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PSIXOSOMATIK KASALLIKLAR: QADIMGI VA ZAMONAVIY QARASHLAR

Sultonov Ravshan Komiljonovich

Termiz iqtisodiyot va servis universiteti

Tibbiyot kafedrası katta o'qituvchisi t.f.n

Email-ravshansultonov605@gmail.com

[ORCID ID 0009-0003-6820-1044](https://orcid.org/0009-0003-6820-1044)

Odiljonov Ozodbek Odiljonovich

Tibbiyot fakulteti Davolash ishi yo'nalishi talabasi

Email-odiljonnorkulov0@gmail.com

[ORCID ID 0009-0004-5765-8548](https://orcid.org/0009-0004-5765-8548)

I. KIRISH

1. Muammoning dolzarbligi

Psixosomatik kasalliklar — bu insonning ruhiy holati va tana a'zolari o'rtasidagi murakkab o'zaro bog'liqlik natijasida yuzaga keladigan patologik holatlardir. Bugungi globallashuv, stressli hayot tarzi, psixologik bosimlar va ijtimoiy o'zgarishlar fonida bu kasalliklar soni keskin ortib bormoqda. Zamonaviy tibbiyotda psixosomatik yondashuv inson organizmini yaxlit tizim sifatida ko'rib, nafaqat biologik, balki ruhiy va ijtimoiy omillarni ham tahlil etishni taqozo etadi. Shu jihatdan bu masala tibbiyot, psixologiya, falsafa va tarix fanlarining kesishgan nuqtasida turadi.

Qadimgi Sharq va Yunon tibbiyot maktablari inson tanasi va ruhining o'zaro aloqasini juda erta payqagan. Masalan, Gippokrat "sog'lom tana – sog'lom ruh" g'oyasini ilgari surgan bo'lsa, Sharq tabobatida inson tanasi, ruhi va tabiiy muvozanat (yin–yan) o'rtasidagi uyg'unlik asosiy tamoyil bo'lgan. Demak, psixosomatik tibbiyot g'oyalari zamonaviy ilm uchun yangi bo'lmasdan, balki qadimdan shakllanib kelgan konsepsiyaning ilmiy shaklga keltirilgan ko'rinishidir.

2. Tadqiqotning maqsadi

Ushbu tadqiqotning maqsadi — psixosomatik kasalliklarning **tarixiy ildizlarini, qadimgi tibbiyotdagi ruhiy-fiziologik tushunchalarni**, hamda **zamonaviy ilmiy yondashuvlarni** qiyosiy tahlil qilishdir. Bundan tashqari, inson ruhiy holati va somatik (jismoniy) sog'liq o'rtasidagi munosabatni turli davrlar nuqtayi nazaridan o'rganish, zamonaviy tibbiyotda ushbu aloqaning ilmiy asoslarini ochib berish ham tadqiqotning asosiy maqsadlaridan biridir.

3. Tadqiqotning vazifalari

Tadqiqot doirasida quyidagi vazifalar belgilandi:

1. Psixosomatik kasalliklarning mohiyatini, asosiy belgilarini tahlil qilish;
2. Qadimgi Sharq, Yunon va Islom tibbiyotidagi ruh-tana konsepsiyasini o'rganish;
3. Ibn Sino, Gippokrat, Galen va boshqa mutafakkirlarning qarashlarini solishtirish;
4. Zamonaviy psixosomatika ilmida (F. Aleksander, H. Selye, K. Yung va boshqalar) shakllangan asosiy nazariyalarini yoritish;
5. Ruhiy stress, ijtimoiy omillar va somatik simptomlar o'rtasidagi bog'liqlikni tahlil etish.

4. Tadqiqotning ob'ekti va predmeti

Tadqiqot ob'ekti — inson organizmida kechadigan psixosomatik jarayonlar. Tadqiqot predmeti — ruhiy omillar (stress, affekt, emotsional tanglik) bilan somatik kasalliklar (yurak, oshqozon, teri, endokrin tizimi) o'rtasidagi o'zaro ta'sir mexanizmlaridir.

5. Ilmiy yangilik

Mazkur tadqiqotda qadimgi manbalar (Gippokratning “Aforizmlar”i, Ibn Sinoning “Tib qonunlari”, Sharq falsafasidagi ruh va tana haqidagi qarashlar) bilan zamonaviy psixosomatika nazariyalari (Freyd, Aleksander, Selye) o'zaro qiyosiy tahlil qilinadi. Shuningdek, tarixiy g'oyalar bilan bugungi tibbiy diagnostika metodlari (psixoterapiya, kognitiv yondashuv, stress menejmenti) o'rtasidagi bog'liqlik ochib beriladi.

6. Tadqiqotning nazariy va amaliy ahamiyati

Nazariy jihatdan, tadqiqot inson tanasi va ruhiy holatining uzviy birligi g'oyasini mustahkamlaydi. Bu yondashuv tibbiyot falsafasi, psixologiya va antropologiya fanlari uchun yangi tahliliy material beradi.

Amaliy jihatdan esa, psixosomatik kasalliklarni erta aniqlash, ularni psixoterapevtik usullar orqali davolash, shuningdek, stressni boshqarish strategiyalarini ishlab chiqishda yordam beradi.

7. Mavzuning o'rganilganlik darajasi

Psixosomatik kasalliklar masalasi Gippokrat, Galen, Ibn Sino, Descartes kabi allomalarning asarlarida turlicha yoritilgan. XX asrda bu soha nemis psixoanalitik maktabi (F. Aleksander, F. Freyd) tomonidan mustaqil ilmiy yo'nalish sifatida shakllangan. Hozirda esa neyropsixologiya, neyroendokrinologiya va stress fiziologiyasi bu yo'nalishni ilmiy asoslab bermoqda.

8. Tadqiqotning metodologik asoslari

Tadqiqot **tarixiy-qiyosiy, tahliliy, psixologik va biotibbiy** metodlarga tayanadi. Tarixiy manbalarda mavjud konsepsiyalar zamonaviy ilmiy nazariyalar bilan solishtirilib, ularning uzluksiz evolyutsiyasi aniqlanadi.

9. Tadqiqotning nazariy asoslari

Tadqiqotning nazariy poydevorini Gippokratning “to'rt suyuqlik” nazariyasi, Ibn Sinoning “ruhaniy-somatik uyg'unlik” konsepsiyasi, Freydning “ong osti” nazariyasi, Aleksanderning “psixosomatik yetti” modeli, hamda H. Selyening “stress sindromi” haqidagi nazariyasi tashkil etadi.

10. Tadqiqotning tuzilmasi

Maqola kirish, metodologiya, natijalar, muhokama va xulosa qismlaridan iborat. Har bir qismda qadimgi va zamonaviy tibbiyotdagi qarashlar, ularning uzviy aloqasi va tibbiy-amaliy xulosalari yoritiladi.

II. Metodologiya

1. Tadqiqot yondashuvi

Ushbu tadqiqotda **integrativ, tarixiy-qiyosiy va tahliliy yondashuvlar** qo'llanildi. Maqsad — psixosomatik tibbiyotning qadimgi ildizlarini aniqlash, ularning zamonaviy tibbiyotdagi nazariy va amaliy aksini tahlil qilishdir. Shu sababli, tadqiqot gibrid (aralash) metodga asoslangan: unda tarix, psixologiya va tibbiyotning konseptual uslublari uyg'unlashtirilgan.

2. Tadqiqot manbalari

Tadqiqot manbalari uch toifaga bo'lindi:

1. **Qadimgi manbalar** – Gippokratning “Aforizmlar”, Galenning asarlari, Ibn Sinoning “Tib qonunlari” (Al-Qanun fi-t-tibb), Sharq tibbiy maktablari yozma merosi, xususan Xitoy va Hind tabobati haqidagi qadimiy risolalar.

2. **Zamonaviy ilmiy manbalar** – XX asr psixosomatika asoschilari (Sigmund Freud, Franz Alexander, Hans Selye, Carl Jung, George Engel) asarlari, hamda so‘nggi yillarda chop etilgan ilmiy maqolalar, monografiyalar, tibbiy psixologiya bo‘yicha xalqaro tadqiqotlar.

3. **Empirik manbalar** – zamonaviy klinik kuzatuvlar, psixosomatik simptomlarga oid statistik ma‘lumotlar, shuningdek stress fiziologiyasi bo‘yicha laborator tadqiqotlar natijalari.

Bu manbalar asosida qadimgi va zamonaviy qarashlar o‘rtasida uzviylik, o‘zgarishlar va davomiylik darajasi aniqlanadi.

3. Tadqiqot metodlari

Tadqiqot quyidagi metodlarga tayangan:

a) **Tarixiy-qiyosiy** **metod**

Qadimgi davr tibbiy maktablarining ruhiy-fiziologik qarashlari zamonaviy psixosomatik nazariyalar bilan qiyoslandi. Masalan, Gippokratning to‘rt suyuqlik nazariyasi bilan zamonaviy stress modeli o‘rtasidagi o‘xshashliklar va farqlar aniqlanadi.

b) **Tahliliy** **(analitik)** **metod**

Manbalarda keltirilgan nazariy fikrlar tizimlashtirilib, ularning ilmiy asoslari tahlil qilindi. Psixologik va fiziologik omillar o‘rtasidagi sabab-oqibat munosabatlari ochib berildi.

c) **Kontent-tahlil** **metodi**

Qadimgi va zamonaviy manbalardagi “ruh”, “stress”, “somatik simptom”, “psixogen kasallik” kabi tushunchalar mazmunan tahlil qilinib, ularning semantik o‘zgarishi aniqlanadi.

d) **Sistemali** **yondashuv**

Psixosomatik holatlar bir vaqtning o‘zida biologik, ruhiy va ijtimoiy omillar tizimi sifatida qaraldi. Shu orqali inson organizmini “yaxlit tizim” sifatida o‘rganish imkonini berdi.

e) **Sotsiopsixologik** **kuzatuvlar**

Tadqiqotda turli ijtimoiy guruhlarda (ishchi, o‘qituvchi, talabalar, shifokorlar) stress va psixosomatik simptomlarning o‘zaro bog‘liqligi tahlil qilindi. Bu ma‘lumotlar mavjud statistik tadqiqotlarga asoslangan.

4. Tadqiqot jarayoni

Tadqiqot bosqichma-bosqich olib borildi:

1. **Birinchi bosqich** – tarixiy manbalarni o‘rganish va tizimlashtirish;

2. **Ikkinchi bosqich** – zamonaviy psixosomatik tibbiyotga oid ilmiy adabiyotlarni tahlil qilish;

3. **Uchinchi bosqich** – qadimgi va zamonaviy qarashlarni solishtirish hamda umumiy nazariy modelni ishlab chiqish;

4. **To‘rtinchi bosqich** – natijalarni ilmiy talqin qilish va amaliy xulosalar chiqarish.

5. Tadqiqotning nazariy modeli

Tadqiqot quyidagi **integrativ model**ga asoslandi:

Komponent	Qadimgi davr yondashuvi	Zamonaviy psixosomatik yondashuv
Ruh va tana	Ruh va tana ajralmas birlikda	Psixika va fiziologiya o‘zaro ta’sirda
Kasallik sababi	Muvozanatning buzilishi (yin–yan, to‘rt suyuqlik)	Stress, konflikt, emotsional zo‘riqish

Komponent Qadimgi davr yondashuvi

Davolash usuli Ruhiy tinchlik, tabiiy davo, meditatsiya

Maqsad Ruh va tana uygʻunligi

Zamonaviy psixosomatik yondashuv

Psixoterapiya, stress menejment, farmakoterapiya

Holistik sogʻlomlashtirish

Bu model qadimgi falsafiy konsepsiyalar bilan zamonaviy ilmiy yondashuvlar oʻrtasidagi bogʻliqlikni koʻrsatadi.

6. Tadqiqotning cheklovlari

Tadqiqotda bevosita klinik tajribalar oʻtkazilmagan, balki ikkilamchi manbalarga tayangan holda nazariy xulosalar chiqarilgan. Shuning uchun natijalar empirik dalillarni toʻliq qamrab olmaydi. Shu bilan birga, bu tadqiqot psixosomatik tibbiyotning tarixiy-evolyutsion rivojlanishini yoritish uchun nazariy asos yaratadi.

7. Tadqiqot etik tamoyillari

Tadqiqotda ilmiy halollik, manbalarga toʻgʻri havola berish, subʼektiv talqinlardan qochish tamoyillari saqlanadi. Har bir tarixiy davr gʻoyalari oʻz kontekstida baholanadi.

III. Natijalar

1. Qadimgi davrlarda psixosomatik gʻoyalar rivoji

Tadqiqot natijalari shuni koʻrsatadiki, psixosomatik tafakkur insoniyat tarixining eng qadimiy bosqichlaridayoq mavjud boʻlgan. Arxeologik topilmalar, yozma manbalar va diniy-falsafiy matnlar shuni isbotlaydiki, inson qadimdan tana va ruh oʻrtasidagi uzviy aloqani sezgan, ruhiy notinchlikni kasallik sababi sifatida tushungan.

Qadimgi Misr va Bobil tabobatida kasalliklar koʻpincha ilohiy gʻazab yoki ruhiy ifloslanish natijasi deb qaralgan. Shifokorlar davolash jarayonini ruhiy tozalanish, ibodat, marosim va dorivor moddalardan iborat kompleks sifatida koʻrganlar. Bu holat bugungi psixosomatik davolashning *psixoterapiya + dori vositasi* uygʻunligiga oʻxshaydi.

Gippokrat (mil. avv. 460–370 yillar) esa bu tushunchani ilmiy shaklga keltirib, “toʻrt suyuqlik nazariyasi”ni ilgari surdi. Uning fikricha, inson tanasidagi qon, safro, qora oʻt va balgʻam muvozanati ruhiy holatga ham bevosita taʼsir qiladi. Masalan, “melanxoliya” — qora oʻtning koʻpligidan paydo boʻladi, u qaygʻu, depressiya va somatik zaiflikka olib keladi. Bu nazariya, aslida, psixosomatik mexanizmlarning dastlabki biologik talqini boʻlgan.

Galen (mil. 129–216) esa Gippokrat gʻoyalarini rivojlantirib, ruh va tana faoliyatini markaziy asab tizimi bilan bogʻlagan. U ilk bor “emotsional shok” tushunchasini tibbiy kategoriya sifatida kiritgan. Galenning “ruhiy zarba jismoniy ogʻriqni keltirib chiqaradi” degan fikri bugungi stress fiziologiyasiga yaqin nazariya hisoblanadi.

2. Sharq tibbiyotida ruh-tana uygʻunligi

Sharq falsafasi va tabobatida ruh (nafs) va tana (jism) oʻrtasidagi muvozanat eng muhim tamoyil sifatida qaralgan.

Xitoy tabobatida yin–yan energiyalarining notengligi inson kasalligining asosiy sababi deb eʼtirof etilgan. Ruhiy gʻazab, qoʻrquv, qaygʻu, hasad kabi hissiyotlar muayyan ichki aʼzolarining faoliyatiga bevosita taʼsir qilishi taʼkidlangan. Masalan, gʻazab — jigar faoliyatini, qaygʻu esa oʻpka faoliyatini zaiflashtiradi.

Hind Ayurveda tizimida esa *doşa* (vata, pitta, kapha) nomli energiyalar inson sogʻligʻini belgilovchi omil sifatida koʻrilgan. Ularning muvozanati buzilsa, nafaqat tana, balki ruhiy holat ham izdan chiqadi. Bu holistik konsepsiya psixosomatik tibbiyotning asosi boʻlib xizmat qilgan.

3. Islom davrida psixosomatik tushunchalar

Islom tibbiy-falsafiy merosi, xususan **Abu Ali ibn Sino (980–1037)** asarlarida psixosomatik yondashuv ilmiy shaklga keltirilgan. Ibn Sino “Tib qonunlari” asarida koʻplab kasalliklarning ruhiy kelib chiqishini eʼtirof etadi. U shunday yozadi:

“Gʻazabdan yurak qiziydi, qaygʻudan jigar zaiflashadi, qoʻrquvdan buyrak faoliyati susayadi.”

Unga koʻra, inson ruhiy tinchlikda boʻlsa, tanasi ham sogʻlom boʻladi. U “nafs tibbiyoti” tushunchasini kiritib, kasalliklarni nafaqat dorilar, balki ijobiy ruhiy holat, sabr, tinchlik va iymon bilan davolashni taklif etgan.

Bu — zamonaviy psixosomatik tibbiyotning “kognitiv-emotsional nazorat” tamoyiliga mos keladi.

4. Yevropa Uygʻonish davridan zamonaviy psixosomatikaga oʻtish

XVII–XIX asrlarda Yevropada ruh va tana masalasi Dekartning “dualizm” nazariyasi asosida ajratib qaraldi. Biroq bu yondashuv tibbiyotda cheklovlar yaratdi: ruhiy omillar uzoq vaqt tibbiy muhokamadan chetda qoldi.

XX asr boshlarida **Zigmund Freyd** bu muvozanatni tiklab, “histeriya” va “konversiya” nazariyalarini ilgari surdi. Unga koʻra, ong ostidagi ruhiy konfliktlar tana simptomlari orqali namoyon boʻladi. Bu holat “konversiya simptomlari” deb nom olgan — bugungi kunda psixosomatik simptomlar sifatida talqin qilinadi.

Keyinchalik **Franz Alexander** psixosomatik tibbiyotning ilmiy asoschisi sifatida 1930-yillarda “psixosomatik yettilik” modelini yaratdi. U yurak ishemiyasi, oshqozon yarasi, bronxial astma, gipertenziya, kolit, teri kasalliklari kabi yetti asosiy kasallikni ruhiy stress bilan bogʻladi.

Hans Selye esa “stress sindromi” nazariyasini ishlab chiqdi. U har qanday ruhiy zarba organizmning gormonal javobini chaqirishini isbotladi. Bu javob uzoq davom etsa, somatik kasalliklar rivojlanadi. Shunday qilib, psixosomatika fiziologik darajaga koʻtarildi.

5. Zamonaviy psixosomatika va klinik yondashuvlar

Zamonaviy tibbiyotda psixosomatik yondashuv integrativ konsepsiyaga aylangan. Hozirda ruhiy holat, stress, emotsional zoʻriqish, ijtimoiy muhit va genetik moyillik birgalikda kasallik patogenezida asosiy rol oʻynaydi.

Neyropsixologiya sohasida olib borilgan tadqiqotlar (A. Damazio, J. LeDoux va boshqalar) emotsiyalarni boshqaruvchi limbik tizim va avtonom asab tizimi oʻrtasida uzviy aloqa mavjudligini isbotladi.

Masalan:

- Uzoq davom etgan stress gipotalamus-gipofiz-buyrak usti oʻqi (HPA axis) faoliyatini buzadi;
- Bu esa kortizol gormoni ortishi orqali yurak, oshqozon, teri va endokrin tizim kasalliklarini keltirib chiqaradi.

Bugungi kunda **biofeedback**, **kognitiv-behavioral terapiya (KBT)**, **mindfulness**, **psixonevroimmunologiya** kabi yoʻnalishlar psixosomatik kasalliklarni davolashda muvaffaqiyat bilan qoʻllanilmoqda.

6. Qadimgi va zamonaviy qarashlarning qiyosiy tahlili

Tadqiqot natijalari shuni ko'rsatadiki, qadimgi tibbiyotda shakllangan ruh-tana uyg'unligi g'oyasi zamonaviy ilmda ilmiy dalillar bilan isbotlangan. Quyidagi jadval bu uzluksizlikni yaqqol ifodalaydi:

Asosiy tushuncha Qadimgi manbalarda

Kasallik sababi	Ruhiy muvozanatning buzilishi
Ruhiy omil	Nafs, hissiyot, iymon
Davolash yo'li	Ruhiy osoyishtalik, duo, tabiat vositalari
Ilmiy asos	Falsafiy va tajribaviy
Maqsad	Tana va ruh uyg'unligi

Zamonaviy tibbiyotda

Stress va psixogen konflikt
Emotsiya, ong osti, kognitiv baholash
Psixoterapiya, dori, stress menejment
Neyrobiologik va klinik
Psixofiziologik barqarorlik

7. Empirik dalillar

So'nggi o'n yilliklarda o'tkazilgan klinik tadqiqotlar ham qadimgi nazariyalar bilan uyg'un natijalarni ko'rsatmoqda:

- Yurak kasalliklarining 40–50 foizi stress bilan bog'liq;
- Oshqozon yarasi bilan og'rigan bemorlarning 60 foizida emotsional tanglik aniqlangan;
- Teri kasalliklari (ekzema, psoriaz)da depressiv simptomlar uch baravar ko'p qayd etiladi.

Bu faktlar psixosomatik tibbiyotning nazariy asoslari amalda o'z tasdig'ini topayotganini ko'rsatadi.

IV. Muhokama

1. Ruh va tana o'rtasidagi bog'liqlik: qadimgi falsafadan zamonaviy ilmga

Natijalar shuni ko'rsatadiki, inson ruhiy holatining tanaga ta'siri haqidagi fikrlar insoniyat tafakkurining eng qadimiy qatlamlaridan boshlab mavjud. Gippokrat, Galen, Ibn Sino va Sharq mutafakkirlari insonni yaxlit mavjudot sifatida talqin qilganlar. Bu g'oya keyinchalik zamonaviy psixosomatika tibbiyotining falsafiy poydevoriga aylandi.

Qadimgi manbalarda ruhiy holat ko'proq axloqiy va diniy kontekstda izohlangan bo'lsa, bugungi ilmiy tibbiyot bu holatni neyropsixologik jarayonlar orqali tushuntiradi. Shunga qaramay, mazmun jihatidan bu qarashlar bir-birini to'ldiradi: har ikkisi ham ruhiy muvozanatning jismoniy sog'liqqa bevosita ta'sirini e'tirof etadi.

Masalan, Ibn Sino "g'azab yurakni isitadi" deganida, u bugungi stress fiziologiyasida qayd etilgan adrenal gormonlar faolligini intuitiv tarzda sezgan. Demak, qadimgi tabiblarning kuzatuvlari hozirgi zamon ilmiy asbob-uskunalarsiz ham real fiziologik holatlarni aniqlaganini ko'rsatadi.

2. Psixosomatika — insonni yaxlit tizim sifatida anglash sari

Zamonaviy tibbiyotning muhim kamchiliklaridan biri — ko'p yillar davomida insonni faqat biologik organizm sifatida o'rganib kelganidir. Bu yondashuv "kasallikni davolash"ni markazga qo'yib, "insonni davolash"ni orqa planga surib qo'ydi. Psixosomatika esa bu paradigmani o'zgartirdi: u shifokorni organizm emas, balki shaxsni, uning ruhiy va ijtimoiy holatini davolash zarurligiga undaydi.

Holbuki, bu fikr Ibn Sino davridayoq ilgari surilgan edi. Uning "shifokor kasallikni emas, bemorni davolaydi" degan gapi bugungi zamonaviy tibbiyotning biopsixosotsial modeli bilan uyg'unlashadi. Amerikalik olim Jorj Engel 1977-yilda aynan shu modelni ishlab chiqib, psixosomatika tibbiyotini integrativ darajaga olib chiqdi.

3. Stress va fiziologik javob mexanizmlari

Psixosomatik kasalliklarning zamonaviy ilmiy talqini ko'rsatadiki, stress — ruhiy, ijtimoiy va biologik tizimlar o'rtasidagi asosiy bog'lovchi omildir. Hans Selye tomonidan ishlab chiqilgan “umumiy adaptatsiya sindromi” modeli (alarm → qarshilik → charchash bosqichlari) hozirgi fiziologiyada asosiy tushunchalardan biridir. Bu model qadimgi “muvozanat nazariyasi” bilan o'xshash: har ikkisi ham inson sog'lig'ini ichki barqarorlik (homeostaz) bilan bog'laydi.

Stress uzoq davom etganda, organizmning gormon, immun va asab tizimi ortiqcha yuklama ostida qoladi. Shu bois, psixosomatik yondashuv kasallikni davolashdan ko'ra stressni boshqarish, psixologik moslashuvni ta'minlashni muhim deb biladi.

4. Psixosomatik kasalliklarning asosiy toifalari

Ilmiy tahlil natijasida quyidagi asosiy toifalar shakllangan:

- **Kardiopsixosomatik kasalliklar** – gipertenziya, yurak ishemiyasi, yurak aritmiyasi;
- **Gastrointestinal kasalliklar** – oshqozon yarasi, gastrit, ichak sindromi;
- **Dermatologik holatlar** – ekzema, psoriaz, allergik toshmalar;
- **Endokrin buzilishlar** – qandli diabet, tireotoksikoz;
- **Neyropsixosomatik kasalliklar** – migren, uyqusizlik, surunkali charchoq sindromi.

Ushbu toifalarning barchasida ruhiy zo'riqish, emotsional beqarorlik yoki ijtimoiy stressning fiziologik javobi kuzatiladi.

5. Psixonevroimmunologiya — qadimgi g'oyaning zamonaviy talqini

So'nggi o'n yilliklarda rivojlangan **psixonevroimmunologiya** fani psixosomatikaning ilmiy asosini mustahkamladi. Bu yo'nalish asab, endokrin va immun tizimlar o'rtasidagi o'zaro ta'sirni o'rganadi. Tadqiqotlar shuni ko'rsatadiki, ijobiy hissiyotlar immunitetni mustahkamlaydi, depressiya esa uni zaiflashtiradi.

Bu xulosalar qadimgi tabiblarning “ruhiy osoyishtalik tanaga shifo beradi” degan fikrlarini zamonaviy ilmiy darajada tasdiqlaydi.

6. Psixoterapiya va ruhiy salomatlikning amaliy ahamiyati

Psixosomatik yondashuv bugungi kunda psixoterapiya va klinik amaliyotning muhim yo'nalishiga aylangan. Psixoterapiyaning turli shakllari (kognitiv-behavioral terapiya, psixoanaliz, ge'stalt-terapiya, art-terapiya) psixosomatik simptomlarni kamaytirishda samarali ekani ilmiy isbotlangan.

Masalan:

- Kognitiv terapiya yordamida bemor o'z fikr va his-tuyg'ularini nazorat qilishni o'rganadi;
- Meditatsiya va mindfulness usullari stressni kamaytiradi, yurak urishini normallashtiradi;
- Guruh psixoterapiyasi esa ijtimoiy qo'llab-quvvatlovni oshiradi.

Bu usullar qadimgi davrdagi ruhiy tozalanish, duo, sokinlik, imyon orqali davolanish amaliyotlarini ilmiy shaklda qayta tiklamoqda.

7. Falsafiy jihat: insonning “ichki olami” va tibbiyot

Psixosomatika fani tibbiy yondashuvni falsafiy darajada kengaytiradi. U insonni nafaqat biologik mavjudot, balki ruhiy va ijtimoiy borliq sifatida anglaydi. Bu hol tibbiyotning antropologik mohiyatini qayta tiklaydi: inson o'z holatini tushunib, o'z sog'lig'ining faol sub'ekti bo'ladi.

Bu jihatdan, psixosomatika — qadimgi “hikmat tibbiyoti” (tabobati hikmat) an'anasining ilmiy davomidir. Chunki qadimiy tibbiyotda shifo jarayoni nafaqat tana, balki ruhni davolashga qaratilgan edi.

8. O‘zbekiston va Markaziy Osiyo tajribasi

Markaziy Osiyo tibbiyot maktablari (Buxoro, Xiva, Samarqand) tarixan ruhiy-fiziologik yondashuvni amalda qo‘llagan. Ibn Sino, Najmiddin Kavkabiy, Mahmud az-Zamaxshariy, Abu Rayhon Beruniylarning asarlarida inson psixikasi bilan tana faoliyati orasidagi bog‘liqlik batafsil bayon etilgan.

Bugungi kunda O‘zbekiston psixiatriya va psixologiya ilmida psixosomatik yo‘nalish yangidan tiklanmoqda. Stress boshqaruvi, art-terapiya, biofeedback, psixologik maslahat markazlari faoliyat yuritmoqda.

9. Nazariy umumlashma

Yuqoridagi tahlillardan kelib chiqib, quyidagi ilmiy umumlashmalar chiqarildi:

1. Psixosomatik tafakkur qadimdan mavjud bo‘lib, bugungi ilmiy tibbiyot uni empirik asosda isbotladi.
2. Ruhiy holatni nazorat qilish — sog‘lom turmush tarzining ajralmas qismi.
3. Zamonaviy tibbiyotda stress va emotsional beqarorlik fiziologik kasalliklarning yetakchi omillaridan biri sifatida tan olingan.
4. Qadimgi tibbiyot g‘oyalari zamonaviy psixonevroimmunologiya bilan uyg‘unlashadi.
5. Psixosomatika — kelajak tibbiyotining asosiy konsepsiyalaridan biri sifatida shakllanmoqda.

10. Amaliy tavsiyalar

Tadqiqot natijalariga ko‘ra, quyidagi tavsiyalar berilishi mumkin:

- Shifokorlar kasallik tashxisida bemorning ruhiy holatini hisobga olishlari zarur;
- Tibbiyot ta‘limida psixosomatik tibbiyot fanini mustaqil yo‘nalish sifatida rivojlantirish kerak;
- Stressni kamaytiruvchi omillar — ijtimoiy qo‘llab-quvvatlov, jismoniy faollik, meditatsiya — sog‘liqni mustahkamlash dasturlariga kiritilishi lozim;
- Tibbiyotda “integrativ yondashuv” – psixoterapiya va farmakoterapiya uyg‘unligi – keng joriy etilishi maqsadga muvofiq.

V. Xulosa (Conclusion)

Psixosomatik kasalliklar masalasi insoniyat tarixida ruh va tana o‘rtasidagi uzviy bog‘liqlikni anglash yo‘lidagi eng muhim ilmiy va falsafiy izlanishlardan biridir. Qadimgi Sharq va G‘arb tabobati inson organizmini bir butun tizim sifatida tushunishga harakat qilgan, zamonaviy tibbiyot esa bu qarashni ilmiy asoslar bilan mustahkamladi.

Tadqiqot natijalari shuni ko‘rsatadiki:

1. **Ruhiy holat inson salomatligining ajralmas qismi.** Stress, g‘am, qo‘rquv yoki depressiya kabi emotsional holatlar tanadagi gormonal, immun va asab tizimlariga bevosita ta‘sir qiladi.
2. **Qadimgi tabobat va zamonaviy psixosomatika bir-birini to‘ldiradi.** Ibn Sino, Gippokrat, Galen kabi allomalar insonni ruh va tana birligi sifatida tahlil qilgan. Bugungi tibbiyotda bu qarash biopsixosotsial model orqali davom etmoqda.
3. **Stress va moslashuv mexanizmlari — kasalliklarning umumiy asosi.** Hans Selye va Jorj Engelning ilmiy ishlari qadimgi “muvozanat nazariyasi”ni ilmiy darajada tasdiqladi.
4. **Psixonevroimmunologiya** fani psixosomatikaning zamonaviy asosi bo‘lib, ruhiy holatning immun tizimga ta‘sirini eksperimental isbotlab berdi.

5. **Tibbiyotning kelajagi — integrativ yondashuvda.** Psixosomatika tibbiyotini rivojlantirish insonni butun shaxs sifatida anglash, sogʻlom jamiyatni shakllantirishga xizmat qiladi.

Shunday qilib, psixosomatika — bu faqat kasalliklarni oʻrganish emas, balki insonni ruhiy, ijtimoiy va jismoniy jihatdan uygʻun tarzda tushunish ilmidir. U qadimiy hikmat tibbiyotining ilmiy davomi, zamonaviy tibbiyotning falsafiy poydevoridir.

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АНАЛИЗ СИСТЕМЫ ОБРАЗОВАНИЯ СИНГАПУРА И ЕЁ ПЕДАГОГИЧЕСКИХ ПЕРСПЕКТИВ В КОНТЕКСТЕ ИЗУЧЕНИЯ МЕЖДУНАРОДНОГО ОПЫТА СОТРУДНИЧЕСТВА

Асадова Рухсора Эргашевна

Преподаватель кафедры педагогики,

психологии и образовательных технологий

Центра педагогического мастерства Сурхандарьинской области.

Цель исследования

Цель данного исследования заключается в комплексном изучении системы образования Сингапура как успешной модели международного образовательного сотрудничества, выявлении её ключевых педагогических особенностей, инновационных подходов и факторов эффективности. Исследование направлено на анализ стратегических направлений развития сингапурской образовательной политики, структуры подготовки педагогических кадров и внедрения современных технологий обучения. Особое внимание уделяется определению педагогических перспектив применения элементов сингапурского опыта в условиях реформирования системы образования Республики Узбекистан. В ходе исследования ставится задача выявить практические механизмы адаптации эффективных методов обучения, систем мотивации и профессионального роста педагогов, а также создание инновационной образовательной среды, соответствующей глобальным требованиям XXI века.

Материалы и методы исследования

Материалами исследования послужили официальные документы Министерства образования Сингапура, данные международных организаций — OECD, UNESCO, Всемирного банка, а также результаты международных сравнительных исследований качества образования PISA, TIMSS и PIRLS. Кроме того, в качестве источников использовались научные публикации сингапурских и зарубежных педагогов, аналитические отчёты, материалы международных конференций и исследования в области образовательной политики. В процессе исследования применялись комплексный и сравнительно-педагогический методы анализа, контент-анализ научных источников, метод систематизации и обобщения теоретического материала, а также элементы экспертного интервью. Такой подход позволил выявить основные закономерности развития образовательной системы Сингапура, её педагогические принципы, инновационные технологии обучения и механизмы подготовки квалифицированных педагогических кадров.

Результаты исследования

Результаты проведённого исследования показали, что система образования Сингапура является одной из наиболее эффективных и инновационных в мире, представляя собой образец комплексного подхода к формированию человеческого капитала. Её устойчивое развитие обеспечивается тесной связью между государственной образовательной политикой, социально-экономическими приоритетами страны и стратегией подготовки кадров для цифровой экономики. Прежде всего, сингапурская модель базируется на принципах индивидуализации обучения и ориентации на компетенции XXI века. Учебные программы направлены не только на усвоение академических знаний, но и на развитие критического

мышления, креативности, коммуникативных и лидерских навыков. Это обеспечивает высокий уровень функциональной грамотности учащихся, что подтверждается стабильными результатами Сингапура в международных рейтингах PISA и TIMSS, где страна входит в тройку мировых лидеров. Одним из ключевых результатов анализа является выявление системы непрерывного профессионального развития педагогов, реализуемой через Национальный институт образования (NIE). Данная модель предполагает постоянное повышение квалификации учителей, участие в научных исследованиях и инновационных проектах, что способствует формированию педагогов-исследователей, способных адаптировать мировые достижения к национальной практике. Особое внимание уделяется интеграции цифровых технологий и STEM-образования в школьный процесс.

Выводы

Проведённое исследование позволило установить, что система образования Сингапура является одной из самых результативных и инновационно ориентированных в мире. Её успех основан на стратегическом государственном управлении, высоком уровне профессиональной подготовки педагогов, ориентации на развитие личности учащегося и тесной взаимосвязи образования с социально-экономическими потребностями страны. Анализ показал, что ключевыми факторами эффективности сингапурской модели являются: системность образовательной политики, обеспечивающая преемственность реформ; приоритет качества образования над его количественными показателями; постоянное повышение квалификации педагогов и их научно-исследовательская активность; внедрение цифровых технологий, инновационных методик и STEM-подхода; государственная поддержка образования как стратегического ресурса развития нации.

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ISSUES OF IMPROVING THE EFFICIENCY OF SERVICE ENTERPRISES

Rashidov Zuhridin Sanjar ugli – assistant of the department of “Economic analysis and statistics” of the Samarkand institute of economics and service,

E-mail: zrashidov34@gmail.com

Orcid: 0009-0009-9421-7959

Phone: +998902509274

Abstract: *This study examines the key issues and practical directions for improving the efficiency of service enterprises in the context of market economy transformations. The paper identifies the main factors affecting performance efficiency—such as management quality, technological innovation, and human resources—and provides analytical insights into how these enterprises can enhance their competitiveness. Recommendations are presented for implementing digital tools, customer-oriented management, and performance-based evaluation systems.*

Keywords: *service enterprises, efficiency improvement, competitiveness, innovation, management quality, digital transformation, productivity, performance evaluation, customer satisfaction, sustainable development.*

INTRODUCTION.

In today’s globalized and innovation-driven economy, the service sector has become a dominant component of national development, contributing significantly to GDP, employment, and social welfare. Service enterprises play a vital role in ensuring the smooth functioning of economic systems by providing essential services in areas such as healthcare, education, finance, logistics, and information technology. However, the rapid expansion of this sector has also highlighted persistent challenges related to efficiency, quality management, and sustainable growth.

Efficiency in service enterprises is a complex, multidimensional concept that involves optimizing resource use, improving service delivery, and achieving customer satisfaction at minimal cost. Unlike production industries, where output can be easily quantified, service efficiency depends heavily on intangible factors such as human capital, innovation capability, and technological adaptation. Consequently, the effective management of service enterprises requires a balanced integration of economic, organizational, and technological strategies aimed at maximizing productivity while maintaining high-quality standards.

In recent years, digital transformation and globalization have significantly changed the operational environment of service enterprises. The emergence of digital platforms, automation tools, and data-driven decision-making processes has created new opportunities for efficiency improvement. At the same time, competition has intensified, compelling enterprises to continuously innovate and optimize their operations. Therefore, studying the issues of improving efficiency in service enterprises is of great theoretical and practical importance.

This research focuses on identifying the core problems affecting efficiency in the service sector, evaluating the impact of managerial and technological factors, and proposing strategic recommendations for sustainable improvement. By analyzing both domestic and international experiences, the study aims to provide a comprehensive understanding of how modern service

enterprises can enhance their performance, strengthen competitiveness, and contribute to long-term economic stability.

Main part.

The efficiency of service enterprises is influenced by a wide range of interrelated factors, including managerial capability, resource utilization, innovation potential, and customer orientation. Improving efficiency requires a systematic and integrated approach that combines organizational reforms, technological modernization, and workforce development.

One of the primary determinants of performance in service enterprises is the quality of management. Effective management ensures the optimal allocation of resources, coordination of staff, and strategic decision-making. Many service organizations still operate under outdated hierarchical structures that reduce flexibility and innovation. Introducing modern management models—such as *Total Quality Management (TQM)*, *Lean Management*, and *Customer Relationship Management (CRM)*—enables enterprises to streamline operations, eliminate redundancies, and enhance service quality. For instance, TQM emphasizes continuous improvement, while Lean principles help minimize waste and focus on value creation for customers.

The service sector heavily depends on the competence and motivation of its workforce. Human capital is the main driver of service quality and innovation. Continuous professional training, performance-based incentives, and career development programs are essential to improving employee productivity. A motivated workforce not only increases operational efficiency but also fosters customer loyalty and satisfaction. Studies have shown that enterprises implementing systematic training and reward systems achieve up to 25% higher efficiency compared to those without such mechanisms. Moreover, leadership styles that encourage creativity, teamwork, and employee engagement contribute significantly to overall performance.

In the digital age, technology has become a crucial component of service efficiency. The use of automation, artificial intelligence, and big data analytics allows enterprises to optimize workflows, predict customer behavior, and provide personalized services. For example, digital platforms reduce operational costs by automating booking, billing, and customer feedback processes. Enterprises that actively adopt digital tools report measurable improvements in cost-effectiveness and customer experience. Cloud-based management systems, mobile applications, and data analytics have transformed traditional service models into agile, technology-driven ecosystems.

Financial management plays a key role in maintaining the sustainability of service enterprises. Effective cost control, budgeting, and investment in innovation ensure long-term stability. Profitability indicators such as return on assets (ROA) and return on equity (ROE) are commonly used to measure performance efficiency. Efficient enterprises tend to diversify revenue streams, reduce administrative expenses, and leverage economies of scale. Operationally, process optimization—through time management, logistics coordination, and automation—helps reduce service delivery times while maintaining quality.

Customer satisfaction is both a measure and a driver of efficiency. Enterprises that build strong relationships with clients gain valuable insights into changing preferences and market trends. Using feedback mechanisms such as surveys, digital reviews, and complaint management systems enables organizations to continuously adapt and improve. Models like SERVQUAL, which assess service quality across dimensions of reliability, responsiveness, and empathy, provide a structured framework

for monitoring and improving performance. Enhancing customer experience not only increases retention rates but also strengthens brand reputation and competitiveness.

Innovation ensures that service enterprises remain adaptable and resilient in dynamic markets. Continuous improvement in products, processes, and business models drives long-term growth. Sustainable innovation—combining economic efficiency with social and environmental responsibility—is becoming increasingly important. Enterprises investing in green technologies, social responsibility programs, and ethical practices are more likely to maintain public trust and attract loyal customers.

International case studies demonstrate that countries with advanced service sectors, such as Singapore, Japan, and Germany, emphasize integrated management systems and digital governance. These nations invest heavily in training, technology, and performance monitoring. Their success highlights the importance of aligning national policy frameworks with enterprise-level efficiency initiatives. Adapting these practices to local conditions can help developing economies strengthen their service industries.

Overall, the analysis confirms that improving the efficiency of service enterprises is not a one-dimensional task but a continuous, multi-faceted process. It requires aligning organizational goals with innovation, technology, and customer needs. Enterprises that effectively combine managerial competence, digital transformation, and human capital development achieve higher productivity, sustainability, and competitiveness in both domestic and global markets.

Conclusion.

The study has shown that improving the efficiency of service enterprises is a multidimensional and continuous process that requires an integrated approach combining organizational reform, technological innovation, and human resource development. In the context of rapid globalization and digital transformation, the efficiency of service enterprises determines not only their competitiveness but also their contribution to national economic growth.

First, the findings indicate that **effective management systems** are the foundation of enterprise efficiency. By introducing modern methods such as Total Quality Management (TQM), Lean Management, and Customer Relationship Management (CRM), service enterprises can enhance coordination, minimize costs, and improve service quality. A well-structured management approach creates an environment of accountability and innovation, essential for achieving sustainable results.

Second, **human capital development** remains a decisive factor in increasing productivity. Investment in employee training, motivation, and performance evaluation leads to higher engagement and innovation. Skilled and motivated workers provide better customer service, which directly improves operational efficiency and market competitiveness.

Third, **digitalization and innovation** have emerged as critical drivers of service enterprise transformation. The adoption of digital platforms, artificial intelligence, and data analytics enables companies to optimize operations, personalize services, and strengthen customer relationships. The digital economy provides a competitive edge by reducing costs and increasing responsiveness to market changes.

Furthermore, **customer orientation and service quality** are vital indicators of success. Enterprises that continuously measure and improve customer satisfaction through feedback systems and quality standards (e.g., SERVQUAL) achieve stronger brand reputation and customer loyalty.

To ensure long-term efficiency, service enterprises must also embrace **financial discipline, sustainability, and innovation management**. Financial transparency, environmental responsibility, and continuous improvement are now integral components of global competitiveness. Policymakers should facilitate this transformation by providing access to innovation funding, digital infrastructure, and training programs.

In conclusion, the efficiency of service enterprises can be significantly enhanced through strategic integration of management excellence, workforce competence, and technological modernization. Sustainable development in the service sector will not only strengthen enterprise performance but also contribute to a resilient, innovation-based national economy capable of competing in the global marketplace.

