carefully and think about how they affect the overall tone and meaning of your writing.

Overall, theoretical assumptions about cliché similes in linguistics highlight their multifaceted role in communication, cognition, and social interaction. Researchers continue to explore the nuances of cliché similes to better understand their impact on language use and interpretation.

Many clichés began in classic works like Shakespeare or specific stories and were repeated to communicate the same timeless theme that the original author so effectively portrayed. When Shakespeare first used the expression "a rose by any other name would smell as sweet" in his play *Romeo and Juliet*, it was deemed innovative. Nowadays, comparing a lady to a flower is considered a cliché.

<sup>30</sup> Galperin I. A. Stylistics.pdf p.177 <https://studfile.net/preview/5116113/>



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