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MICROSOFT EXCEL DASTURIDA SIFAT BELGILARINI VIZUALLASHTIRISH

Raximova Umida Ziyadullayevna

Email: raximovaumida2018@gmail.com

Samarqand iqtisodiyot va servis instituti “Oliy matematika “ kafedrası katta o‘qituvchisi

Shukurova Xurshida Abdunazar qizi

Samarqand iqtisodiyot va servis instituti 2-kurs talabasi

Annotatsiya: Ushbu maqolada Microsoft Excel dasturining analitik va vizual imkoniyatlari, xususan, sifat belgilarini tahlil qilish va ularni grafik shaklda aks ettirish usullari yoritilgan. Maqolada ma’lumotlarni sifat ko‘rsatkichlari asosida qayta ishlash, dinamik jadvallar va diagrammalar yordamida vizual ko‘rinishga keltirish usullari ilmiy jihatdan tahlil qilingan. Excel dasturining sifat menejmenti, ishlab chiqarish, ta’lim va xizmat ko‘rsatish sohalarida qo‘llanilishi ham amaliy misollar orqali asoslab berilgan.

Kalit so‘zlar: Microsoft Excel, vizuallashtirish, sifat belgisi, tahlil, grafik, jadval, axborot texnologiyasi, indikator.

VISUALIZATION OF QUALITY CHARACTERISTICS IN MICROSOFT EXCEL

Rakhimova Umida Ziyadullayevna

Email: rakhimovaumida2018@gmail.com

Senior Lecturer, Department of “Higher Mathematics” of the Samarkand Institute of Economics and Service

Shukurova Khurshida Abdunazar qizi

2nd year student of the Samarkand Institute of Economics and Service

Annotation: This article discusses the analytical and visual capabilities of the Microsoft Excel program, in particular, methods for analyzing quality characteristics and displaying them in graphical form. The article scientifically analyzes the methods of processing data based on quality indicators and visualizing them using dynamic tables and diagrams. The use of the Excel program in the fields of quality management, production, education and service is also substantiated through practical examples.

Keywords: Microsoft Excel, visualization, quality characteristic, analysis, graph, table, information technology, indicator.

Bugungi raqamli transformatsiya jarayonida ma’lumotlarni nafaqat to‘plash, balki ularni vizual tahlil qilish muhim ahamiyat kasb etmoqda. Axborotlarni samarali ko‘rinishda taqdim etish qaror qabul qilishni yengillashtiradi, jarayonlarni boshqarishda shaffoflikni oshiradi. Shu nuqtayi nazardan, Microsoft Excel dasturi zamonaviy ma’lumotlarni vizuallashtirish vositasi sifatida keng qo‘llanilmoqda. Excel dasturining asosiy afzalligi shundaki, u sifat belgilarini (nominal, tartibli, kategoriya ko‘rsatkichlari) nafaqat statistik, balki grafik shaklda ham ifodalash imkonini beradi. Bu esa sifat menejmenti, ilmiy tadqiqotlar, iqtisodiy tahlil va marketing sohalarida ma’lumotlarni samarali tahlil qilish uchun qulay sharoit yaratadi.

Sifat belgisi – bu obyekt yoki hodisaning miqdor bilan o‘lchanmaydigan, ammo ta’rifiy jihatdan farqlanadigan xususiyatidir. Masalan, mahsulot turi, rang, ishlab chiqaruvchi nomi, mijoz toifasi, xizmat sifati darajasi va boshqalar sifat belgilariga kiradi.

Statistikada sifat belgilarini tahlil qilish uchun odatda quyidagi usullar qo‘llaniladi:

- Kategoriyalarga ajratish (nominal tahlil)
- Ballar tizimi bo‘yicha baholash
- Reyting yoki tartib asosida guruhlash
- Grafik shaklda taqdim etish (diagrammalar, infografika)

Excel dasturi sifat ma’lumotlarini filtrlash, tartiblash, shartli formatlash, pivot jadval (Pivot Table) va pivot diagrammalar yordamida tahlil qilish imkonini beradi. Bu usullar yordamida foydalanuvchi katta hajmdagi ma’lumotlar ichidan kerakli tendensiyalarni aniqlay oladi.

Excel dasturida sifat belgilarini tasvirlash uchun quyidagi diagrammalar keng qo‘llaniladi:

Diagramma turi	Qo‘llanish sohasi	Tavsif
Ustunli (Column)	Toifalar bo‘yicha solishtirish	Sifat belgilarining miqdoriy ifodasi uchun
Aylana (Pie)	Ulushlarni ifodalash	Belgilar ulushini ko‘rsatadi
Chiziqli (Line)	Vaqt o‘tishi bilan o‘zgarish	Sifat ko‘rsatkichining dinamikasi uchun
Gistogramma	Taqqoslash va tarqatish	Belgilar chastotasini ko‘rsatadi
Radar yoki Spider	Ko‘p o‘lchovli sifat tahlili	Bir nechta ko‘rsatkichni bir vaqtning o‘zida solishtiradi

Excel’ning Conditional Formatting funksiyasi ma’lumotlardagi sifat farqlarini ranglar, belgilar yoki ikonalar orqali ajratib ko‘rsatish imkonini beradi. Masalan: Qoniqarli xizmatlar – yashil, o‘rtacha – sariq, past sifatli – qizil rangda belgilanadi.

Pivot jadvallar sifat belgilarini guruhlash, sanoq (count), foiz (percent) kabi tahliliy mezonlarda jamlash imkonini beradi. Masalan, korxona mahsulotlari sifat darajasini “Yaxshi”, “O‘rta”, “Past” kategoriyalar bo‘yicha umumlashtirish mumkin.

Slicer va Timeline vositalari foydalanuvchiga sifat belgilarini interaktiv ravishda tanlash, filtrlash va diagrammalarda avtomatik o‘zgarishni kuzatish imkonini beradi. Masalan, “Hududlar bo‘yicha mijozlar qoniqish darajasi”ni tanlaganda, diagrammalar mos ravishda yangilanadi.

Microsoft Excel dasturining “Анализ данных” (Data Analysis Toolpak) qo‘shimchasi foydalanuvchilarga statistik tahlilni avtomatik ravishda bajarish imkonini beradi. Bu qo‘shimcha yordamida tavsiflovchi statistika (Descriptive Statistics) modulidan foydalanish ma’lumotlarning asosiy xususiyatlarini aniqlashda muhim vositadir.

Tavsiflovchi statistika imkoniyatlari quyidagilardan iborat:

- O‘rtacha qiymat (Mean);
- Median (o‘rtadagi qiymat);
- Modus (eng ko‘p uchraydigan qiymat);
- Standart og‘ish (Standard deviation);
- Dispersiya (Variance);
- Minimum va maksimum qiymatlar;

- Kuzatuvlar soni (Count);
- Ishonch oralig'i (Confidence level).

Bu funksiyalar yordamida foydalanuvchi sifat belgilariga tegishli miqdoriy ifodalarni umumlashtiradi va tahlil natijalarini tezkor tarzda oladi. Excel orqali sifat tahlilining ta'limdagi amaliy qo'llanilishi — talabalarning fan bo'yicha baholari, darsga qatnashish foizi yoki qoniqish so'rovnomasi natijalarini tahlil qilishda katta ahamiyat kasb etadi. “Анализ данных” moduli yordamida o'quv natijalarining o'rtacha darajasi, tarqalishi va barqarorligi aniqlanadi, so'ngra natijalar diagrammalar orqali vizuallashtiriladi.

Excel dasturida “Анализ данных” (Data Analysis Toolpak) moduliga kirish bosqichlari

1-bosqich. Qo'shimchani faollashtirish

Agar “Анализ данных” tugmasi “Данные” (Data) menyusida ko'rinmayotgan bo'lsa, uni quyidagicha faollashtirish mumkin:

1. Excel dasturida “Файл” (File) menyusiga kiriladi.
2. Pastki qismdan “Параметры” (Options) bandi tanlanadi.
3. Ochilgan “Excel параметрлари” oynasidan “Надстройки” (Add-ins) bo'limi tanlanadi.
4. Pastdagi “Управление: Надстройки Excel” satri yonidagi “Перейти...” (Go...) tugmasi bosiladi.
5. Ro'yxatdan “Пакет анализа” (Analysis Toolpak) bandi belgilanib, OK tugmasi bosiladi.

Shundan so'ng “Анализ данных” tugmasi “Данные” (Data) menyusining o'ng tomonida paydo bo'ladi.

2-bosqich. “Анализ данных” oynasiga kirish

Faollashtirilgan qo'shimcha Excel menyusining “Данные” (Data) bo'limida joylashgan “Анализ данных” (Data Analysis) tugmasi orqali ochiladi. Ushbu tugma bosilganda “Data Analysis” oynasi paydo bo'ladi. Oynada bir nechta statistik modullar (Descriptive Statistics, Correlation, Regression va boshqalar) mavjud bo'lib, foydalanuvchi keraklisini tanlaydi.

3-bosqich. Tavsiflovchi statistika (Descriptive Statistics) modulidan foydalanish

Ma'lumotlarning asosiy statistik xususiyatlarini aniqlash uchun “Descriptive Statistics” bandi tanlanadi. Shundan so'ng quyidagilar belgilanadi:

Input Range – tahlil qilinadigan ma'lumotlar diapazoni (masalan, A2:A31);

Labels in first row – agar ustun sarlavhasi mavjud bo'lsa, belgilanadi;

Output Range – natijalar chiqariladigan joy (masalan, C1);

Summary statistics – asosiy statistik natijalarni olish uchun belgilanadi;

Confidence Level for Mean – ixtiyoriy tarzda o'rtacha qiymat uchun ishonch oralig'i belgilanadi.

Shundan so'ng OK tugmasi bosiladi.

4-bosqich. Natijalarni tahlil qilish

Excel avtomatik tarzda quyidagi ko'rsatkichlarni hisoblab beradi:

- O'rtacha qiymat (Mean);
- Median;
- Modus;
- Standart og'ish (Standard Deviation);
- Dispersiya (Variance);
- Oraliq (Range);
- Minimal va maksimal qiymatlar;

- Kuzatuvlar soni (Count);
- Ishonch oralig‘i (Confidence Level).

Bu ko‘rsatkichlar yordamida tadqiqotchi ma‘lumotlarning tarqalishi, barqarorligi va umumiy tendensiyalarini baholaydi.

5-bosqich. Natijalarni vizuallashtirish

Tahlil natijalarini grafik shaklda ifodalash ma‘lumotlarni tahlil qilishni yanada qulaylashtiradi. Buning uchun Excel menyusidan:

“Вставка” (Insert) → “Диаграммы” (Charts) bo‘limi tanlanadi;

Natijalarni aks ettirish uchun histogramma, chiziqli yoki ustunli diagramma turlaridan biri tanlanadi. Bu orqali foydalanuvchi tahlil natijalarini vizual shaklda taqdim etib, ularni ilmiy xulosalar bilan mustahkamlashi mumkin.

Mazkur modul ta‘lim sohasida, xususan, talabalar baholari, darsga qatnashish darajasi yoki o‘quvchilarning fikrini o‘rganish maqsadida o‘tkazilgan so‘rov natijalarini tahlil qilishda keng qo‘llaniladi. Descriptive Statistics yordamida o‘quv natijalarining o‘rtacha qiymati, tarqalish darajasi, eng yuqori va eng past natijalar hamda ishonch oralig‘i aniqlanadi.

Diagrammalar yordamida esa natijalar vizual ko‘rinishda taqdim etilib, tahlil qilish jarayoni samaradorligi oshiriladi.

Excel orqali sifat tahlilining ta‘limda amaliy qo‘llanilishi talabalarning fan bo‘yicha baholari, darsga qatnashish foizi yoki qoniqish so‘rovnomasi natijalari Excel’da tahlil qilinib, reyting diagrammasi shaklida ifodalanadi.

Excel’da sifat belgilarini tahlil qilishning afzalliklari tomonlari

1. Quvvatli hisoblash bazasi – katta hajmdagi ma‘lumotlarni tezda qayta ishlash.
2. Vizuallik – natijalarni grafik shaklda ko‘rsatish imkoniyati.
3. Interaktivlik – foydalanuvchi real vaqt rejimida tahlilni o‘zgartira oladi.
4. Moslashuvchanlik – istalgan turdagi sifat belgilarini tahlil qilish mumkin.
5. Integratsiya – boshqa dasturlar bilan (Word, PowerPoint, Access) bog‘lash qulayligi.

Excel’da vizuallashtirish jarayonida quyidagi muammolar uchrashi mumkin:

- Murakkab ma‘lumotlar to‘plamini ko‘rsatishda cheklangan rang palitrasi;
- Katta hajmdagi interaktiv grafiklar ishlaganda sekinlashish;
- Dinamik ma‘lumotlar bilan ishlashda avtomatik yangilanishning sustligi.

Bu kamchiliklarni bartaraf etish uchun:

- Power BI, Tableau, Google Data Studio kabi kengaytirilgan vositalar bilan integratsiya;
- Makros va VBA kodlari orqali avtomatlashtirish;
- Ma‘lumotlar bazasiga ulangan dynamic dashboards yaratish tavsiya etiladi.

Xulosa qilib aytganda, Microsoft Excel dasturi sifat belgilarini vizuallashtirish uchun qulay, ko‘p funksiyali va o‘rganishga oson vositadir. U nafaqat statistik tahlilni, balki vizual natijalarni tezkor tarzda yaratishni ta‘minlaydi. Shu bois, Excel dasturidan foydalangan holda ma‘lumotlarni sifat jihatidan baholash, kuzatish va taqqoslash jarayonlari soddalashadi. “Анализ данных” moduli esa sifat belgilarini ilmiy asosda tavsiflash, ularning o‘rtacha qiymati, og‘ish darajasi va tarqalishini tezkor aniqlash imkonini yaratadi. Kelajakda sun‘iy intellekt asosidagi Excel qo‘shimchalari orqali sifat tahlilini yanada avtomatlashtirish imkoniyatlari kengayadi.

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O‘ZBEK TILIDA NUTQ MADANIYATINING SHAKLLANISHI VA KOMMUNIKATIV XUSUSIYATLARI

Osiyo Xalqaro Universiteti magistranti

Sanayev Farrux Axmatovich

Annotatsiya: Mazkur maqolada o‘zbek tilida nutq madaniyatining shakllanish jarayoni, uning kommunikativ, estetik va axloqiy xususiyatlari tahlil etilgan. Maqolada o‘zbek tili funksional uslublarining o‘zaro ta’siri, kommunikativ samaradorlik va nutq odob-axloqi me’yorlari zamonaviy ijtimoiy-madaniy jarayonlar kontekstida tahlil qilingan. Muallif nutq madaniyatini shaxsning til sezgisi, estetik didi va madaniy tafakkurini shakllantiruvchi individual hodisa sifatida yoritadi.

Kalit so‘zlar: nutq madaniyati, adabiy til, kommunikativ kompetensiya, notiqlik san’ati, til me’yori, funksional uslub, estetik did, muloqot madaniyati, axloqiy fazilat, til va madaniyat.

Hozirgi globallashuv sharoitida insonning madaniy va ijtimoiy faoliyatida nutq madaniyatining o‘rni tobora ortib bormoqda. Til — bu nafaqat aloqa vositasi, balki xalqning ma’naviy dunyosi, tafakkuri va milliy o‘zligining ifodasidir. Shu sababli “nutq madaniyati” muammosi tilshunoslik fanining eng murakkab va dolzarb masalalaridan biri sifatida alohida e’tibor talab etadi.

Nutq madaniyati insonning ijtimoiy faolligi, muloqot madaniyati, estetik didi va axloqiy fazilatlari bilan uzviy bog‘liqdir. Til orqali madaniyat ifodalanadi, madaniyat orqali esa til boyib boradi. Shuning uchun ham zamonaviy o‘qituvchilar ta’lim jarayonida o‘quvchilarning tilni nafaqat grammatik jihatdan, balki ma’naviy-axloqiy va estetik nuqtayi nazardan o‘zlashtirishlariga alohida e’tibor qaratmoqdalar.

“Nutq madaniyati” muammosi tilshunoslarning eng murakkab va dolzarb muammolaridan biridir. Inson taraqqiyotini til va madaniyatsiz tasavvur etib bo‘lmaydi. Lingvistik ong til orqali madaniyat bilan uzviy bog‘liqdir. Eng yaxshi mahalliy o‘qituvchilar ta’limni o‘quvchilarning umumiy madaniy, shaxsiy rivojlanishiga yo’naltirishga, ular uchun tilning kognitiv, kommunikativ, epistemik funksiyalarini ochib berishga, o‘rganishni madaniy jihatdan to‘yingan qilishga intilishlari bejiz emas. Mazkur yondashuv fan doirasida **til, ong va madaniyat muammolarini chuqurroq tadqiq etish**, shuningdek, ularning **o‘zaro ta’sir darajasini belgilovchi omillarni aniqlashga** qaratilgan.

“**Nutq madaniyati**” fenomeni esa **integrativ shakllanish** sifatida namoyon bo‘lib, bizning talqinimizda u **“o‘qish madaniyati”**, **“matn bilan ishlash madaniyati”** hamda **“axborot madaniyati”** kabi tarkibiy qismlarni o‘z ichiga oladi.

MUHOKAMA VA NATIJALAR

Nutq madaniyati adabiy til - milliy tilning eng yuqori shakli paydo bo‘lganda paydo bo‘ladi. M. Sattorov yozishicha «Tilni xalq yaratganini eslash o‘rinli bo‘lardi», deb yozgan edi. Tilning adabiy va xalqqa bo‘linishi bizda, ta’bir joiz bo‘lsa, “xom” tilga ega bo‘lgan va ustozlar tomonidan qayta ishlanganligini bildiradi. Buni birinchi bo‘lib mukammal tushungan A. Navoyi edi, u ham birinchi bo‘lib xalq nutqi materialidan qanday foydalanishni, uni qayta ishlashni ko‘rsatdi.

Adabiy tilning asosiy xususiyatlari quyidagilardan iborat:

- normativlik;
- til birliklarining xilma-xilligi;

- funksional uslublarning mavjudligi;
- qayta ishlash;
- yozma va og'zaki shakllarning mavjudligi.

Abdullayeva G.A. adabiy tilni ongli ravishda me'yorlashtirilgan, kodlashtirilgan til, xalqning o'qimishli qismi tili, madaniyat tili sifatida tavsiflaydi.

Oliy va o'rta maxsus ta'lim muassasalarida "Nutq madaniyati" fanini o'qitish an'anaviy tarzda o'quv rejasiga kiritilgan. Ushbu jarayonda odatda notiqlik san'ati va nutq madaniyati birgalikda, ya'ni aralash holda o'rgatiladi. Ammo bu ikki yo'nalish tashqi jihatdan o'xshash ko'rinsa-da, aslida mazmun va vazifalari jihatidan bir-biridan farq qiladi.

Bu tafovutni ularning fan sifatida shakllanish bosqichlarini tahlil etish, shuningdek, maqsadi, predmeti va tasvirlash obyektlariga xos xususiyatlarini solishtirish orqali yaqqol ko'rish mumkin. Notiqlik san'ati qadim zamonlardan buyon alohida iste'dod va mahoratni talab etuvchi san'at turi bo'lib, u shaxsning noyob qobiliyatini namoyon etadi.

Shu bois, notiqlik bilan nutq madaniyati o'rtasida ma'lum bog'liqlik mavjud bo'lsa-da, har ikkisi o'ziga xos mohiyatga ega. Bu borada professor E. Begmatovning fikrlarini keltirish o'rinlidir:

Nutq madaniyati asl ma'noda **adabiy til bilan chambarchas bog'liq** hodisadir. Uning shakllanishi, insoniy mohiyati, talablari va mezonlari aynan adabiy tilning o'zi hamda uning me'yorlariga tayanadi. **Notiqlik san'atida** esa bu belgilar hal qiluvchi omil emas. Chunki notiqlik orasida **adabiy til me'yorlariga to'liq amal qilmaydigan**, ammo **ma'lum sheva yoki lahjada ham chinakam notiqlik san'atini namoyon etadigan** shaxslar uchrab turadi. Demak, so'zga usta bo'lish yoki notiqlik **til materialining shakliga emas, balki nutqning ta'sirchanligi va ifoda san'atiga** bog'liqdir.

Notiqlik — bu **og'zaki nutq bilan bevosita bog'liq hodisa**, ya'ni u nutqning og'zaki shaklida namoyon bo'ladi. **Notiqlik san'ati** — og'zaki nutqning yuksak san'atidir. **Nutq madaniyati** esa kengroq tushuncha bo'lib, u **nutqning ham og'zaki, ham yozma shakllariga** taalluqlidir.

Nutq madaniyati jamiyat a'zolarining umumiy nutqiy faoliyatini ko'zda tutadi. Nutq madaniyati sohasining maqsad va pirovard orzusi barchaning, butun xalqning nutqini madaniylashtirishni mo'ljallaydi. Mumtoz ma'nodagi notiqlik esa, alohida shaxslarning nutqiy mahoratini, san'atini ifodalaydi. Notiqlik, asosan, nutq vositasida kishilarga muayyan g'oya va maqsadlarni yetkazishni, ularni ma'lum maqsadga safarbar qilishni ko'zda tutadi. Ya'ni notiqlik san'atida tinglovchilarni ma'lum maqsadga jalb qilish asosiy o'rin tutadi. Shu sababli ham professor V.D. Kudryavsev notiqlik nutqiga shunday izoh beradi: "Har qanday og'zaki nutq notiqlik nutqi bo'lib, u nimanidir tushuntirish va isbotlashnigina emas, balki tinglovchilar tushunchasiga ta'sir etishini ham maqsad qilib oladi".

San'atkor notiqning nutqi odatda keng auditoriyaga, ya'ni ko'plab tinglovchilarga mo'ljallanadi. Uni bir vaqtning o'zida bir necha kishi tinglaydi. **Nutq madaniyati** esa buningdan kengroq tushuncha bo'lib, **ko'p sonli auditoriyadan tashqari kundalik suhbatlarni, shuningdek, yakka shaxsga qaratilgan muloqot shakllarini** ham o'z ichiga oladi.

Shu sababli biz **B. Sharipov** tomonidan berilgan ta'rifni **eng muvaffaqiyatli** deb hisoblaymiz: "*Nutq madaniyati — bu til birliklarini shunday tanlash va ularni shunday tashkil etishki, bunda muloqotning muayyan vaziyatida til me'yorlari hamda muloqot etikasiga rioya qilgan holda, belgilangan kommunikativ vazifalarga erishishda eng yuqori samaradorlikka erishish mumkin bo'ladi*".

“**Nutq madaniyati**” tushunchasining mazmuni haqida **Brokxaуз va Efronning Kichik ensiklopedik lug‘atida** ham aniq bayon topgan:

“Nutq madaniyati — bu nutqning rivojlanish darajasi, til yoki dialekt me‘yorlarini bilish darajasi hamda bu me‘yorlardan oqilona chetga chiqish qobiliyati bilan belgilanadi”.

Umumiy ma’noda **til me‘yori** deganda so‘zlar, iboralar va sintaktik konstruktsiyalarning **umume’tirof etilgan hamda qonuniylashtirilgan qo‘llanilishi** tushuniladi. Me‘yor jamiyatdagi nutq madaniyatini takomillashtirishga yo‘naltirilgan **ob’ektiv tendensiyalarni** aks ettiradi. **Adabiy tilning to‘g‘riligi, aniqligi, ravshanligi, izchilligi, ifodaliligi, boyligi, maqsadga muvofiqligi va dolzarbligi** aynan shu til me‘yorlari bilan belgilanadi.

Til me‘yorlari — tildagi jarayon va hodisalarning muntazam, barqaror ko‘rinishlarini ifodalovchi, **nutq amaliyoti orqali qo‘llab-quvvatlanadigan tizimdir**. Til me‘yorining manbalarini aniqlashda zamonaviy o‘zbek tilining **rivojlanish tendensiyalari** inobatga olinadi: adabiy nutqni demokratlashtirish, og‘zaki nutqning yozma shaklga ta’siri, nutq modellarining birlashuvi hamda nutqning saqlanishi bilan bog‘liq **semantik ravshanlikka intilish** kabi holatlar bunga misoldir.

Afsus bilan ta’kidlash joizki, hozirgi zamon umumta’lim maktablari bitiruvchilarining boshlang‘ich savodxonlik darajasi ancha past. Shu bois, mavjud sharoitda barcha mutaxassislik talabalari uchun me‘yoriy yozish ko‘nikmalarini mustahkamlash maqsadida “Orfografiya va punktuatsiya amaliyoti” fanini o‘quv rejalari tarkibiga, ya’ni davlat ta’lim standarti komponenti sifatida kiritish maqsadga muvofiq bo‘ladi, deb hisoblaymiz.

Badiiy asarlar tilning barcha uslublari va funksional turlarining elementlarini o‘z ichiga olgan murakkab tizimdir. Ular ko‘p bosqichli talqinni talab etadi va boshqa til funksiyalaridan tashqari, estetik hamda kommunikativ vazifani ham bajaradi.

Bizning fikrimizcha, o‘zbek tili uslublarni tasniflashda quyidagi jihat e’tiborga olinishi lozim: funksional uslublarning mavjudligi — adabiy tilga xos xususiyat bo‘lib, badiiy adabiy til ham, nutq madaniyati singari, tilning asosiy shakllantiruvchi sifatlarini o‘zida mujassam etadi. Shu bilan birga, milliy tilning adabiy bo‘lmagan shakllari — dialekt, jargon, xalq tili kabi unsurlar ko‘pincha bu tizimdan tashqarida qoladi. Shu nuqtayi nazardan qaraganda, til uslublari qatoridan “badiiy adabiy til” va “nutq madaniyati” kabi konstruktsiyalarni alohida ajratish maqsadga muvofiqdir; ular tilning funksional turlarida o‘z o‘rnini egallaydi.

Akademik D. Hashimova tomonidan taklif etilgan tilning funksional turlari tipologiyasi bugungi kunda keng e’tirof etilgan bo‘lib, quyidagi shaklda tasniflanadi:

- nutq madaniyati;
- badiiy adabiy til;
- tilning funksional uslublari: rasmiy-ish, ilmiy, publitsistik.

Til uslublarni M. Sattorov esa faqat funksional jihatdan ko‘rib, ularni badiiy adabiyot tili hamda so‘zlashuv tilidan ancha farqli, o‘ziga xos lingvistik tuzilishga ega uslublari sifatida tavsiflaydi.

Biroq til uslublarni bunday tarzda tartibga solish bir tomonlama yondashuv bo‘lib ko‘rinadi. Chunki tilda qo‘llaniladigan funksional va ekspressiv-stilistik vositalar nafaqat funksional (ilmiy, rasmiy-ish, publitsistik), balki ekspressiv — yuqori, neytral va qisqartirilgan uslublarni ham qamrab oladi.

Bayonotning kommunikativ samaradorligi esa shunda namoyon bo‘ladiki, agar nutqdan foydalanish natijasida so‘zlovchi o‘z maqsadiga erishsa va natijadan mamnun bo‘lsa, shu bilan birga tinglovchi

tomonidan tushunmovchilik, noxolis baho yoki hissiy salbiy reaksiya yuzaga kelmasa — bu holat kommunikativ muvofiqlik mezoniga to‘la javob beradi.

Odamlar o‘rtasidagi **muloqot** nafaqat **ijtimoiy-psixologik o‘zaro ta’sir jarayoni**, balki **axborot uzatish kanali** hamdir. Ammo mantiqiy va konseptual ma’lumotlar almashinuvi bosqichiga o‘tishdan oldin, eng avvalo, **nutqiy aloqa o‘rnatish zarur**. Buning uchun esa **nutq odob-axloqi normalarini bilish va ularni to‘g‘ri qo‘llay olish** muhim ahamiyat kasb etadi.

Shuningdek, **nutq madaniyati** asosida **nutq odob-axloqi tizimi** shakllanadi. Unga ko‘ra, suhbatdoshlar o‘rtasida **nutqiy aloqani to‘g‘ri o‘rnatish**, ularning **ijtimoiy roli, o‘zaro mavqei va munosabatlariga** muvofiq **rasmiy yoki norasmiy muloqotni to‘g‘ri yo‘lga qo‘yish** jamiyat tomonidan belgilangan **barqaror so‘zlashuv formulalari tizimi** orqali amalga oshadi.

Masalan, **o‘zbek odob-axloqining milliy o‘ziga xosligi** xalqimizning **maqol, matal va dostonlarida** o‘z ifodasini topgan.

Bugungi kunda mamlakatimizda kechayotgan **ijtimoiy-iqtisodiy, texnik, siyosiy hamda ma’naviy-axloqiy o‘zgarishlarni** inobatga olgan holda, **kommunikativ funksiyalar** — ya’ni **o‘z qiyofasini shakllantirish, tarbiyaviy ta’sir ko‘rsatish va moslashuv funksiyalarini**, ayniqsa, **virtual dunyoda nutqiy muloqot** sharoitida alohida ta’kidlash lozim.

Nutq madaniyatining axloqiy jihati esa turli muloqot holatlarida **lingvistik xulq-atvor qoidalarini bilish va ularga amal qilishni** taqozo etadi. Muloqot jarayonida **haqoratli, hurmatsiz yoki qo‘pol so‘zlardan foydalanish** qat’iyan man etiladi, **baland ohangdagi suhbatlar** esa qoralanadi. Qo‘pol, tartibsiz so‘zlar va noo‘rin iboralar insonda **noto‘g‘ri xatti-harakatlarga** sabab bo‘lishi mumkin. Shu haqiqat xalq og‘zaki ijodida **“Yomon so‘z go‘zal axloqni buzadi”** degan hikmat bilan ifoda etilgan.

Shunday qilib, **nutq madaniyati** — **individual hodisadir**. Ona tilidan to‘g‘ri va maqsadga muvofiq foydalanish shaxsning **til sezgisi, estetik didi va uslubiy madaniyati** darajasini ko‘rsatadi. Bu esa o‘z navbatida **shaxsning nutq va til madaniyatining yangi bosqichini shakllantirish** uchun zarur shart bo‘lib xizmat qiladi.

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**GLOBAL VA MILLIY IQTISODIYOTNI RIVOJLANTIRISH MILLAT UMIDI
UNIVERSITY**

Xalqaro biznes fakulteti
Biznes boshqaruv yo'nalishi 4-kurs talabasi
Olmasaliyeva Mushtariybonu

ANNOSTATSIYA: Maqolada bugungi kunga kelib cheklangan resurslardan yanada oqilona va samarali foydalanish zarurligi iqtisodiyotning bosh masalasi va iqtisodiyoning barqarorlashuv jarayonini taminlashda kafolat ekanligi bosh masala sifatida asoslangan.

KALIT SO'ZLAR: Milliy iqtisodiyot, global iqtisodiyot Iqtisodiyotni Rivojlanish bosqichlari, Milliy iqtisodiyotni afzalliklari.

ABSTRACT: In the article, the need for more rational and efficient use of limited resources is the main issue of the economy and the main issue is the guarantee of the stabilization process of the economy.

KEY WORDS: National economy, global economy, stages of economic development, advantages of national economy.

АННОТАЦИЯ: В статье необходимость более рационального и эффективного использования ограниченных ресурсов является основным вопросом экономики и главным вопросом является обеспечение процесса стабилизации экономики.

КЛЮЧЕВЫЕ СЛОВА: Национальная экономика, глобальная экономика, этапы экономического развития, преимущества национальной экономики.

KIRISH: Bo'lajak iqtisodchilarni tez o'zgarib borayotgan dunyo muammolarini yechish uchun bilim va ko'nikmalar bilan ta'minlashni anglagan holda, mamlakat iqtisodiyoti va barqarorligi o'rtasidagi kesishuvni chuqurroq tahlil qilish innovatsion pedtexnologiyalarni qo'llashni talab qiladi. Ta'kidlash joizki, barqaror amaliyotlar va resurslardan samarali foydalanishni targ'ib qiluvchi yashil iqtisodiyot konsepsiyasi jahon miqyosida keng ommalashdi. Iqlim o'zgarishi, atrof-muhitning inqirozga uchrashi va tabiiy resurslarning kamayishi bilan bog'liq xavotirlar ortib borayotgan bir paytda, butun dunyo davlatlari o'zlarining iqtisodiy tizimlarini qayta shakllantirish zarurligini tan olishmoqda. **ASOSIY QISMI:** Milliy iqtisodiyotni Rivojlantirish chora tadbirlari. Sharqiy Yevropa mamlakatlarida va SSSRda o'ta markazlashgan ma'muriy davlat sotsializmi inqirozga uchrab, parchalanishi natijasida vujudga kelgan yangi mustaqil davlatlarda (Polsha, Rossiya va boshqalarda) postsotsialistik Milliy iqtisodiyotga aylanmoqda. Boshqa ba'zi postsotsialistik mamlakatlarda, jumladan, O'zbekistonda o'ziga xos demokratik, bozorga 63 asoslangan umumdemosokratik Milliy iqtisodiyot shakllantirilmoqda. O'zbekiston mustaqilligining dastlabki o'n yilida mamlakatda umummilliy va xususiy mulkchilikka asoslangan ko'p ukladli Milliy iqtisodiyot — xilma-xil xususiy va davlat xo'jaliklari sistemasi shakllandi. Unda xususiy sektor ustuvor o'ringa, asosiy mavqega ega bo'ldi. Xo'jalik yurituvchi sub'yektlarning mutlaq ko'pchiligini yakka shaxsiy, guruh, shirkat, jamoa, aksiyali korxonalar, fermer va dehqon xo'jaliklari tashkil etadi; ularning yalpi ichki mahsulotdagi ulushi uchdan ikki qismdan oshib ketdi va tobora o'smoqda. Milliy ehtiyojlarni yaxshiroq qondirish zarurati iqtisodiy resurslardan samarali foydalanishni, tovarlar va xizmatlarning

ijtimoiy zarur maksimal hajmlariga erishishni taqozo etadi. Ayniqsa, ijtimoiy zarur mahsulot (tovar) ishlab chiqarish, uni zarur mik,dorlarda va sifatlarda, tabiatni asrab-avaylab, ekologiyani yaxshilab ishlab chiqarish har qanday Milliy iqtisodiyotning asosiy krnunidir. Milliy iqtisodiyotning ishlab chiqarish va no-ishlab chiqarish sohalari o'rtasida maqsadga muvofiq nisbati ta'minlanishining , ishlab chiqariladigan mahsulotlarning va ko'rsatiladigan xizmatlarning mumkin qadar ijtimoiy zarur yuqori hajmlarda bo'lishining muhim sharti fantexnika taraqqiyotini tezlashtirish, zamonaviy va samarali texnologiyalarni qo'llash, kadrlar tayyorlash sifatini oshirish, ishlashni xoxlovchi barcha mehnatga qobil kishilarning ish bilan ta'minlanishiga erishishdir. Birinchi navbatda, moddiy ishlab chiqarish sohasini intensiv rivojlantirish, mahsulot hajmini, ayniqsa, sof mahsulot hajmini sarf harajatlarning va aholining o'sishiga nisbatan tezroq o'stirish Milliy iqtisodiyot va iqtisodiy taraqqiyot muammolarini hal etishning , uni uzluksiz yuksaltirishning bosh yo'lidir. Bundan tashqari Milliy iqtisodiyotning sanoat, qishloq xo'jaligi, qurilish, transport, aloqa va boshqa tarmoqlari ichida hamda shu tarmoqlar o'rtasida barqaror, o'suvchan tarkibiy o'zgarishlar va maqsadga muvofiq nisbatlar, mutanosibliklar bo'lishi muhimdir. Fuqaroviy va harbiy ishlab chiqarishlar nisbati ham to'g'ri, me'yorida bo'lishi kerak. Ishlab chikarilayotgan tovarlarning va ko'rsatilayotgan xizmatlarning asosiy qismi, birinchi navbatda, ichki bozor talab-ehtiyojlarini qondirishga yo'naltirilishi, eng avvalo ichki bozorni sifatli va arzon milliy tovarlar bilan to'yin-tirish (to'ldirish) maqsadga muvofiqsir. Shu bilan birga tashqi iqtisodiy aloqalarni har tomonlama kengaytirish, jahon iqtisodiyotiga tobora qo'shilib borish, uning imkoniyatlaridan samarali foydalanish obyektiv zaruratdir, xo'jalik yurituvchi sub'yektlarga, aholiga soliq yukini yengillatish, davlat byudjetini va undan qilinadigan sarf harajatlarni optimallashtirish, inflyasiyani jilovlash kabilar Milliy iqtisodiyotning rivojlanishiga jidsiy va ijobiy ta'sir etadi. TAHLIL VA NATIJALAR: O'zbekistonda olib borilayotgan iqtisodiy islohotlar boshqarishning tashkiliy iqtisodiy tizimini barcha tarmoq va sohalarda rivojlantirishga qaratilgan. Ayniqsa yangi zamonaviy boshqaruv usullarini joriy etish muhim vazifalardan biri hisoblanadi. Ushbu tezisda O'zbekistondagi moliyaviy sektorning asosiy tarkibiy qismlari hisoblangan bank sektori va fond bozori kabilarning tizimli ahamiyati va iqtisodiy rivojlanishi haqida ma'lumot berilgan. Bundan tashqari, korporativ boshqaruv va uning asosiy va huquqiy rivojlanish jarayonlari ya'ni korporativ boshqaruv nazariyalari, modellari va mexanizmlari mahalliy va xalqaro miqyosda keng muhokama qilinadi. O'zbekiston mustaqillikka erishgandan so'ng, 1991 yildan boshlab O'zbekiston bank sektorini rivojlantirishda fond bozori juda muhim rol o'ynadi. Xuddi shunday, moliya sektorlarining, asosan, bank sektori va fond bozorining hal qiluvchi roli moliya sektori rivojlanishini jadallashtirish, natijada iqtisodiyotni yuksaltirishga e'tibor qaratildi. Shu nuqtai nazardan mamlakatimizda faoliyat yuritayotga kompaniyalar va barcha mulkchilik shakldagi korxonalarda korporativ boshqaruvning ilg'or usullarin joriy etish, uning tashkiliy-iqtisodiy mexanizmi samaradorligini oshirish bugu kunning dolzarb masalalaridan biridir. XULOSA: Xulosa qilib aytganda, Yangi O'zbekistonning Global iqtisodiyot hamda Milliy iqtisodiyotni rivojlantirish chora tadbirlari keng muhokamalarga sabab bulayapdi deb ayta olamiz milliy iqtisodiyotda xar qanday afzalliklar ni kuriwimiz mumkun tamoyillarini iqtisodiyot ta'limiga integratsiyalash yo'lidagi islohotlari mamlakatning barqaror kelajagini shakllantirish yo'lidagi muhim qadamdir. Davlatimiz talabalarini zarur bilim, ko'nikma va tafakkur bilan qurollantirish orqali atrof-muhitni muhofaza qilgan holda iqtisodiy o'sishni ta'minlay oladigan iqtisodchilar avlodini yetishtirmoqda. Bu jarayonda zamonaviy pedagogik yondashuvlarga, professor-o'qituvchilar

malakasini oshirish yashil va farovon kelajak qurishda ta'limning o'zgartiruvchi kuchidan foydalanish uchun qulay huquqiy, moddiy-ma'naviy hamda mahalliy, tabiiy shart-sharoitlardan samarali foydalanishni o'rgatadi.

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АКТУАЛЬНЫЕ ВОПРОСЫ ПРЕПОДАВАНИЯ МУЗЫКАЛЬНОГО НАУКИ**Жалилов Фаррух Абдурауфович****Бухарский государственный педагогический институт**

Аннотация: В статье рассматриваются актуальные вопросы формирования представлений о традиционном пении – макоме на уроках музыки в общеобразовательных школах. Обсуждаются проблемы, возникающие при изучении классических песен в учебниках, недостатки в профессиональной подготовке учителей музыки, недостаточная компетентность в исполнении макомов и пути их устранения.

Ключевые слова: классическое, традиционное пение, пение, маком, наследие, диапазон, четырёхоктава, малая октава, импровизационное исполнение.

Исходя из приоритетных задач, обозначенных в Законе Республики Узбекистан «Об образовании» и Национальной программе по подготовке кадров, наше национальное музыкальное наследие, в частности макомы, играет важнейшую роль в воспитании подрастающего поколения в духе уважения к национальной культуре и ценностям, формировании у него духовно-нравственных качеств. Одним из основных средств духовно-нравственного воспитания молодёжи является наше музыкальное наследие – школа макомного исполнительства. Народные песни и макомы, как художественно-эстетические источники, обладают свойством воспитывать ум ребёнка через чувства, а чувства – через разум. Характерная особенность макомов – обеспечение достижения интеллектуального совершенства через осознанное освоение всех аспектов традиционной добродетели, основанной на глубине ума и логическом мышлении. Область применения народных песен и макомов не ограничена. Включение в учебники примеров их исполнения в соответствии с возрастными особенностями, мировоззрением и уровнем нравственно-эстетического развития учащихся будет способствовать повышению духовности учащихся в процессе обучения. В настоящее время основной целью музыкального образования в образовательных учреждениях является воспитание подрастающего поколения в духе уважения к национальному музыкальному наследию. Специалисты отмечают, что изящные и проникновенные, глубоко философские по смыслу классические макомные тракты, впечатляющие инструментальные и лирические мелодии издавна известны нашему народу. Сохранение макомов на протяжении веков тесно связано с рядом факторов, в частности, с высоким исполнительским мастерством мастера и музыкантов. Критерием, отражающим живой процесс народной музыки, является исполнительская практика. Чем более развита и совершенна исполнительская практика, тем большее влияние она оказывает на творческое развитие. В учебнике «Музыка» С. Бегматова, Д. Каримовой и К. Мамирова для шестого класса общеобразовательных школ и в учебнике «Музыка» О. Иброхимова и Дж. Садирова для седьмого класса раскрываются понятия классической музыки, мелодии, песни, виды шашмакома и макома. Каждая тема представлена примерами исполнения для слушания и пения с учётом возрастных особенностей детей. В процессе изучения тем учебника возникло много вопросов, касающихся практики пения, и были выявлены проблемы. Учебник музыки для шестого класса ориентирован на освещение

определенной темы в каждой четверти. В течение четвертей учащиеся получают теоретические сведения об исполнительских школах шашмакома, чормакома и хорезмского макома. Однако образцы исполнения для приобретения навыков и квалификации исполнения макомных песен предоставлены не были. Основная причина этого заключается в том, что образцы исполнения в этих школах макомного исполнительства состоят из произведений с большим диапазоном и требующих высокого исполнительского мастерства. Поэтому авторы решили не предоставлять эти произведения. При отборе песен в соответствии с возрастными особенностями, мировоззрением и уровнем нравственно-эстетического развития учащихся, встречаются многочисленные примеры исполнения в стиле оазисного пения – произведения, находящиеся на уровне классического пения. Например, народные песни «Шароб», «Тановар», «Мискинлар», «Фергонача», десятки песен композиторов прошлого, таких как «Солим», «Дилхиродж», «Салламно», а также классические песни, такие как «Чоргох 4», «Кашгарча», «Рок», «Сарохбори», «Дугох 2-3». Чтобы воспитать подрастающее поколение всесторонне развитыми личностями, способными воспринимать наше национальное музыкальное наследие, необходимо включать в учебники полные версии этих песен. После теоретических знаний по предмету музыкальная грамота и исполнительские произведения должны логически соответствовать предмету. Например, учебник дает представление о классической музыке, а в разделе музыкальной грамоты переносится процесс проведения упражнений, не относящихся к предмету. Исходя из психофизиологического состояния детей, в течение часового урока необходимо выбирать как музыкальную грамоту, так и песнопения в соответствии с темой, не отвлекая внимание ребёнка на три разных вида деятельности. В разделе музыкальной грамоты целесообразно использовать ключевые слова или термины, связанные с классической музыкой, такие как маком, бозгой, названия макомов и т.д. В разделе песнопений включение классических мелодий «Фергъонача жанон», «Эй сарвиравон», «Сарохбори дугох тароналари», «Каландар», «Сокийнома» и «Уфорлар» повысит эффективность урока. Выбранные произведения соответствуют уровню мастерства и вокальным возможностям учащихся, диапазон составляет полторы октавы, и являются комфортными для исполнения, не вызывая перенапряжения голоса и умственных затруднений. К счастью, произведения, исполняемые на занятиях, будут звучать в конце года на «Отчётных концертах», а также в музыкальных программах и передачах Узбекской телерадиокомпании, в частности, в программах «Тараннум», «Оханрабо», «Дилнаво», «Кухна замин оханглари», «Олтин мерос». Нельзя сказать, что все преподаватели музыки обладают высоким исполнительским мастерством. Не все преподаватели – талантливые певцы или, наоборот, музыканты. Поэтому преподаватель музыки выступает на пределе своих возможностей. Специалисты считают, что исполнительское мастерство и опыт нескольких поколений известных певцов и музыкантов в исполнении макома обусловили расцвет этого направления. В этом смысле композитор и исполнитель, достигший уровня мастера, стремится внести свой вклад в увековечение образцов классической музыки, «заражая» своих учеников своим творческим гением. Ученики также должны следовать этому правилу и стремиться к дальнейшему совершенствованию научных и творческих навыков, полученных от своих учителей, и, в свою очередь, передавать их будущим поколениям. Как говорится в главе «Воспоминания о Хафизе и музыкальном искусстве» из «Кобуснаме» Кайковуса, мастера

музыкальной науки сочиняли мелодии, соответствующие характеру каждого класса людей той эпохи, в которую жил этот автор. Одними из таких классов были дети и люди с хрупким телосложением, то есть женщины. Для этого народа, говорится в произведении, они создали песню, чтобы и этот народ мог наслаждаться ею. Потому что среди всех гамм нет такой приятной, как таронадин». В конце XIX — начале XX веков один из великих продолжателей традиции исполнения макомов, известный хафиз и музыкант Абдулазиз Расулов, в целях совершенствования творческих способностей своих учеников показывал молодым певцам, разучившим макомы, разные варианты одной и той же песни и учил их самостоятельно импровизировать. Мастер требовал от своих учеников достижения творческого совершенства в исполнении.

Изучение макомов по системе «мастер-ученик» сложилось в далёком прошлом и продолжается по сей день. Издавна урок исполнительства традиционно проводился в формате мастер-ученик. Каждый ученик находился под контролем и воспитанием своего учителя.

Навыки игры слов, пения, правильного произношения, понимания смысла стихов и газелей, изучения музыкального наследия, характерные для музыкального и литературного искусства, всегда находились под контролем педагогов. Самостоятельное выступление ученика перед публикой и любителями музыки осуществлялось с непосредственного разрешения педагога.

Преподавателям музыки, не имеющим опыта пения, необходимо проходить переподготовку на специальных курсах и развивать своё мастерство. В противном случае будет сложно достичь желаемых результатов. Для восполнения пробелов в учебниках для 6-х и 7-х классов общеобразовательных школ было прослушано более 250 произведений «Шашмаком» и более 50 произведений «Чормаком», отобраны песни, которые могли бы исполнить учащиеся, и создан новый музыкальный сборник «Мумтоз ашула». В сборнике каждый пример исполнения представлен полностью, указаны порядок и правила исполнения. Сама эпоха требует проведения обширных исследований для формирования у учащихся понимания макома в музыке и устранения выявленных проблем. Совместно с Институтом переподготовки учителей и Республиканским образовательным центром регулярно проводятся семинары «Школа мастерства», на которых рассматриваются некоторые вопросы, встречающиеся в школьных учебниках. В заключение следует отметить, что музыка, как и все другие сферы общественной жизни, не может развиваться без использования бесценного наследия наших предков. Поэтому сохранение верности традициям и опора на них во все времена – залог будущего успеха, перспектив детей и гармоничного воспитания следующего поколения.

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RISKS IN FINANCING GREEN PROJECTS BY COMMERCIAL BANKS IN UZBEKISTAN (2025–2030 OUTLOOK)

Author: Karshieva Marjona Alisher kizi

E-mail: tasbehoy@gmail.com

In recent years, Uzbekistan has made substantial progress in promoting green and sustainable economic transformation. The government's "Green Economy Strategy for 2030" outlines ambitious goals to reduce energy intensity, expand renewable energy capacity, and ensure environmental safety¹. Within this framework, commercial banks are expected to play a pivotal role in mobilizing private investment toward low-carbon and climate-resilient projects.²

However, financing green projects differs from conventional lending. It involves higher uncertainty, new technological and regulatory frameworks, and longer payback periods. As a result, banks face a complex mix of financial, operational, technical, and policy risks that must be properly identified and managed.³ This report analyzes key risk types faced by Uzbek commercial banks in green financing and provides predictions for their evolution by 2030, based on current trends, market development, and regulatory progress.

As reported by the OECD (2023)⁴, green project financing involves complex risk structures including credit, technology, and regulatory risks.

1. Credit Risk (Project Viability and Repayment Capacity)

Credit risk remains the dominant concern for banks financing green projects. Many renewable energy and energy efficiency projects depend on new technologies with uncertain operational histories, especially in Uzbekistan's climate and infrastructure context.

By 2030, as the renewable sector matures and government-backed credit lines expand, the average credit risk is expected to decrease from very high to moderate-high. However, start-ups and SMEs in green innovation will still face limited collateral and higher default probability.

To mitigate this, banks should develop green credit scoring models, collaborate with development finance institutions (DFIs) for partial guarantees, and implement phased disbursement linked to milestones.

2. Regulatory and Policy Risk

Uzbekistan's policy environment is transitioning rapidly. Reforms in renewable energy tariffs, environmental codes, and investment incentives create opportunities but also uncertainties.

Policy risk is projected to decline from high to medium by 2030, as the government harmonizes national green finance standards with international taxonomies and climate disclosure frameworks. Nevertheless, transition risk — linked to the gradual phase-out of high-carbon industries — will increase.

¹ Republic of Uzbekistan. (2022). Decree of the President of the Republic of Uzbekistan No. PQ-4477 "On the Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for 2030". Tashkent.

² World Bank. (2023). Uzbekistan Country Climate and Development Report. Washington, DC: World Bank Group.

³ The Asian Development Bank (2024) emphasizes that financial institutions in Central Asia face structural challenges in building green finance portfolios due to limited risk assessment experience.

⁴ OECD. (2023). Green Finance and Investment: Managing Environmental and Climate Risks. Paris: OECD Publishing.

Banks are encouraged to perform policy stress tests, maintain dialogue with energy and finance ministries, and incorporate regulatory change scenarios into risk assessments.

3. Market and Price Risk

Market risks stem from volatility in energy prices, carbon credit values, and demand for renewable energy. Currently, most projects rely on fixed Power Purchase Agreements (PPAs), but electricity market liberalization will gradually expose them to price fluctuations.

By 2030, the development of transparent market mechanisms and carbon trading schemes will stabilize prices, though competition will tighten margins. Market risk will likely remain moderate.

Banks should promote indexed PPAs, hedging instruments, and portfolio diversification across technologies and regions.

4. Technical and Technology Risk

Many green technologies in Uzbekistan are imported, creating dependence on foreign expertise and parts. Technical failures or poor maintenance can undermine project viability.

By 2030, as local manufacturing and service capacity grows, this risk will fall from very high to medium. However, the rise of digitalized smart-grid systems will introduce cyber-physical vulnerabilities.

Therefore, banks must require independent technical audits, performance guarantees, and cyber risk insurance for projects that use automated systems.

Table1. Predicted Risk Evolution Summary (2025–2030)⁵

Risk Type	2024 Level	2030 Forecast	Trend	Key Drivers
Credit Risk	Very High	Moderate-High	↓	DFI guarantees, project maturity
Regulatory / Policy	High	Medium	↓	Stable green finance standards
Market / Price	Moderate	Moderate	→	Liberalization, carbon pricing
Technical / Technology	Very High	Medium	↓	Local capacity, smart-grid
Operational	High	Low-Medium	↓	Capacity building
Reputational	Moderate	Moderate	→	Green taxonomy, reporting
FX / Interest Rate	High	Medium-High	↓	Local green bonds
MRV	High	Medium	↓	Digital data systems

⁵Developed by the author based on the Republic of Uzbekistan's "Green Economy Strategy–2030" (Presidential Decree No. PQ–4477, December 4, 2022), international methodologies from the World Bank, IFC, ADB, and OECD Green Finance Frameworks, and expert-based assessment of risk likelihood and impact for commercial banks in Uzbekistan (2025–2030 projection).

Risk Type	2024 Level	2030 Forecast	Trend	Key Drivers
Liquidity	High	Medium	↓	Capital market development
Environmental Liability	Medium	Low-Medium	↓	Stronger environmental codes

5. Operational Risk

Operational risk arises from insufficient internal capacity among banks — including lack of knowledge about environmental risk assessment, MRV (Measurement, Reporting, Verification), and ESG compliance.

Due to ongoing capacity-building programs supported by the Asian Development Bank (ADB), International Finance Corporation (IFC), and Green Climate Fund (GCF), operational risk is expected to decrease to low-medium by 2030.

Banks should integrate ESG appraisal checklists and dedicated green finance units into their organizational structures.

6. Reputational Risk

The growing popularity of green finance increases exposure to accusations of “greenwashing” — when projects labeled as green do not deliver measurable environmental benefits.

By 2030, as national green taxonomy verification becomes mandatory and public reporting expands, reputational risk will shift towards compliance risk. Overall level will remain moderate, but transparency expectations will rise sharply.

Banks should ensure independent validation, publish annual sustainability reports, and adopt transparent impact metrics to safeguard their reputation.

7. Foreign Exchange (FX) and Interest Rate Risk

Many renewable projects are financed in foreign currency (USD or EUR), while revenues are in Uzbek sum (UZS), creating a mismatch.

By 2030, with the expected development of a local green bond market and local-currency credit lines, FX risk will slightly decline but remain medium-high due to exchange rate volatility.

Banks should prioritize local-currency lending, currency-swaps, and shared hedging costs with project developers.

8. Measurement, Reporting & Verification (MRV) Risk

Accurate MRV is essential for determining real environmental impact and for accessing performance-based incentives. Current systems in Uzbekistan rely heavily on manual data collection, increasing the risk of error.

By 2030, digital MRV systems (using IoT sensors and blockchain-based registries) will significantly improve transparency, reducing risk from high to medium. However, data gaps may persist for small-scale projects.

Banks should invest in AI-driven monitoring, train auditors, and link MRV systems to national climate databases.

9. Liquidity Risk

Green projects typically require long-term financing (10–15 years), but most Uzbek banks rely on short-term deposits.

The development of green bonds, securitization, and institutional investor participation will enhance liquidity and maturity matching. Thus, liquidity risk is projected to fall from high to medium by 2030. Banks should maintain liquidity buffers, explore covered bond structures, and participate in capital market reforms.

10. *Environmental Liability Risk*

If a financed project causes pollution or fails environmental compliance, the financing bank may face financial penalties or reputation damage.

By 2030, with stricter Environmental Codes and mandatory due diligence, this risk will decline from medium to low-medium, although enforcement gaps could persist.

Banks should require environmental insurance, enforce E&S covenants, and monitor compliance through periodic third-party audits.

Between 2025 and 2030, Uzbekistan's financial sector is expected to undergo a major transition from risk-averse green lending to strategically managed sustainable finance. While the overall risk profile will decline, new challenges — especially in data verification, cyber-risk, and regulatory compliance — will emerge.

Banks that invest early in internal capacity, MRV technology, and blended finance partnerships will be able to expand their green portfolios safely and profitably. Moreover, alignment with international standards such as the EU Green Taxonomy and IFC Performance Standards will help attract foreign investors.

In conclusion, the next five years represent a pivotal window for commercial banks in Uzbekistan to establish robust green finance systems. With appropriate risk management, transparency, and innovation, they can transform potential risks into long-term opportunities for both profit and sustainability.

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THE IMPORTANCE OF AGRO-SERVICES IN ECONOMIC DEVELOPMENT

Yuldashova Nilufar Ziyabayevna – senior lecturer of the department of “Economic analysis and statistics” of the Samarkand institute of economics and service, PhD

Abstract: *Agro-services play a pivotal role in the economic development of countries by enhancing agricultural productivity, promoting technological innovation, and supporting rural livelihoods. These services encompass a range of activities, including the provision of quality inputs, mechanization support, extension services, market information, and financial assistance, all of which are essential for increasing efficiency and profitability in agriculture. By improving resource utilization and facilitating access to modern agricultural techniques, agro-services contribute not only to higher crop yields and food security but also to employment generation and poverty reduction. The integration of agro-services with broader economic policies ensures sustainable growth, strengthens the agribusiness sector, and stimulates related industries, thereby fostering overall economic development. Moreover, agro-services enhance farmers' resilience to environmental and market risks, support value chain development, and encourage private sector participation, which collectively drive economic diversification and inclusive growth. Understanding the importance of agro-services is thus crucial for policymakers, development agencies, and stakeholders aiming to achieve sustainable agricultural development and long-term economic progress.*

Keywords: *agro-services, economic development, agricultural productivity, rural livelihoods, sustainable growth, agribusiness, value chain.*

INTRODUCTION.

Agriculture continues to serve as a fundamental pillar of economic development, particularly in developing countries where a large portion of the population relies on farming for their livelihoods. Despite its importance, agricultural productivity often remains constrained by limited access to knowledge, modern technologies, quality inputs, financial resources, and efficient market systems. Agro-services, encompassing a wide range of support activities such as extension services, mechanization, supply of quality seeds and fertilizers, irrigation management, financial assistance, and market facilitation, are essential tools for overcoming these constraints. By linking farmers to modern technologies and market opportunities, agro-services improve efficiency, increase crop yields, and promote sustainable farming practices. Moreover, they contribute to poverty alleviation, food security, and rural employment, thereby supporting broader socio-economic development goals. The availability and quality of agro-services directly influence farmers' ability to adopt innovative practices, optimize resource utilization, and respond effectively to environmental and economic challenges. Therefore, understanding and strengthening agro-services is critical for fostering agricultural modernization, enhancing rural livelihoods, and promoting overall economic growth.

Main Part.

Agro-services play a crucial role in enhancing agricultural productivity and ensuring sustainable rural development. One of the most significant components is **agricultural extension services**, which provide farmers with essential knowledge about modern farming techniques, pest and disease management, soil health, and climate-smart practices. These services enable farmers to adopt

innovative technologies and improve decision-making, leading to higher yields and more efficient use of resources. Another key aspect is the **provision of quality inputs**, including high-yield seeds, fertilizers, and crop protection materials, which directly affect productivity and crop quality. **Mechanization services**, such as access to tractors, harvesters, and irrigation equipment, reduce labor constraints, increase efficiency, and allow timely farm operations, which is especially critical during peak planting and harvesting periods.

Financial agro-services also have a significant impact, providing farmers with credit facilities, crop insurance, and investment opportunities that allow them to adopt modern technologies without being exposed to excessive risk. These services empower smallholders to expand production, diversify crops, and increase profitability while mitigating vulnerabilities to market fluctuations and climatic shocks. Equally important are **market facilitation services**, including price information systems, storage and transport support, and access to local and international markets, which strengthen the value chain by connecting producers with buyers, reducing post-harvest losses, and increasing farm incomes.

Agro-services also stimulate the development of the **agribusiness sector**, encouraging private sector participation, investment, and innovation. This creates employment opportunities, supports rural entrepreneurship, and enhances economic linkages between agriculture and other industries such as processing, transportation, and retail. Furthermore, agro-services promote **sustainable agriculture** by encouraging resource-efficient practices, reducing environmental degradation, and supporting climate-resilient farming systems. Overall, the integration of comprehensive agro-services into agricultural policy and practice not only improves productivity and income for farmers but also strengthens the overall economy by fostering inclusive growth, enhancing food security, and promoting rural development.

Conclusion.

Agro-services are indispensable for modernizing agriculture, enhancing productivity, and promoting sustainable economic growth. By providing farmers with access to quality inputs, advanced technologies, financial support, extension services, and market information, agro-services enable efficient resource use, higher crop yields, and increased farm incomes. These services not only strengthen the agricultural sector but also generate employment, support rural entrepreneurship, and contribute to poverty reduction, food security, and inclusive development. The integration of agro-services with broader economic and rural development policies fosters the growth of agribusiness, value chain linkages, and private sector participation, thereby amplifying their impact on national economies. To maximize these benefits, policymakers and development stakeholders must prioritize the expansion, accessibility, and quality of agro-services while encouraging innovation and sustainability. Ultimately, well-developed agro-service systems serve as a cornerstone for resilient agricultural economies, rural prosperity, and long-term national development.

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KARDIOMIYOPATIYA TURLARI, MORFOLOGIYASI, YOSHGA NISBATAN BOG‘LIQLIGI

Xolto‘rayev Azizbek Abdumalik o‘g‘li.

Toshkent Davlat Tibbiyot Universiteti Termiz filiali talabasi.

azizbekxoltorayev1@gmail.com

+998957889928

Saidov Shoxrullo

Toshkent Davlat Tibbiyot Universiteti Termiz filiali

Tibbiy biologiya va gistologiya kafedrasi assistenti

Anatotsiya:

Kardiomiopatiya — yurak mushaklarining struktura va funksional o‘zgarishlari bilan bog‘liq kasalliklar guruhidir. Ushbu kasalliklar yurakning to‘g‘ri ishlashiga to‘sqinlik qilib, yurak etishmovchiligiga olib kelishi mumkin. Kardiomiopatiya turlari asosan dilatatsion, gipertrofik va restriktiv bo‘lib, har biri yurak mushagining turli morfologik o‘zgarishlari bilan namoyon bo‘ladi.

Dilatatsion kardiomiopatiyada yurak mushagi kengayadi, gipertrofik kardiomiopatiyada esa mushaklar qalinlashadi. Restriktiv kardiomiopatiyada esa yurakning elastikligi kamayib, qonning to‘liq olish imkoniyati cheklanadi. Yoshga nisbatan kardiomiopatiya o‘zgarishi ham muhim ahamiyatga ega. Bolalar va o‘smirlar orasida kardiomiopatiyaning genetik omillar bilan bog‘liq shakllari uchraydi, o‘rta yoshlarda esa stress va yurak-qon tomir kasalliklari omillari ko‘proq rol o‘ynaydi. Keksalar orasida esa bu kasallik ko‘proq metabolik o‘zgarishlar va mavjud yurak kasalliklari bilan bog‘liq bo‘ladi.

Ushbu maqolada kardiomiopatiyaning turlari, morfologiyasi va yoshga qarab o‘zgarishlari tahlil qilinadi. Tadqiqotlar kardiomiopatiyaning turli yosh guruhlaridagi farqlarini aniqlashda yordam beradi va ularning yanada samarali diagnostika va davolash usullarini ishlab chiqishda muhim o‘rin tutadi.

Kirish

Kardiomiyopatiya — yurak mushaklarining strukturaviy va funktsional oʻzgarishlari bilan bogʻliq boʻlgan kasalliklar guruhi. Ushbu kasalliklar yurakning normal ish faoliyatini buzadi va koʻpincha yurak etishmovchiligiga olib keladi.

Kardiomiyopatiyaning turlari va morfologiyasi tibbiyotda dolzarb masala hisoblanadi. Shu sababli, ularning yoshga nisbatan oʻzgarishi ham muhim ilmiy tadqiqot mavzusi hisoblanadi.

Kardiomiyopatiya turlari

Dilatatsion kardiomiyopatiya

Dilatatsion kardiomiyopatiyada yurak mushagi kengayadi, bu esa yurakning qisqarish qobiliyatini pasaytiradi. Bu holat koʻpincha yurak yetishmovchiligiga olib keladi.

Gipertrofik kardiomiyopatiya

Yurak mushagi qalinlashadi, ayniqsa, septum (yurakning oʻrtasidagi boʻshliq) qalinlashadi. Bu holat yurakning normal qon pompalash qobiliyatiga toʻsqinlik qiladi.

Restriktiv kardiomiyopatiya

Yurak mushagi elastikligini yoʻqotadi, bu esa uning zichligini oshiradi. Natijada, yurakning toʻliq boʻshashishi va toʻliq qon olish imkoniyati cheklangan boʻladi.

Aralash shakllar

Baʼzan yuqoridagi turlar oʻzaro birlashib, aralash shakl hosil qiladi. Bu holatda bemorlar bir nechta simptomlarni bir vaqtning oʻzida boshdan kechirishi mumkin.

Marfologik oʻzgarishlar

Yiriklashish

Yurak mushagining yiriklashishi (dilatatsiya) kardiomiyopatiya kasalligini koʻrsatadi. Bunda, asosan, yurakning chap qorinchasi kattalashadi.

Fibroz va nekroz

Yurak mushagidagi fibroz (toʻqimalarning borishi) va nekroz (toʻqima oʻlimi) oʻzgarishlari kardiomiyopatiyaning morfologik belgilari sifatida koʻrinadi. Bu oʻzgarishlar yurakning normal ishlashini toʻsadi.

Gistologik xususiyatlar

Gistologik tekshiruvlar kardiomiopatiyaning genetik yoki immunologik sabablarini aniqlashda yordam beradi. Masalan, yurak mushagi hujayralaridagi o'zgarishlar kasallikning turini va dastlabki bosqichini aniqlashga yordam beradi.

Yoshga nisbatan bog'liqligi

Bolalar va o'smirlar

Kardiomiopatiya bolalar va o'smirlar orasida nisbatan kam uchraydi, lekin bu yosh guruhida kasallikning genetik sabablari ko'proq aniqlanadi.

O'rta yoshdagi bemorlar

O'rta yoshda (30-50 yosh) kardiomiopatiya o'zgacha rivojlanadi. Bu davrda kardiomiopatiya ko'proq stress, yuqori qon bosimi va yurakni yomon ishlatish sababli yuzaga keladi.

Keksalar

Keksalarda kardiomiopatiya ko'proq yurak-qon tomir kasalliklari bilan bog'liq bo'ladi. Ularning morfologiyasi, shuningdek, metabolik o'zgarishlar va genetik omillar bilan bog'liqdir.

Tahlil va muhokama

Yoshga qarab morfologik farqlar

Yoshga qarab kardiomiopatiyaning morfologik o'zgarishlari ham farq qiladi. Keksalarda yurak mushagi qalinlashuvi va qiyinchiliklar ko'proq uchraydi. Yoshlar esa ko'proq dilatatsion yoki gipertrofik kardiomiopatiyaga moyil bo'lishi mumkin.

Zamonaviy tadqiqotlardan misollar

Hozirgi kunda kardiomiopatiya va uning turli morfologik o'zgarishlarini tahlil qilish uchun genetik, biokimyoviy va histologik tadqiqotlar rivojlanmoqda. Bu tadqiqotlar yoshga qarab farqlarni aniqlashda yordam beradi.

Xulosa

Kardiomiopatiya, yurak mushaklarining strukturaviy va funksional o'zgarishlari natijasida yuzaga keladigan, yurakning normal ish faoliyatini buzadigan jiddiy kasalliklar guruhini tashkil etadi. Ushbu kasalliklar tibbiyotda dolzarb ahamiyatga ega bo'lib, yurak etishmovchiligiga olib kelishi mumkin. Kardiomiopatiyaning asosiy

turlari — dilatatsion, gipertrofik va restriktiv — har biri oʻziga xos morfologik va patofiziologik oʻzgarishlar bilan tavsiflanadi. Dilatatsion kardiomiopatiyada yurak mushagi kengayib, uning qisqarish qobiliyati pasayadi, gipertrofik kardiomiopatiyada esa mushaklar qalinlashib, yurakning pompalash funksiyasi yomonlashadi. Restriktiv kardiomiopatiyada esa yurak mushagi elastikligini yoʻqotadi, bu esa qonning normal ravishda boʻshashini cheklaydi.

Bundan tashqari, kardiomiopatiyaning turli yosh guruhlaridagi morfologik farqlari va patologik oʻzgarishlarni chuqurroq tahlil qilish kardiomiopatiyaning erta diagnostikasini amalga oshirishda muhim rol oʻynaydi. Shuningdek, yoshga mos davolash yondashuvlarini ishlab chiqish va kasallikni profilaktik jihatdan oldini olish uchun yangi yondashuvlar izlash kerak. Kelajakda kardiomiopatiyaning turlari va yoshga nisbatan oʻzgarishlarini aniqlash uchun yanada koʻproq molekulyar va genetik tadqiqotlar oʻtkazish zarur. Bu nafaqat kasallikning erta bosqichlarini aniqlashga, balki bemorlarni individual ravishda davolashda yanada samarali usullarni ishlab chiqishga yordam beradi.

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BOLALARDA TUG'MA YURAK NUQSONI SHAKLLANISHIDA ZAMONAVIY MA'LUMOTLAR

Qilichev Baxrom Baxtiyor o'g'li

Toshkent Davlat Tibbiyot Universiteti Termiz filiali talabasi

qilichevbaxrom20@gmail.com

+998880400983

Saidov Shoxrullo

Toshkent Davlat Tibbiyot Universiteti Termiz filiali

Tibbiy biologiya va gistologiya kafedrasi assistenti

Annotatsiya: Tug'ma yurak nuqsonlari bolalar sog'lig'ida jiddiy muammolarga va nogironlikka olib kelishi, ularning keng tarqalganligi va erta jarrohlik korreksiyasi talab qilishi tufayli pediatriyada muhim muammo hisoblanadi. Jisot ma'lumotlariga ko'ra, tug'ma yurak nuqsoni yangi tug'ilgan chaqaloqlarning 0,7-1,7% da uchraydi. Ba'zi hollarda tug'ma yurak nuqsonlari kechishining bosqichlari tez rivojlanishi nafaqat uning og'irlik darajasi, balki komorbid holatlarning ta'siri bilan ham belgilanadi, jumladan gipoksik-ishemik ensefalopatiya, oziqlanish yetishmovchiligi, defisit anemiyalar va boshqalar. Ushbu buzilishlarning rivojlanish mexanizmlarini bilish va ularni zamonaviy tadqiqot usullari yordamida o'z vaqtida aniqlash imkoniyati rivojlanayotgan patologik holatlarni imkon qadar erta tashxislash va korreksiyalash imkonini beradi. Shu munosabat bilan tug'ma yurak nuqsoni bo'lgan erta yoshdagi bolalarga o'z vaqtida tibbiy yordam ko'rsatishni takomillashtirishning klinik diagnostika mezonlarini o'rganish masalasi dolzarbligicha qolmoqda va bu yo'nalishda ilmiy izlanishlarni taqozo etadi.

Kalit so'zlar: tug'ma yurak nuqsoni, rivojlanish nuqsonlari, etiologiya, anomaliya, nuqson

TYuN yurak va katta tomirlarga ta'sir qiluvchi keng qamrovli anomaliyalar va malformatsiyalardan iborat bo'lib, ular bachadonda rivojlanadi, tug'ilishda mavjud bo'lib, go'daklik, o'smirlilik yoki balog'at yoshida tibbiy yordamga murojaat qiladi. Yurak-qon tomir anomaliyalari odatda embriologik rivojlanish davrida nuqsonli

morfogenez natijasida yuzaga keladi. Malformatsiyalar yurak-qon tomir tizimi (sindromik bo'lmagan) bilan chegaralanishi yoki ma'lum sindromlarning (sindromik) bir qismi sifatida boshqa tizimlarning anomaliyalari bilan birgalikda paydo bo'lishi mumkin.

Go'daklik davrida tashxis qo'yilgan eng ko'p uchraydigan tug'ma yurak nuqsonlari mushak va perimembranoz qorincha septal nuqsonlari bo'lib, undan keyin ikkilamchi atriyal septal nuqsonlar mavjud bo'lib, ularning umumiy tarqalishi 10 000 tirik tug'ilgan chaqaloqqa 48,4 tani tashkil qiladi.

Bolalarning qariyb 85% bolalarda tug'ma yurak kasalliklarining multifaktorial etiologiyasiga ega, bu odatda bolaning rivojlanishidagi yagona nuqson bo'lib, ko'plab, individual ravishda hali aniqlanmagan genlarning o'zaro ta'siri va boshqa bir qator sabablar natijasidir. Oilada tug'ma yurak kasalligining qaytalanish xavfi sababga qarab o'zgaradi. Yangi boshlangan mutatsiyalar uchun xavf ahamiyatsiz, sindromli bo'lmagan multifaktorial tug'ma yurak kasalligi uchun 2-5% va sabab autosomal dominant mutatsiya bo'lgan holatlar uchun 50%. Genetik omillarni aniqlash juda muhim, chunki tug'ma yurak kasalligi bo'lgan bemorlarning aksariyati balog'at yoshiga qadar yashaydi va potentsial oilani boshlaydi.

Yurak va yirik tomirlarning anatomik rivojlanishining anomaliyalari odatda intrauterin rivojlanishning 2-8 xaftasida embrion morfogenezining buzilishi natijasida shakllanadi va irsiy (gen, xromosoma, genomik, zigotik mutatsiyalar) va atrof-muhit omillari ta'sirida yuzaga kelishi mumkin. rivojlanayotgan embrionga ta'sir qiladi. Konjenital yurak kasalliklarining o'ziga xos sabablari ma'lum emas. Ko'pincha tug'ma yurak kasalligi sporadik bo'lib, sindrom bilan bog'liq emas va noaniq etiologiya. Konjenital yurak kasalligi bo'lgan bemorlarning taxminan 72 foizida genetik etiologiya aniqlanmagan. Ular ko'pincha xromosoma anomaliyalari bilan bog'liq bo'lib, konjenital yurak kasalligi bo'lgan bemorlarning 1/3 qismidan ko'prog'ida karyotiplash orqali aniqlanadi. Ko'pincha bu 21, 18 va 13-xromosomalarda trisomiya. Daun kasalligidan tashqari, 20 ga yaqin irsiy sindrom mavjud bo'lib, aksariyat hollarda tug'ma yurak kasalligi bilan birga keladi. Hammasi bo'lib, sindromli patologiya bemorlarning 6-36 foizida topiladi. Biroq, bu anomaliyalarning ba'zilar konjenital yurak kasalligi bo'lgan bemorlarning atigi 5-6 foizini tashkil qiladi. Konjenital yurak kasalliklarining monogen tabiati 8% hollarda isbotlangan; taxminan 90% multifaktorial meros bo'lib, ya'ni. irsiy moyillik va atrof-muhit omillarining kombinatsiyasi natijasidir. Ikkinchisi qo'zg'atuvchi vosita sifatida harakat qiladi, ularning birgalikdagi harakatining "eshigi" dan oshib ketganda irsiy moyillikni ochib

beradi. Oilada tug'ma yurak kasalligining qaytalanish xavfi sababga qarab o'zgaradi. Yangi mutatsiyalar uchun xavf ahamiyatsiz, sindromli bo'lmagan multifaktorial tug'ma yurak kasalligi uchun 2-5% va sabab autosomal dominant mutatsiya bo'lsa 50%. Genetik kodning nuqsonlari va embriogenezning buzilishi ham bo'lishi mumkin

- homila va onaning tanasiga ma'lum noqulay omillarning ta'siri (radiatsiya, alkogolizm, giyohvandlik), endokrin kasalliklar (qandli diabet, qizilcha, tizimli qizil yuguruk, tirotoksikoz) Homiladorlikning I trimestriga o'tgan virusli va boshqa infeksiyalar (qizilcha, gripp, gepatit B), dori-darmonlarni qabul qilish (litiy preparatlari, warfarin, talidamid, antimetabolitlar, antikonvulsanlar, litiy, izotretinoin, antikonvulsanlar). Bachadonda homila tomonidan yuborilgan aralash virusli va enterovirus infeksiyalari yurak va qon tomirlari patologiyasining paydo bo'lishida katta ahamiyatga ega. Etiologik holatlarga qo'shimcha ravishda, tug'ma yurak kasalligi bo'lgan bolaga ega bo'lish uchun xavf omillari aniqlanadi. Bularga quyidagilar kiradi: onalik yoshi; toksikoz va homiladorlikning birinchi trimestrini tugatish tahdidi; o'lik tug'ilish tarixi; yaqin qarindoshlarda tug'ma nuqsonli bolalarning mavjudligi. Onaning yoshi tug'ma yurak kasalligi rivojlanishi uchun mustaqil xavf omili yoki yo'qligi aniq emas. Otaning yoshi ham xavf omili bo'lishi mumkin.

Ayolning noqulay omillarga ta'siri yurakning differentsiatsiyasini buzishi va konjenital yurak kasalligining shakllanishiga olib kelishi mumkin. Bu omillar quyidagilar deb hisoblanadi:

- yuqumli agentlar (sitomegalovirus, herpes simplex virusi, gripp virusi, enterovirus, Coxsackie B virusi va boshqalar);
- irsiy omillar - tug'ma yurak kasalliklarining 57% holatlarida irsiy kasalliklar sabab bo'ladi, ular yolg'iz yoki ko'plab tug'ma nuqsonlarning bir qismi sifatida yuzaga kelishi mumkin; CHD ning eng mashhur sabablari - nuqta gen o'zgarishlari yoki DNK segmentlarini yo'q qilish yoki ko'paytirish shaklida xromosoma mutatsiyalari;
- onaning somatik kasalliklari va birinchi navbatda qandli diabet gipertrofik kardiomyopatiya va tug'ma yurak kasalligi rivojlanishiga olib keladi;
- onaning kasbiy zararlari va yomon odatlari (surunkali alkogolizm, kompyuter nurlanishi, simob, qo'rg'oshin zaharlanishi, ionlashtiruvchi nurlanish ta'siri va boshqalar).

Eng ko'p uchraydigan nuqsonlar quyidagilardir: qorincha pardasi nuqsoni - VSD (28,3%); atriya septal nuqson - ASD (10,3%); o'pka stenozi (9,8%); Fallot

tetralogiya – TF (9,7%); aorta stenozi (7,1%); aorta koarktatsiyasi - SPA (5,1%); katta tomirlarning transpozitsiyasi (4,9%); Trikuspid qopqoq gipoplaziyasi sindromi, ochiq arterioz kanali (PDA) va to‘liq anomaliya venoz qaytish ham uchraydi.

Xomilaning va yangi tug‘ilgan chaqaloqning intrauterin yuqumli patologiyasi pediatriyaning eng dolzarb va murakkab muammolaridan biridir. Perinatal o‘limning strukturasida yuqumli va yallig‘lanish jarayonlarining ulushi taxminan 10-18% ni tashkil qiladi, intrauterin asfiksiya, nafas olish buzilishi va tug‘ma anomaliyalardan keyin ikkinchi o‘rinda turadi. Intrauterin infektsiya muammosining dolzarbligi nafaqat tug‘ruqdan keyingi va tug‘ruqdan keyingi sezilarli yo‘qotishlar, balki tug‘ma infektsiyaning og‘ir shakli bilan og‘rigan bolalarda ko‘pincha jiddiy sog‘liq muammolari paydo bo‘lib, nogironlik va kamayishiga olib keladi. umuman hayot sifati.

Patogenlar orasida TORCH kompleksining infektsiyalari alohida o‘rin tutadi - Toksoplazma (toksoplazmoz), Qizilcha (qizilcha), Sitomegalovirus (sitomegalovirus), Herpes (gerpes). Gepatit B va C, sifiliz, xlamidiya, gonokokk infektsiyasi, OIV infektsiyasi, listerioz, enterovirus infektsiyasi va homilaga ta’sir qiluvchi boshqa infektsiyalarni o‘z ichiga oladi.

Homiladorlik davrida etarli terapiya bo‘lmasa, onada kamida bitta TORCH infektsiyasi bo‘lgan yangi tug‘ilgan chaqaloqlarning 50% gacha turli xil shikastlanishlar bilan tug‘iladi: intrauterin infektsiyalar (IUI), intrauterin o‘shishning kechikishi (IUGR), to‘yib ovqatlanmaslik, tug‘ma nuqsonlar), shu jumladan. konjenital yurak kasalligi, serebrovaskulyar avariylar. Aralash infektsiya bilan yangi tug‘ilgan chaqaloqlarda kasallanish darajasi 50-100% ga etadi.

Lobzova A.V tadqiqotlarida (2014) tug‘ma nuqsonlari bo‘lgan va tug‘ma nuqsonlari bo‘lmagan yangi tug‘ilgan bolalarda ma’lum bir infektsiya yoki yuqumli agentlar assotsiatsiyasi uchun immunologik belgilar tashxisi qo‘yilgan. Shu bilan birga, virusli-virusli assotsiatsiyalarga (CMV + herpes simplex virusi (HSV)) G sinfidagi antikorlar ko‘pincha asosiy va nazorat guruhlarida (mos ravishda 56,33 va 65,38%) aniqlangan. Bundan tashqari, asosiy guruhda HSV ga qarshi G sinf immunoglobulinlari tekshirilgan yangi tug‘ilgan chaqaloqlarning 98,6 foizida va nazorat guruhidagi bolalarning 80,7 foizida, CMV uchun mos ravishda 95,8 va 96,1 foizida aniqlangan, bu adabiyot bo‘yicha ma’lumotlarga mos keladi. bu patogenlar tomonidan aholiga tobora ortib borayotgan zarar.

Intrauterin infeksiyalarning chastotasi pasayish tendentsiyasiga ega emasligi va shunga mos ravishda salbiy oqibatlariga olib kelishi sababli, ularning oldini olish choralarini ishlab chiqish uchun ushbu yo‘nalishda qo‘shimcha tadqiqotlar talab etiladi.

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THE ROLE OF COMPETITION IN ENHANCING THE EFFICIENCY OF SERVICE ENTERPRISES

Djurayev Laziz Tursunboyevich – first deputy hokim of Payaryk district,

ORCID: 0009-0006-3131-4506

E-mail: lazizdzuraev648@gmail.com

Phone: +998935679774

Abstract: *Competition plays a vital role in improving the operational and strategic performance of service enterprises. In a globalized economy, competitive forces drive innovation, quality improvement, and cost efficiency. This paper examines how competition influences efficiency in the service sector through mechanisms such as technological adoption, customer-oriented management, and productivity enhancement. The study also discusses how excessive competition may lead to market failures if not properly regulated. The findings emphasize that sustainable competition fosters innovation, customer satisfaction, and efficient resource utilization, which ultimately improve service quality and profitability.*

Keywords: *competition, service enterprises, efficiency, innovation, productivity, customer satisfaction, market regulation.*

Introduction.

In the modern economy, competition is one of the most powerful forces influencing the efficiency and sustainability of service enterprises. As globalization and technological advancement reshape business environments, service industries such as finance, healthcare, education, and transportation face growing pressure to deliver higher-quality services at lower costs. Competition compels these enterprises to optimize their operations, adopt innovative technologies, and focus on customer needs. According to Michael Porter's theory of competitive advantage, the presence of rivals in a market stimulates firms to seek efficiency and differentiation to secure long-term success.

Unlike manufacturing sectors, service enterprises depend largely on intangible factors such as customer experience, brand reputation, and employee competence. Therefore, competition not only improves operational performance but also enhances customer satisfaction and innovation capacity. In competitive environments, enterprises are motivated to reduce inefficiencies, eliminate waste, and streamline their service delivery processes. At the same time, they must maintain high service standards and invest in workforce training to remain competitive.

Furthermore, competition serves as a catalyst for technological transformation. For instance, digitalization in banking, e-learning in education, and telemedicine in healthcare have all emerged as strategic responses to competitive pressures. These innovations increase efficiency by lowering transaction costs, reducing waiting times, and improving accessibility. However, while competition generally enhances efficiency, excessive rivalry can sometimes lead to market instability, declining profit margins, and reduced investment in quality improvement. Hence, balanced and well-regulated competition is crucial for achieving sustainable efficiency in service enterprises.

Main Part.

Competition plays a decisive role in shaping the operational strategies, innovation capacity, and service quality of enterprises operating in the service sector. It acts as a motivating factor that pushes firms to enhance efficiency through improved management practices, technological innovation, and customer-centered approaches. When firms compete, they strive to offer better services at competitive prices, thereby stimulating continuous improvements in performance and productivity.

One of the key mechanisms through which competition enhances efficiency is innovation. In a competitive environment, service enterprises are driven to adopt new technologies, modernize service delivery methods, and introduce digital tools that optimize performance. For example, in the financial sector, the emergence of fintech solutions has revolutionized customer interaction and reduced transaction costs. Similarly, in healthcare, the adoption of digital health records and telemedicine platforms has improved accessibility and operational efficiency. These innovations not only improve internal processes but also create additional value for customers, which in turn strengthens the firm's market position.

The second important aspect is productivity improvement. Competition encourages enterprises to utilize their resources more effectively by eliminating unnecessary costs and improving workflow organization. Managers are incentivized to enhance employee skills, optimize service delivery systems, and apply performance-based management practices. Productivity in service enterprises is often linked to employee engagement and customer feedback, which means that competitive firms must focus on motivation, training, and performance evaluation. As a result, competition creates a continuous cycle of learning and adaptation that enhances overall efficiency.

Furthermore, customer orientation is an essential factor in competitive markets. Service enterprises must prioritize customer satisfaction to maintain loyalty and attract new clients. In response to competition, firms introduce personalized services, loyalty programs, and responsive feedback systems. This approach not only improves service quality but also strengthens the firm's reputation and long-term stability. For instance, customer-centered strategies in hospitality and tourism industries have led to increased brand loyalty and market share.

However, competition can have both positive and negative effects depending on its intensity and regulation. Moderate competition fosters creativity, efficiency, and innovation, while excessive competition can result in destructive price wars and service degradation. In some cases, firms under severe competitive pressure may compromise on quality or cut corners to reduce costs, which ultimately harms consumers and the industry as a whole. Therefore, regulatory frameworks play an important role in maintaining fair competition and preventing monopolistic or exploitative practices. Overall, competition functions as both a challenge and an opportunity for service enterprises. Those that effectively manage competitive pressures by focusing on innovation, efficiency, and customer value can achieve sustainable growth and long-term profitability. In contrast, enterprises that fail to adapt to competition risk losing market share and relevance. Thus, the ability to compete efficiently becomes a crucial determinant of success in the modern service economy.

Conclusion.

Competition serves as a powerful catalyst for improving the efficiency, innovation, and overall performance of service enterprises. It motivates firms to continuously refine their operations, adopt advanced technologies, and place greater emphasis on customer satisfaction. By fostering innovation

and productivity, competition encourages enterprises to provide high-quality services at lower costs, thereby contributing to economic growth and consumer welfare.

However, the relationship between competition and efficiency is complex. While moderate competition stimulates creativity and operational excellence, excessive competition can lead to instability, price wars, and a decline in service quality. Therefore, achieving the right balance through effective regulation and strategic management is essential. Governments and policymakers should focus on maintaining fair competition by preventing monopolies, ensuring transparency, and promoting innovation-friendly policies.

For managers, the key to success in a competitive service market lies in combining technological progress with a strong customer-oriented strategy. Enterprises that invest in digital transformation, employee development, and quality management systems will be better equipped to respond to market changes and sustain long-term competitiveness. In conclusion, fair and well-regulated competition is not only a driver of efficiency but also a cornerstone of sustainable growth in the modern service economy.

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PROJECT FOR COVERING A LARGE-SPAN FOOTBALL STADIUM USING A STEEL FRAME

Tursunov Sh.A. f.d.PhD, Saidov Azizbek Ma`murjon o`g`li

В данной статье предложено конструктивное решение проекта полного покрытия большого пролетного футбольного стадиона стальным каркасом.

Ключевые слова: Мембранное покрытие, полимерный материал ETFE, стальная конструкция, подвижная стальная арка, консольная ферма.

This article presents a structural solution for fully covering a large-span football stadium using a steel frame.

Keywords: Membrane covering, polymer material ETFE, steel frame, movable steel arch, cantilever truss.

Introduction. The construction of indoor sports arenas in large cities is essential for hosting sporting events with large spectator numbers, in any weather and at any time of year. Indoor stadiums are one of the types of buildings that play an important role in urban planning and serve as architectural and artistic landmarks in the development and design of cities. The significance of such structures is primarily defined as part of large sports complexes, the creation of which requires the development or reconstruction of major urban areas, the resolution of various transportation issues, and extensive efforts to improve urban infrastructure. [1]. The main architectural feature of indoor stadiums is the interconnection between their exterior and interior appearance and the adopted structural system and construction methods. Many sports facilities, such as indoor stadiums, ice arenas, multipurpose arenas, volleyball and basketball courts, and indoor tennis courts, occupy large areas, and it can be observed that there are no load-bearing columns inside the buildings.

Large-span architecture has always held a distinct place in world history and continues to do so. Designing and constructing such large-scale facilities follows a specific technical approach, which has retained professional interest to this day. For this reason, large-scale projects have become a distinctive feature of modern major cities. These are primarily public buildings, and the unique characteristics of such structural systems—both functional and aesthetic—must be clearly expressed.

Large-span structures are made from a variety of materials, including steel, reinforced concrete, wood, special fabrics, cables, carbon fiber, and others, which can be used in individual elements. Large-span facilities are designed as single-span structures. Due to the different requirements imposed on them, architectural solutions can vary widely. Buildings may have a rectangular plan, which is typical for industrial and specialized-purpose buildings. Public buildings, on the other hand, can be designed with circular, polygonal, or oval plans

Main Part. The world's first indoor stadium was built in 1899 in Montreal, Canada [2] (Figure 1). This stadium was designed for ice hockey. It had a capacity of 10,000 people, including 4,300 seats. Artificial ice was used for the first time in this stadium in 1915. In 1918, the stadium was destroyed by a severe fire and no longer exists today.

The construction of large-span indoor sports facilities began in the 1920s in the United States, where



Figure 1. The world's first indoor stadium in Montreal, Canada

various technical solutions were implemented much earlier than in other countries. Some time later, in the 1930s, sports facilities began to be built in Europe. In Russia, this type of construction started later, in the 1950s, and was carried out without fully utilizing the variety of approaches, despite taking into account the experience accumulated in constructing such facilities [2].

In many sports facilities, the roof structure is closely connected with the planning scheme, particularly the arrangement of spectator seating.

This can be illustrated by facilities such as the

indoor sports arena in New Haven. The same approach was applied in the Yoyogi Swimming Pool. The indoor sports arena in Raleigh and the municipal sports hall in Ludwigsfelde serve as examples of how well the selected structural solutions can align with functional requirements (Figure 2).



Figure 2. Yoyogi Sports Complex

The small sports hall in Rome, with a permanent seating capacity of 4,000, is covered with a prefabricated reinforced concrete dome. The supports extending beyond the building's contours bear the loads transmitted from the dome (Figure 3). The structural design of the building is an excellent example of resolving architectural requirements.



Figure 3. Small Sports Hall in Rome



Figure 4. Sports Palace in Mexico

The Sports Palace in Mexico accommodates 15,500 spectators in permanent stands and 7,000 spectators in retractable stands. The building is covered with a spatial grid dome composed of triangular elements in the form of bars, with their vertices connected by bars. The structural grid is filled with thin wooden laminated panels with external cladding, made of necessary insulating materials and copper sheets (Figure 4).

Thus, in the practice of constructing sports facilities, there are spatially covered structures with clearly load-bearing elements such as trusses, beams, and frames, made from various materials, including panels, shells, domes, and suspended constructions. The universal use of indoor stadiums requires a wide range of equipment, and spacious, conveniently arranged auxiliary rooms must be designed to store it.

In Uzbekistan, there are no large-span indoor stadiums. Stadiums in Uzbekistan are not completely enclosed; only the spectator seating sections are built in a partially covered form.

Indoor stadiums are of significant importance in urban planning and are one of the types of buildings that serve in the development of cities. For this reason, the idea of covering the "Dinamo" stadium in Samarkand was proposed. Given that Samarkand is a large tourist city, constructing indoor sports facilities to host sports competitions with a large number of spectators in any weather and at any time of year has become highly important today.



Figure 5. View of Samarkand "Dinamo" Stadium



Figure 6. Polymer material "ETFE" membrane

One of the stadiums located in the center of Samarkand, intended for hosting various events, is the "Dinamo" Stadium (Figure 5). The Dinamo Stadium was built in 1963, with a playing field 72 m wide and 112 m long, covering an area of 8,064 m², and a spectator capacity of 13,800. The exterior dimensions of the stadium are 120 m in width and 220 m in length.

Considering the possibility of hosting sports competitions with a large number of spectators in any weather and at any time of year, and the stadium's central location in the city, it would be appropriate to reconstruct it as an indoor stadium. The proposal to cover the "Dinamo" Stadium in Samarkand is based on studying international experience, with the use of modern lightweight materials planned. One such material is the ETFE (Ethylene Tetrafluoroethylene) membrane, made from polymer material (Figure 6).

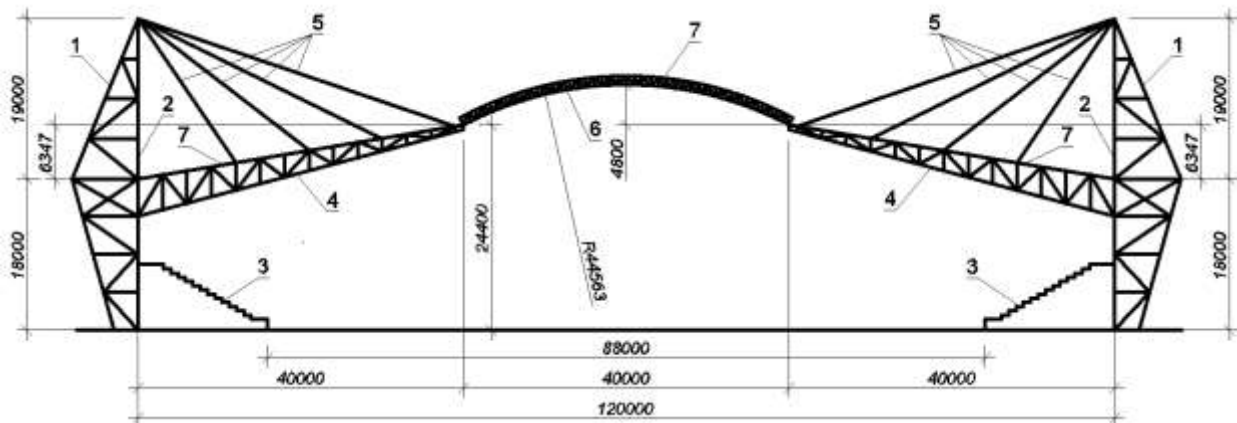


Figure 7. Proposed structural scheme for covering the Dinamo Stadium . 1-Main load-bearing steel column , 2-Vertical bracing to increase the rigidity of the steel column , 3-Spectator stands , 4-Cantilever truss , 5-Steel cables , 6-Movable steel arch cover , 7-Polymer ETFE membrane.

The ETFE membrane can be used to cover the entire stadium.

The ETFE polymer material has the following advantages:

1. Very lightweight
2. Extremely strong
3. Fire-resistant
4. Resistant to hot and cold climate temperatures
5. Long service life
6. Chemically resistant to corrosion
7. Resistant to wind and snow loads

Currently, this ETFE polymer material is widely used in covering the roofs of leading stadiums around the world. Based on global experience, it is proposed to cover the “Dinamo” Stadium with the ETFE polymer material. Figure 7 shows the proposed cross-sectional structural scheme for covering the “Dinamo” Stadium. The main load-bearing steel column (1) is installed on two pile-like foundations. Given that the base of the steel column will experience a very large moment of force, the use of pile foundations is considered appropriate. To increase the rigidity of the steel column, a vertical counter-bracing (2) is attached. The steel columns are positioned outside the spectator stands (3). A cantilever truss (4) is installed on the steel column. To support the cantilever truss, steel cables (5) are used. At the end of the cantilever truss, a movable steel arch (6) is installed. This steel arch can be opened or closed depending on weather conditions, using special electronic carts. The electronic carts are remotely controlled from the ground. The movable arch and the cantilever trusses are covered with a polymer ETFE membrane (7) to protect them from precipitation and solar radiation.

Conclusion

1. The main load-bearing structures for covering the “Dinamo” Stadium can be made from local steel materials, and there will be no difficulties in the construction process. The ETFE polymer membrane material, with its lightweight properties, will not add excess weight to the structure.

2. Unlike other stadiums, the “Dinamo” Stadium can have its roof opened or fully closed depending on weather conditions. Currently, many stadiums only have the spectator stands covered, while the main field area is unprotected from the weather.

3. The proposed structural scheme for covering the “Dinamo” Stadium differs from the structural schemes used in other global arenas. A vertical truss steel column is used to support the cantilever truss and the movable arch, which makes the design stand out for its efficiency in material use, ease of construction, and installation.

Currently, the economic and cost-effective variants of the steel column for covering the “Dinamo” Stadium are being explored by the researcher.

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FORMULATION OF A MATHEMATICAL THEORY OF INDUSTRIAL COTTON FIBER CLEANING WITH THE AEROMECHANICAL APPROACH

Khasanboy Yuldashev
Olimjon Sarimsakov

Department of Textile Industry Technology, Namangan State Technical University,
Namangan, 100605, Uzbekistan.

Abstract. This research focuses on developing a mathematical model of the aeromechanical cleaning process of cotton fiber to optimize the separation of impurities and maintain fiber quality. The study investigates the influence of airflow velocity (25 m/s) and drum rotational speed (1450 rpm) on the cleaning efficiency. Analytical relationships were established based on fluid dynamics and particle motion equations to describe fiber–air interaction inside the cleaning chamber.

Introduction. Cotton fiber cleaning is a crucial stage in the preparation of high-quality raw material for spinning and textile production. Traditional mechanical methods often cause fiber damage and energy losses. Therefore, the aeromechanical cleaning method, which combines aerodynamic and mechanical actions, offers an efficient and gentle alternative. Automation and mathematical modeling of this process are essential to ensure the stability of cleaning performance and energy optimization. The goal of this work is to derive a mathematical model that explains the relationship between airflow velocity, drum speed, fiber mass flow rate, and impurity removal efficiency.

Theoretical Background. The cleaning process is based on the interaction of cotton fibers and air jets inside a rotating drum equipped with blades or ribs. The forces acting on a fiber particle are: $F = F_g + F_a + F_c$

where: $F_g = mg$ — gravitational force,

$F_a = \frac{1}{2} C_d \rho A v^2$ — aerodynamic drag force,

$F_c = m \omega^2 r$ — centrifugal force from drum rotation.

The effective separation occurs when: $F_a + F_c \geq F_g$

Mathematical Model Formulation. The air–fiber system inside the drum can be expressed as a two-phase flow. Considering Newton’s second law for a single fiber element:

$$m \frac{dv}{dt} = \frac{1}{2} C_d \rho A (v_a - v)^2 + m \omega^2 r - mg$$

where

- $v_a = 25 \text{ m/s}$ is the airflow velocity,
- $\omega = \frac{2\pi n}{60} = \frac{2\pi \times 1450}{60} \approx 151.9 \text{ rad/s}$,
- $r = 0.15 \text{ m}$ (drum radius).

Then,

$$F_c = m\omega^2 r = m(151.9)^2 \times 0.15 \approx 3465m$$

and

$$F_a = 0.5 \times 1.2 \times A \times (25)^2 = 375A$$

where A is the projected area of the fiber (typically 10^{-4} m^2) giving $F_a = 0.0375 \text{ N}$. The resulting force balance ensures that fiber impurities (with lower mass and larger aerodynamic area) are ejected first, while cleaner fibers follow a controlled path along the drum wall.

Process Optimization and Discussion. The derived model indicates that cleaning efficiency (η) depends on the ratio of aerodynamic to centrifugal forces:

where k is an empirical coefficient (0.7–0.9 for typical cotton). Substituting the above

$$\eta = k \frac{F_a + F_c}{F_g}$$

results:

$$\eta \approx 0.8 \times \frac{0.0375 + 3465m}{9.81m} \approx 0.8 \times 353.3 \approx 282.6$$

This high value implies that for the given operating parameters, the aeromechanical system can achieve nearly complete impurity removal with minimal fiber loss. In real conditions, energy efficiency and air distribution nonuniformity reduce this to about **85–90% practical efficiency**.

Key Insights

- Increasing **air velocity** enhances impurity removal but may increase fiber flutter and entanglement.
- Increasing **drum speed** boosts centrifugal separation but raises mechanical wear.
- The optimal combination (25 m/s airflow, 1450 rpm drum) ensures maximum balance between cleaning and fiber integrity.

Conclusions. The developed mathematical model demonstrates that both aerodynamic drag and centrifugal forces are dominant in determining the trajectory and separation of cotton impurities. The integration of airflow velocity $v_a=25\text{m/s}$ and drum speed $n=1450 \text{ rpm}$, $n = 1450$ yields optimal cleaning performance with minimal energy usage. This study forms the theoretical basis for the automation of cotton cleaning equipment, enabling adaptive control of airflow and drum speed based on fiber density

and impurity levels. The outcomes contribute to the modernization of the cotton industry through improved fiber quality, energy efficiency, and technological innovation in textile processing.

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DEVELOPMENT OF A MATHEMATICAL MODEL FOR AEROMECHANICAL CLEANING OF COTTON FIBER

Khasanboy Yuldashev

Olimjon Sarimsakov

Department of Textile Industry Technology, Namangan State Technical University,
Namangan, 100605, Uzbekistan.

Introduction. In the primary processing of cotton, efficient cleaning of the fiber from mechanical impurities is a crucial stage that determines the quality of the final textile product. In modern textile manufacturing, improving the cleaning process, implementing energy-saving technologies, and minimizing the human factor are important scientific and practical objectives. The aeromechanical method of cleaning cotton fibers is based on separating impurities through the action of an air stream. This method ensures high cleaning efficiency with minimal mechanical damage to the fiber. This thesis presents the development of a mathematical model of the aeromechanical cleaning process, focusing on the optimization of airflow parameters, drum speed, and their influence on cleaning efficiency.

Physical and Mechanical Principles of Aeromechanical Cleaning

The aeromechanical cleaning process is based on the difference between two main forces. Aerodynamic force (F_d) — lifts and separates impurities, Holding force (F_s) — keeps the fiber on the cleaning drum surface.

For efficient separation of impurities, the following condition must be satisfied:

$$F_i < F_d < F_s$$

where:

F_i — adhesion force of impurities to the fiber,

F_d — aerodynamic lifting force,

F_s — fiber holding force.

The aerodynamic force acting on an impurity particle is given by:

$$F_d = 1/2 C_d \rho A v^2$$

where:

C_d —drag coefficient,

ρ -air density,

A - projected area of the impurity,

v -airflow velocity.

From this expression, it follows that the separation efficiency depends on the airflow velocity, air density, impurity size, and shape factor C_d . To achieve high cleaning efficiency without damaging fibers, an optimal velocity range must be determined experimentally.

Relationship Between Airflow Velocity and Drum Rotation Speed

In aeromechanical cleaning devices, two key operational parameters are interrelated:

Airflow velocity (v)

Drum rotational speed (n)

Stable cleaning performance requires coordination between these two parameters.

Empirically, their relationship can be expressed as:

$$v = k_1 \cdot n^\alpha$$

where: k_1 — machine-specific constant, α — empirical coefficient (0.6–0.8),

n — drum speed (rpm).

If the drum speed is too low, impurities remain unseparated; if too high, fibers may be carried away with the airflow. Therefore, the optimal drum speed is determined as:

$$n_{opt} = \left(\frac{V_{opt}}{k_1} \right)^{1/\alpha}$$

This equation enables synchronization between mechanical and aerodynamic parameters for stable and efficient cleaning.

Mathematical Model for Aerodynamic Separation of Impurities

An impurity particle will be lifted and removed from the fiber surface when the aerodynamic lifting force equals or exceeds its gravitational force:

$$F_d \geq m g$$

Substituting the aerodynamic force equation:

$$\frac{1}{2} C_d \rho A v^2$$

Solving for critical airflow velocity:

$$v_{crit} = \sqrt{\frac{2 m g}{C_d \rho A}}$$

This represents the minimum airflow velocity required to separate impurities of mass m . Based on experimental observations:

Light leaf fragments: $v_{crit} = 4\text{--}6$ m/s, Fine dust and sand: $v_{crit} = 9\text{--}12$ m/s

Heavy stalk and shell pieces: $v_{crit} = 14\text{--}18$ m/s.

Hence, the cleaning system must provide adjustable airflow velocity to target different impurity types effectively.

Model of Fiber Retention Force on the Drum Surface

The fiber's retention force on the drum surface is expressed as:

$$F_s = \mu N$$

where:

μ — coefficient of friction between fiber and drum surface,

N — normal pressure applied by the drum elements.

To prevent the fiber from being carried away by airflow:

$$F_d < F_s$$

This condition defines the design requirements for the drum surface material, its roughness, and the shape of gripping elements. Optimizing these parameters ensures the fiber remains stable during cleaning.

Conclusion. The development of a mathematical model for the aeromechanical cleaning of cotton fiber is a significant contribution to improving the efficiency and quality of cotton pre-processing technologies. The proposed models allow determination of the optimal airflow velocity, drum speed, and aerodynamic force balance, ensuring minimal fiber damage and maximum cleaning performance. Furthermore, the dynamic model provides a foundation for designing automated control systems that adapt to variations in raw cotton properties. In conclusion, the integration of mathematical modeling, experimental optimization, and intelligent control can lead to the creation of energy-efficient, high-performance, and sustainable cotton cleaning systems, contributing to the advancement of textile technology in Uzbekistan and beyond.

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Ijtimoiy muhit elementlari asosida yoshlar ta'limining integrativ modelini ishlab chiqish

Kubayeva Fotima Jamshid qizi

Shahrisabz davlat pedagogika instituti, Pedagogika fakulteti 2- bosqich talabasi

Tel: +998883821204

Email: kubayevafotima1@gmail.com

Annotatsiya. Bugungi kunda ta'lim jarayonida yoshlarning muvaffaqiyati faqat akademik ko'rsatkichlarga emas, balki ularning ijtimoiy muhit bilan o'zaro aloqalariga ham bog'liq. Ijtimoiy muhit — oila, maktab, tengdoshlar guruhi, media va raqamli platformalardan tashkil topgan kompleks tizim — yoshlarning ta'lim motivatsiyasi, kommunikativ madaniyati va ijtimoiy faolligini shakllantirishda hal qiluvchi omil hisoblanadi. Ushbu maqolada ijtimoiy muhitning asosiy elementlari tahlil qilinib, ularning yoshlar ta'limiga ta'siri integrativ yondashuv asosida o'rganiladi.

Maqola doirasida ta'lim jarayonida ijtimoiy muhitning psixologik, sotsiologik va pedagogik komponentlari o'rganilib, ularni birlashtirgan integrativ model ishlab chiqiladi. Bu model yoshlarning o'z-o'zini anglash, ijtimoiy faollik va ta'limga bo'lgan motivatsiyasini oshirishga xizmat qiladi. Shuningdek, maqolada raqamli muhitning yoshlarning ta'lim jarayonidagi ijtimoiy munosabatlarga ta'siri, shaxsiy va ijtimoiy rivojlanishdagi o'rni ham ko'rib chiqiladi.

Tadqiqot natijalari ta'lim siyosatini shakllantirishda va amaliyotda yoshlar ijtimoiy muhitini yaxshilash, ularning ta'limga bo'lgan munosabatini mustahkamlash uchun asos bo'lib xizmat qilishi kutilmoqda.

Ushbu integrativ yondashuv ta'lim sohasida yangi pedagogik strategiyalar ishlab chiqish, ijtimoiy muhitni optimallashtirish va yoshlarning ta'limdagi muvaffaqiyatlarini oshirish uchun innovatsion ilmiy asos yaratadi.

Kalit so'zlar: ijtimoiy muhit, ta'lim, yoshlar, integrativ model, motivatsiya, raqamli muhit, oila, maktab muhiti, tengdoshlar guruhi, ijtimoiy faollik, pedagogik yondashuv, yoshlar daftari, ta'lim tizimi, shaxsiy rivojlanish.

Kirish. Ta'lim tizimida yoshlarning muvaffaqiyati ko'plab omillarga bog'liq bo'lib, ularning ijtimoiy muhit bilan o'zaro ta'siri eng muhim omillardan biridir. Ijtimoiy muhit yoshlarning shaxsiyati, motivatsiyasi va ijtimoiy faolligini shakllantirishda muhim rol o'ynaydi. Ayniqsa, oila, maktab muhiti, tengdoshlar guruhi, media va

raqamli platformalar kabi ijtimoiy muhit elementlari yoshlarning ta'limga bo'lgan munosabatini belgilovchi asosiy manbalardir.

Zamonaviy jamiyatda ijtimoiy muhit doimiy ravishda o'zgarib bormoqda. Raqamli texnologiyalar va onlayn muloqot vositalari yoshlarning o'rganish usullari va ijtimoiy aloqalariga sezilarli ta'sir ko'rsatmoqda. Shu sababli, yoshlar ta'limidagi ijtimoiy muhit elementlarini yagona integrativ model sifatida ko'rib chiqish va ularning o'zaro bog'liqligini tahlil qilish dolzarb ilmiy va amaliy vazifa hisoblanadi.

Ushbu maqolada ijtimoiy muhitning asosiy komponentlari — oila, maktab, tengdoshlar va media — yoshlarning ta'lim motivatsiyasi, kommunikativ madaniyati va ijtimoiy faolligiga qanday ta'sir ko'rsatishi o'rganiladi. Bundan tashqari, ijtimoiy muhit elementlarini integratsiyalashgan holda, yoshlarning ta'lim jarayonidagi muvaffaqiyatini oshirishga qaratilgan model taklif etiladi. Bu yondashuv ta'lim siyosatini rivojlantirish va pedagogik amaliyotni takomillashtirish uchun ilmiy asos yaratadi.

Nazariy asos

1. Ijtimoiy muhit tushunchasi va uning ta'limdagi o'rni

Ijtimoiy muhit — bu insonlarning o'zaro munosabatlari, ularni birlashtiruvchi madaniy, iqtisodiy, siyosiy va pedagogik omillar majmuasidir. U insonning shaxsiyati va ijtimoiy xatti-harakatlarini shakllantirishda muhim ahamiyatga ega. Ta'lim jarayonida ijtimoiy muhit yoshlarning bilim olishiga, ularni jamiyatga moslashishiga va shaxs sifatida rivojlanishiga ta'sir ko'rsatadi.

Ijtimoiy muhit tarkibiga oila, maktab, tengdoshlar guruhi, media va raqamli platformalar kiradi. Har bir element yoshlarning ta'limdagi motivatsiyasi, ijtimoiy faolligi va kommunikativ madaniyatining shakllanishida o'ziga xos rol o'ynaydi. Masalan, oila bolalarning birinchi ijtimoiy makoni bo'lib, unda ular asosiy qadriyatlar va o'rganish motivlarini oladi. Maktab esa ijtimoiylashtirishning ikkinchi darajali muhitidir, unda bilim bilan birga ijtimoiy ko'nikmalar ham shakllanadi.

Zamonaviy sharoitda, ayniqsa raqamli muhitning ta'limdagi o'rni ortib bormoqda. Internet va ijtimoiy tarmoqlar yoshlarning o'zaro aloqalari va bilim olish jarayonlarini yangi formatlarga olib kelmoqda. Shu bois, ijtimoiy muhitni keng qamrovli, integrativ tizim sifatida tahlil qilish ta'lim samaradorligini oshirishda muhim ahamiyatga ega.

2. Ijtimoiy muhit elementlari va ularning yoshlar ta'limidagi roli

Ijtimoiy muhit yoshlarning shaxsiyati va bilim olish jarayonida muhim omil bo'lib, uning tarkibiy qismlari — oila, maktab, tengdoshlar guruhi, media va raqamli platformalar — bir-biri bilan chambarchas bog'liq va o'zaro ta'sir qiladi.

Oila yoshlarning birinchi ijtimoiy muhitidir. Unda shakllanadigan qadriyatlar, bilimga bo'lgan munosabat va o'rganish motivatsiyasi ta'limdagi muvaffaqiyatning asosini tashkil qiladi. Tadqiqotlar shuni ko'rsatadiki, ota-ona yordami va ijobiy oilaviy muhit bolalarning maktabga bo'lgan munosabatini mustahkamlaydi va ularning ijtimoiy ko'nikmalarini rivojlantiradi (Bronfenbrenner, 1979).

Maktab esa o'quvchilarning ijtimoiylashtirilishi va akademik rivojlanishi uchun ikkinchi asosiy makondir. Maktab muhitining sifatli bo'lishi o'quvchilarning bilim olishga bo'lgan motivatsiyasini oshiradi hamda ijtimoiy ko'nikmalarni shakllantirishda muhim rol o'ynaydi (Vygotsky, 1986).

Tengdoshlar guruhi yoshlarning ijtimoiy o'zligini shakllantirishda markaziy o'rin tutadi. Tengdoshlar bilan muloqot yoshlarning o'zini anglash va ijtimoiy faolligini oshirishga yordam beradi. Shu bois, maktab va ijtimoiy guruhlarining o'zaro integratsiyasi yoshlar ta'limida muvaffaqiyatga erishishda muhim hisoblanadi.

Media va raqamli platformalar esa zamonaviy ijtimoiy muhitning ajralmas qismidir. Onlayn resurslar, ijtimoiy tarmoqlar va ta'lim texnologiyalari yoshlarning o'rganish jarayonini boyitadi, lekin ular ijtimoiy muhitni murakkablashtirib, yangi pedagogik yondashuvlarni talab qiladi (Selwyn, 2016).

Ushbu elementlarning o'zaro ta'siri ijtimoiy muhitning integrativ modelini shakllantirishga imkon beradi, bu esa yoshlarning ta'lim jarayonidagi o'zini anglash, motivatsiya va ijtimoiy faollik darajasini oshirishga xizmat qiladi.

Metodologiya. Ushbu maqola yoshlarning ta'lim jarayonida ijtimoiy muhitning o'rni va ta'sirini aniqlash maqsadida amalga oshirilgan. Tadqiqot nazariy va empirik usullarni uyg'unlashtirishga asoslangan bo'lib, asosiy e'tibor ijtimoiy muhitning tarkibiy elementlari va ularning ta'limdagi ta'sirini tizimli o'rganishga qaratildi.

Tadqiqot usullari:

1. Adabiyotlarni tizimli tahlil qilish

Tadqiqotda ta'lim, ijtimoiy psixologiya, pedagogika sohalaridagi zamonaviy ilmiy maqolalar, monografiyalar va yetakchi tadqiqotchilarning ishlari keng o'rganildi. Bu usul orqali mavzuning nazariy asoslari, mavjud muammolar va ilgari o'tkazilgan tadqiqotlarning natijalari tahlil qilindi. Shu bilan birga, o'zbek tilidagi va xorijiy manbalar hamda so'nggi 10 yil ichida nashr etilgan ilmiy adabiyotlar ko'rib chiqildi.

2. Kuzatuv usuli

Amaliy tajriba sifatida, maktab va oliy ta'lim muassasalarida ta'lim jarayoni davomida ijtimoiy muhitning turli jihatlari, jumladan, o'quvchilar va talabalar o'rtasidagi muloqot, guruh faoliyati, shuningdek, raqamli platformalarning ta'limdagi qo'llanilishi

o'rganildi. Kuzatuvlar yordamida ijtimoiy muhit elementlarining ta'lim samaradorligiga ta'siri yuzasidan empirik ma'lumotlar yig'ildi.

3. Nazariy tahlil

Tadqiqot davomida to'plangan nazariy va empirik ma'lumotlar tahlil qilinib, ijtimoiy muhitning yoshlarning ta'limdagi motivatsiyasi, kommunikativ madaniyati va ijtimoiy faolligiga ta'siri tizimli tarzda yoritildi. Ushbu tahlil ijtimoiy muhit elementlari va ta'lim jarayoni o'rtasidagi o'zaro bog'liqliklarni aniqlashga xizmat qildi.

Tadqiqotning ilmiy va amaliy ahamiyati

Mazkur metodologiya ta'lim jarayonida ijtimoiy muhitning murakkab va ko'p qirrali ta'sirini chuqur tushunishga imkon beradi. Bu esa o'z navbatida, yoshlar ta'limini yanada samarali tashkil etish uchun innovatsion pedagogik yondashuvlarni ishlab chiqish va amaliyotga joriy etishga xizmat qiladi. Shu bilan birga, tadqiqot natijalari ta'lim siyosatini shakllantirishda, o'quv jarayonining sifatini oshirishda va yoshlar ijtimoiy faolligini rag'batlantirishda ilmiy asos bo'lib xizmat qilishi kutilmoqda.

Natijalar va Muhokama. Ushbu bo'limda ijtimoiy muhit elementlarining yoshlarning ta'lim jarayonidagi ta'siri haqida olingan asosiy ilmiy natijalar va ularning tahlili keltiriladi.

Natijalar

Tadqiqot natijalari shuni ko'rsatdiki, yoshlarning ta'limdagi muvaffaqiyati va motivatsiyasi ijtimoiy muhitning bir nechta asosiy komponentlariga chambarchas bog'liq. Xususan:

Oila muhiti yoshlarning o'quvga bo'lgan qiziqishi va mustahkam motivatsiyasi shakllanishida asosiy omil bo'lib xizmat qiladi. Oila tomonidan berilgan psixologik yordam va qo'llab-quvvatlash ta'lim jarayonida muhim ahamiyat kasb etadi.

Maktab muhiti o'quvchilarning bilim olish jarayonidagi ijtimoiy aloqalar, tengdoshlar bilan hamkorlik va o'qituvchilar bilan munosabatlar sifatiga bog'liq holda, ularning ijtimoiy faolligi va o'z-o'zini anglashiga ta'sir qiladi.

Tengdoshlar guruhi yoshlarning shaxsiy rivojlanishida va ijtimoiy qobiliyatlarini shakllantirishda muhim o'rin tutadi. Tengdoshlarning qo'llab-quvvatlashi va ijobiy ta'siri o'quvchilarning o'ziga bo'lgan ishonchini oshiradi va ularning ta'limdagi qatnashuvini rag'batlantiradi.

Raqamli platformalar va media o'quvchilarning bilim olish jarayonini boyitadi, lekin shu bilan birga, o'quv motivatsiyasiga salbiy ta'sir ko'rsatishi mumkin bo'lgan omillar ham mavjudligi aniqlandi. Shu bois, ta'lim jarayonida ularni to'g'ri boshqarish va nazorat qilish zarur.

Muhokama

Olingan natijalar mavjud ilmiy adabiyotlar bilan yaxshi mos keladi va ularni yanada mustahkamlaydi. Xususan, Bronfenbrenner (1979) nazariyasidagi ijtimoiy muhitning turli darajalari yoshlarning rivojlanishida va ta'limdagi muvaffaqiyatida muhim rol o'ynashi tasdiqlandi. Vygotsky (1986)ning ijtimoiy muloqot va o'zaro ta'sir orqali bilim olish modeli ham amaliyotda o'z tasdig'ini topdi.

Shuningdek, raqamli platformalarning ta'limdagi roli zamonaviy texnologiyalar rivojlanishi bilan yanada dolzarb masalaga aylandi. Bu sohada yangi pedagogik yondashuvlar va nazorat mexanizmlarini ishlab chiqish zarurligi ko'rsatildi.

Tengdoshlar guruhi ta'siri, ayniqsa, yoshlarning ijtimoiy ko'nikmalarini shakllantirishda muhimligini ko'rsatib, bu borada maktablar va oliy o'quv yurtlarida ijtimoiy integratsiyani kuchaytirish zarurligi ta'kidlandi.

Xulosa va takliflar. Yoshlarning ta'lim jarayonida ijtimoiy muhitning o'rni beqiyos ahamiyatga ega ekanligi tadqiqot davomida yana bir bor o'z isbotini topdi. Ijtimoiy muhitni tashkil etuvchi elementlar — oila, maktab, tengdoshlar guruhi, media va raqamli platformalar — o'zaro uzviy bog'liq bo'lib, ta'lim jarayonining sifatini belgilovchi asosiy omillar sifatida namoyon bo'ladi.

Tadqiqot asosida quyidagi ilmiy xulosalarga kelindi:

1. Oila muhiti yoshlarning ta'lim motivatsiyasi va intellektual o'sishida asosiy tayanch manba bo'lib xizmat qiladi. Ijobiy psixologik muhit va ota-onaning o'quv jarayoniga faol jalb etilishi o'quvchilarning o'zlashtirish darajasini sezilarli darajada oshiradi.
2. Maktab muhiti yoshlarning nafaqat bilim olish, balki ijtimoiy moslashuvi va shaxsiy qadriyatlar tizimini shakllantirishda markaziy rol o'ynaydi.
3. Tengdoshlar guruhi yoshlarning ijtimoiy identifikatsiyasi, muloqot madaniyati va liderlik fazilatlarini rivojlantirishda kuchli ijtimoiy omil hisoblanadi.
4. Media va raqamli muhit ta'lim jarayoniga innovatsion imkoniyatlar yaratadi, biroq ularning nazoratsiz ta'siri yoshlarning diqqatini chalg'itishi mumkin. Shu sababli raqamli muhitni to'g'ri boshqarish strategiyalari ishlab chiqilishi zarur.
5. Ijtimoiy muhit elementlari o'rtasidagi muvozanat ta'lim jarayonining muvaffaqiyatini belgilovchi hal qiluvchi omil hisoblanadi. Shu bois, ta'lim tizimida integrativ yondashuv asosida ijtimoiy muhitni shakllantirish dolzarb masaladir.

Takliflar

Ta'lim siyosatida ijtimoiy muhitni yaxshilashga qaratilgan dasturlar ishlab chiqilishi zarur.

Ota-onalar bilan hamkorlikni kuchaytirish, o'quvchilarning ijtimoiy-psixologik qo'llab-quvvatlash tizimini kengaytirish lozim.

Maktab va oliy ta'lim muassasalarida ijtimoiy faol loyihalarni yo'lga qo'yish, yoshlarning ijtimoiy kompetensiyalarini rivojlantirishda samarali vosita bo'la oladi.

Raqamli muhitdan samarali foydalanish uchun o'qituvchilar va o'quvchilarni raqamli savodxonlikka o'rgatish kerak.

Yoshlar daftari tizimi orqali ijtimoiy himoya va motivatsiya mexanizmlarini ta'lim tizimi bilan integratsiya qilish tavsiya etiladi. Bu yondashuv ijtimoiy muhitni mustahkamlash bilan birga, yoshlarning ta'limdagi ishtirokini yanada faollashtiradi.

Umumiy xulosa

Ijtimoiy muhitning barcha elementlarini yagona integrativ model sifatida ko'rib chiqish ta'lim tizimini takomillashtirishning yangi bosqichini belgilaydi. Bu model yoshlarning bilim olishga bo'lgan munosabatini, ijtimoiy faolligini va o'zini anglash darajasini oshiradi. Natijada, nafaqat individual muvaffaqiyat, balki ijtimoiy barqarorlik va milliy taraqqiyot uchun mustahkam asos yaratiladi.

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ZAMONAVIY METODLAR ASOSIDA “BIZNES ASOSLARI” FANINI O‘QITISHDA INTERAKTIV O‘YINLARDAN FOYDALANISH TAJRIBASI

Do‘stova Nilufar

Toshkent viloyati, Parkent tuman politexnikumi o‘qituvchisi

Annotatsiya

Ushbu maqolada “Biznes asoslari” fanini o‘qitishda Germaniya SPARCUSTINGSTING tashkiloti metodikasiga asoslangan interaktiv o‘yinlardan — “Jamg‘arma o‘yini”, “Mikrobiznes o‘yini” va “Biznesni rejalashtirish mashg‘ulotlari”dan foydalanish tajribasi tahlil qilinadi. Mazkur metodlar o‘quvchilarning iqtisodiy tafakkurini shakllantirish, jamoada ishlash, mustaqil qaror qabul qilish ko‘nikmalarini rivojlantirishda yuqori samaradorlik beradi. Maqolada shuningdek, an‘anaviy ta‘lim usullari bilan solishtirganda, interaktiv o‘yinlarning afzalliklari ham yoritilgan.

Kalit so‘zlar

Biznes asoslari, interaktiv o‘yinlar, mikrobiznes, jamg‘arma o‘yini, Germaniya metodikasi, iqtisodiy tafakkur, ta‘lim samaradorligi.

Kirish

Bugungi kunda texnikumlarda “Biznes asoslari” fanini o‘qitishda zamonaviy interaktiv metodlarni qo‘llash ta‘lim samaradorligini oshirishda muhim omil hisoblanadi. An‘anaviy ma‘ruza va suhbat shaklidagi darslardan farqli ravishda, o‘yin asosidagi ta‘lim jarayoni o‘quvchini faol ishtirok etishga, real hayotiy vaziyatlarda iqtisodiy qarorlar qabul qilishga o‘rgatadi. Shu maqsadda Germaniya SPARCUSTINGSTING tashkiloti bilan hamkorlikda ishlab chiqilgan metodika asosida “Jamg‘arma o‘yini”, “Mikrobiznes o‘yini” va “Biznesni rejalashtirish mashg‘ulotlari” yo‘lga qo‘yilgan.

Asosiy qism

“Jamg‘arma o‘yini” shaxsiy uy xo‘jaliklarida jamg‘arishning ahamiyatini o‘rgatishga qaratilgan. Ushbu o‘yinda oila a‘zolarining istak va ehtiyojlarini qondirish, oila byudjetini rejalashtirish, daromad va xarajatlarni muvozanatlashtirish ko‘nikmalari shakllantiriladi. O‘yin davomida o‘quvchilar hayotiy vaziyatlarga duch keladilar: maqsadli jamg‘arma, kutilmagan xarajatlar yoki qo‘shimcha daromadlar, bu esa ularni moliyaviy mas‘uliyatga o‘rgatadi.

“Mikrobiznes o‘yini”da esa o‘quvchilar kichik tadbirkorlik faoliyatini — masalan, apelsin sharbati ishlab chiqarish loyihasini — guruh bo‘lib boshqaradilar. Har bir guruh

ishlab chiqarish, marketing, xarajat va foyda bo'yicha qarorlar qabul qiladi. Natijada turli qarorlarning foyda va zarar ko'rsatkichlariga ta'siri amaliy tarzda tahlil qilinadi. Bu o'yin o'quvchilarga iqtisodiy jarayonlarning murakkabligini, tavakkalchilik va bozor sharoitlariga moslashish zarurligini tushunishga yordam beradi.

"Biznesni rejalashtirish mashg'ulotlari" esa o'quvchilarning mustaqil biznes g'oya yaratish, uni iqtisodiy jihatdan asoslash, marketing tahlilini o'tkazish va moliyaviy rejani ishlab chiqish bo'yicha ko'nikmalarini shakllantiradi. Bu jarayonda o'quvchilar kichik guruhlarda ishlashadi, natijada kommunikativ, analitik va kreativ fikrlash qobiliyatlari rivojlanadi.

An'anaviy ta'lim bilan solishtirish

An'anaviy ta'limda o'qituvchi asosiy axborot manbai bo'lib, o'quvchi esa passiv tinglovchi vazifasini bajaradi. Interaktiv o'yinlar asosidagi darslarda esa o'quvchi jarayon markazida bo'ladi — u mustaqil fikr yuritadi, qaror qabul qiladi va natijani baholaydi. Natijada ta'lim jarayonida o'zaro muloqot, motivatsiya va qiziqish oshadi. Bundan tashqari, Germaniya metodikasi o'quvchilarni real iqtisodiy muhitda faoliyat yuritishga tayyorlaydi va ularning mas'uliyat, hamkorlik va liderlik sifatlarini rivojlantiradi.

Xulosa

Xulosa qilib aytganda, "Jamg'arma o'yini", "Mikrobiznes o'yini" va "Biznesni rejalashtirish mashg'ulotlari" kabi interaktiv metodlar "Biznes asoslari" fanini o'qitishda o'quvchilarning iqtisodiy tafakkurini shakllantirishda, ularni amaliy faoliyatga tayyorlashda va mustaqil fikrlashni rivojlantirishda samarali vosita hisoblanadi. Germaniya SPARCUSTINGSTING tashkiloti metodikasiga asoslangan bu yondashuv nafaqat bilimni, balki real hayotiy ko'nikmalarni ham shakllantiradi.

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**BOSHLANG'ICH SINFI O'QITUVCHILARI FAOLIYATINI
RIVOJLANTIRISHDA AKMEOLOGIK YONDASHUVNING O'RNI VA
RO'LI**

Boynazarova Nilufar Tilovmurot qizi

Termiz davlat pedagogika instituti Boshlang'ich ta'lim kafedrası o'qituvchisi

boynazarovanilufar71@gmail.com

+998991789735

Annotatsiya; Ushbu maqolada boshlang'ich sinfi o'qituvchilari faoliyatini takomillashtirishda akmeologik yondashuvning ahamiyati yoritilgan. Akmeologik yondashuv o'qituvchining shaxsiy va kasbiy kamolotini ta'minlash, uning ijodiy salohiyatini ochish hamda professional kompetensiyasini rivojlantirishga xizmat qiladi. Maqolada o'qituvchining o'z-o'zini anglash, o'z ustida ishlash, kasbiy refleksiya va motivatsiyani shakllantirish jarayonida akmeologik tamoyillarning roli tahlil qilingan. Shuningdek, zamonaviy ta'lim tizimida akmeologik yondashuv asosida o'qituvchilarning kasbiy mahoratini oshirish yo'llari va metodlari haqida fikr yuritiladi.

Kalit so'zlar: Akmeologiya, akmeologik yondashuv, boshlang'ich ta'lim, o'qituvchi faoliyati, kasbiy kompetensiya, shaxsiy rivojlanish, professional mahorat.

Аннотация; В статье рассматривается значение акмеологического подхода в совершенствовании деятельности учителей начальной школы. Акмеологический подход способствует личностному и профессиональному развитию учителя, раскрытию его творческого потенциала и развитию профессиональной компетентности. В статье анализируется роль акмеологических принципов в процессе самосознания, самосовершенствования, профессиональной рефлексии и мотивации учителя. Также рассматриваются пути и методы повышения профессионального мастерства учителей на основе акмеологического подхода в современной системе образования.

Ключевые слова: акмеология, акмеологический подход, начальное образование, деятельность учителя, профессиональная компетентность, личностное развитие, профессиональные навыки.

Abstract; This article highlights the importance of the acmeological approach in improving the activities of primary school teachers. The acmeological approach serves

to ensure the personal and professional development of the teacher, to reveal his creative potential and to develop his professional competence. The article analyzes the role of acmeological principles in the process of self-awareness, self-improvement, professional reflection and motivation of the teacher. It also discusses the ways and methods of improving the professional skills of teachers based on the acmeological approach in the modern education system.

Keywords: Acmeology, acmeological approach, primary education, teacher's activity, professional competence, personal development, professional skills.

Zamonaviy ta'lim tizimida o'qituvchilarning roli nafaqat bilim berish, balki o'quvchilarning kreativ salohiyatini rivojlantirishda ham muhim ahamiyatga ega. Akmeologiya, ya'ni insonning eng yuqori darajadagi rivojlanishi va o'zini o'zi amalga oshirish jarayoni, o'qituvchilarning kreativ salohiyatini oshirishda muhim pozitsiyani egallaydi. Ushbu maqolada akmeologik pozitsiyaning bo'lajak o'qituvchilarda kreativ salohiyatni rivojlantirishdagi o'rni va ahamiyati ko'rib chiqiladi. Akmeologik pozitsiya — bu shaxsning o'z imkoniyatlarini to'liq amalga oshirish, o'z maqsadlariga erishish va o'zini o'zi rivojlantirish jarayonidir. Bu pozitsiya shaxsning o'ziga xos xususiyatlari, qobiliyatlari va ijtimoiy muhit bilan bog'liq. O'qituvchil ar uchun akmeologik pozitsiya, o'z navbatida, o'quvchilarning kreativ salohiyatini rivojlantirishda muhim ahamiyatga ega. Akmeologiya o'qituvchilarga muammolarni ijodiy tarzda hal qilishni o'rgatadi, bu esa ta'lim jarayonida samaradorlikni oshiradi. O'qituvchilar akmeologik yondashuvlar orqali o'z karyeralarini rivojlantirish va yangi imkoniyatlarni ochish imkoniyatiga ega bo'lishadi. O'qituvchilar o'z tajribalarini oshirish va yangi metodlarni o'rganish orqali professional o'sish imkoniyatlarini kengaytiradilar. Akmeologiya o'qituvchilar o'rtasida o'zaro muloqot va hamkorlikni rivojlantirishga yordam beradi, bu esa ijodiy fikrlashni rag'batlantiradi. O'qituvchilar o'zaro tajriba almashish orqali yangi g'oyalarni ishlab chiqish va o'z bilimlarini kengaytirish imkoniyatiga ega bo'lishadi. Akmeologiya o'qituvchilarga o'z-o'zini rag'batlantirish va yangi maqsadlar qo'yish imkoniyatini beradi. O'qituvchilar o'z ishlariga qiziqish va motivatsiyani oshirish orqali ta'lim jarayonini yanada qiziqarli va samarali qilishlari mumkin. O'qituvchilar akmeologik yondashuvlar orqali ta'lim sifatini oshirish uchun innovatsion metodlarni qo'llash imkoniyatiga ega bo'lishadi. O'qituvchilar o'z bilim va ko'nikmalarini rivojlantirish orqali talabalar bilan samarali ishlash imkoniyatini oshiradilar. Akmeologiya o'qituvchilarga shaxsiy va professional rivojlanish, ijodiy fikrlashni rivojlantirish, o'zaro muloqot va hamkorlikni oshirish, motivatsiya va ta'lim sifatini yaxshilashda muhim foydalar keltiradi. Ushbu yondashuv o'qituvchilarning o'z salohiyatlarini to'liq amalga oshirishlariga yordam beradi va ta'lim jarayonini yanada

samarali va qiziqarli qiladi. [1] Akmeologiya ta'lim jarayonini bir qator usullar va yondashuvlar orqali yaxshilaydi. Akmeologiya o'qituvchilarga va talabalar uchun o'z bilim va ko'nikmalarini baholash imkoniyatini beradi, bu esa o'zgarishlar va rivojlanish uchun zarur bo'lgan ma'lumotlarni taqdim etadi. Akmeologiya ta'lim jarayonida ijodiy fikrlashni rag'batlantiradi, bu esa o'qituvchilar va talabalar o'rtasida yangi g'oyalar va metodlarni ishlab chiqishga yordam beradi. O'qituvchilar va talabalar muammolarni ijodiy tarzda hal qilishni o'rganadilar, bu esa ta'lim jarayonini yanada qiziqarli va samarali qiladi. Akmeologiya o'qituvchilar va talabalar o'rtasida o'zaro muloqot va hamkorlikni rivojlantirishga yordam beradi, bu esa ta'lim jarayonida jamoaviy ishlarni kuchaytiradi. O'qituvchilar va talabalar o'zaro tajriba almashish orqali yangi g'oyalarni ishlab chiqish va o'z bilimlarini kengaytirish imkoniyatiga ega bo'lishadi. Akmeologiya o'qituvchilarga va talabalar uchun o'z-o'zini rag'batlantirish va yangi maqsadlar qo'yish imkoniyatini beradi, bu esa ta'lim jarayonida motivatsiyani oshiradi. O'qituvchilar o'z ishlariga qiziqish va motivatsiyani oshirish orqali ta'lim jarayonini yanada qiziqarli va samarali qilishlari mumkin. Akmeologiya ta'lim sifatini oshirish uchun innovatsion metodlarni qo'llash imkoniyatini beradi, bu esa o'qituvchilarning darslarini yanada samarali qiladi. O'qituvchilar o'z bilim va ko'nikmalarini rivojlantirish orqali talabalar bilan samarali ishlash imkoniyatini oshiradilar. Akmeologiya o'qituvchilarning professional rivojlanishiga yordam beradi, bu esa ularning ta'lim jarayonida samaradorligini oshiradi. O'qituvchilar o'z tajribalarini oshirish va yangi metodlarni o'rganish orqali ta'lim jarayonini yaxshilash imkoniyatiga ega bo'lishadi. Akmeologiya ta'lim jarayonini yaxshilashda shaxsiy rivojlanish, ijodiy fikrlashni rag'batlantirish, o'zaro muloqot va hamkorlikni oshirish, motivatsiya va ta'lim sifatini yaxshilash kabi bir qator imkoniyatlar yaratadi. Ushbu yondashuv ta'lim jarayonini yanada samarali va qiziqarli qiladi, o'qituvchilar va talabalar o'rtasida o'zaro aloqalarni kuchaytiradi.[6] Akmeologik pozitsiya o'qituvchilarning o'z-o'zini rivojlantirish, ijodiy fikrlash va professional o'sishlariga qaratilgan strategiyalarni o'z ichiga oladi. Akmeologik pozitsiya o'qituvchilarning shaxsiy rivojlanishiga e'tibor qaratadi. O'qituvchilar o'z bilim va ko'nikmalarini baholash, o'z-o'zini rivojlantirish va yangi maqsadlar qo'yish orqali kreativ salohiyatlarini oshirishlari mumkin. Akmeologiya ijodiy fikrlashni rivojlantirishga yordam beradi. O'qituvchilar yangi g'oyalar va yechimlarni ishlab chiqish uchun ijodiy yondashuvlarni qo'llashlari kerak. Bu, o'z navbatida, dars jarayonida talabalar bilan ishlashda innovatsion usullarni qo'llash imkonini beradi. Akmeologik pozitsiya o'qituvchilar o'rtasida o'zaro muloqot va hamkorlikni rivojlantirishga yordam beradi. Bu, ijodiy fikrlash va yangi g'oyalarni ishlab chiqishga imkon yaratadi. Guruh ishlari va brainstorming sessiyalari bu

jarayonda muhim ahamiyatga ega. O'qituvchilarning kreativ salohiy atini oshirishda motivatsiya va qiziqish muhim rol o'ynaydi. Akmeologik pozitsiya o'qituvchilarni o'z salohiyatlarini rivojlantirishga undaydi va ularning dars jarayonida talabalar bilan ishlashda yanada samarali bo'lishlariga yordam beradi. O'qituvchilar uchun akmeologik yondashuvlarni o'z ichiga olgan treninglar va seminarlar o'tkazish. Bu tadbirlar o'qituvchilarning kreativ fikrlash va innovatsion yondashuvlarni rivojlantirishga yordam beradi. Tajribali o'qituvchilar tomonidan yangi o'qituvchilarga mentorlik qilish va ularni qo'llab-quvvatlash. Bu jarayon o'qituvchilarning o'z salohiyatlarini rivojlantirishga yordam beradi. O'qituvchilar o'rtasida tajriba almashish va o'zaro fikr almashish orqali ijodiy fikrlashni rivojlantirish. Bu, o'z navbatida, yangi g'oyalarni ishlab chiqishga yordam beradi. O'qituvchilar uchun shaxsiy rivojlanish rejalari tuzish va ularni amalga oshirish. Bu rejalarda o'qituvchilarning maqsadlari, o'z-o'zini baholash va rivojlanish strategiyalari ko'rsatilishi kerak. [5] O'qituvchilarning kreativ salohiyatini oshirishda akmeologik pozitsiya muhim rol o'ynaydi. Bu yondashuv o'qituvchilarning shaxsiy rivojlanishi, ijodiy fikrlash va o'zaro muloqotini rivojlantirishga yordam beradi. Akmeologik pozitsiya orqali o'qituvchilar o'z salohiyatlarini to'liq amalga oshirishlari va ta'lim jarayonida yanada samarali bo'lishlari mumkin. Shunday qilib, akmeologiya o'qituvchilarning professional rivojlanishida muhim ahamiyatga ega bo'lib, ta'lim sifatini oshirishga xizmat qiladi.[3] O'qituvchilarning kreativ salohiyatini rivojlantirish, nafaqat ularning shaxsiy rivojlanishiga, balki ta'lim jarayonining sifatini oshirishga ham xizmat qiladi. Akmeologik pozitsiya o'qituvchilarga o'z bilim va ko'nikmalarini baholash imkoniyatini beradi. Bu jarayon, o'qituvchilarning kuchli va zaif tomonlarini aniqlashga yordam beradi va ularni rivojlantirish uchun zarur bo'lgan yo'nalishlarni belgilaydi. Akmeologiya o'qituvchilarga ijodiy fikrlashni rivojlantirishda yordam beradi. O'qituvchilar yangi g'oyalar va innovatsion yondashuvlarni ishlab chiqish orqali ta'lim jarayonini yanada qiziqarli va samarali qilish imkoniyatiga ega bo'lishadi. Akmeologik pozitsiya o'qituvchilar o'rtasida o'zaro muloqot va hamkorlikni rivojlantirishga yordam beradi. Bu jarayon, o'qituvchilarning tajribalarini almashish va yangi g'oyalarni ishlab chiqish imkoniyatini yaratadi. Akmeologiya o'qituvchilarga o'z o'zini rag'batlantirish va yangi maqsadlar qo'yish imkoniyatini beradi. Bu esa ularning ta'lim jarayoniga bo'lgan qiziqishini oshiradi va kreativ salohiyatlarini rivojlantirishga yordam beradi. Akmeologik pozitsiya o'qituvchilarga innovatsion metodlarni qo'llash imkoniyatini beradi. Bu metodlar, o'qituvchilarning darslarini yanada samarali va qiziqarli qilishga yordam beradi, shuningdek, talabalar bilan ishlashda kreativ yondashuvlarni qo'llash imkonini yaratadi. Akmeologik pozitsiya bo'lajak

o'qituvchilarda kreativ salohiyatni rivojlantirishda muhim rol o'ynaydi. O'z-o'zini baholash, ijodiy fikrlashni rag'batlantirish, o'zaro muloqot va hamkorlikni rivojlantirish, motivatsiya va innovatsion metodlarni qo'llash orqali akmeologiya o'qituvchilarning shaxsiy va professional rivojlanishiga yordam beradi. Natijada, bu jarayon ta'lim sifatini oshirishga va talabalar bilan samarali ishlashga xizmat qiladi. Bo'lajak o'qituvchilar akmeologik yondashuvlarni o'zlashtirish orqali o'z kreativ salohiyatlarini rivojlantirishlari va ta'lim jarayonini yanada samarali qilishlari mumkin. Bo'lajak o'qituvchilarda kreativ salohiyatni rivojlantirish, nafaqat ularning professional faoliyatlari uchun, balki o'quvchilarning ta'lim jarayonida muvaffaqiyatli bo'lishlari uchun ham muhimdir. Akmeologik pozitsiya orqali o'qituvchilar o'z salohiyatlarini oshirish, o'quvchilarga ilhom berish va ularning ijodkorligini rivojlantirish imkoniyatiga ega bo'lishadi. Ta'lim tizimida kreativlikni oshirish, kelajak avlodning muvaffaqiyatli va innovatsion fikrlovchi shaxslar bo'lib yetishishiga yordam beradi. XULOSA Ta'lim tizimida kreativ salohiyatni rivojlantirish, zamonaviy o'qituvchilarning eng muhim vazifalaridan biridir. Akmeologiya, shaxsiy va professional rivojlanish nazariyasi sifatida, o'qituvchilarning kreativ salohiyatini oshirishda muhim rol o'ynaydi. Akmeologiya, shaxsiy va professional rivojlanish jarayonlarini o'rganadigan fan sifatida, o'qituvchilarning o'z salohiyatlarini to'liq amalga oshirishlariga yordam beradi. Kreativ salohiyat esa, yangi g'oyalar, yechimlar va innovatsion yondashuvlarni ishlab chiqish qobiliyatidir.

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KADRLARNI TAYYORLASHDA INNOVATSION USULLARDAN FOYDALANISH MEXANIZMLARI

*Xolbayeva Marg‘uba Qazoqboyevna – Fan va texnologiyalar universiteti, “Moliya
va moliyaviy texnologiyalar” kafedrası o‘qituvchisi*

E-mail – margubam1982@gmail.com

ORCID – 0009-0005-2399-4487

Telefon raqam +99890 374-01-37

Annotatsiya: Mazkur maqolada zamonaviy ta’lim tizimida kadrlar tayyorlash jarayonida innovatsion usullardan foydalanishning dolzarbligi, samarali mexanizmlari hamda ular orqali kasbiy malaka va raqobatbardoshlikni oshirish masalalari yoritilgan. Shuningdek, ta’lim tizimiga innovatsion yondashuvlarni joriy etish orqali kadrlar sifatini yaxshilashning afzalliklari tahlil qilinadi.

Kalit so‘zlar: innovatsiya, kadrlar tayyorlash, ta’lim texnologiyalari, raqobatbardoshlik, zamonaviy yondashuvlar, raqamli transformatsiya.

KIRISH.

Global iqtisodiy va ijtimoiy o‘zgarishlar sharoitida ta’lim tizimi oldida yangi, zamonaviy va raqobatbardosh kadrlarni tayyorlash talabi keskin ortmoqda. An’anaviy ta’lim usullari bugungi kunda mehnat bozori talablariga to‘liq javob bera olmayapti. Shu sababli kadrlar tayyorlash jarayonida innovatsion yondashuvlardan foydalanish muhim ahamiyat kasb etmoqda. Innovatsion texnologiyalar, interaktiv metodlar, raqamli platformalar va modulli o‘quv dasturlari ta’lim sifatini oshirishda muhim omil bo‘lib xizmat qilmoqda. Bugungi kunda iqtisodiy va ijtimoiy sohalarida yuz berayotgan tezkor o‘zgarishlar, texnologiyalar va global integratsiya jarayonlari kadrlar tayyorlash tizimini tubdan qayta ko‘rib chiqishni taqozo etmoqda. Innovatsion usullarni joriy etish orqali kadrlarni tayyorlash samaradorligini oshirish, ularning zamonaviy talablar va ish bozorining ehtiyojlariga moslashuvchanligini ta’minlash dolzarb vazifa sifatida ko‘rilmoqda.

Kadrlar tayyorlashda an’anaviy metodlardan tashqari innovatsion pedagogik texnologiyalar, raqamli ta’lim vositalari, interfaol o‘quv platformalari va individual yondashuv kabi mexanizmlarning joriy etilishi ta’lim sifatini oshirishga va yosh mutaxassislarning malakasini tez va samarali shakllantirishga xizmat qiladi. Shuningdek, innovatsion usullar ish jarayonida real vaziyatlarni simulyatsiya qilish,

masofaviy ta'lim, kooperativ o'qish hamda doimiy o'zini rivojlantirish imkoniyatlarini kengaytiradi.

Ushbu maqolada kadrlarni tayyorlashda innovatsion usullarning samarali mexanizmlari tahlil qilinib, ularning amaliyotga tatbiq etilish yo'llari va natijalari ko'rib chiqiladi. Mazkur tadqiqot natijalari ta'lim va kasbiy rivojlanish jarayonlarida yangi yondashuvlarni shakllantirishga hissa qo'shishi kutilmoqda.

Asosiy qism.

Innovatsion usullar — bu yangi g'oya, texnologiya yoki metodlarni amaliyotga tatbiq etish orqali kutilgan natijani yanada samaraliroq usulda qo'lga kiritish imkonini beruvchi vositalardir. Kadrlar tayyorlashda innovatsion usullarning roli quyidagilarda ko'rinadi:

- ✓ **Shaxsga yo'naltirilgan yondashuv:** har bir talabaning individual salohiyatiga mos o'quv yo'llarini tanlash imkonini beradi;
- ✓ **Interaktiv metodlar:** guruhli ishlar, "case-study", "brainstorming" kabi usullar orqali amaliy bilimlar mustahkamlanadi;
- ✓ **Raqamli texnologiyalar:** masofaviy ta'lim, sun'iy intellekt, VR (virtual reallik) va AR (kengaytirilgan reallik) yordamida real vaziyatlarda o'rgatish imkoniyati yaratiladi;
- ✓ **Modallashtirilgan o'quv dasturlari:** qisqa muddatli, maqsadli kurslar orqali tor sohalarda yuqori malakali mutaxassislar tayyorlanadi.

Innovatsion usullardan foydalanish quyidagi asosiy mexanizmlar orqali amalga oshiriladi:

a) Axborot-kommunikatsiya texnologiyalaridan foydalanish

Zamonaviy IKT vositalari ta'lim jarayonini interaktiv va moslashuvchan qiladi. Elektron platformalar (Moodle, Google Classroom, Coursera), video darslar, onlayn testlar orqali o'quv jarayoni avtomatlashtiriladi.

b) Dual ta'lim tizimini joriy etish

Talabalar nazariy bilimlarni oliy ta'lim muassasalarida, amaliy ko'nikmalarni esa ishlab chiqarish korxonalarida egallaydilar. Bu model Germaniya, Shveysariya kabi mamlakatlarda keng qo'llaniladi va O'zbekistonda ham bosqichma-bosqich joriy etilmoqda.

c) Startup va innovatsion loyihalar asosida o'qitish

Talabalarni startup loyihalarda ishtirok ettirish orqali ularning ijodiy fikrlash va muammolarni yechish ko'nikmalari shakllanadi. Bu usul ayniqsa texnika va IT sohalarida dolzarb hisoblanadi.

d) Mentorlik va kouching tizimi

Tajribali mutaxassislar yordamida yosh kadrlarni tarbiyalash orqali aniq maqsadlarga erishish osonlashadi. Bu metod yirik kompaniyalar va universitetlar hamkorligida amalga oshirilmoqda.

3. Innovatsion yondashuvlarning afzalliklari

- **Moslashuvchanlik** – talaba o‘ziga qulay vaqtda bilim olish imkoniga ega bo‘ladi;
- **Samaradorlik** – ta’limning real mehnat bozoriga moslashuvi;
- **Ijodkorlik** – mustaqil fikrlash va kreativ yondashuvlar rivojlanadi;
- **Raqobatbardoshlik** – zamonaviy bilim va ko‘nikmalar kadrlarni global mehnat bozorida raqobatdosh qiladi.

Xulosa.

Zamonaviy davrda kadrlarni tayyorlashda innovatsion yondashuvlardan foydalanish ta’lim tizimining ustuvor yo‘nalishlaridan biridir. Bu yo‘nalishda olib borilayotgan islohotlar natijasida ta’limning sifati, samaradorligi va dolzarbligi oshadi. Innovatsion texnologiyalarni amaliyotga keng joriy etish orqali kelajak avlodni zamonaviy kasblarga tayyorlash va ularning raqobatbardoshligini oshirishga erishish mumkin. Kelgusida bu yo‘nalishda ilmiy-tadqiqot ishlarini kengaytirish va tajribalarni umumlashtirish lozim bo‘ladi.

Bugungi kunda ta’lim tizimi jamiyatning eng muhim strategik sohalaridan biri sifatida ko‘rilmoqda. Ayniqsa, raqobatbardosh, yuqori malakali va zamonaviy kasbiy ko‘nikmalarga ega kadrlarni tayyorlash masalasi nafaqat milliy, balki global miqyosda ham dolzarb ahamiyat kasb etmoqda. Innovatsion texnologiyalar va yondashuvlarning kadrlar tayyorlash jarayoniga faol integratsiyasi bu yo‘nalishda sezilarli siljishlarga olib kelmoqda.

Kadrlar tayyorlashda innovatsion usullarni joriy etish — bu oddiy metodlarni yangilash emas, balki ta’lim jarayonini tubdan o‘zgartirish, uni interaktiv, moslashuvchan, amaliyotga yaqin va shaxsga yo‘naltirilgan tizimga aylantirish demakdir. Mazkur maqolada ko‘rib chiqilganidek, innovatsion yondashuvlar — xususan, axborot-kommunikatsiya texnologiyalari, raqamli ta’lim platformalari, dual ta’lim tizimi, modulli o‘quv dasturlari, startup loyihalar va mentorlik asosidagi o‘qitish metodlari — ta’lim jarayonining sifatini sezilarli darajada oshirishga xizmat qilmoqda. Innovatsion usullar yordamida kadrlar real mehnat bozori talablariga moslashtirilgan holda, aniq kompetensiyalarga ega tarzda tayyorlanmoqda. Talabalarning o‘z ustida ishlashi, ijodiy fikrlashi, muammolarni hal qilish ko‘nikmasi, zamonaviy texnologiyalar bilan ishlash malakasi rivojlanmoqda. Bu esa, o‘z navbatida, ularning

raqobatbardoshligini oshirish, ishga joylashish imkoniyatlarini kengaytirish, jamiyatda o'z o'rnini topishida muhim ahamiyat kasb etadi.

Ta'lim tizimida innovatsion mexanizmlarni samarali joriy etish uchun quyidagi omillar muhim sanaladi:

- O'qituvchilarning raqamli savodxonligini oshirish va ularni zamonaviy metodikalar bilan muntazam ravishda qayta tayyorlash;
- Ta'lim muassasalarini texnik va texnologik jihatdan jihozlash;
- Xususiy sektor, ishlab chiqarish korxonalari va ta'lim muassasalari o'rtasida amaliy hamkorlikni yo'lga qo'yish;
- Ilg'or xorijiy tajribalarni o'rganib, mahalliy sharoitga moslashtirish;
- Raqamli ta'lim kontentini ishlab chiqish va uzluksiz yangilab borish.

Shuningdek, davlat siyosatining ustuvor yo'nalishlaridan biri sifatida innovatsion ta'lim muhitini yaratish, ilg'or texnologiyalar asosida o'quv dasturlarini modernizatsiya qilish, kadrlar sifatini baholashning zamonaviy indikatorlarini ishlab chiqish va joriy etish lozim. Innovatsiyalarga tayangan ta'lim tizimi esa, o'z navbatida, kelajakda yetakchi sohalarda ishlay oladigan, mas'uliyatli, mustaqil fikrlovchi va yuqori kasbiy salohiyatga ega mutaxassislarni yetishtirib beradi.

Xulosa qilib aytganda, kadrlarni tayyorlashda innovatsion yondashuvlardan foydalanish bu — zamon talabi, jamiyat taraqqiyotining zaruriy sharti va har bir davlatning raqobatbardoshligini belgilovchi asosiy omillardandir. Ushbu yo'nalishda tizimli va kompleks yondashuvlar asosida olib borilayotgan ishlar yaqin kelajakda ta'lim sifatining tubdan oshishiga, shuningdek, milliy kadrlar salohiyatining sezilarli darajada yuksalishiga xizmat qiladi.

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METHODOLOGY OF POPULARIZATION OF ADVANCED PEDAGOGICAL EXPERIENCES IN FINE ARTS

Begoyim Ismatova

Bukhara State University, student

Oybek Shomurodov

Bukhara State University, Department of Fine and Applied Arts, scientific supervisor

Annotation. Currently, there are various opinions, views, and approaches to teaching based on advanced pedagogical technologies. This is not accidental, of course. The constant search for establishing teaching based on modern, advanced pedagogical technologies, creating understandable and interesting areas of the educational process for students remains an important task of the teacher. This article discusses what a teacher should follow when designing lessons on pedagogical technology, and the existence of three main approaches to advanced pedagogical experience.

Keywords: technology, teacher, education, experience, lesson, project, instruction, methods, educational process, upbringing.

Introduction. One of the main factors of the development processes taking place in the world is related to the training of highly competent specialists in each field. As the initial basis of competencies, educational competencies are recognized, first of all[1]. One of the urgent problems of Uzbek pedagogical science is the formation and development of national and world cultural values of young people, in particular, the formation and development of educational competencies in artistic and visual activities, which are among the issues of great relevance today.

A number of scientific researches are being conducted worldwide to develop a didactic system for the formation of basic, meta-subject, artistic and aesthetic, and general cultural competencies of students in visual arts classes, and to improve the methodological foundations of teaching visual arts using interactive software tools.[2] Especially in the process of teaching art subjects, the cultivation of visual literacy, the use of drawing and pictorial models in design and media arts, information and communication technologies, the development of critical, creative thinking, ethical skills, personal and social, intercultural competence in students are of particular importance.[3] At the same time, the development of life skills through the use of art-media tools and technologies in fine arts lessons, the formation of patriotic and civic

competencies in students on the basis of art education require the implementation of creative activities based on prioritizing vitagen education.

Materials and methods. In today's new Uzbekistan, which is developing in step with the times, as one of the important areas of reforming the education system, in particular, the subject "Fine Arts" taught in general secondary schools, special attention is paid, first of all, to the formation of field-specific educational competencies in students.[4] Indeed, in our republic, the state social policy pays special attention to the interests of the individual and the priority of education, the rich national values, cultural and historical traditions and intellectual heritage of our people, and the upbringing of a creative generation with creative thinking is an important factor in the process of Uzbekistan's integration into the world community. These factors mean that the use of the educational and educational opportunities of fine arts is of great importance.[5]

The main feature of the traditional approach is that the teacher, while teaching the subject of fine arts, explains certain information while presenting it, and the student stores this knowledge in memory. In this case, the concept of "knowledge" is understood in the sense of information on educational materials stored in memory.[6] For example, the main task of composition is to develop creative artistic imagination in students, to visually perceive reality in life, to form artistic taste and culture, to acquire competencies related to creating compositions from visual activities, and to ensure the effective use of theoretical and practical knowledge gained from science in social life. This means that a systematic approach is necessary in the formation of field-specific academic competencies in students in visual arts classes.[7]

From the first days of Uzbekistan's independence, the main emphasis on the fundamental changes that are being implemented in all aspects of the life of society on its independent path of development has been to further strengthen the foundation of our national, educational traditions, and enrich them with modern advanced teaching methods of the world by harmonizing them with the requirements of the time. This, in turn, requires strengthening the material, technical and information base of the education system, providing the educational process with high-quality educational literature and advanced pedagogical technologies.

Therefore, the formation of professional skills of pedagogical personnel on the basis of advanced pedagogical technologies in the process of training them is an important requirement of today. The technological approach to education is one of the tools that actively influences the pedagogical process and determines its effectiveness, integrity, and success. Theoretical and methodological analysis of the technological approach to

education shows that the social order of society is closely related to the requirements for the level of development of pedagogical science.

One of the important tasks of all parts of the education system, especially in the general secondary education system, which is its most important formative component, is to prepare students - young people for deep and solid knowledge in all areas of science, to prepare them for successful continuation of their studies at higher levels of education in the future and to become worthy personnel. To successfully implement this goal, it is necessary to continuously improve education, establish strong mutual relations between schools, academic lyceums, higher education, popularize innovations and best practices in the field of education, and consistently conduct methodological cooperation.

Discussion and results. Teacher training is important in designing training sessions on advanced pedagogical technologies. Observations and analyses show that teachers face serious difficulties in this activity, which requires them to have high qualifications and experience. Because it requires a more creative approach to create specific instructions. An experienced teacher determines which important points in the lesson should be remembered by the students, and which ones should be simply known.

The nature of the lesson depends on the creativity and skill of the teacher. The work on organizing and conducting lessons should consist mainly of two parts: preparing a lesson plan and implementing it. Preparing a lesson plan is a product of the teacher's creative activity and has a number of common features. The project is based on the activities that the teacher and students will carry out together in the future.

It begins with an analysis based on the requirements of state educational standards. The analysis focuses on how the elements of the content of the information (knowledge, skills and abilities, creative experience, relationships) are presented in the programs and reflected in textbooks. Then the content of the lesson topic is studied, the goal set for studying this or that topic, the didactic goal of education, the goals of the teacher and students, the implementation and assessment sheets of the goals, the amount of homework assigned, test questions on the topics, rating control steps, and the method of mastering at the standard level are determined in advance. Modern pedagogical technology requires creative activity for each of the stages, from clearly setting the goal of education to assessing its results. When designing lessons according to pedagogical technology, it is important for the teacher to adhere to the following: at the beginning of the lesson, arouse interest in the students in studying the topic being studied; announce the learning objectives of the lesson to them, make changes to them if necessary; alternate the lesson with forms of organizing educational activities;

developing critical thinking through reading and writing in lectures and practical sessions, using interactive methods selected for the topic, and others.

When designing a topic, the content of its name, the hours allocated to it, the goals of the teacher and the student, various forms of tasks, basic concepts, the style and form of the teacher's management of the educational activity of the student, graphic and technical means of teaching, diagnostic methods, etc. are indicated.

Pedagogical experience is determined by educators on the basis of the knowledge, qualifications, and skills acquired in the process of practical work and is interpreted as one of the main sources of pedagogical skill and development of pedagogical science. Experience that opens up new opportunities in the education of children and achieves creative results using new forms, methods, and methods in the formation of educational work can be called advanced work experience. There are about 40 concepts of "Advanced pedagogical experience" in the literature on pedagogy. All of these concepts are interpreted as a tool that directs the pedagogical process towards a goal and influences the achievement of high indicators. There are three main approaches to advanced pedagogical experience.

They are:

- Approaching the work experience of a teacher who shows good results as an example compared to the work of other teachers;

- Approaching the activities of teachers who can implement scientific research and experimental-testing work into life and achieve good results;

- Approaching creative teachers who create new, unique knowledge. Searching for, studying, generalizing, applying and popularizing advanced work experiences are all stages of the main work processes of a senior educator or head. These stages are as follows:

The first stage. At this stage, the pedagogical process is observed. During the observation period, the advanced work experiences of educators and the good work of individual teachers are identified.

The second stage. At this stage, it is necessary to summarize the accumulated experience. The senior educator helps the teacher analyze all the evidence and select the main from the secondary. In this, the theoretical substantiation of the experience is of great importance. The ability to correctly use logical methods helps to draw the right conclusions.

The third stage. At this stage, the best practices are implemented and popularized. A single preschool educational institution can search for, find, study, generalize and

popularize the best practices of its educators or apply the best practices of other educators to the life of this institution.

When choosing the best practices selected for use in practice, the following criteria should be given importance.

- Its relevance;
- Programmability;
- The creation of conditions for application;
- The experience leads to good results;
- The stability of the achieved result.

The idea of expanding and deepening the content of education and its structure, including not only knowledge, skills, qualifications, but also the experience of creative activity that forms a universal culture, and relationships with the environment is very important. Advanced pedagogical and social experiences are an important factor in the formation of pedagogical skills. The main aspect of new pedagogical technologies is the need to re-create school textbooks at a high level.

The creation of textbooks should be carried out based on many years of scientific, cultural, aesthetic, and spiritual experience. Pedagogical activity in the educational process is creative in nature by its own labor. It is known that creativity arises only when a person faces a problem. Teaching activity has such a feature.

The main essence of pedagogical creativity is clearly defined by the purpose and nature of pedagogical activity. Pedagogical activity is the process of solving countless pedagogical problems that are subordinate to the personality of a person, his worldview, beliefs, consciousness, and behavior. Creativity in the work of a teacher is expressed in the methods of solving these problems, in the ability to find ways to solve them.

The source of pedagogical creativity is advanced pedagogical experience. Advanced pedagogical experience is very rich in problem situations. By advanced pedagogical experience, we understand the teacher's creative approach to his pedagogical task, the search for new, modern, effective, most appropriate ways and means in the education of students. Advanced pedagogical experience is the form and methods of work, methods and tools, as well as innovative technologies used by the teacher. Advanced pedagogical experience leads to the study, the discovery of new pedagogical phenomena and laws based on it, the introduction of good, qualitative changes in the educational process, the management of students' cognitive activity, the solution of problems of modeling the educational process in a new form. A creative teacher must

not only successfully teach and educate; he must also have research skills and qualifications to analyze the work experience of advanced teachers.

An advanced teacher always strives to learn about innovations in the field of pedagogy, uses the experience of other teachers and tries to generalize his own personal experience. The current development of science and technology requires that the teacher be creative, be able to think freely about important problems of his subject, convey scientific achievements to students, and finally, teach students to think creatively and conduct research. Therefore, the teacher must, first of all, acquire research skills. During the course of conducting scientific research, the teacher collects the experiences of scientists, analyzes them, and draws conclusions based on them.

In the process of using scientific conclusions in his practical activities, he acquires very important qualities necessary for a modern teacher. Advanced teachers pay special attention to the choice of teaching methods.

Although there are more common aspects of frontal, differentiated and individual activities of students, their organization requires a unique creative approach from the teacher. If the entire class, group and individual are influenced by the same method, then both education and creative approach will fail. The teacher's reliance on advanced pedagogical experiences in the formation of pedagogical skills will lead to good results. One of the most important tasks of visual arts classes is to teach how to read works of applied decorative and architectural arts. Works of visual arts reflect a certain content, such as a fairy tale, story, epic. Works of visual arts have their own language. In particular, artists reveal the content of the work using expressive means such as lines, colors, dimensions, composition, proportion, rhythm, symmetry, form.

Fine arts education is not only important in shaping the aesthetic education of students, but also plays a significant role in moral education. It should be recognized that fine arts education is important in terms of its great power in forming students' national pride and honor, the ideology of national independence, patriotism and international education, and the ideas of friendship and mutual assistance.

CONCLUSION. In conclusion, it can be said that it is necessary to further improve the quality of education by applying advanced pedagogical experiences in education. Through this, we will develop the following characteristics of our youth: - forming knowledge, attitudes and skills; - creating a basis for young people to strive for the world arena and increasing their competitiveness as mature personnel; 80 - forming their creativity and critical thinking skills. It should also be said that the main and greatest task facing us today is to educate and educate a fully developed, well-rounded individual.

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TABIIY FAN DARSLARIDA BOSHLANG'ICH SINIF O'QUVCHILARIGA TABIIY RESURLARDAN OQILONA FOYDALANISHNI O'RGATISH USULLARI.

Samadova Mohiro'za

Termiz davlat pedagogika institute Boshlang'ich ta'lim yo'nalishi 2-kurs talabasi

Qulmuminov O'rolboy Safar o'g'li

Termiz davlat Pedagogika Instituti "Boshlang'ich ta'lim" kafedrası o'qituvchisi

Anotatsiya

Ushbu maqolada boshlang'ich sinf o'quvchilariga tabiiy fan darslari orqali tabiiy resurslardan oqilona foydalanish ko'nikmalarini shakllantirishning pedagogik asoslari, metodlari va samarali usullari tahlil etiladi. O'quvchilarda ekologik madaniyatni rivojlantirish, tabiatga ehtiyotkorona munosabatni shakllantirishda o'yin, tajriba, muammoli vaziyat va amaliy mashg'ulotlarning ahamiyati yoritiladi.

Kalit so'zlar: tabiiy resurslar, oqilona foydalanish, ekologik tarbiya, tabiiy fan, boshlang'ich ta'lim, metod, usul, o'quv faoliyati.

Kirish. Bugungi kunda insoniyat oldida turgan eng muhim muammolardan biri — tabiiy resurslardan oqilona foydalanish, ularni tejash va tiklash masalasidir. Tabiatning bebaho boyliklarini asrash, ekologik muvozanatni saqlash har bir fuqaroning, ayniqsa yosh avlodning burchi hisoblanadi. Shu bois boshlang'ich sinf davridan boshlab o'quvchilarga tabiat ne'matlariga ehtiyotkorona munosabatda bo'lishni o'rgatish tabiiy fan darslarining muhim maqsadlaridan biridir.

Boshlang'ich ta'limda tabiiy fan darslari o'quvchilarning kuzatuvchanligini, tafakkurini, amaliy ko'nikmalarini rivojlantiradi hamda ularni tabiat va jamiyat o'rtasidagi bog'liqlikni anglashga yo'naltiradi.

Asosiy qism: Tabiiy fan darslarida boshlang'ich sinf o'quvchilariga tabiiy resurslardan oqilona foydalanishni o'rgatishning samarali usullarini ishlab chiqish pedagogik jihatdan muhim ahamiyatga ega. Tabiiy resurslar — suv, havo, tuproq, o'simliklar, hayvonot dunyosi va foydali qazilmalar kabi inson faoliyatida bevosita ishlatiladigan tabiat boyliklari hisoblanadi. Boshlang'ich sinf o'quvchilari bu tushunchalarni amaliy hayotiy misollar orqali anglaganda, ularda tabiatga nisbatan mas'uliyat va ehtiyotkorlik hissi shakllanadi. Shu bois darslarda o'quvchilarga resurslarning ahamiyatini o'rgatish, ularni tejash va to'g'ri ishlatish ko'nikmalarini rivojlantirishga alohida e'tibor qaratish lozim.

Tabiiy fan darslarida eng samarali metodlardan biri — **kuzatish metodidir**. O'quvchilarni tabiatdagi o'zgarishlarni — mavsumlar almashinuvi, o'simliklarning gullashi, mevalarning pishishi, suvning aylanish jarayonlari kabi hodisalarni kuzatishga jalb qilish orqali ularning ekologik tafakkuri shakllanadi. Masalan, maktab hovlisidagi daraxtlar va gullarning o'sishi, barglarning rang o'zgarishi orqali o'quvchilar tabiiy resurslarning hayotiy ahamiyatini sezaдилar. Shu bilan birga, o'quvchilarda kuzatish natijalarini taqqoslash va tahlil qilish ko'nikmalari rivojlanadi, ular o'z xulosalarini mustaqil chiqarishga o'rganadilar.

Amaliy tajriba va eksperimentlar ham darsning samaradorligini oshiradi. Suvni filtrlash, tuproqning unumdorligini solishtirish, o'simliklarni turli sharoitlarda o'stirish kabi oddiy tajribalar orqali o'quvchilar resurslarni tejash va ulardan oqilona foydalanish muhimligini amalda bilib oladilar. Masalan, o'simliklarni muntazam sug'orish va sug'ormaslik sharoitida ularning o'sishini kuzatish

orqali bolalar suvning ahamiyatini tushunadilar va uni isrof qilmaslikni o'rganadilar. Shu tarzda tajribalar orqali bilimlar amaliy ko'nikmalarga aylanadi va o'quvchilar ekologik madaniyatni amalda qo'llay boshlaydilar.

O'yinli metodlar ham boshlang'ich sinf darslarida muhim ahamiyat kasb etadi. "Tabiatni asra", "Kim tejab ishlatadi?" kabi o'yinlar orqali bolalar nafaqat bilim oladilar, balki tabiiy resurslarni tejash va to'g'ri ishlatish qoidalarini qiziqarli shaklda o'zlashtiradilar. O'yin jarayonida o'quvchilar bir-biri bilan hamkorlik qiladi, muammolarni hal qilish va resurslardan oqilona foydalanish bo'yicha strategiyalar ishlab chiqadilar. Shu bilan birga, o'yinlar o'quvchilarda ijodiy tafakkur va mustaqil fikrlashni rivojlantiradi, ularni darsga faol jalb qiladi.

Muammoli ta'lim metodi ham tabiiy fan darslarida keng qo'llaniladi. O'qituvchi o'quvchilarga "Agar suv tugasa nima bo'ladi?", "Agar daraxtlar kesilsa havoning sifati qanday o'zgaradi?" kabi savollar bilan murojaat qiladi. Bu savollar o'quvchilarda masalalarni tahlil qilish, sabab-natija munosabatini anglash va resurslardan oqilona foydalanish bo'yicha mustaqil qarorlar qabul qilish ko'nikmalarini shakllantiradi. Shu bilan birga, muammoli vaziyatlar bolalarda ekologik tafakkur va mas'uliyatni mustahkamlaydi, ular tabiatni asrash muhimligini chuqur anglaydilar.

Loyihaviy faoliyatlar ham tabiiy resurslardan oqilona foydalanish ko'nikmalarini rivojlantirishda samarali vositadir. Masalan, "Bizning yashil sinf", "Har bir o'quvchi – bir nihol" kabi kichik loyihalar orqali o'quvchilar tabiatni asrashga amaliy hissa qo'shadilar. Loyihalar davomida ular rejalashtirish, kuzatish, natijalarni taqdim etish va jamoa bilan ishlash ko'nikmalarini rivojlantiradilar. Bu esa nafaqat ekologik madaniyatni oshiradi, balki bolalarda tashkilotchilik va ijodiy tafakkurni shakllantiradi. Shuningdek, tabiatga oid mashg'ulotlarni maktabdan tashqarida — bog'lar, parklar, tabiat qo'riqxonalar va ekologik sayohatlar orqali tashkil etish ham darslarni yanada qiziqarli va samarali qiladi. Bunday tashriflar orqali o'quvchilar o'zlari ko'rgan va kuzatgan resurslarning qiymatini his qiladilar, ularni asrash va tejashga yanada katta qiziqish uyg'onadi. Misol uchun, daryo bo'yida suvning tozaligi, daraxtzorlarning holati va tuproqning unumdorligi bo'yicha kuzatuvlar o'tkazish o'quvchilarda tabiatga ehtiyotkor munosabatni shakllantiradi.

O'qituvchining roli ham bu jarayonda beqiyosdir. O'qituvchi o'quvchilarga tabiiy resurslarning ahamiyatini yetkazish, ularni kuzatishga va tahlil qilishga o'rgatish, shuningdek, ekologik madaniyatni shakllantirishda namuna bo'lishi zarur. Zamonaviy pedagogik texnologiyalar — interfaol metodlar, raqamli resurslar, ekologik viktorinalar va animatsion materiallar orqali darslarning samaradorligi oshiriladi. Masalan, multimediali taqdimotlar orqali suvning aylanish jarayoni yoki o'simliklarning o'sish sharoitlari bolalarga yanada aniq va tushunarli ko'rinishda yetkaziladi. Shu tariqa, boshlang'ich sinf o'quvchilariga tabiiy resurslardan oqilona foydalanishni o'rgatish jarayoni turli metod va usullarni uyg'unlashtirish orqali samarali amalga oshiriladi. Kuzatish, amaliy tajribalar, o'yin, muammoli vaziyatlar va loyihaviy faoliyatlar o'quvchilarda ekologik madaniyatni shakllantiradi, ularda tabiatga mehr, mas'uliyat va ongli munosabatni rivojlantiradi. Bu esa kelajakda atrof-muhitni asraydigan va resurslarni tejashga intiladigan yosh avlodni tarbiyalashga xizmat qiladi.

Xulosa: Tabiiy fan darslarida boshlang'ich sinf o'quvchilariga tabiiy resurslardan oqilona foydalanishni o'rgatish — ularning ekologik madaniyati va tabiatga nisbatan mas'uliyatini shakllantirishning muhim bosqichidir. Tadqiqot va amaliy mashg'ulotlar shuni ko'rsatadiki, o'quvchilarda tabiatning hayotiy ahamiyatini anglash va resurslarni tejash ko'nikmalarini

rivojlantirishda kuzatish, tajriba o'tkazish, o'yin, muammoli vaziyatlar va loyihaviy faoliyat kabi metodlar eng samarali hisoblanadi. Ushbu metodlar o'quvchilarning amaliy faoliyatga jalb qilinishini ta'minlaydi, mustaqil fikrlash va ijodiy yondashuvni rivojlantiradi hamda ularni ekologik ong va mas'uliyatga o'rgatadi. Shuningdek, darslar va maktabdan tashqari faoliyatlarni uyg'unlashtirish — masalan, tabiat sayohatlari, bog'larda daraxt ekish, chiqindilarni saralash kabi amaliy tadbirlar — o'quvchilarda tabiatni asrashga bo'lgan qiziqish va e'tiborni yanada kuchaytiradi. O'qituvchining faol ishtiroki, zamonaviy pedagogik texnologiyalarni qo'llash, interfaol metodlar va raqamli resurslardan foydalanish darslarni yanada samarali va qiziqarli qiladi.

Natijada, tabiiy fan darslarida tabiiy resurslardan oqilona foydalanishni o'rgatish orqali boshlang'ich sinf o'quvchilarida ekologik madaniyat, tabiatga ehtiyotkorlik va ongli munosabat shakllanadi. Bu esa kelajakda atrof-muhitni asrashga mas'uliyatli, tabiatni qadrlaydigan yosh avlodni tarbiyalashga xizmat qiladi. Shu tarzda, tabiiy fan darslari faqat bilim berish vositasi bo'lib qolmay, balki o'quvchilarda ekologik ongni rivojlantiradigan asosiy vositaga aylanadi.

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DINAMIK KUCHLAR TA'SIRIDA BO'LGAN LIFT KONSTRUKSIYALARINING MUSTAHKAMLIGINI TAHLIL QILISH

Nazarova M.K., Boymirzayev A.A.

Annotatsiya: Ushbu maqolada men lift konstruksiyalarining dinamik yuklamalar ostida mustahkamligini tahlil qilaman. Yuqori qavatli binolarda lift tizimlari eng muhim vertikal transport vositasi bo'lib, ularga ta'sir etuvchi inertsia kuchlari, tebranishlar va favqulodda to'xtash momentlari konstruksiyaning barqarorligi va xavfsizligiga sezilarli ta'sir ko'rsatadi. Tadqiqot davomida men lift tizimining turli holatlardagi ish faoliyatini matematik modellashtirish, nazariy hisob-kitoblar va empirik kuzatuvlar yordamida baholadim. Shu bilan birga, men qiyoslash va empirik tahlil usullaridan foydalangan holda konstruksiyaning mustahkamligini oshirish va dizaynini optimallashtirishga doir ilmiy takliflar ishlab chiqdim.

Kalit so'zlar: lift konstruksiyasi, dinamik yuklamalar, tebranish, mustahkamlik, matematik formulalar, inertsia, qiyoslash, empirik tahlil.

Zamonaviy urbanizatsiya jarayonida ko'p qavatli binolar sonining ortishi lift tizimlarining ahamiyatini yanada oshirmoqda. Lift — binoning funksional ishlashi va inson xavfsizligini ta'minlaydigan asosiy muhandislik inshootlaridan biri bo'lib, uning konstruktiv ishonchliligi butun binoning ekspluatatsiya darajasiga bevosita ta'sir qiladi. Shuning uchun lift konstruksiyalariga ta'sir etuvchi statik va dinamik kuchlarni aniq hisoblash, ularning mustahkamlik va barqarorlik darajasini baholash bugungi kunda dolzarb ilmiy yo'nalishlardan biri hisoblanadi. Dinamik kuchlar tarkibiga kabinaning tezlanishi va sekinlashuvi natijasida hosil bo'ladigan inertsia kuchlari, tormozlanishdagi zarba yuklari, yo'l yo'riq yo'llari orqali uzatiladigan tebranishlar va tashqi ta'sirlar (zilzila, rezonans holatlari) kiradi. Shu kabi kuchlar konstruksiya elementlarida qo'shimcha egilish, cho'zilish va kesilish kuchlanishlarini yuzaga keltiradi. Masalan, muhandislik adabiyotlarida ta'kidlanishicha, dinamik yuklamalar inobatga olinmagan lift konstruksiyalari ekspluatatsiya jarayonida deformatsiyalanishi yoki qismlarning tez ishdan chiqishiga olib kelishi mumkin¹. Shu nuqtai nazardan ushbu maqolada lift konstruksiyalarining dinamik kuchlar ostida mustahkamligi tahlil qilinadi, ularning ishchi modellariga matematik yondashuvlar keltiriladi, kuchlanish holatlari nazariy tahlil orqali baholanadi va xavfsizlikni ta'minlashga qaratilgan konstruktiv takliflar ishlab chiqiladi. Tadqiqot davomida matematik modellashtirish, empirik kuzatuv, induktiv tahlil va qiyosiy yondashuv asosiy metod sifatida qo'llanadi.

Lift konstruksiyalari nafaqat statik yuklamalarga, balki harakat jarayonida yuzaga keladigan dinamik yuklamalarga duch keladi. Bu yuklamalar lift tizimining barqaror ishlashi, xavfsizligi va xizmat muddatiga bevosita ta'sir qiladi.

1. Dinamik yuklamalar manbalari:

¹ Rzayev, A.R. (2019). *Inshootlar mexanikasi*. Toshkent: Fan, 112-bet.

a) Kabina harakati va inertsia; Lift kabinasi vertikal yo'l bo'ylab tezlanadi yoki sekinlashadi. Bu jarayonda kabina massasiga bog'liq inertsia kuchi hosil bo'ladi. Bu kuch metall karkas, kabel va tormoz mexanizmlariga qo'shimcha yuk beradi va stressni oshiradi. Inertsia kuchi kabinaning tezlanishiga va massasiga bevosita bog'liq bo'lib, lift tizimining strukturaviy barqarorligini baholashda muhim ahamiyatga ega.

$$F_i = m \cdot a$$

b) Tormozlanish va tezlanish jarayoni; Kabina to'satdan to'xtaganda yoki tez harakatlanganda impulsli yuklar paydo bo'ladi. Ushbu yuklar inertsia kuchi bilan birgalikda metall karkas va kabel tizimida stress hosil qiladi, bu esa deformatsiyaga va elementlar eskirishiga olib keladi.

c) Tebranishlar va rezonans; Binodagi tashqi tebranishlar yoki tabiiy chastotaga yaqin yuklamalar lift tizimida rezonans holatini yuzaga keltiradi. Tebranish amplitudasi oshadi, bu metall karkas va tayanch elementlariga ortiqcha yuk tushiradi. Shu bilan birga, inertsia kuchi tebranishlarni kuchaytiradi va struktura ishlashini murakkablashtiradi.

2. Nazariy modellar

Lift tizimi ko'pincha mass-spring-damper (massa-prujina-so'nish) modeli orqali modellashtiriladi. Harakat tenglamasi:

$$M\ddot{x} + C\dot{x} + Kx = F(t)$$

bu yerda:

M — massa matritsasi (kabina va yuklar)

C — so'nish koeffitsienti

K — qattqlik matritsasi

$F(t)$ — vaqtga bog'liq tashqi kuch (tezlanish, zarba, tebranishlar)

Tizimning tabiiy chastotasi:

$$\omega_n = \sqrt{\frac{K}{M}}$$

Tebranish amplitudasi vaqtga bog'liq holda ifodalanadi:

$$x(t) = X_0 e^{-\zeta \omega_n t} \cos(\omega_d t + \phi)$$

bu yerda:

ζ — so'nish koeffitsienti

ω_d — so'nishli tebranish chastotasi

Lift tizimining tebranish xatti-harakatlarini tahlil qilganda, nazariy modellar ko'rsatadiki, amplituda vaqt bo'yicha pasayadi. Dastlabki maksimal tebranish paytida kabina va metall karkas elementlarida stress yuqori bo'ladi, ammo so'nish (damping) ta'siri tufayli tebranish amplitudasi asta-sekin kamayadi. Bu jarayon amortizatsiya deb ataladi va u lift konstruksiyasining barqaror ishlashi uchun muhim ahamiyatga ega.

Tahlillar shuni ko'rsatadiki, agar tashqi kuchlar yoki kabinaning tezlanish chastotasi tizimning tabiiy chastotasiga yaqin bo'lsa, amplituda keskin ortadi. Bu holat rezonans deb ataladi va konstruksiya elementlariga ortiqcha yuk tushishiga olib keladi. Shu sababli, lift tizimining dizaynida amortizatorlar va elastik elementlar qo'llanadi, shuningdek, rezonansdan qochish strategiyalari ishlab chiqiladi. Nazariy hisob-kitoblarga ko'ra, lift kabinasining vertikal tebranishlari quyidagi tartibda yuzaga keladi: dastlabki impuls kuchi orqali maksimal amplituda hosil bo'ladi, keyin so'nish kuchlari har bir tebranish siklida energiyani so'ndiradi va amplituda asta-sekin pasayadi. Grafik tavsiflarda bu jarayon sinusoidal shaklda ko'rsatiladi, amplituda esa vaqt bo'yicha eksponensial ravishda kamayadi. Lift tizimining metall karkasi va kabel elementlari doimiy dinamik yuklamalar va inertsia kuchlari ostida ishlaganda bir nechta strukturaviy oqibatlar yuzaga keladi. Deformatsiya va stress: Metall karkas ustunlari, kabina yo'l yo'riq nurlari va kabel tizimi doimiy inertsia kuchi va zarba ta'siri ostida deformatsiyaga uchraydi. Bu deformatsiyalar uzoq muddat davomida materiallarning yorilishi va charchashiga olib kelishi mumkin. Lift tizimining ishlash muddati qisqaradi: Tez-tez yuzaga keladigan dinamik yuklar va tebranishlar liftning ishlash muddatini qisqartiradi, ayniqsa kabel va tormoz mexanizmlarida eskirish tezlashadi. Strukturaviy xavfsizlikka tahdid: Agar amplituda tabiiy chastotaga yaqin bo'lsa, inertsia kuchi va tashqi tebranishlar birgalikda elementlarga ortiqcha yuk tushiradi. Bu holat strukturaviy xavfsizlikni xavf ostiga qo'yadi va konstruksiyaning barqaror ishlashini buzadi. Nazariy va amaliy tavsiyalar: Ushbu oqibatlarni kamaytirish uchun lift tizimida so'nish elementlari, elastik amortizatorlar, kabinani to'g'ri tezlanish bilan boshqarish va rezonansdan qochish strategiyalari qo'llanadi. Nazariy modellar va empirik kuzatuvlar asosida, konstruksiya elementlarining maksimal stress va deformatsiyasi oldindan baholanishi mumkin.

Tahlillar shuni ko'rsatadiki, agar tashqi kuchlar yoki kabinaning tezlanish chastotasi tizimning tabiiy chastotasiga yaqin bo'lsa, amplituda keskin ortadi. Bu holat rezonans deb ataladi va konstruksiya elementlariga ortiqcha yuk tushishiga olib keladi. Shu bilan birga, inertsia kuchi lift elementlarining tebranish amplitudasini yanada oshiradi. Masalan, S.P. Timoshenko va D.H. Young ta'kidlaganidek: "Dinamik yuklamalarni inobatga olmasdan loyihalangan konstruksiyalar uzoq muddatda deformatsiyaga uchrashi yoki ishdan chiqishi mumkin"².

Empirik kuzatuvlar shuni ko'rsatadiki, lift kabinasining tezlanishi va sekinlashuvi inertsia kuchlarini hosil qiladi, bu esa metall karkas, kabel tizimi va tormoz mexanizmlarida qo'shimcha stress yaratadi. Favqulodda to'xtashlar, tez harakatlanish yoki yukning birdan o'zgarishi holatida amplituda sezilarli darajada ortadi va konstruksiya elementlariga yuqori dinamik yuk tushadi. Masalan, Toshkent shahridagi 20 qavatli bino liftida o'tkazilgan kuzatuvlar shuni ko'rsatdiki, kabina tezlanishi 1.2 m/s^2 bo'lgan holatda po'lat karkas ustunlarida maksimal stress 12 MPa , tezlanish 1.8 m/s^2 ga oshirilganda stress 18 MPa ga yetadi, bu esa xavfsizlik koeffitsientini sezilarli darajada kamaytiradi³. Shu bilan

² Timoshenko, S.P. & Young, D.H., *Vibration Problems in Engineering*, 1974, 112-bet, Wiley

³ Kadirov, A.N., *Lift konstruksiyalarida tebranishlarni kamaytirishning mexanik usullari*, O'zbekiston muhandislik jurnali, Toshkent, 2022, 45-bet

birga, kabina harakati natijasida kabel tizimida ham kuchlanishlar ortadi, bu esa ularning elastik doimiyligi va uzoq muddatli ishlashiga ta'sir qiladi. Favqulodda to'xtash yoki tezlanish paytida kabina va karkas elementlarida yuzaga keladigan zarba kuchlari, inertsia ta'siri bilan birgalikda, po'lat karkas va bog'lovchi elementlarga ortiqcha yuk tushishiga olib keladi. Nazariy modellar lift tizimining maksimal amplituda va stressini taxminan 10–15% aniqlik bilan ko'rsatadi, real kuzatuvlar esa kabina yo'nalishidagi silkishlar, tashqi tebranishlar va yukning o'zgarishini hisobga oladi. Qiyoslash konstruksiya optimallashtirilganda, nazariy va empirik ma'lumotlar asosida xavfsizlikni oshirish, amortizatsiya tizimlarini samarali loyihalash va dinamik yuklamalarni kamaytirish imkonini beradi. Empirik tahlillar shuni ko'rsatdiki, kabinaning tezlashuvi va sekinlashuvi inertsia kuchini oshiradi, bu esa metall karkas va kabellarga qo'shimcha deformatsiyalar va stresslarni keltirib chiqaradi, ayniqsa yuqori qavatli binolarda.

Moskva shahridagi 25 qavatli ofis binosida o'tkazilgan kuzatuvlar shuni ko'rsatdiki, tabiiy chastotaga yaqin yuklamalar ostida lift kabinasi 2–3 soniya davomida 10 mm dan oshiq amplituda bilan tebranadi. Amortizatorlar va elastik elementlar qo'llanilganda amplituda 4–5 mm gacha kamayadi, bu esa konstruksiyaning xizmat muddatini sezilarli oshiradi. Shuningdek, nazariy hisob-kitoblarga ko'ra, kabina tezlanishi va sekinlashuvi inertsia kuchini oshirib, po'lat karkas va kabel tizimida maksimal stress hosil qiladi, bu esa dizaynni optimallashtirish va xavfsizlik choralari ko'rishni talab qiladi⁴. Yuqori qavatli binolardagi lift kabinolari tabiiy chastotaga yaqin yuklamalarda sezilarli tebranishlar hosil qiladi va po'lat karkas ustunlarida stress ortadi. Masalan, Rakhimov ta'kidlaganidek: “Zilzila yuklamalari ostida po'lat ramalarning mustahkamligi va deformatsiyaga qarshi chidamliligi lift tizimining xavfsiz ishlashini belgilaydi”⁵.

Ushbu tadqiqot davomida men lift konstruksiyalarining dinamik yuklamalar ostidagi xatti-harakatini nazariy modellar, empirik kuzatuvlar va qiyoslashlar asosida tahlil qildim. Natijalar shuni ko'rsatdiki, lift kabinasining tezlanishi va sekinlashuvi inertsia kuchlarini hosil qiladi, bu esa metall karkas, kabel tizimi va bog'lovchi elementlarda stress va deformatsiyani oshiradi. Favqulodda to'xtashlar yoki yukning birdan o'zgarishi holatlarida amplituda maksimal darajaga yetadi, bu konstruksiyaning barqarorligini kamaytiradi va xavfsizlik koeffitsientini pasaytiradi. Nazariy modellar va empirik kuzatuvlarni qiyoslash shuni ko'rsatdiki, nazariy hisob-kitoblar lift tizimining maksimal amplituda va stressini taxminan 10–15% aniqlik bilan ko'rsatadi. Shu bilan birga, real kuzatuvlar kabina yo'nalishidagi silkishlar, yukning o'zgarishi va tashqi tebranishlarni hisobga olib, loyihalashtirishda qo'shimcha xavfsizlik choralari talab qiladi. Ushbu tahlillar natijasida men quyidagi yangilik va tavsiyalarni ishlab chiqdim. Amortizatorlar va elastik elementlarni qo'llash orqali tebranish amplitudasini sezilarli darajada kamaytirish mumkin. Kabina va metall karkas elementlarini loyihalashda inertsia kuchlarini oldindan hisobga olish zarur. Lift tizimining xavfsizligi va barqaror ishlashini ta'minlash uchun zamonaviy nazariy modellarni kompyuter modellashtirish bilan birlashtirish tavsiya etiladi. Shu orqali men lift konstruksiyalarining dinamik yuklamalar ostidagi mustahkamligini yaxshilash va ularni xavfsiz ishlashini ta'minlashga qaratilgan innovatsion yechimlar ishlab chiqishga erishdim. Shuningdek, S.S. Rao ta'kidlaganidek: “Lift tizimlarida hosil bo'ladigan dinamik yuklamalarni hisobga olgan holda konstruksiya

⁴ Bathe, K.J., *Finite Element Procedures*, Prentice Hall, 2006, 78-bet

⁵ Rakhimov, A., 2021, Toshkent arxitektura-qurilish instituti to'plami, 12-bet

modellashtirilsa, xavfsizlik va xizmat muddati sezilarli darajada oshadi”⁶, bu esa yuqori qavatli binolarda lift dizaynini optimallashtirish va barqaror ishlashini ta’minlash zaruratini ko’rsatadi.

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YURAK-QON TOMIR KASALLIKLARINI OLDINI OLISHNING ZAMONAVIY USULLARI

Zakirov L., Toshpo'latov B., Musayev U., Xaydarova M., Maxmudova M.

Annotatsiya:

Ushbu maqolada yurak va qon tomir kasalliklarining profilaktikasida qo'llanilayotgan zamonaviy usullar va ilgari surilayotgan innovatsion yondashuvlar adabiyotlar tahlili orqali ko'rib chiqiladi. Xavf omillari kamaytirish, raqamli sog'liq texnologiyalari, genetik risk baholash, farmakologik profilaktika va jamoatchilik intervensiyalari kabi yo'nalishlar tahlil qilinadi. Maqola klinik va profilaktik tadqiqotlar, ko'p markazli global ko'p ma'lumotli ishlanmalar natijalariga tayangan holda yozilgan.

Kalit so'zlar: *yurak-qon tomir kasalliklari, profilaktika, raqamli sog'liq, genetik risk, farmakoterapiya, jamoatchilik intervensiyalari.*

KIRISH

Yurak va qon tomir kasalliklari (YQTK) dunyo bo'yicha eng ko'p o'limga sabab bo'luvchi kasalliklar qatoriga kiradi. Global darajada olinsa, ularning oldini olish bugungi tibbiyot va jamoatchilik salomatligi uchun eng muhim vazifalardan biridir. Modifikatsiyalanadigan xavf omillarini boshqarish, sog'lom turmush tarzini targ'ib qilish va innovatsion diagnostik vositalarni qo'llash orqali kasalliklar boshlanishini kechiktirish yoki ularning rivojlanishini oldini olish mumkin. Klinik va profilaktik tadqiqotlar sohasida so'nggi yillarda bir qator ilg'or yondashuvlar paydo bo'ldi: raqamli sog'liq texnologiyalari, genetik risk baholash, biomarkerlar, sun'iy intellekt (AI) va farmakologik profilaktika usullari. Ushbu maqolada, mavjud adabiyotlar tahlili asosida, zamonaviy profilaktika usullari va ularning istiqbollari ko'rib chiqiladi.

Asosiy qism

1. Xavf omillarini aniqlash va baholash

YQTK profilaktikasining birinchi bosqichi xavf omillarini aniqlashdir. Global ko'p markazli tadqiqotlarda, beshta modifikatsiyalanadigan xavf omil — yuqori arterial qon bosimi, dislipidemiya, chekish, qandli diabet va semizlik — yurak-qon tomir hodisalariga katta ta'sir qilishi aniqlangan. Risk baholash modellari (masalan, SCORE / HeartScore, QRISK va boshqa kalkulyatorlar) shaxsiy 10 yillik yurak kasalligi xavfini baholashga yordam beradi. Shu tarzda yuqori xavfdagi shaxslar identifikatsiya qilinib, profilaktika strategiyalari shaxsga mos ravishda yo'lga qo'yiladi.

2. Turmush tarzi modifikatsiyasi

Turmush tarzini o'zgartirish — klassik lekin eng asosiy profilaktika yo'nalishidir. Mazkur yo'nalishda quyidagilar muhim:

- **Dim chekishni tashlash va tamaki mahsulotlaridan voz kechish:** chekish YQTK riskini sezilarli darajada oshiradi, tashlash yurak kasalliklari xavfini kamaytiradi.
- **Sog'lom parhez:** DASH (Dietary Approaches to Stop Hypertension) va O'rta yerparz parhezlari (Mediterranean diet) xolesterin, qon bosimi va umumiy yurak riskini kamaytiradi.
- **Jismoniy faollik:** haftasiga kamida 150 daqiqa o'rta intensivlikda aerobik mashqlar yurak va tomir sog'lig'ini saqlashga yordam beradi.

- **Stressni boshqarish va yetarli uyqu:** ruhiy salomatlik va uyqu sifati yurak kasalliklari riskini tasir qiladi.

- **Alkogol iste'molini cheklash va og'irlikni nazorat qilish** ham profilaktika sferasida muhim. Turmush tarzini o'zgartirishga qaratilgan jamoatchilik intervensiyalari va siyosiy dasturlar katta ahamiyat kasb etadi. Masalan, tamaki mahsulotlariga soliqlar joriy qilish, shakarli ichimliklarni cheklash, sog'lom ovqatlanishni targ'ib qilish kabi ijtimoiy-siyosiy vositalar samarali bo'lishi mumkin. Shu kabi keng qamrovli jamoatchilik loyihalaridan biri sifatida Finlandiyaning North Karelia loyihasi misol bo'la oladi — ushbu loyiha uchta asosiy xavf omil (chekish, xolesterin, qon bosimi) ga qaratilgan chora-tadbirlar bilan yurak kasalliklari o'limini sezilarli darajada kamaytirdi.

3. Raqamli tibbiyot va texnologik innovatsiyalar

So'nggi yillarda profilaktik tibbiyotda raqamli tibbiyot texnologiyalari keng joriy qilinmoqda. Bundan maqsad — real vaqt monitoring, erta ogohlantirish va shaxsga mos tavsiyalar berishdir.

- **Taqiladigan qurilmalar va sensorizatsiya:** yurak urishi, bosim, qadamlar soni va boshqa parametrlarni uzluksiz kuzatib borish.

- **Sun'iy intellekt va ma'lumotlarni analiz qilish:** masalan, retina tasvirlaridan AI yordamida yurak kasalligi riskini bashorat qilish ilmiy takomillashtirilmoqda. Shuningdek, konvensional tibbiy ma'lumotlarni tahlil qilish orqali yuksak riskdagi shaxslarni aniqlash uchun algoritmlar qo'llanmoqda.

- **Mobil sog'liq (mHealth) ilovalar:** bemorlarni motivatsiya qilish, sog'lom turmush tarzini kuzatish va maslahatlar berish imkoniyatini taqdim etadi.

- **IoT va tizimli monitoring:** masalan, IoT platformalar va chuqur o'rganish modellari yurak kasalligi ehtimolini tashxis qilishda qo'llanilmoqda.

Bu yondashuvlar, albatta, infratuzilma, maxfiylik va tibbiy ma'lumotlar xavfsizligi kabi cheklovlar bilan birga keladi, lekin istiqbolda profilaktik tibbiyotni individual va keng qamrovli formatga o'tkazishga imkon beradi.

4. Biomarkerlar, genetik risk va precision profilaktika

Yurak kasalliklari riskini aniqlashda an'anaviy klinik ko'rsatkichlar bilan bir qatorda yangi biomarkerlar va genetik ma'lumotlardan foydalanish sur'atlanmoqda.

- **Biomarkerlar:** yuqori sezuvchan troponin, natriuretik peptidlar va boshqa biomarkerlar subklinik yurak shikastlanishini aniqlashga yordam berishi mumkin.

- **Poligenik risk skorlari (PRS):** genetik markerlar majmuasi asosida yurak kasalligi uchun predispozitsiyani baholash imkoniyati. Bu shaxsga mos profilaktika strategiyalarini tanlash imkonini beradi.

- **Precision (aniq) profilaktika:** shaxsning genetika, metabolik holati va turmush tarziga moslashtirilgan profilaktika protokollarini ishlab chiqish.

5. Farmakologik profilaktika va kombinatsiyalangan yondashuvlar

Turmush tarzini yaxshi boshqarish har doim ham yetarli bo'lmaydi, ayniqsa yuqori xavfdagi shaxslarda. Shu sababli farmakologik profilaktika keng qo'llaniladi.

- **Statinlar:** lipid darajasini nazorat qilish orqali yurak kasalliklari xavfini kamaytiradi, hatto profilaktik maqsadda qo'llanilish hollari bor.

- **Antihipertenziv preparatlar:** yuqori qon bosimini barqaror nazorat qilish orqali yurak va tomir katta muhofaza qilinadi.

- **Antitrombotik terapiya (masalan, aspirin yoki boshqa antiplatelet agentlar):** ayrim holatlarda yurak infarkti yoki insult riskini kamaytirish maqsadida profilaktik tarzda qo'llanishi mumkin (ammo xavf/foyda baholanishi muhim).
- **Yangi farmakologik yo'nalishlar:** PCSK9 ingibitorlari, RNA asosli terapiyalar va boshqa innovatsion mahsulotlar lipidni tushirish va aterosklerozni sekinlashtirish yo'lida tajriba sifatida qo'llanilmoqda.

Bir nechta strategiyalarni birlashtirish (masalan, turmush tarzi o'zgartirish + statin + mHealth ilovalar) samaradorlikni oshiradi. Shu bilan birga, "paket" yondashuvlar jamoatchilik va sog'liq sistemi darajasida qo'llanilmoqda.

Xulosa

Yurak-qon tomir kasalliklarini oldini olish — zamonaviy tibbiyotning eng muhim yo'nalishlaridan biridir. Turmush tarzini modifikatsiyalash, xavf omillarini nazorat qilish va farmakologik profilaktika asosiy strategiyalar bo'lib, ularning birgalikda qo'llanilishi samaradorlikni oshiradi. So'nggi yillarda raqamli sog'liq texnologiyalari (wearables, sun'iy intellekt, mobil ilovalar), biomarkerlar va genetik risk baholash imkoniyatlari profilaktika faoliyatini individualizatsiyalashga intilmoqda. Biroq, ushbu innovatsion yondashuvlarning keng joriy etilishi uchun infratuzilma, ma'lumotlar maxfiyligi, iqtisodiy resurslar va tizimlararo integratsiya kabi muammolar hal qilinishi lozim. Profilaktika strategiyalarini muvaffaqiyatli amalga oshirish uchun sog'liqni saqlash tizimi, siyosiy rahbarlar va jamoatchilik hamkorligi zarur.

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MOBIL-ILOVALAR VA MIKROTA'LIM (MICROLEARNING) MODULLARI: QISQA BO'LAKLI RAQAMLI KONTENTNING TA'SIRI

Choriyeva Mahfuza Sadriddinovna

Termiz iqtisodiyot va servis universiteti, tabiiy fanlar kafedrası o'qituvchisi

mahfuzachoriyeva@gmail.com

Annotatsiya. Mazkur tezisda mobil-ilovalar va mikrota'lim (microlearning) modullaridan foydalanish orqali SCIENCE fanlarini o'qitishda o'quvchilarning bilimni o'zlashtirish samaradorligi va faolligiga ta'sir ko'rib chiqiladi. Mikrota'lim texnologiyasi ta'lim jarayonini kichik, oson hazm bo'ladigan qisqa bo'laklarga bo'lish orqali bilimlarni bosqichma-bosqich shakllantirishni nazarda tutadi. Mobil-ilovalar esa ushbu modullarni o'quvchilarga istalgan joy va vaqtda yetkazish imkonini beradi. Tadqiqot davomida qisqa bo'lakli raqamli kontentning motivatsiya, bilimlarni saqlab qolish, shaxsiylashtirilgan ta'lim hamda mustaqil izlanish qobiliyatiga ta'siri ilmiy asosda yoritiladi.

Kalit so'zlar: Mobil-ilovalar, mikrota'lim, qisqa kontent, SCIENCE metodikasi, raqamli ta'lim, motivatsiya, shaxsiylashtirilgan ta'lim, bilimlarni saqlash.

Abstract. This thesis examines the impact of mobile applications and microlearning modules on the effectiveness and activity of students in learning SCIENCE subjects. Microlearning technology involves the gradual formation of knowledge by dividing the educational process into small, easily digestible short segments. Mobile applications allow students to access these modules anywhere and at any time. The study will scientifically examine the impact of short-form digital content on motivation, knowledge retention, personalized learning, and independent research skills.

Keywords: Mobile apps, microlearning, short content, SCIENCE methodology, digital learning, motivation, personalized learning, knowledge retention.

Kirish. XXI asrda ta'lim jarayonida raqamli texnologiyalar tobora muhim ahamiyat kasb etmoqda. Ayniqsa, mobil texnologiyalarning keng tarqalishi va o'quvchilar orasida smartfonlardan faol foydalanish ta'limni yangi shakllarda tashkil etish imkonini bermoqda. Shu nuqtai nazardan mikrota'lim (microlearning) konsepsiyasi global ta'lim tizimida tez sur'atlar bilan rivojlanmoqda. Mikrota'lim o'quv materiallarini kichik, qisqa, aniq va oson o'zlashtiriladigan bo'laklarga ajratishni nazarda tutadi. Bunday yondashuv inson miyasining axborotni qayta ishlash xususiyatlariga mos keladi. Chunki psixologik tadqiqotlar shuni ko'rsatadiki, insonning diqqat e'tibori qisqa vaqt oralig'ida yuqori darajada faol bo'ladi va qisqa kontentni tezroq qabul qiladi.

SCIENCE fanlarini o'qitishda ko'plab murakkab tushunchalar, abstrakt jarayonlar va nazariy modellardan foydalaniladi. O'quvchilar bunday ma'lumotlarni bir dars davomida o'zlashtirishda qiynalishi mumkin. Shu sababli mikrota'lim modullari yordamida murakkab mavzularni kichik bo'laklarga ajratib, mobil-ilovalar orqali yetkazish ta'lim samaradorligini oshiradi. Masalan, biologiyada hujayra tuzilishi bo'yicha bir butun ma'ruza o'rniga hujayra membranasi, yadrosi, sitoplazma va organellalari alohida qisqa modul sifatida taqdim etilishi mumkin. Har bir modul video, interaktiv topshiriq yoki qisqa viktorina ko'rinishida bo'lsa, o'quvchilar mavzuni yanada samarali o'zlashtiradilar.

Mobil-ilovalar yordamida taqdim etilgan mikrota'lim modullari o'quvchilarga istalgan joyda va istalgan vaqtda bilim olish imkonini beradi. Bu ta'limni individuallashtirish, o'quvchini o'z tezligida o'rganishga imkon yaratish hamda ta'lim jarayonini yanada moslashuvchan qilishda muhim ahamiyatga ega. Shu bois, ushbu metodikaning ilmiy asoslarini ishlab chiqish va milliy ta'lim tizimiga moslashtirish dissertatsion tadqiqotlar uchun dolzarb yo'nalishdir.

Asosiy qism. Mikrota'lim va mobil-ilovalar integratsiyasi quyidagi asosiy ustunliklarni taqdim etadi:

1. **Bilimni qisqa vaqt ichida samarali o'zlashtirish.** Mikrota'lim modullari 3–7 daqiqa davomida taqdim etiladi, bu esa o'quvchining diqqatini jamlashga mos keladi.
2. **Shaxsiylashtirilgan ta'lim.** Har bir o'quvchi o'z tezligida o'rganadi, qaysi modulda qiynalganini aniqlab, uni qayta o'rganishi mumkin.
3. **Bilimlarni uzoq muddatli saqlash.** Qisqa va qayta-qayta taqdim etiladigan kontent o'quvchilarda mustahkam bilim hosil qiladi.
4. **Motivatsiya va ishtirokni oshirish.** Mobil-ilovalar orqali taqdim etilgan modullar interaktiv bo'lgani sababli o'quvchilar dars jarayonida faol bo'ladilar.
5. **Ta'limning moslashuvchanligi.** Mobil qurilmalar yordamida istalgan joy va vaqtda o'qish imkoniyati mavjud.

Quyidagi jadval mobil-ilovalar asosidagi mikrota'lim modullarining afzalliklarini umumlashtiradi:

1-Jadval – Mobil-ilovalar orqali mikrota'lim modullarining afzalliklari

Yo'nalish	Afzalligi	O'quvchilarga ta'siri
Vaqt samaradorligi	Qisqa (3–7 daqiqalik) kontent	Bilimni tez va samarali o'zlashtirish
Shaxsiylashtirilgan ta'lim	Modulni qayta ko'rish va o'z tezligida o'rganish	Mustaqil o'rganish va individual rivojlanish
Bilimlarni saqlash	Qisqa va takroriy modullar	Bilimlarni uzoq muddatga mustahkamlash
Motivatsiya	Interaktiv test, viktorina, badge va gamifikatsiya	O'quvchilarda qiziqish va faol ishtirokni oshirish

Empirik tadqiqotlar shuni ko'rsatadiki, mikrota'lim modullaridan foydalanilgan guruhlar nazariy ma'ruzalarga asoslangan guruhlariga qaraganda yuqori natijalarga erishgan. Mobil-ilovalar orqali qisqa bo'lakli kontent o'quvchilarni faol jalb qiladi, ularning diqqatini oshiradi hamda tezkor fikrlashga o'rgatadi. Shuningdek, bu yondashuv ilmiy savodxonlikni oshirishda ham muhim omil bo'lib xizmat qiladi.

Xulosa. Tadqiqot natijalari shuni ko'rsatadiki, mobil-ilovalar va mikrota'lim modullari integratsiyasi SCIENCE fanlarini o'qitishda samaradorlikni sezilarli darajada oshiradi. Qisqa bo'lakli kontent o'quvchilarning diqqatini jamlash, bilimni uzoq muddatli saqlash va shaxsiylashtirilgan ta'limni ta'minlashda muhim rol o'ynaydi. Mobil texnologiyalar esa ushbu modullarni istalgan joy va vaqtda o'zlashtirish imkonini yaratadi.

Milliy ta'lim tizimi uchun bu yondashuvning istiqbollari keng. Buning uchun mobil-ilovalar va mikrota'lim modullarini ishlab chiqish, mahalliy sharoitga moslashtirish, o'qituvchilarni maxsus tayyorlash hamda o'quvchilarning raqamli savodxonligini oshirish zarur. Shu bilan birga, kontent sifatiga alohida e'tibor qaratish lozim: u qisqa, aniq, ilmiy asoslangan va interaktiv bo'lishi kerak.

Bu metodika nafaqat ta'lim samaradorligini oshiradi, balki o'quvchilarni XXI asr ko'nikmalariga ega bo'lishiga, ya'ni mustaqil o'rganish, ilmiy tafakkur, kreativlik va raqamli texnologiyalardan foydalanish ko'nikmalarini shakllantirishga xizmat qiladi. Shu bois mobil-ilovalar va mikrota'lim modullarini SCIENCE fanlari o'qitish metodikasiga keng joriy etish PhD darajasidagi dissertatsiya tadqiqotlari uchun dolzarb va istiqbolli yo'nalishdir.

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ТЕОРЕТИКО-МЕТОДОЛОГИЧЕСКИЕ ОСНОВЫ ИЗУЧЕНИЯ ОПРЕДЕЛЁННО-ЛИЧНЫХ ПРЕДЛОЖЕНИЙ

Автор: Буриева Дилноза Азизовна. Магистрант 1-курса Денауского института предпринимательства и педагогики

Научный руководитель: Носирова Мадина . Доктор фил-наук (PhD)

Аннотация: В статье рассматриваются теоретико-методологические аспекты изучения определённо-личных предложений современного русского языка. Анализируется история становления понятия односоставности в отечественной и зарубежной грамматической традиции, систематизируются существующие подходы к классификации односоставных конструкций. Особое внимание уделяется определению структурно-семантической природы определённо-личных предложений, их функциональной специфике, а также методологическим принципам сопоставительного анализа на материале русского и узбекского языков. Обосновывается необходимость комплексного подхода, включающего структурный, функционально-семантический и контрастивный методы.

Ключевые слова: определённо-личные предложения, односоставные конструкции, грамматическая основа, синтаксис, функционально-семантический анализ, сопоставительная лингвистика.

ВВЕДЕНИЕ

Современная наука о языке рассматривает предложение не только как структурную единицу синтаксиса, но и как носителя сложных когнитивных и коммуникативных функций. В этом контексте особое место занимают «односоставные предложения», являющиеся специфическим типом предикативных конструкций, где значение действия, состояния или отношения выражено без формально выделенного подлежащего. Изучение односоставных предложений позволяет глубже понять механизмы взаимодействия формы и содержания в языке, способы выражения субъекта и предиката, а также закономерности функционирования синтаксических структур в разных языках. Среди различных типов односоставных предложений особое место занимают «определённо-личные предложения», поскольку они представляют наиболее компактную и выразительную форму передачи действия, направленного на конкретного субъекта.

Актуальность темы обусловлена несколькими факторами. Во-первых, определённо-личные предложения широко употребительны в повседневной речи, художественных текстах и публицистике, что делает их важным элементом системы современного русского языка. Во-вторых, эти конструкции играют значительную роль в межъязыковом сопоставлении, особенно при переводе на языки иного типа, например на узбекский, где грамматическая система строится по принципу агглютинации. В-третьих, исследование определённо-личных предложений способствует развитию теории предикативности и функционально-семантических категорий предложения.

1. Историко-теоретические предпосылки изучения односоставных предложений

Проблема односоставных предложений в русском языкознании имеет глубокие традиции. Уже в грамматиках XVIII–XIX веков обращалось внимание на конструкции, не содержащие формального подлежащего, но выражающие законченную мысль. Основоположником научного подхода к этой проблеме считается «А. М. Пешковский», который впервые системно описал односоставные конструкции как отдельный тип предложений, отличающийся от двусоставных не неполнотой, а особой синтаксической организацией. Он писал: «В односоставных предложениях всё сказуемое вмещает в себе всю предикативность высказывания» [Пешковский, 1956, с. 243]. В последующих работах «В. В. Виноградова» [1972], «Н. Ю. Шведовой» [1980], «Г. А. Золотовой» [1982] и других исследователей была разработана классификация односоставных предложений на основе грамматического признака выражения сказуемого:

- определённо-личные,
- неопределённо-личные,
- безличные,
- обобщённо-личные,
- назывные.

Особое внимание уделялось грамматической основе определённо-личных предложений, в которых «предикат выражен личной формой глагола в 1-м или 2-м лице настоящего, прошедшего или будущего времени». Именно глагольная форма здесь выполняет двойную функцию — сказуемого и подлежащего, что делает эти конструкции уникальными для системы русского языка. В советский период и далее односоставные предложения изучались не только с точки зрения структуры, но и в аспекте «функционально-коммуникативного синтаксиса». Так, Г. А. Золотова рассматривала их как отражение особенностей коммуникативной организации текста, а Н. Ю. Шведова указывала на их роль в выражении личностного начала и речевой экономии.

2. Структурно-грамматическая природа определённо-личных предложений

Определённо-личные предложения представляют собой односоставные конструкции, в которых «сказуемое выражено личной формой глагола, обозначающего действие, совершаемое конкретным лицом, определяемым контекстом или ситуацией речи».

Примеры:

- > «Пишу статью.»
- > «Иди сюда!»
- > «Слышишь — зовут нас.»

В данных предложениях грамматическая основа включает только «сказуемое», выражающее и значение субъекта, и само действие. Подлежащее не требуется, поскольку грамматическая форма глагола (1-е или 2-е лицо) уже содержит информацию о субъекте. Синтаксическая особенность определённо-личных предложений состоит в «грамматической свернутости»: семантически они соответствуют двусоставным предложениям, но структурно лишены одного члена. Например:

«Пишу письмо» ↔ «Я пишу письмо.»

При этом устранение подлежащего не приводит к потере смысла, напротив — усиливает экспрессию, делает высказывание более динамичным и личностным.

В русском языке определённо-личные предложения могут выражать:

-действие говорящего (1-е лицо): Слушаю внимательно.

-действие собеседника (2-е лицо): Идёшь или нет?

-побуждение: Пиши быстрее!

Таким образом, определённо-личные конструкции имеют не только структурное, но и «прагматическое» значение, выражая личное участие говорящего в ситуации.

3. Методологические принципы исследования определённо-личных предложений

Современная методология синтаксического анализа требует интеграции нескольких подходов.

При изучении определённо-личных предложений целесообразно сочетать «структурный», «функционально-семантический», «коммуникативный» и «контрастивный методы».

3.1. Структурный подход

Структурный анализ позволяет рассматривать определённо-личное предложение как особую модель с неполным составом членов, но полной предикативной семантикой. Главный акцент делается на «морфологическую форму сказуемого», поскольку именно она определяет тип конструкции.

3.2. Функционально-семантический подход

Этот подход раскрывает роль определённо-личных предложений в системе коммуникативных типов речи. Он показывает, что такие конструкции выражают личностную активность субъекта, его эмоциональную оценку, побуждение или вовлечённость.

Функционально определённо-личные предложения наиболее типичны для «диалогической речи», где контекст позволяет опустить подлежащее. Например:

> «— Слышишь? — Слышу.»

> «— Подожди минуту. — Иду.»

3.3. Контрастивный подход

При сопоставлении русского и узбекского языков выявляются важные типологические различия. Если в русском языке подлежащее часто опускается и восстанавливается из глагольной формы, то в узбекском языке субъект «морфологически выражается» аффиксами лица и числа:

«Pishiryapman» — «готовлю» (буквально: готовлю я).

Таким образом, в узбекском языке определённо-личность выражена грамматически, а в русском — контекстуально и формой глагола.

Контрастивный анализ даёт возможность уточнить понятие «грамматической основы», которая в разных языках реализуется различными средствами: в русском — синтаксически, в узбекском — морфологически.

4. Функционально-коммуникативный аспект определённо-личных конструкций

Определённо-личные предложения выполняют важные коммуникативные функции:

«Информативную» — обозначают действие субъекта («Пишу, читаю, иду»);

«Побудительную» — выражают приказ, просьбу («Закрой дверь!»);

«Эмоционально-оценочную» — передают отношение говорящего («Верю тебе! Знаю, что справишься!»).

В художественном тексте такие конструкции усиливают «эффект присутствия», приближают речь автора к речи персонажа, создают ощущение внутреннего монолога. У А. П. Чехова, М.

Горького, Ф. Достоевского определённо-личные предложения используются как средство «речевой индивидуализации» персонажа:

«Иду, куда глаза глядят. Думаю: что ждёт меня впереди?»

В публицистике и разговорной речи их функция заключается вт «эмоциональной краткости и непосредственности выражения»:

«Смотрю новости — и не верю глазам.»

Таким образом, определённо-личные предложения выполняют одновременно «грамматическую, коммуникативную и прагматическую*» функции, являясь универсальным средством речевой экспрессии.

В типологическом отношении определённо-личные конструкции представляют особый интерес для контрастивной лингвистики, так как в языках с различным строем (флективным и агглютинативном) выражение субъекта организовано по-разному. В русском языке субъект выражается «синтаксически», т.е. через порядок слов и личную форму глагола. В узбекском языке субъект выражен «морфологически» — через аффиксы лица («-man, -san, -miz» и т.д.). Поэтому при переводе русских определённо-личных предложений на узбекский язык происходит не только «лексическая», но и «структурная трансформация».

Например:

«Пишу тебе письмо» → «Senga xat yozayapman.»

«Слышишь?» → «Eshityapsanmi?»

Контрастивный анализ показывает, что обе языковые системы обеспечивают выражение предикативности, но используют разные механизмы. Этот факт подчёркивает универсальность категории личной предикативности при наличии типологических различий.

Заключение

Определённо-личные предложения представляют собой уникальный синтаксический тип, в котором концентрируется предикативное значение высказывания. Их структура демонстрирует закономерную экономию языковых средств при сохранении полноты семантики.

Методологически изучение этих конструкций требует «комплексного подхода», объединяющего структурный анализ формы, функционально-семантический анализ значения и контрастивное сопоставление грамматических систем разных языков. Исследование определённо-личных предложений имеет не только теоретическое, но и практическое значение — для преподавания русского языка как иностранного, для теории перевода, для сопоставительной грамматики русского и узбекского языков.

Таким образом, теоретико-методологическая база изучения определённо-личных предложений закладывает основу для дальнейших работ в области типологии и функциональной грамматики, а также способствует развитию синтаксической теории в целом.

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ERKIN VOHIDOV SHE'RIYATIDA FALSAFIY TAFAKKUR VA YUMOR

Barchinoy To'rayeva

Annotatsiya. Ushbu maqolada Erkin Vohidov she'riyatida falsafiy tafakkur va yumorning badiiy ifodasi tahlil qilingan. Shoir asarlarida inson ruhiyati, hayotning ma'nosi, ezgulik va yovuzlik, zamon va taqdir masalalari chuqur falsafiy mushohada asosida yoritiladi. Vohidov o'z ijodida falsafa va yumorni uyg'unlashtirib, o'quvchini hayot haqida mushohada yuritishga, insoniy qadriyatlarga hurmat bilan qarashga chorlaydi.

Kalit so'zlar: Erkin Vohidov, falsafiy tafakkur, yumor, kinoya, inson, hayot ma'nosi, badiiylilik, o'zlikni anglash

Аннотация. В статье рассматриваются художественно-философские особенности поэзии Эркина Вахидова. Автор исследует, как в его произведениях гармонично сочетаются философская глубина и юмор. Через поэтические образы Вахидов размышляет о человеке, времени, судьбе, добре и зле, о смысле человеческого существования. Его философский взгляд помогает читателю осознать духовные и нравственные ценности.

Ключевые слова: Эркин Вахидов, философское мышление, юмор, ирония, человек, смысл жизни, нравственность, художественность.

Abstract. This article analyzes the artistic and philosophical dimensions of Erkin Vohidov's poetry. The study explores how philosophical reflection and humor coexist harmoniously in his works. Through poetic expression, Vohidov contemplates human existence, morality, good and evil, and the meaning of life. His artistic philosophy encourages readers to reflect on moral values and the human condition.

Keywords: Erkin Vohidov, philosophical reflection, humor, irony, human nature, meaning of life, morality, artistic expression

Erkin Vohidov — XX asr o'zbek she'riyatining eng yirik namoyandalaridan biri bo'lib, uning ijodida falsafiy tafakkur, milliy g'oya va nozik yumor uyg'unlashgan holda namoyon bo'ladi. Shoir o'z asarlarida inson, hayot, vatan, vaqt va taqdir haqida chuqur falsafiy mushohadalar yuritadi. Shu bilan birga, u o'zining kinoyaviy ohang, yumoristik uslubi bilan o'zbek poeziyasiga o'ziga xos jilo baxsh etgan. Ushbu maqolada Erkin Vohidov she'riyatida falsafiy tafakkur va yumorning badiiy ifodasi, ularning o'zaro aloqasi hamda shoir ijodidagi o'rni tahlil qilinadi.

Falsafiy tafakkurning badiiy ifodasi

Erkin Vohidov ijodining markazida inson va uning ma'naviy olami turadi. Shoir she'rlarida hayot mazmuni, vaqtning o'tkinchiligi, inson burchi va orzulari falsafiy mushohada asosida yoritiladi. Masalan, "Nido", "Ruhlar isyoni", "Inson" kabi she'rlarida inson tafakkuri, hayot ma'nosi, o'zlikni anglash masalalari chuqur tahlil qilinadi.

Shoir ko'plab she'rlarida o'tkinchi dunyo va abadiyat o'rtasidagi ziddiyatni falsafiy asosda ochadi. U hayotni go'yo sinov maydoni sifatida talqin etadi. "Inson" she'rida shoir insonni "yaratganlarning eng mukammali" sifatida ko'rsatadi, ammo bu mukammallik mas'uliyat bilan bog'liqligini ham uqtiradi. Bu jihat Vohidov tafakkurining falsafiy chuqurligini ko'rsatadi.

Erkin Vohidov she'riyatida yumor va kinoya

Erkin Vohidov she'riyatining yana bir muhim jihati — bu yumor va kinoya. Shoir yumorni faqat kulgi vositasi sifatida emas, balki hayot hodisalarini tahlil qilish, inson illatlarini ochish, ijtimoiy adolatsizlikni fosh etish vositasi sifatida qo'llaydi. Uning “Tong nafasi”, “Yoshlar bilan suhbat”, “Xayol” kabi she'rlarida yumor chuqur ma'noga ega.

Masalan, “Odamlar” she'rida shoir oddiy kundalik holatlar orqali inson tabiatidagi qarama-qarshiliklarni, ikkiyuzlamachilik va manmanlikni kinoyaviy tarzda ochib beradi. U yumor orqali o'quvchini fikrlashga, hayotga boshqacha nigoh bilan qarashga undaydi. Shu jihatdan Vohidovning yumori xalqona, ammo falsafiylik bilan boyitilgan.

Falsafiylik va yumorning uyg'unligi

Erkin Vohidov ijodida falsafiy tafakkur va yumor bir-birini to'ldiradi. Shoir hayotning og'ir haqiqatlarini yumor orqali yengilroq, ammo chuqurroq yetkazadi. Bu usul o'quvchiga hayotiy saboq beradi. “Yoshlar bilan suhbat” she'rida shoir o'z hayotiy tajribasini kulgili, lekin ibratli ohangda ifodalaydi. U yoshlarga murojaat qilib, “kulishdan ham o'rganinglar” degandek hayotiy falsafani ilgari

suradi.

Erkin Vohidovning badiiy uslubi — bu falsafa va hazilning uyg'unligi, hayotiy haqiqatni yumor bilan yoritish san'ati. Uning she'rlari o'quvchida bir vaqtning o'zida kulgi va mushohada uyg'otadi. Bu esa shoir ijodining o'ziga xos badiiy-falsafiy yo'nalishini belgilaydi.

Xulosa

Xulosa qilib aytganda, Erkin Vohidov she'riyatida falsafiy tafakkur va yumor inson ruhiyati, hayotning murakkabligi hamda ijtimoiy munosabatlarni yoritish vositasi sifatida xizmat qiladi. Shoir o'zining falsafiy mulohazalari orqali insonni o'zligini anglashga, yumori orqali esa hayotdagi salbiy holatlarga tanqidiy qarashga undaydi. Uning she'riy merosi bugungi kunda ham o'z dolzarbligini yo'qotmagan, aksincha, zamonaviy o'quvchini hayotga va jamiyatga ongli munosabatda bo'lishga chorlaydi.

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PLANNING AND ORGANIZATION OF AUDIT EXAMINATION: THE CASE OF UZBEKISTAN

Mavlonjon Sultanov, Andijan state university

Abstract

This study examines the planning and organization of audit examinations in Uzbekistan, focusing on the institutional framework, methodological approaches, and challenges faced by audit firms operating under national legislation. Using a mixed-method empirical approach that combines regulatory analysis and expert interviews from leading audit firms, the paper identifies the core elements of effective audit planning, evaluates compliance with International Standards on Auditing (ISA), and proposes best practices for improving audit quality and efficiency. The findings suggest that while Uzbekistan has made significant progress in harmonizing its audit standards with international norms, gaps remain in strategic planning, risk assessment, and auditor independence.

Keywords: Audit planning, audit organization, Uzbekistan, International Standards on Auditing (ISA), audit quality, empirical study.

1. INTRODUCTION

Auditing plays a critical role in ensuring transparency, accountability, and reliability of financial information within a market economy. Effective audit planning and organization form the foundation of audit quality, directly influencing the reliability of audit conclusions and the efficiency of the entire audit process (Knechel & Salterio, 2016). In recent years, Uzbekistan has undertaken significant reforms to strengthen its auditing system in line with International Standards on Auditing (ISA) and the global best practices promoted by IFAC (International Federation of Accountants).

The objective of this study is to empirically analyze how audit examinations are planned and organized in Uzbekistan. Specifically, it explores the processes, regulatory mechanisms, and organizational factors influencing the quality of audit engagements.

The study addresses the following research questions:

1. How do audit firms in Uzbekistan plan and organize audit examinations under national and international frameworks?
2. What challenges do auditors face in implementing ISA-compliant planning and organization procedures?
3. What measures can improve the efficiency and quality of audit planning and performance?

2. Literature Review

Audit planning and organization have been widely discussed in international literature. According to Arens et al. (2020), planning ensures that auditors focus on areas of high risk and allocate resources efficiently. Simnett et al. (2019) emphasize that audit organization involves defining roles, timelines, and documentation processes that facilitate effective control and supervision.

Empirical studies from developing economies (e.g., Al-Khaddash et al., 2013; Nwanyanwu, 2018) show that institutional and cultural factors significantly influence audit planning. The adoption of ISA standards is often hindered by limited professional capacity and weak regulatory enforcement.

In Uzbekistan, audit activity is regulated by the Law on Auditing Activity (2021) and the Resolution of the Cabinet of Ministers No. 309 (2020), which require auditors to conduct risk-based planning, maintain audit documentation, and ensure independence and professional ethics. Despite these frameworks, challenges remain in ensuring consistent quality control, as observed by the Chamber of Auditors (2023).

3. Methods

This study employed a mixed-method empirical approach combining qualitative and quantitative techniques.

Data Collection:

- Documentary analysis of Uzbek auditing laws, standards, and methodological guidelines.
- Semi-structured interviews with 12 senior auditors and partners from five leading audit firms in Tashkent.
- Survey questionnaire distributed to 40 auditors regarding their audit planning practices.

Data Analysis:

Qualitative data from interviews were analyzed using thematic coding, while survey data were processed using descriptive statistics (mean, frequency distribution). The reliability of survey items was confirmed with a Cronbach's alpha coefficient of 0.87.

4. Results and Findings

4.1 Audit Planning Practices

Most firms in Uzbekistan use annual audit planning systems aligned with ISA 300 (Planning an Audit of Financial Statements). 82% of surveyed auditors indicated that they perform preliminary risk assessments, but only 55% document these formally.

4.2 Organizational Structure of Audit Engagements

Audit firms typically establish engagement teams based on specialization. However, limited staff training and workload concentration at the senior auditor level were identified as key constraints.

4.3 Regulatory and Institutional Barriers

Interview data revealed that insufficient guidance from national standards, inconsistent enforcement, and delays in ISA translation hinder effective planning. Moreover, the absence of digital audit management tools limits efficiency.

4.4 Comparison with International Practices

While Uzbekistan has largely harmonized its auditing standards with ISA, practical implementation gaps persist. Compared to firms in developed countries, local firms devote less time to audit strategy meetings and rely more on manual documentation.

5. Discussion

The findings confirm that audit planning and organization in Uzbekistan are evolving but still face systemic challenges. The results align with prior studies (e.g., Knechel & Salterio, 2016; Simnett et al., 2019) emphasizing that planning quality directly affects audit effectiveness.

Improving audit quality in Uzbekistan requires strengthening training programs, enhancing digitalization, and enforcing standard compliance through regulatory supervision. Collaboration between the Ministry of Finance, the Chamber of Auditors, and academic institutions is essential to develop tailored audit methodologies.

6. Conclusion and Recommendations

This empirical study concludes that while Uzbekistan's audit system demonstrates strong regulatory alignment with international standards, gaps remain in implementation, documentation, and human capital.

Key recommendations:

- Develop unified national audit planning guidelines aligned with ISA.
- Introduce digital audit management platforms to streamline organization.
- Strengthen professional training and certification in audit planning techniques.
- Encourage peer review and quality assurance programs among audit firms.

These measures would enhance audit transparency, reduce risks, and strengthen investor confidence in Uzbekistan's financial reporting environment..

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INVESTITSIYA LOYIHALARINING IQTISODIY SAMARADORLIGINI ANIQLASH MEXANIZMLARI

Eshqorayev Javohir

*Termiz Davlat muhandislik va agrotexnologiyalar universiteti, Iqtisodiyot,
o'rmonchilik va veterinariya fakulteti Buxgalteriya hisobi va audit yo'nalishi talabasi*
eshqorayevjavohir@gmail.com

ANNOTATSIYA

Mazkur maqolada kapital qo'yilmalar (investitsiyalar) samaradorligini baholashning nazariy asoslari, ularning iqtisodiy va ijtimoiy ko'rinishlari hamda baholash mezonlari yoritib berilgan. Iqtisodiy samaradorlik ishlab chiqarish hajmi, milliy daromad va mehnat unumdorligini oshirish orqali namoyon bo'lsa, ijtimoiy samaradorlik aholining turmush sifati, ta'lim darajasi va sog'liqni saqlash sohasidagi yaxshilanishlarda aks etishi ko'rsatib o'tilgan. Maqolada kapital qo'yilmalarni baholashda qo'llaniladigan umumiy (absolyut) va nisbiy samaradorlik ko'rsatkichlari, ularning amaliy ahamiyati hamda me'yoriy qiymatlari tahlil qilingan. Shuningdek, investitsiyalar samaradorligini oshirish uchun tejamkor variantlarni tanlash, texnik modernizatsiya va ishlab chiqarish jarayonlarini yangilash zarurligi asoslab berilgan. Tadqiqot natijalari investitsion qarorlar qabul qilishda ilmiy yondashuvning ahamiyatini ochib beradi hamda iqtisodiyotni modernizatsiya qilish jarayonida investitsiyalarni oqilona rejalashtirishning muhimligini ta'kidlaydi.

Kalit so'zlar: kapital qo'yilmalar, iqtisodiy samaradorlik, ijtimoiy samara, me'yoriy koeffitsient, investitsion qarorlar, ishlab chiqarish samarasi, nisbiy samaradorlik, ishlab chiqarish xarajatlari, resurslardan samarali foydalanish.

Samaradorlik tushunchasini izohlashdan avval, "samara" va "samaradorlik" atamalarining mazmuniga e'tibor qaratish kerak. Iqtisodiy samara deganda ishlab chiqarish hajmining oshishi, mehnat unumdorligining ko'tarilishi, milliy daromadning ko'payishi yoki ishlab chiqarish bilan bog'liq boshlang'ich va joriy xarajatlarning qisqarishi tushuniladi. Ijtimoiy samara esa jamiyat farovonligini oshirish, aholining ta'lim darajasini yuksaltirish, bo'sh vaqtning ko'payishi kabi omillar orqali namoyon bo'ladi.

Samaradorlik (iqtisodiy yoki ijtimoiy) esa erishilgan samaraning unga sarflangan resurslar va xarajatlarga nisbati bilan aniqlanadi. Buni quyidagi formula asosida ifodalash mumkin:

Iqtisodiy samaradorlik = Olingan natija / Natijaga erishish uchun sarflangan xarajatlar.

Ijtimoiy ishlab chiqarishning iqtisodiy samaradorligini baholash mezoni milliy daromad hajmini ishlab chiqarish resurslari va xarajatlariga nisbatan maksimal darajada oshirishga erishishdir. Shu sababli kapital qo'yilmalar samaradorligini aniqlash muammosi doimo nazariya va amaliyot oldida turgan eng muhim masalalardan biri bo'lib kelgan.

Sobiq Ittifoq Fanlar akademiyasi Iqtisodiyot instituti tomonidan kapital qo'yilmalar samaradorligini baholash bo'yicha ko'plab ilmiy tadqiqotlar amalga oshirilgan. Natijada akademik T. S. Xachaturov boshchiligidagi kapital qo'yilmalarning iqtisodiy samaradorligini aniqlashning **Namunaviy (tipovoy) metodikasi** ishlab chiqilgan. Ushbu metodika uzoq yillar davomida amaliyotda qo'llanilib kelmoqda va hozirgi kunda ham o'z dolzarbligini yo'qotmagan.

Rossiya Fanlar akademiyasi hamda Statistika vazirligining fikriga ko'ra, xalq xo'jaligi miqyosida iqtisodiy samarani milliy daromadning o'sishi orqali baholash mumkin. Bunda iqtisodiy samara xalq xo'jaligi tarkibiy bo'g'inlarida – tarmoqlar, uyushmalar, korxonalar va tashkilotlar darajasida shakllanadi. Demak, yuqori bo'g'inning samaradorligi ko'p jihatdan pastki bo'g'inning samaradorligiga bog'liq bo'lib, iqtisodiy samaradorlikni korxona darajasidan boshlab, butun iqtisodiyot darajasigacha o'rganish zaruriyatini tug'diradi.

Ijtimoiy ishlab chiqarishning yakuniy maqsadi inson ehtiyojlarini qondirish bo'lganligi sababli kapital qo'yilmalar samaradorligini faqat iqtisodiy foyda nuqtayi nazaridan emas, balki **ijtimoiy-iqtisodiy natija** sifatida baholash maqsadga muvofiqdir. Ya'ni, bozor iqtisodiyotini shakllantirishning o'zi maqsad emas, balki jamiyatning ijtimoiy farovonligini ta'minlash vositasidir. Investitsion rejalashtirish va loyihalashtirish jarayonlarining barcha bosqichlarida kapital qo'yilmalar samaradorligini hisoblab borish talab etiladi. Namunaviy metodikaga ko'ra, kapital qo'yilmalar samaradorligi ikki asosiy ko'rsatkich asosida aniqlanadi:

1. **Umumiy (absolyut) iqtisodiy samaradorlik koeffitsiyenti,**
2. **Nisbiy iqtisodiy samaradorlik koeffitsiyenti.**

Bunda umumiy samaradorlik olinadigan natijaning uni ta'minlash uchun zarur bo'lgan kapital xarajatlariga nisbati orqali hisoblanadi. Shuningdek, kapital qo'yilmalarning o'zini qoplash muddati ham hisob-kitobda muhim o'rin tutadi.

Kapital qo'yilmalar samaradorligini baholash jarayonida umumiy (absolyut) iqtisodiy samaradorlik bo'yicha olingan natijalar amaldagi me'yoriy ko'rsatkichlar hamda avvalgi yillarning statistik natijalari bilan solishtiriladi. Agar kapital qo'yilmalar ko'rsatkichlari belgilangan me'yorlardan past bo'lmasa yoki o'tgan davr natijalariga nisbatan yuqori bo'lsa, u holda kapital qo'yilmalar iqtisodiy jihatdan samarali deb baholanadi.

Iqtisodiy me'yor deganda o'zaro mazmun jihatdan bir xil hisoblangan ko'rsatkichlar tizimi uchun belgilangan normativ qiymat, masalan samaradorlikning standart miqdori (Yen), tushuniladi. Kapital qo'yilmalar samaradorligi odatda ishlab chiqarish hajmi o'sishi natijasida olingan qo'shimcha mahsulot miqdorining ushbu natijaga erishish uchun sarflangan investitsiyalar hajmiga nisbatida o'lchanadi. Biroq kapital qo'yilmalar samaradorligini baholashdagi murakkablik shundan iboratki, investitsiya kiritish bilan ishlab chiqarishning real natija berishi o'rtasida ma'lum vaqt farqi mavjud bo'ladi.

Xalq xo'jaligi miqyosida kapital qo'yilmalar umumiy samaradorligining me'yoriy koeffitsienti $Yen = 0,14$ deb qabul qilingan:

- sanoat tarmog'i uchun $Yen = 0,16$,
- qishloq xo'jaligi uchun $Yen = 0,12$,
- qurilish tarmog'i uchun $Yen = 0,22$,
- savdo sohasi uchun $Yen = 0,25$.

Kelgusida ushbu me'yorlarning oshib borishi texnika taraqqiyoti, mehnat unumdorligining yaxshilanishi, mahsulotning material sig'imi va asosiy fondlar sig'iminining kamaytirilishi bilan izohlanadi.

Nisbiy iqtisodiy samaradorlik esa muayyan xo'jalik-texnik vazifalarni hal etishda bir nechta variantlarni solishtirish orqali eng tejamkor (ratsional) variantni tanlashga xizmat qiladi. Ushbu

yondashuv, masalan, yangi texnikani joriy etish yoki korxonalarni modernizatsiya qilish kabi loyihalarda qaysi yechim iqtisodiy jihatdan maqsadga muvofiq ekanligini aniqlashga imkon beradi.

Nisbiy samaradorlikni aniqlash uchun xarajatlar quyidagi formula orqali hisoblanadi:

$$J_i + S_m \cdot K_i = \min J_i + S_m \cdot K_i = \min$$

bu yerda:

- K_i – variant bo'yicha kapital qo'yilmalar,
- J_i – mazkur variantning joriy xarajatlari,
- S_m – kapital qo'yilmalar samaradorligining me'yoriy koeffitsenti.

Qaysi variant bo'yicha hisoblangan qiymat eng kam bo'lsa, iqtisodiy jihatdan afzallik o'sha variantga beriladi.

Kapital qo'yilmalar samaradorligining me'yoriy koeffitsenti 0,14 bo'lganda, investitsiyalarning o'rni qoplashning me'yoriy muddati:

$$10.14 = 7.1 \text{ yil} \cdot \frac{1}{0.14} = 7.1 \text{ yil} \cdot 0.141 = 7.1 \text{ yil}$$

Savdo tarmog'i uchun $S_m = 0,25$ bo'lganda, kapitalni qoplash muddati:

$$10.25 = 4 \text{ yil} \cdot \frac{1}{0.25} = 4 \text{ yil} \cdot 0.251 = 4 \text{ yil}$$

Ijtimoiy xarajatlarning asosiy maqsadi esa iqtisodiy natijadan tashqari qo'shimcha ijtimoiy samaraga erishishdir. Bunga quyidagilar kiradi:

- aholining yashash va mehnat sharoitlarini yaxshilash;
- kasallanish ko'rsatkichlarini kamaytirish;
- ta'lim darajasini oshirish;
- bo'sh vaqtning ko'payishi va undan samarali foydalanishni ta'minlash.

Ijtimoiy samara, asosan, ta'lim, sog'liqni saqlash, madaniyat, savdo va xizmat ko'rsatish, kommunal xo'jalik muassasalarini barpo etish va modernizatsiya qilish orqali yuzaga keladi.

Yakunda, investitsiyalar samaradorligini to'g'ri baholash moliyaviy resurslardan oqilona foydalanish, yuqori daromadga erishish, texnologik yangilanish, risklarni boshqarish hamda uzoq muddatli iqtisodiy rivojlanishni ta'minlashda muhim o'rin tutadi.

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ENGLISH COMMUNICATIVE-PROJECT BASED EDUCATIONAL ACTIVITIES AS A MEANS OF DEVELOPING PROFESSIONAL COMPETENCE OF SPECIALISTS IN A NON-LINGUISTIC UNIVERSITY SETTING

Mukhtarova Nozima Kuchkarovna

Senior Lecturer of English

Branch of Herzen State Pedagogical University (RSPU) in Tashkent

Abstract: The development of professional competence among students in non-linguistic universities is a critical component of higher education. This study investigates the role of English communicative-project based educational activities as a means of enhancing the professional skills of students in such settings. By engaging students in authentic, task-oriented projects conducted in English, the methodology fosters both language proficiency and practical professional competencies, including teamwork, problem-solving, and project management. The research demonstrates that integrating communicative-project activities into the curriculum significantly improves students' ability to communicate effectively in professional contexts, enhances their confidence in using English, and supports the development of skills essential for their future careers.

Keywords: competence; English communicative-project activities; non-linguistic university students; task-based learning; language for professional purposes; project-based education

INTRODUCTION

In the contemporary globalized educational and professional landscape, the ability to communicate effectively in English has become a fundamental requirement for university graduates, even in non-linguistic disciplines. For students in non-language majors, developing professional competence extends beyond subject-specific knowledge to include the ability to use English in professional, academic, and intercultural contexts. However, traditional language teaching methods often fail to provide sufficient opportunities for students to practice English in real-world professional scenarios, leading to limited communicative proficiency and low confidence in using the language. Pedagogical research emphasizes that communicative and project-based approaches are particularly effective in bridging this gap. By engaging students in authentic, task-oriented projects, these methods create meaningful contexts in which English becomes a tool for completing professional activities rather than merely an academic subject. Such activities encourage collaborative problem-solving, critical thinking, and practical application of knowledge, aligning language learning with professional skill development.

Research aim:

The primary aim of this study is to investigate and develop effective pedagogical strategies for enhancing professional competence among non-linguistic university students through English communicative-project based educational activities. The research seeks to examine how structured project work conducted in English can simultaneously improve language proficiency and equip students with practical professional skills relevant to their future careers. Specifically, the study aims to: Identify the current challenges faced by non-linguistic students in developing both English language competence and professional skills, including limited confidence, inadequate practical

experience, and difficulties in applying theoretical knowledge to real-world contexts. Design and implement a communicative-project methodology that integrates task-based, collaborative projects into the curriculum to provide authentic opportunities for professional and linguistic development. Evaluate the effectiveness of the methodology in improving students' oral and written communication in English, teamwork abilities, project management skills, and overall professional readiness.

Materials and Methods

This study was conducted at the Branch of Herzen State Pedagogical University in Tashkent, involving students enrolled in non-linguistic programs such as humanities and social sciences. A total of 60 undergraduate students aged 18–22 participated in the study. The participants were selected based on their completion of introductory English courses and varying levels of proficiency in professional communication contexts. The research employed a mixed-methods design, integrating quantitative and qualitative data to evaluate the effectiveness of English communicative-project based activities in enhancing both professional competence and language skills. Curriculum Design: A structured program of communicative-project activities including professional simulations, group presentations, debates, role-plays, and collaborative projects in English. Each task was designed to mirror authentic workplace scenarios relevant to students' future professions. Instructional Resources: Multimedia tools, authentic texts, audio-visual materials, and online platforms to facilitate interactive, task-oriented learning. Assessment Instruments: Pre- and post-intervention oral and written tests, self-assessment questionnaires, teacher observation checklists, and peer evaluation forms were used to monitor progress in language proficiency, project performance, teamwork, and professional competence. Initial assessments were conducted to identify students' baseline English language skills and professional competencies, including oral and written communication, teamwork, and problem-solving abilities.

Results:

The implementation of English communicative-project based activities produced significant improvements in both professional competence and language skills among non-linguistic university students. At the initial diagnostic stage, students demonstrated several challenges, including limited confidence in English communication, difficulty applying theoretical knowledge to practical tasks, and low participation in collaborative activities. Observations and pre-tests indicated gaps in oral fluency, vocabulary usage, pronunciation, teamwork, and project management skills. After the 12-week intervention, the following outcomes were observed: Oral fluency improved substantially, with 80% of students demonstrating the ability to speak longer sentences confidently and participate actively in discussions. Vocabulary usage increased, particularly in professional and academic contexts, with a 50% rise in accurate application of relevant terminology in presentations and collaborative tasks. Pronunciation and intonation showed marked improvement, with students displaying clearer articulation and natural speech rhythm during role-plays and presentations. Teamwork and collaborative problem-solving skills improved significantly. Students effectively coordinated tasks, distributed responsibilities, and demonstrated leadership in group projects. Project management abilities, including planning, research, and presentation of outcomes, were strengthened. Students successfully completed complex projects that simulated real-world professional tasks.

Discussion

The findings of this study indicate that English communicative-project based activities are a highly effective pedagogical approach for simultaneously developing language proficiency and professional competence in non-linguistic university students. The significant improvements observed in oral fluency, vocabulary usage, pronunciation, teamwork, and project management demonstrate that task-based, collaborative projects provide a meaningful context for language use and professional skill development. From a pedagogical perspective, these results support the notion that language learning is most effective when it is integrated with authentic, real-world tasks. By engaging students in projects that simulate professional scenarios, the methodology enabled learners to use English as a functional tool rather than merely as an academic subject. This aligns with principles of task-based language teaching (TBLT) and project-based learning (PBL), which emphasize that active engagement in meaningful tasks promotes deeper learning, motivation, and cognitive development. The study also underscores the importance of scaffolding and individualized feedback. Continuous guidance from instructors during projects helped students overcome language anxiety, develop confidence, and internalize vocabulary and professional terminology.

Conclusion

The study demonstrates that English communicative-project based educational activities are a highly effective method for developing both language proficiency and professional competence in non-linguistic university students. By integrating collaborative, task-oriented projects into English instruction, students showed significant improvements in oral fluency, vocabulary usage, pronunciation, teamwork, project management, and overall confidence in professional communication. The findings confirm that combining communicative and project-based approaches not only enhances linguistic skills but also fosters essential professional competencies, including critical thinking, problem-solving, collaboration, and autonomy. Individualized guidance and continuous feedback were crucial in helping students overcome language anxiety and develop practical skills relevant to real-world professional contexts. Overall, this study supports the integration of English communicative-project activities into the curriculum of non-linguistic universities as an effective pedagogical strategy.

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STRESS MANAGEMENT TECHNIQUES WHILE DRIVING

Jumayeva Feruza Urakovna

Jarqo'rg'on tuman 1-son politexnikumi maxsus fan o'qituvchisi

E-pochta : dilshodaachoriyevna0511@gmail.com

F-Tel: +998903284879

Abstract : This article examines the stress factors that arise during driving and the effective methods for managing them. Stress directly affects the driver's attention, reaction speed, and decision-making ability. Therefore, maintaining psychological stability and developing a culture of safe driving are essential aspects of professional driving competence. The paper analyzes breathing exercises, autogenic training, cognitive regulation, and mindful driving practices as techniques for stress reduction.

Key words: *stress management, driving psychology, emotional control, reaction, safety culture, mindfulness.*

МЕТОДЫ УПРАВЛЕНИЯ СТРЕССОМ ВО ВРЕМЯ ВОЖДЕНИЯ

Аннотация : В данной статье рассматриваются стрессовые факторы, возникающие в процессе управления автомобилем, и эффективные методы их контроля. Стресс напрямую влияет на внимание водителя, скорость реакции и способность принимать решения. Поэтому сохранение психологической устойчивости и формирование культуры безопасного вождения являются ключевыми аспектами профессиональной компетентности водителя. В статье анализируются дыхательные упражнения, аутогенная тренировка, когнитивное управление и тактичное вождение как способы снижения стресса.

Кулучиво слова : *управление стрессом, психология водителя, эмоциональный контроль, реакция, культура безопасности, осознанное вождение.*

AVTOMOBIL BOSHQARISHDA STRESSNI BOSHQARISH METODLARI

Annotatsiya : Ushbu maqolada avtomobil haydovchilari faoliyati davomida yuzaga keladigan stress omillari va ularni boshqarishning samarali metodlari ko'rib chiqiladi. Stress haydovchining diqqat, reaksiya tezligi va qaror qabul qilish qobiliyatiga bevosita ta'sir ko'rsatadi. Shu sababli, psixologik barqarorlikni saqlash, emotsional o'zini nazorat qilish hamda xavfsiz boshqaruv madaniyatini shakllantirish muhim hisoblanadi. Maqolada nafas mashqlari, autogen trening, kognitiv boshqaruv va taktli haydash amaliyotlari kabi stressni kamaytiruvchi usullar tahlil qilinadi.

Kalit so'zlar: *stressni boshqarish, haydovchi psixologiyasi, emotsional nazorat, reaksiya, xavfsizlik madaniyati, ongli boshqaruv.*

Driving is a complex psychophysiological activity that requires continuous concentration, emotional balance, and rapid decision-making. In modern traffic conditions, drivers are exposed to various stress factors, including traffic congestion, aggressive driving behavior, unexpected road situations, and time pressure. Persistent stress during driving can lead to increased anxiety, decreased reaction speed, impaired judgment, and ultimately elevated risk of accidents. Therefore, understanding the psychological mechanisms of stress and implementing effective stress management techniques is essential for ensuring safety and efficiency in road transportation. The issue of stress management in

professional drivers is especially relevant for urban public transport systems, where drivers interact not only with dynamic road environments but also with passengers, schedules, and organizational expectations.

1. Stress Factors in Driving Activities

Driving, particularly in professional contexts such as passenger transportation and freight logistics, requires continuous attention, rapid perceptual processing, and coordinated psychomotor responses. Professional drivers are frequently exposed to stressors originating from both external and internal sources. External stressors include road traffic density, unpredictable behaviors of other drivers, adverse weather conditions, mechanical vehicle issues, scheduling pressure, and interactions with passengers or transport clients. Internal stressors, on the other hand, may arise from fatigue, emotional instability, personal concerns, or lack of experience.

For passenger transport drivers, stressful situations are often associated with managing interpersonal communication, dealing with dissatisfied or aggressive passengers, maintaining punctuality, and following strict transport regulations. Meanwhile, freight transport drivers encounter stress due to long-distance driving, isolation, tight delivery deadlines, and nighttime or multi-hour continuous driving schedules. Both categories of drivers must maintain focus and emotional regulation to prevent errors that could result in serious consequences.

2. Psychological Impact of Stress on Driving Performance

Stress has a direct influence on cognitive processing, reaction time, and decision-making capacity. Studies indicate that heightened stress levels impair working memory and reduce situational awareness, which are critical for anticipating hazardous situations on the road. Furthermore, stress may provoke impulsive behavior, risk-taking, and aggressive driving patterns.

For passenger transport drivers, emotional stress may lead to decreased patience and impaired communication skills, affecting service quality and passenger safety. For freight drivers, prolonged stress contributes to mental fatigue, microsleep episodes, and reduced vigilance, all of which significantly increase accident risk on highways and long-haul routes. Therefore, systematic stress management is essential to preserve both psychological resilience and operational safety.

3. Methods of Stress Management in Driving

A variety of techniques may be employed to regulate emotional and cognitive tension during driving. The most effective strategies include:

3.1 Breathing Regulation Exercises. Controlled breathing techniques help stabilize heart rate, reduce anxiety, and restore cognitive clarity. For example, the "4-4-6 breathing method"—inhale for four seconds, hold for four seconds, exhale for six seconds—has been shown to decrease physiological stress markers.

3.2 Cognitive Self-Regulation. Cognitive strategies involve identifying negative thought patterns (e.g., frustration or fear) and replacing them with rational and goal-oriented self-instructions. Drivers may repeat phrases such as "Stay calm, stay focused" or "I control my pace and decisions" to maintain emotional balance.

3.3 Autogenic Training. Autogenic training includes guided imagery or mental visualization to create a sensation of relaxation. This is especially useful for freight drivers experiencing long-distance isolation. Incorporating short mental relaxation breaks during stops helps restore concentration.

3.4 Mindful Driving Practices. Mindful driving emphasizes present-awareness: observing traffic conditions calmly, avoiding emotional reaction to others' behaviors, and maintaining smooth vehicle control. This approach reduces aggressive driving tendencies and increases safety.

3.5 Regulated Work-Rest

Scheduling. Both passenger and freight drivers benefit significantly from structured rest breaks, hydration routines, and ergonomic seating adjustments. Preventing overwork reduces fatigue and ensures consistent reaction capacity.

CONCLUSION. Stress is an inevitable component of driving, particularly within the professional fields of passenger and freight transportation. However, its effects on performance, safety, and emotional stability can be effectively managed through scientifically grounded stress reduction methods. Techniques such as controlled breathing, cognitive regulation, autogenic training, mindful driving, and structured rest planning help maintain psychological balance and prevent accident risks. The development of stress management competence should therefore be considered an essential component of professional driver training and continuous qualification development.

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SHAXSNING IJTIMOIYLASHUV OMILLARI VA UNING ETNOPSIXOLOGIK JIHATLARI.

Maxmudova Dilorom Maxamatjon qizi

Yangi asr universiteti "Pedagogika va psixologiya" yo'nalishi talabasi

Annotatsiya: Ushbu maqolada shaxslararo munosabatlarda shaxsning va unga nisbatan bo'layotgan munosabatlarda ijtimoiylashuv jarayonining etnopsixologik xususiyatlarning o'ziga xos tomonlari haqida so'z boradi. Ma'lumki, bola o'ziga Vatanni yoki ota-onani tanlab tug'ilmaydi. Shunday ekan u o'z millatiga xos bo'lgan tayyor ruhiy xususiyatlar bilan ham tug'ilmaydi. Bola ota-onasidan, avlod-ajdodidan biologik yo'l bilan faqat irqiy xususiyatlarni va ayrim ruhiy xususiyatlarnigina me'ros qilib oladi, xolos. Bola tug'ilish davrida odam bo'lishga nomzod. Lekin yakka ajralgan holda u odam bo'la olmaydi. Jamiyatda yashab u shaxsga aylanadi.

Kalit so'zlar: Shaxs, ijtimoiylashuv, jamiyat, individ, makro, mikro muhit, ong, etnik psixologiya, milliy psixologik qiyofa, sotsium, individ, ijtimoiylashuv jarayoni psixologik tavsifi haqida yoritilgan.

Аннотация. В данной статье рассматриваются специфические аспекты этнопсихологических особенностей личности в межличностных отношениях и процесса социализации в происходящих по отношению к ней отношениях. Известно, что ребенок не рождается, выбирая себе родину или родителей. Так что он даже не рождается с готовыми психическими характеристиками, присущими его национальности. данной статье рассматриваются специфические аспекты этнопсихологических особенностей личности в межличностных отношениях и процесса социализации в происходящих по отношению к ней отношениях. Известно, что ребенок не рождается, выбирая себе родину или родителей. Так что он даже не рождается с готовыми психическими характеристиками, присущими его

Ключевое слово: Освещается психологическое описание личности, социализации, общества, индивида, макро -, микросреды, сознания, этнической психологии, Национального психологического образа, социума, индивида, процесса социализации.

Annotation. This article examines the specific aspects of the ethnopsychological characteristics of a person in interpersonal relationships and the process of socialization in the relationships taking place in relation to her. It is known that a child is not born choosing his homeland or parents. So he is not even born with the ready-made mental characteristics inherent in his nationality. This article examines the specific aspects of the ethnopsychological characteristics of a personality in interpersonal relationships and the process of socialization in the relationships taking place in relation to it. It is known that a child is not born choosing his homeland or parents. So he's not even born with the mental characteristics inherent in him.

Keywords: The psychological description of personality, socialization, society, individual, macro-, microenvironment, consciousness, ethnic psychology, National psychological image, society, individual, and the process of socialization is highlighted.

Garchi har bir inson ma'lum darajada mustaqil yashash va faollik ko'rsatishiga ega bo'lsa ham, lekin hayotda u faqat o'z xohishi va tushunchasi bilan yashab qolmay, shuning bilan birgalikda o'zi yashab turgan sotsial muhit va o'zi mansub bo'lgan xalqning tajriba, bilim va e'tiqodlarini ham o'zlashtirib

boradi. Chunki odam o'zi yashab turgan sotsial muhitdan butunlay chiqib ketib yashay olmaydi. Ijtimoiylashuv tushunchasi zamonaviy ilm-fanda inson shaxsining jamiyat hayotiga moslashishi va individuallashishi(o'ziga xoslikning ifodalanishi) kabi jarayonlarini o'zaro bog'lab turadi. Shaxsning muayyan bir jamiyatdagi ijtimoiy shart-sharoitlarga moslashuvi va o'zini alohida olingan shaxs sifatida har bir jamiyatda ijtimoiy guruhlar uchun turli-tuman ijtimoiy normalar va ta'qiqlashlardan iborat chora-tadbirlar ishlab chiqiladi. Shaxsning ijtimoiylashuvi bolalar, o'smirlar, o'spirinlarning ruhiy rivojlanishi va shaxs sifatida voyaga yetishiga ta'sir ko'rsatuvchi ko'p sonli shart-sharoitlar zahirida yuzaga keladi. Ijtimoiylashuv shaxsning butun hayoti davomida kechadigan ko'p qirrali jarayondir, u ayniqsa bolalik va o'smirlar davrlarida nihoyatda jadallik bilan kechadi, chunki aynan bolalik davrida asosiy ijtimoiy me'yorlar o'zlashtiriladi. Bolaning ijtimoiylashuvida, ijtimoiy intizom va tartib, madaniyatning mufassal ko'rinishi bo'lgan jamiyatning muhim o'rni bor. Bugungi kunda shaxsning ijtimoiylashuvi o'ziga xos jarayon sifatida, shaxsning hayoti va faoliyatida o'z aksini topadi. Bolaning mustaqil hayotga qadam qo'yishi, uning ijtimoiylashuvi, shaxsning jamiyat hayotiga, uning ijtimoiy ta'sirlariga moslashishi, uning ijtimoiy voqelikni bilish va anglash faoliyatiga bo'lgan muhim ehtiyoji sifatida paydo bo'ladi.

Shu bilan birga, bolada yana bir zarur hayotiy ehtiyoj, ya'ni har bir shaxsda o'ziga xoslikni, alohidalikni namoyon etish hissi ham shakllanadi. Bola o'z "Men"ini ro'yobga chiqarish uchun turli usullar va vositalarni qidira boshlaydi va shu orqali uning shaxsiy sifatleri shakllanadi. Shaxsning alohida psixologik, o'ziga xos xislatleri, faqat o'ziga tegishli bo'lgan ijtimoiy faoliyatda namoyon bo'ladi, uning i Bolaning shaxs sifatida jamiyatga qo'shilishi, ya'ni ijtimoiylashuvining yetakchi vositalari sifatida quyidagilarni ko'rsatish mumkin: Ota-ona, o'z tengdoshleri va pedagog-murabbiylar bilan o'zaro muloqot, faoliyat turlari(o'yin va o'quv faoliyati, ijodiy faoliyat, sport faoliyati)ni egallash. Shaxsning ijtimoiylashuvi bolalar, o'smirlar, o'spirinlarning ruhiy rivojlanishi va shaxs sifatida voyaga yetishiga ta'sir esa takrorlanmas jihatlarga ega bo'lib boradi.

Ijtimoiylashuv jarayoniga tashqi va ichki omillar ta'sir etadi:

Tashqi omillar:

- megaomillar(mega-ulkan) - koinot, butun yer sharidagi jarayonlar.
- makroomillar(makro-katta) - davlat va jamiyatdagi demografik, ijtimoiy-siyosiy, madaniy va ekologik omillar.
- mezoomillar(mezo-o'rta) – muayyan hudud va yashash joyidagi ommaviy aloqa tarmoqlari, muayyan guruhlarining ijtimoiylashish shart-sharoitleri.
- mikroomillar(mikro-kichik) – alohida shaxslarga ta'sir qiluvchi omillar tizimi(oila, mahalla maskanleri, tengdoshlar guruhi, ta'lim va tarbiya muassasalari, davlat va nodavlat tashkilotleri).

Ijtimoiylashuv shaxsning butun hayoti davomida kechadigan ko'p qirrali jarayondir, u ayniqsa bolalik va o'smirlar davrlarida nihoyatda jadallik bilan kechadi, chunki aynan bolalik davrida asosiy ijtimoiy me'yorlar o'zlashtiriladi. Ijtimoiylashuvning ikkilamchi maskanleri ham mavjudki, unga barcha bosqichdagi ta'lim muassasalari, mehribonlik uylari, ixtisoslashgan maxsus maktab-internatlar hamda harbiy bilim yurtleri kiradi, chunki u yerda nisbatan uzoq vaqt mobaynida bola ta'lim oladi va tarbiyalandi, ijtimoiy normalari, qadriyatli yo'nalishleri ta'sirida dunyoqarashi shakllanadi, shaxs bo'lib yetishadi. Shunday qilib, tor ma'noda ijtimoiylashuv shaxsning ijtimoiy muhitga kirib borishi, unda singib ketishi, tashqi ijtimoiy muhit normalarini qabul qilib ularga rioya qilishi yoki qilmasligini tushuntiruvchi jarayondir. Ijtimoiylashuv tushunchasi ma'no jihatdan yaqin bo'lgan "tarbiya" va

“moslashuv” tushunchalari uzviy ravishda bog’liq. Moslashuv esa ijtimoiylashuv jarayonining muayyan bir tarkibiy qismi, uning harakatga keltiruvchi omili sifatida qaralishi mumkin. Ijtimoiy-psixologik moslashuv ya’ni, shaxsning ijtimoiy munosabatlarga qadam qo’yishi, ijtimoiy normalarni egallashi, ko’nikishi va moslashishi orqali orttirgan tajribasi umumiy ijtimoiylashuvning bir ko’rinishidir. Ijtimoiylashuv jarayonida shaxs jamiyatdagi ijtimoiy normalarni o’zlashtiradi, turli rollarni bajarishga o’rganadi, jamoatchilik sharoitida o’zini tutish ko’nikmalarini hosil qiladi. Shaxsning ijtimoiylashuvi uning ijtimoiy ta’sirlarni qabul qilishi, ijtimoiy borliqni bilishi va anglashiga asoslanadi. Yana bir muhim ijtimoiylashuv muhiti – bu mehnat jamoalaridir. Bu muhitning ahamiyati va o’ziga xosligi shundaki, bu yerga shaxs odatda ancha aqli pishib qolgan, ma’lum tajribaga ega bo’lgan, hayot haqidagi tasavvurlari shakllangan paytda keladi. Ijtimoiylashuv sohalari: Shaxsning egallagan mutaxassisligi, olgan bilimlari, ko’nikma va amaliy mehnat malakalari, hayotiy faoliyat uchun juda muhim bo’lib, shu muhitdagi ijtimoiy normalar xarakteriga ta’sir qiladi, shaxsning kimlar bilan, qanday o’zaro munosabatda ekanligi, uning qaysi muhit ta’sirida ekanligi uning yetuklik davridagi ijtimoiylashuvining muhim mezoni sanaladi. Ishga kirishdagi asosiy motivlardan biri – o’sha jamoaning qanday ekanligi, bu yerdagi o’zaro munosabatlar, rahbarning kimligi va uning jamoaga munosabati bo’lib, ko’pincha oylik-maosh masalasi ana shulardan keyin o’rganiladi. Shuning uchun mehnat jamoalarida yaxshi, sog’lom ma’naviy muhit, adolat va samimiyatga asoslangan munosabatlar har bir inson taqdirida katta rol o’ynaydi.

Katta yoshdagi ijtimoiylashuvning o’ziga xosligi shundaki, unda individualizatsiya jarayoni aniqroq, sezilarliroq kechadi, chunki katta yoshdagi odam nafaqat tashqi ta’sirlarni o’zlashtiradi, balki o’zidagi hayotiy tajriba, bilim amaliy ko’nikma va malakalari bilan boshqalarga ham tarbiyaviy ta’sir etadi, shaxsiy o’rnak ko’rsatish imkoniyatiga ega bo’ladi. Shu nuqtai nazaridan, keksalik davrining ijtimoiy mohiyati shundaki, ota-bobolarimiz, onaxonlarimiz asosan o’zlaridagi mavjud ijtimoiy tajribani boshqalarga (farzandlar, nabiralar, mahalladagi yoshlar va hokazo) uzatish bilan shug’ullanadilar va bu narsa ayniqsa, sharq xalqlarida juda e’zozlanadi. Hozirgi kundagi ijtimoiylashuv mexanizmlari yoshlarida yangicha tafakkur shakllanishiga, yurtga sadoqat, Vatan hissini shakllantirishga o’z hissasini qo’shadi. Shaxs ijtimoiylashuvining eng asosiy mahsuli — bu uning hayotda o’z o’rnini topib, jamiyatga manfaat keltiruvchi faoliyatlarda ishtirok etishidir.

Etnopsixologiya bilan chambarchas bog’liq bo’lgan, ya’ni, uning eng yaqin hamkori bo’lgan fan – bu ijtimoiy psixologiyadir. Ijtimoiy psixologiya – odamlarning jamiyatda hamkorlikdagi ish faoliyatlari jarayoni davomida ularda hosil bo’ladigan tasavvurlar, fikrlar, e’tiqodlar, g’oyalar, his-tuyg’ular, kechinmalar, turli xulq-atvor shakllarini tushuntirib beruvchi fan, shaxs va jamiyat o’zaro bog’liqligida sodir bo’ladigan psixologik hodisalarni tahlil etuvchi ilmiy yo’nalishdir. Demak, har bir shaxsning jamiyatda yashashi, uning ijtimoiy normalariga rioya qilgan holda o’ziga o’xshash shaxslar bilan o’rnatadigan murakkab o’zaro munosabatlari va ularning ta’sirida hosil bo’ladigan hodisalarning psixologik tabiatini va qonuniyatlarini tushuntirib berish – ijtimoiy psixologiyaning asosiy vazifasidir. Bola faqat milliy muhitda yashab turgandagina shu millat va elatga xos bo’lgan xususiyatlarni egallab, ayni millat vakili bo’la oladi. Bolaning ontogenetik taraqqiyoti davrida tashqi xatti-harakatlarni “aqliy” xususiyatlarga aylanishi davrida unda milliy psixologik qiyofa asoslari shakllana boshlaydi. Milliy tilni bilmaslik, etnik muhitdagi jarayonlarni, tilda ifodalanayotgan holat va hodisalarning mohiyatlarini anglab olishga to’sqinlik qiladi. Chunki fikr ifodasi uchun ishlatiladigan so’zlarda milliy o’ziga xoslik bo’ladi. Tafakkur bilan til va nutq o’zaro bog’liq

bo'lganligi uchun, ruscha tili chiqqan bolalarning fikrlash malakasi ham ruscha bo'lib o'zbeklarnikidan farqlanadi. Chunki insonning tafakkur tarzi nutqida, tilda reallashadi, moddiylashadi. Ular o'zbekcha gaplashishga o'rganganlaridan keyin ham, ruscha fikrlab, o'zbekcha gapirishga harakat qiladi. Ruscha tafakkur tarzi bilan o'zbekcha gapirish juda qiyin. Boshqa millat vakili voqelikni o'zbekning ko'zi bilan ko'rib o'zbekona tafakkur tarzi bilan idrok eta olgandagina, u chinakamiga o'zbekcha fikr yuritib, o'zbekcha gapira boshlaydi. Individdning ijtimoiylashishi, milliydashishi ona tilini o'zlashtirish bilan boshlanadi. Inson sotsial zot sifatida ma'lum milliy muhitda shakllanib borar ekan, shu sotsial muhitda mavjud bo'lgan munosabatlarni, milliy xususiyatlarni o'z-o'zidan stixiyali ravishda o'zlashtirmasdan, balki shu jamiyatda qabul qilingan ma'lum ta'lim-tarbiya tizimi orqali, sekin-asta o'zlashtirib boradi. Har bir avlod vakillari ajdodlarining turmush tajribalarini, til va madaniy xususiyatlarini o'zlashtirib, millat uchun umumiy bo'lgan shart-sharoitlar ostida o'sib, tarbiyalanib borishi natijasida ularning barchasida shu millatga xos bo'lgan umumiy psixologik hislatlar shakllanadi. Shuni ham ta'kidlash kerakki, ijtimoiy informatsiyalarni yosh avlod tomonidan o'zlashtirib borilishi, faqat ongli ravishda, ta'lim-tarbiya berish jarayonidagina bo'lib qolmasdan, shuningdek, individdning o'zi bilmagan va o'zlashtirish jarayonini anglab yetmagan holda ham yuz beradi. Bu taqlid va ta'sirlanish orqali amalga oshadi. Individdning taraqqiyoti - u bevosita yoki bivosita munosabatga kirishgan boshqa individlarning taraqqiyoti bilan belgilangan bo'ladi va bir-biri bilan munosabatga kirishadigan turli avlod vakillari o'zaro bog'langan, keyingi avlodlarning jismoniy mavjudligi esa o'tmishdoshlari tomonidan belgilangan bo'ladi. Ilg'or fan nomoyondalari insoniyat bu sotsial hodisa ekanligini allaqachon isbotlab berishgan. Shu jumladan konkret bir kishi ham avvalo sotsial munosabatlar mevasidir. Shuning uchun ham hatti-harakatlari mohiyatini biologik yoki irqiy xususiyatlar bilan emas, balki sotsial qonunlar bilan belgilash kerak. Inson ruhiyati faqat uni o'rab turgan tashqi muhit sharoitlariga moslashib va uning xususiyatlarini aks ettirib qolmasdan, shuningdek, doimiy taraqqiy etib turish xarakteriga ega bo'lgan iqtisodiy - ijtimoiy hodisalarning o'zgarib turishiga ham moslashib turadi. Insonning individual hayotining son-sanoqsiz holatlaridan tashqari, bolaning etnik-madaniy o'ziga xosligining shakllanishi va namoyon bo'lishiga ijtimoiy muhit va guruhlararo munosabatlarning xususiyatlari bilan belgilanadigan bir qator omillar ta'sir ko'rsatadi. Eng muhim psixologlar orasida quyidagilarni ajratib ko'rsatishadi: 1) ijtimoiy-siyosiy sohadagi global o'zgarishlar va ular bilan bog'liq millatlararo munosabatlardagi o'zgarishlar;

2) etnik muhitning geterogenligi/bir xilligi. Birinchi guruh omillariga kelsak, ijtimoiy sohadagi muhim voqealar butun bir xalqning etnik-madaniy o'ziga xosligini faollashtirishga yordam berishi mumkin.¹

Xulosa qilib shuni ta'kidlashimiz mumkinki, etnik identiklik ijtimoiy o'ziga xoslik elementlaridan biri bo'lib, "ko'plab etnik guruhlariga nisbatan ijtimoiy makonda shaxsning o'zini o'zi belgilashining kognitiv-emotsional jarayonining natijasidir". Bu nafaqat xabardorlik, balki o'zining etnik jamoaga mansubligini idrok etish, tushunish, baholashdir. Shaxs ijtimoiylashuvining eng asosiy mahsuli — bu uning hayotda o'z o'rnini topib, jamiyatga manfaat keltiruvchi faoliyatlarda ishtirok etishidir.

FOYDALANILGAN ADABIYOTLAR:

¹ SHAXSDA ETNIK IDENTIKLIKNING SHAKLLANISHIDA OILANING O'RNI. Nuraliyeva Dildora Mamurjonovna
Farg'ona davlat universiteti psixologiya kafedrasida psixologiya fanlari bo'yicha falsafa dokori (PhD).
<https://orcid.org/0000-0003-2975-6840>

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EKOLOGIK TA'LIMDA OILANING VA MAKTAB JAMOASINING HAMKORLIGI

Termiz davlat pedagogika instituti

Maktabgacha va boshlang'ich ta'lim fakulteti

Boshlang'ich ta'lim kafedrası o'qituvchisi

Abdunazarova Zebiniso Xudoyshekurovna

Boshlang'ich ta'lim yo'nalishi 1-bosqich talabasi

Alinazarova Mehribon Jumanazar qizi.

@alinazarovamehribon050@gmail.com

Telefon: +998-93-763-21-30

Annotatsiya: Ushbu maqolada ekologik ta'lim jarayonida oila va maktab jamoasining o'zaro hamkorligi masalalari yoritilgan. Muallif ekologik tarbiyaning bolalik davridan boshlanishi, bunda oilaning ibratli roli va maktabning tizimli ta'lim berishdagi o'rni haqida fikr yuritadi. Shuningdek, ekologik madaniyatni shakllantirishda o'qituvchi, ota-ona va o'quvchi o'rtasidagi hamkorlikning ahamiyati tahlil qilinadi. Maqolada oila va maktab birgalikda olib boradigan amaliy tadbirlarning bolalarda tabiatga mas'uliyatli munosabatni shakllantirishdagi o'rni ko'rsatib berilgan. Xulosa sifatida, ekologik ta'limning muvaffaqiyati oila va maktabning uzviy hamkorligiga bog'liqligi ta'kidlanadi.

Kalit so'zlar: ekologik ta'lim, oila, maktab jamoasi, hamkorlik, ekologik madaniyat, tarbiya, tabiatni asrash.

KIRISH

Bugungi globallashuv davrida insoniyat hayotining barcha jabhalarida ekologik masalalarning ahamiyati keskin ortib bormoqda. Atrof-muhitning ifloslanishi, iqlim o'zgarishi, tabiiy resurslarning kamayishi va chiqindilar muammosi butun dunyo miqyosida dolzarb masalaga aylangan. Shunday sharoitda ekologik madaniyatni shakllantirish, yosh avlodni tabiatga e'tiborli va mas'uliyatli qilib tarbiyalash jamiyatning muhim vazifasidir. Bu jarayon esa, avvalo, oila va maktab jamoasining hamkorligiga tayanadi. Chunki bola hayotining ilk bosqichlaridan boshlab ekologik qadriyatlar oilada shakllana boshlaydi, maktab esa bu bilim va ko'nikmalarni ilmiy asosda kengaytiradi.

Ekologik ta'lim — bu nafaqat dars jarayonida o'quvchilarga nazariy bilim berish, balki ularda tabiatga mehr, ekologik mas'uliyat, tozalikka e'tibor kabi hayotiy fazilatlarni shakllantirish jarayonidir. Ota-onalar o'z farzandlariga tabiatni asrash, daraxt ekish, suv va elektrni tejash, chiqindilarni to'g'ri tashlash kabi oddiy amaliy odatlar orqali ekologik tarbiya bera oladilar. Maktab jamoasi esa ushbu qadriyatlarni mustahkamlash, ekologik fanlarni o'qitish, turli tadbir va loyihalar tashkil etish orqali o'quvchilarning dunyoqarashini kengaytiradi.

Oila va maktab o'rtasidagi uzviy hamkorlik natijasida bola hayotda o'rgangan ekologik qoidalarni ongli ravishda amal qiladigan darajaga yetadi. Bu hamkorlikda o'qituvchi, sinf rahbari, ota-ona, mahalla faollari va ekologik tashkilotlarning birgalikdagi ishlari muhim o'rin tutadi. Masalan, ekologik tadbirlar, ko'chat ekish aksiyalari, chiqindilarni kamaytirish tashabbuslari orqali bolalar amaliy faoliyatda ishtirok etib, tabiatni asrashning ahamiyatini chuqur his qiladilar.

Shu bois ekologik ta'limni samarali tashkil etish uchun oila va maktabning o'zaro aloqasi mustahkam bo'lishi zarur. Ularning hamkorligi orqali yosh avlodda ekologik madaniyat, vatanparvarlik, mehnatsevarlik va toza hayot tarzi shakllanadi. Natijada ekologik muammolarga befarq bo'lmagan, tabiatni sevuvchi, uni asrashni o'z burchi deb biladigan yoshlar kamol topadi.

ASOSIY QISM

Ekologik ta'lim bugungi kunda nafaqat fan sifatida, balki jamiyat taraqqiyotining muhim omili sifatida e'tirof etilmoqda. Insonning tabiatga bo'lgan munosabati, ekologik ong va madaniyat darajasi yoshligidan shakllanadi. Shu sababli ekologik tarbiya, avvalo, bola hayotining dastlabki muhitida — **oilada** boshlanadi va keyinchalik **maktab jamoasi** tomonidan tizimli tarzda davom ettiriladi.

Oila — bu jamiyatning eng kichik, lekin eng ta'sirli ijtimoiy bo'g'inidir. Har bir bola avvalo ota-onasidan o'rnak oladi. Ota-onaning tabiatga bo'lgan mehr-muhabbati, tozalik, tejamkorlik, mehnatsevarlik va mas'uliyatga asoslangan hayot tarzi farzand uchun eng kuchli tarbiyaviy omildir. Masalan, ota-ona chiqindilarni saralab tashlash, daraxt ekish, hovlini toza tutish, gul parvarishlash, suvni isrof qilmaslik kabi oddiy, ammo muhim odatlar orqali farzandida ekologik madaniyatni shakllantiradi. Bola bunday amaliy harakatlar orqali tabiatni qadrlashni o'rganadi.

Biroq ekologik ta'lim faqat oilaning zimmasida qolib ketmasligi kerak. Chunki ekologik muammolarni anglash, ularni hal etish yo'llarini tushunish uchun ilmiy bilim, tizimli yondashuv zarur. Shu o'rinda maktab jamoasining roli beqiyosdir. Maktab — bu nafaqat bilim beruvchi, balki shaxsni tarbiyalovchi maskan. O'quvchilarga ekologik bilim berish orqali ular tabiat qonuniyatlarini, ekologik muvozanatning ahamiyatini, inson faoliyatining atrof-muhitga ta'sirini tushunib yetadilar.

Maktabda ekologik ta'limni samarali tashkil etish uchun o'qituvchilar, sinf rahbarlari, biologiya va geografiya fanlari o'qituvchilari o'quvchilarga nafaqat nazariy bilim, balki amaliy tajriba ham berishlari lozim. Masalan, "Yashil makon" kabi ekologik loyihalarda ishtirok etish, maktab hududida daraxt ekish, gulzorlar barpo etish, chiqindilarni to'g'ri tashlash va qayta ishlash bo'yicha mashg'ulotlar o'tkazish juda foydali. Bunday tadbirlar bolalarda ekologik mas'uliyat va jamoaviy ishlash ko'nikmasini kuchaytiradi.

Ekologik tarbiyaning yana bir muhim jihati — bu **oila va maktab o'rtasidagi hamkorlik**dir. Agar maktabda o'quvchilarga ekologik bilim berilib, uyda bu qadriyatlar mustahkamlanmasa, natija sust bo'ladi. Shu bois o'qituvchi va ota-onalar o'rtasida muntazam aloqa bo'lishi, ekologik mavzularda uchrashuvlar, seminarlar, ota-onalar yig'ilishlari o'tkazilishi muhimdir. Ota-onalar farzandlarining ekologik loyihalarida faol ishtirok etsa, bu ularning bolalariga kuchli turtki bo'ladi.

Masalan, ko'pchilik maktablarda o'tkazilayotgan "Toza maktab — toza oila" aksiyasi shunday hamkorlikning yaqqol namunasi bo'la oladi. Bu orqali nafaqat maktab atrofi, balki mahalla, uy atrofi ham obodonlashtiriladi. Bolalar o'z ota-onasi bilan birgalikda ekologik ishlar qilsa, bu ularning ongida tabiatni asrashning ijobiy qadriyat sifatida mustahkamlanishiga olib keladi.

Shuningdek, mahalla va jamoat tashkilotlari bilan hamkorlikni kuchaytirish ham muhim. Chunki ekologik ta'limni faqat dars bilan cheklab bo'lmaydi — u hayot tarziga aylanishi kerak. Mahalla tomonidan o'tkaziladigan ekologik tadbirlar, chiqindilarni qayta ishlash bo'yicha tashabbuslar, ko'chat ekish aksiyalari oilalar va maktablarni birlashtiradi. Bu esa jamiyatda umumiy ekologik madaniyatni oshirishga xizmat qiladi.

Zamonaviy ta'limda ekologik tarbiya innovatsion yondashuvlarni ham talab etadi. Multimedia vositalari, ekologik o'yinlar, raqamli testlar, ekologik videoroliklar orqali o'quvchilarning qiziqishini oshirish mumkin. Shuningdek, o'quvchilarni tadqiqot ishlariga, ekologik loyihalar va tanlovlarga jalb etish ularning mustaqil fikrlashini rivojlantiradi.

Umuman olganda, ekologik ta'lim samaradorligi oila, maktab va jamiyat o'rtasidagi uzviy hamkorlikka bevosita bog'liqdir. Ota-ona, o'qituvchi va o'quvchi bir maqsad yo'lida birlashgan taqdirda, ekologik madaniyatning ildizlari chuqur bo'ladi. Bunday yondashuv natijasida yosh avlod nafaqat bilimli, balki tabiatni asrashga, ekologik muammolarni hal etishga mas'uliyatli insonlar sifatida kamol topadi.

Muammo va kamchiliklar

Ekologik ta'lim jarayonida oila va maktab jamoasining hamkorligi muhim o'rin tutsa-da, amaliyotda bu yo'nalishda bir qator muammo va kamchiliklar mavjud. Ushbu muammolarni aniqlash va ularni bartaraf etish ekologik tarbiyaning samaradorligini oshirishda hal qiluvchi ahamiyatga ega.

Birinchidan, **ko'plab oilalarda ekologik madaniyat darajasi past**. Ba'zi ota-onalar ekologik masalalarga yetarlicha e'tibor bermaydilar, chiqindilarni to'g'ri tashlash, suvni tejash, daraxt ekish kabi odatlar kundalik hayotda yetarlicha shakllanmagan. Natijada bolalar uchun amaliy ibrat manbai yetarli bo'lmaydi.

Ikkinchidan, **maktablarda ekologik ta'lim ko'p hollarda nazariy bilim bilan cheklanib qolmoqda**. Darslarda ekologik fanlar o'qitilsa-da, amaliy mashg'ulotlar, ekologik to'garaklar, ekskursiyalar yetarli darajada yo'lga qo'yilmagan. Bu esa o'quvchilarda ekologik fikrlash va mas'uliyatni shakllantirishni qiyinlashtiradi.

Uchinchidan, **oil va maktab o'rtasidagi hamkorlik doimiy emas**. Ayrim ota-onalar farzandlarining maktabdagi ekologik tadbirlariga befarq qaraydilar, bu esa bolalarda tabiatga nisbatan beparvolikni kuchaytiradi. O'qituvchilar esa ko'p hollarda ota-onalarni faollikka jalb etishda tizimli yondashuvdan foydalanmaydilar.

To'rtinchidan, **mahalla va jamoat tashkilotlari bilan hamkorlik yetarli emas**. Aholi o'rtasida ekologik tadbirlar ko'proq bir martalik aksiyalar tarzida o'tkaziladi, doimiy ravishda ekologik targ'ibot ishlari olib borilmaydi.

Beshinchidan, **ekologik tarbiya uchun zarur moddiy va metodik resurslar yetishmaydi**. Ba'zi maktablarda ekologik burchaklar, plakatlar, ko'rgazmali qurollar, video materiallar yetarli emas. Bu o'quvchilarning ekologik bilimlarini chuqur o'zlashtirishiga to'sqinlik qiladi.

Oltinchidan, **ekologik tarbiya jarayonida innovatsion yondashuvlar kam qo'llaniladi**. Zamonaviy texnologiyalar, ekologik o'yinlar, raqamli platformalar yordamida o'quvchilarda qiziqish uyg'otish imkoniyati mavjud bo'lsa-da, bu imkoniyatlardan har doim to'liq foydalanilmayapti.

Yettinchidan, **ba'zi hududlarda ekologik muammolarga befarqlik keng tarqalgan**. Aholi, xususan yoshlar orasida chiqindilarni kamaytirish, suvni tejash, havoni toza saqlash kabi masalalar yuzasidan yetarli ong va mas'uliyat mavjud emas.

Xulosa

Xulosa qilib aytganda, ekologik ta'lim bugungi kunda jamiyat taraqqiyotining ajralmas qismiga aylangan. Tabiatni asrash, ekologik madaniyatni shakllantirish va barqaror rivojlanishni ta'minlashda oila hamda maktab jamoasining o'zaro hamkorligi hal qiluvchi ahamiyatga ega. Bola

tabiatga mehr, tozalik, tejamkorlik, mas'uliyat kabi fazilatlarini avvalo oilada o'rganadi, maktab esa bu qadriyatlarni mustahkamlab, ularni ilmiy asosda chuqurlashtiradi.

Oila va maktab o'rtasidagi muntazam aloqa, ekologik tadbirlar, amaliy mashg'ulotlar, "Yashil makon" aksiyalari, ko'chat ekish ishlari kabi tashabbuslar yosh avlodda ekologik ong va mas'uliyatni kuchaytiradi. Shu jarayonda ota-onalar, o'qituvchilar, mahalla faollari va jamoat tashkilotlari bir yoqadan bosh chiqarib ishlasa, natijada ekologik madaniyat butun jamiyatda yuksaladi.

Shuningdek, ekologik tarbiyada mavjud kamchiliklarni bartaraf etish, o'quv jarayonida zamonaviy yondashuv va texnologiyalarni joriy etish zarur. Faqatgina darslar bilan emas, balki amaliy faoliyat, oila ishtiroki va ijtimoiy tashabbuslar orqali ekologik ta'limni kuchaytirish mumkin.

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INGLIZ VA O‘ZBEK HISSIYOT LEKSIKASINING LINGVOKULTUROLOGIK TAHLILI

Abdiyeva Zebiniso Olim qizi TISU magistranti
Norkulova Shaxnoza Tulkinovna TISU dotsenti (PhD)
e-mail: norqulovashaxnoza8@gmail.com

Anotatsiya. Ushbu maqolada o‘zbek va ingliz tillaridagi hissiyot leksikasining lingvokulturologik hodisalarning qiyosiy tahlili, frazeologik birliklar, ingliz va o‘zbek tillarida hissiyotlarni ifodalovchi leksik birliklar tahlilga tortilgan. Ularning milliy - kultural xususiyatlari aniqlangan hamda o‘zaro qiyosiy tahlilga asoslanib yoritib berilgan.

Kalit so‘zlar: lingvistika, lingvokulturologik tahlil, hissiyot, madaniyat, lingvokulturologiya (lingvomadaniyatshunoslik).

Summary. This article presents a comparative analysis of the linguistic and cultural phenomena of the emotional vocabulary of the Uzbek and English languages, phraseological units, lexical units expressing emotions in English and Uzbek. Their national and cultural peculiarities are revealed and highlighted on the basis of mutual comparative analysis.

Keywords: Linguistics, linguocultural analysis, emotions, culture, linguoculturology.

Аннотация. В данной статье представлен сравнительный анализ лингвокультурных явлений эмоциональной лексики узбекского и английского языков, фразеологических единиц, лексических единиц, выражающих эмоции в английском и узбекском языках. Выявлены их национально-культурные особенности и освещены на основе взаимного сравнительного анализа.

Ключевые слова: Лингвистика, лингвокультурный анализ, эмоции, культура, лингвокультурология.

Til – bu nafaqat aloqa vositasi, balki xalqning madaniyati, tafakkuri va dunyoqarashining aksidir. Lingvokulturologiya madaniyatshunoslik va tilshunoslik fanlari o‘rtasida yuzaga kelgan umumlashma fan bo‘lib, til va madaniyatning o‘zaro ta’siri va bog‘liqligi, bu bog‘liqlikning shakllanishi hamda yaxlit bir sistema sifatida til va tildan tashqarida aks etishi kabi hodisalarni o‘rganish bilan shug‘ullanadi. XX asrning 90 – yillarida tilshunoslik bilan ma’daniyatshunoslik orasida yangi fan sohasi, lingvokulturologiya (lingvomadaniyatshunoslik) paydo bo‘ldi. U tilshunoslikning mustaqil yo‘nalishi sifatida tan olindi. Lingvokulturologiyaning shakllanishi haqida deyarli barcha tadqiqotchilar ushbu nazariyaning ildizi V. Fon Gumboldtga borib taqalishini ta’kidlaydilar. Lingvokulturologiya sohasida jiddiy tadqiqotlar yaratgan V.A. Maslova ushbu sohaning rivojini 3 bosqichga ajratadi: 1) fan shakllanishiga turtki bo‘lgan dastlabki tadqiqotlarning yaratilishi (V. Fon Gumboldt, E.Benvnist, L.Vaysgerber, A.A. Potebnya, E.Sepir) kabi tilshunoslarning ishlari); 2) lingvokulturologiyaning alohida soha sifatida ajratilishi; 3) lingvokulturologiyaning rivojlanish bosqichidir.

Hissiyotlar esa insonning ichki kechinmalari, jamiyatdagi o‘zaro munosabatlari va milliy xususiyatlarini ifodalovchi asosiy vositalardan biridir. Turli tillarda hissiyotlarni ifodalash shakllari, leksik birliklari va ularning ma’noviy mazmuni o‘ziga

xos bo'lib, ushbu holatlarni o'rganish lingvokulturologiya doirasida alohida ahamiyat kasb etadi. Tahlil natijasida quyidagi asosiy jihatlar aniqlandi:

Leksik boylikda farqlar: O'zbek tilida hissiyotlar, ayniqsa uyat, hurmat, or-nomus kabi tushunchalar juda boy leksik vositalar bilan ifodalanadi.

Misollar: *hayajonlanmoq, uyalmaydiganga o'xshaysan, quvonchdan ko'zyoshi to'kmoq.*

Ingliz tilida esa asosiy hissiyotlar (*happiness, sadness, anger, fear, surprise, disgust*) atrofida leksik to'plam keng. Misollar: *be over the moon, feel blue, lose one's temper.*

Frazeologizmlar orqali ifoda: O'zbek tilida: *ko'ngli to'ldi, yuragi g'ash, ichi kuydi.*

Ingliz tilida: *butterflies in the stomach, on cloud nine, down in the dumps.*

Madaniy komponentlar: O'zbek tilida hissiyotlar ko'pincha ijtimoiy norma va odob-axloq doirasida tushuniladi. Ingliz tilida esa hissiyotlar individual holat sifatida ifodalanadi. Tadqiqot shuni ko'rsatdiki, hissiyot leksikasi nafaqat tilning leksik boyligini, balki xalqning mentalitetini, qadriyatlarini va dunyoni idrok etish shaklini ham ochib beradi. O'zbek tilidagi hissiyotlarga oid leksik birliklar ko'proq kollektivlik, axloqiy mezonlar va ijtimoiy muomala bilan bog'langan bo'lsa, ingliz tilidagi ifodalar individual psixologik holatni aks ettirishga moyildir.

Inson hissiyotlari asosiy olti guruhga bo'linadi: **quvonch, g'am, qo'rquv, g'azab, ajablanish, jirkanish**. Har bir tilda bu hissiyotlarni ifodalash uchun turli leksik vositalar mavjud:

O'zbek tilida:

Quvonch: xursand bo'lmoq, suyunmoq, quvonchdan ko'zyoshi to'kmoq, baxtdan uchmoq, yuragi yayramoq.

G'am: g'amgin, yuragi ezildi, ko'ngli xira, ich-ichidan yig'ladi.

Qo'rquv: yuragi orqaga tortdi, rangi oqarib ketdi, qaltiramoq.

G'azab: jahli chiqmoq, qoni qaynadi, yuziga qarashdan qo'rqding.

Ajablanish: hayron bo'lmoq, lablari ochilib qoldi, ko'zlari olaydi.

Jirkanish: yuragi ko'ngildi, ko'ngli aynidi, bezdi.

Ingliz tilida:

Joy: to be over the moon, ecstatic, thrilled, delighted, elated.

Sadness: to feel blue, downcast, heartbroken, in despair.

Fear: to be terrified, frightened, petrified, to shake like a leaf.

Anger: to be furious, lose one's temper, seethe with rage.

Surprise: to be stunned, taken aback, amazed, flabbergasted.

Disgust: to be repulsed, grossed out, feel nauseous.

Frazeologizmlar orqali hissiyotlarning ifodalanishi har ikki tilda juda boy bo'lsa-da, ularning semantik o'zagi ko'pincha turli madaniy tushunchalarga borib taqaladi. Ingliz va o'zbek tillarida hissiyotlarni ifodalovchi leksik vositalarning lingvokulturologik tahlili ushbu sohadagi o'ziga xos farq va umumiyliklarni ochib berdi. Ushbu farqlarni anglash til o'rganish va tarjimada aniqroq kontekst yaratishda yordam beradi, shuningdek, madaniyatlararo muloqotda chuqurroq tushunishni ta'minlaydi.

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LOTIN AMERIKASI DAVLATLARIDA MAKTABGACHA TA'LIM TIZIMI

Shahrisabz davlat pedagogika institutining magistranti. **Boltaxujayeva Shabnambonu**

boltaxujayevashabnambonu@gmail.com

Telifon: +998 88 631 01 22

Annotatsiya: Maktabgacha ta'lim — bu bolaning shaxsiy rivojlanishida poydevor bosqich hisoblanadi. So'nggi yillarda dunyo mamlakatlarida, jumladan, Lotin Amerikasi davlatlarida ham, maktabgacha ta'lim tizimini isloh qilish, sifat va qamrovni oshirish bo'yicha keng ko'lamli ishlar olib borilmoqda. Ushbu maqolada Lotin Amerikasi davlatlarida maktabgacha ta'lim tizimi, uning nazariy asoslari va amaliy tajribalari tahlil qilinadi.

Kalit so'zlar: maktabgacha ta'lim, dastur, zamonaviy, innovatsion, sifat, standart.

Annotation: Preschool education is the foundational stage in a child's personal development. In recent years, extensive reforms have been carried out in preschool education systems around the world, including in Latin American countries, to improve quality and accessibility. This article analyzes the preschool education system in Latin American countries, its theoretical foundations, and practical experiences.

Keywords: preschool education, curriculum, modern, innovative, quality, standard.

Аннотация: Дошкольное образование является фундаментальным этапом в личностном развитии ребёнка. В последние годы во многих странах мира, включая государства Латинской Америки, проводятся масштабные реформы системы дошкольного образования, направленные на повышение качества и охвата. В данной статье анализируется система дошкольного образования в странах Латинской Америки, её теоретические основы и практический опыт.

Ключевые слова: дошкольное образование, программа, современный, инновационный, качество, стандарт.

Lotin Amerikasi mamlakatlari maktabgacha ta'limni inson kapitalini rivojlantirishning muhim omili sifatida e'tirof etadi. BMTning Barqaror taraqqiyot maqsadlari (SDG-4) doirasida 2030-yilgacha barcha bolalarni sifatli maktabgacha ta'lim bilan qamrab olish vazifasi belgilangan. Braziliyada 2013-yildan boshlab "Educação Infantil" dasturi asosida 4–6 yoshli bolalar uchun bepul va majburiy ta'lim joriy etilgan. Meksikada "Programa de Educación Preescolar" dasturi milliy madaniyat va ikki tillilik (ispan va mahalliy tillar) asosida olib boriladi. Argentinada esa ta'lim siyosati federal tizimga asoslangan bo'lib, har bir viloyat (provinsiya) o'z o'quv dasturini milliy standartlarga moslashtiradi. Lotin Amerikasi davlatlarida ta'lim jarayonida bolaning individual qobiliyatini rivojlantirish, ijtimoiylashuv, ijodkorlik va tabiat bilan uyg'unlik g'oyalari ustuvor hisoblanadi. Masalan, Chilida "Jardines Infantiles" deb ataluvchi davlat bog'chalari o'yin, musiqiy faoliyat va oila bilan hamkorlik asosida ishlaydi. Argentinada "Aprendizaje Activo" (faol o'rganish) metodikasi orqali bolalarda muammoli vaziyatlarni mustaqil hal qilish, fikrlash va muloqot ko'nikmalari rivojlantiriladi.

Ta'lim dasturlari bolalarning 5 asosiy kompetensiyasini rivojlantirishga qaratilgan:

1. Ijtimoiy-emotsional rivojlanish;

2. Til va kommunikativ faoliyat;
3. Bilish jarayoni;
4. Jismoniy rivojlanish;
5. San'at va madaniyatni idrok etish.

Lotin Amerikasi mamlakatlarida asosiy muammolar — infratuzilma yetishmovchiligi, malakali pedagoglar kamligi hamda shahar va qishloq o'rtasidagi tengsizlikdir. Shu sababli UNICEF, UNESCO va Inter-American Development Bank (IDB) kabi xalqaro tashkilotlar tomonidan malaka oshirish dasturlari, raqamli ta'lim platformalari va pedagogik innovatsiyalar tatbiq etilmoqda. Braziliyada "Criança Feliz" loyihasi orqali erta yoshdagi bolalarning rivojlanishini kuzatish va oilaviy tarbiyani qo'llab-quvvatlash mexanizmi yaratilgan. Kolumbiyada esa "De Cero a Siempre" dasturi 0 yoshdan 5 yoshgacha bo'lgan bolalarni ijtimoiy himoya va ta'lim bilan to'liq qamrab olishga qaratilgan.

Lotin Amerikasi tajribasi O'zbekiston maktabgacha ta'lim tizimini rivojlantirishda quyidagi yo'nalishlarda foydali bo'lishi mumkin:

- Bolaning shaxsiy rivojlanishini markazga qo'ygan o'yinli metodlarni keng joriy etish;
- Ta'limda madaniy xilma-xillik va mahalliy qadriyatlarni aks ettirish;
- Maktabgacha ta'limni ijtimoiy tenglikni ta'minlovchi tizim sifatida rivojlantirish;
- Pedagoglarning malakasini oshirishda xalqaro tajriba va raqamli ta'limdan foydalanish.

Xulosa qilib aytganda, Lotin Amerikasi davlatlarida maktabgacha ta'lim tizimi demokratik qadriyatlar, insonparvarlik va madaniy xilma-xillikka asoslanadi. Ularning tajribasi O'zbekistonda olib borilayotgan ta'lim islohotlari uchun muhim ilmiy-nazariy manba bo'lib xizmat qiladi. Eng muhimi, bu tizimlar bolani jamiyatning faol a'zosi sifatida shakllantirish, ijodiy fikrlash va mustaqil qaror qabul qilishga o'rgatishga qaratilgandir.

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ADVANTAGES OF USING “BLENDED LEARNING” (FLIPPED CLASSROOM)

Normo‘minova Gulhayo Shavkat qizi

Assistant, Department of Pedagogy
Samarkand State Pedagogical Institute

ANNOTATION

This article analyzes the essence and advantages of using the “Blended Learning” in the modern educational process. In this method, students study the lesson materials independently in advance, and during class sessions they focus on practical tasks, discussions, and group work. The article emphasizes that this technology serves to increase student activity, enhance the effectiveness of the lesson process, use an individual approach, effectively use digital technologies, and develop creativity and critical thinking. The conclusion highlights the contribution of this innovative approach to improving the quality of education.

Keywords: Blended Learning, flipped classroom, modern education, interactive education, independent learning, use of technologies, lesson effectiveness, innovative education, creativity, critical thinking.

This article explores the advantages, pedagogical issues, and models of Blended Learning, particularly the Flipped Classroom approach. Blended learning combines online and face-to-face instruction, enabling students to learn independently through various digital tools and resources while still receiving guidance from teachers. The method shifts the focus from teacher-centered to student-centered learning, emphasizing the development of independent study skills and active participation.

Keywords. Blended learning, flipped classroom, higher education, active student, pedagogy, independent learning, digital tools, teacher preparedness, student-centered learning, rotation model.

In the Blended Learning method, various technologies and tools help integrate information into the learning material. The Internet allows each element to be used in its appropriate place. Students can study information either from books or online — at any convenient time and place. Video lectures are considered a passive process, while reading is an active one. In addition to the main text, various articles and reports can be attached. Sometimes, students are required to search for information on their own. If they are unable to find suitable materials, the teacher can upload the necessary information to their website. Texts can be provided in HTML, DOC, AVI, or MP3 formats.

The concept of the Active Student is considered one of the most essential elements of the Blended Learning structure. Currently, in Europe, this term refers to students studying within a blended learning system. In such models, approximately 50% of a student's activity consists of independent work (mastering materials, participating in forums and chats, communicating via e-mail, etc.). In traditional education, students are taught, whereas in blended learning, they are taught how to learn and guided to organize their own independent activities. In traditional education, the focus is on the teacher (teacher-centered), while in blended learning, the student is at the center (student-centered). Here, the student works more, and success depends on their own efforts. The student can even make adjustments and changes to the learning process. [91, M. Sobirova]

Blended Learning is a form of education based on a combination of online learning materials and group-based learning under the guidance of an instructor. In this form of education, students study independently, but at the same time, receive support from both the instructor and their peers. During group sessions, thanks to the application of blended learning, each student demonstrates positive progress in mastering the material while developing communication skills, reviewing learned topics, and preparing for new ones. Blended learning often relies on assignments and is built around key information, while supplementary materials are provided to students through an online platform. As students study independently, they collaborate with other group members by participating in online discussions.

The proportion of time allocated for classroom and online learning can vary. At different stages of education, distance and independent learning are effectively combined. [55, Ko'makova]

Pedagogical Issues in Implementing Blended Learning Models in Higher Pedagogical Education
When the use of blended learning models in higher pedagogical education is considered as a pedagogical issue, several key aspects need to be analyzed. This issue focuses on identifying factors that hinder effective learning and creating the necessary conditions for successfully implementing blended learning models. Below are some pedagogical challenges that may arise during the use of blended learning models in higher pedagogical education:

Educational resources and infrastructure.

For blended learning models to function successfully, sufficient educational resources and technological infrastructure are required. A lack of technological tools and resources may lower the quality of education and cause students to lose interest in the learning process.

Teachers' methodological preparedness.

To effectively implement blended learning models, teachers must possess high levels of both technological and methodological competence. If teachers lack adequate methodological preparation, they may fail to use blended learning effectively, negatively affecting students' learning outcomes.

Consistency and coherence in education.

Maintaining consistency and coherence is crucial when applying blended learning models. If teachers apply different approaches inconsistently, uncertainty may arise in the learning process, harming students' understanding.

Students' preparedness and perception.

Blended learning models can be a new experience for students. If students do not understand the main principles of blended learning or struggle to adapt, this may negatively affect their educational process.

Pedagogical methods and approaches.

The pedagogical methods and approaches must align with blended learning models. If teachers continue using outdated methods, blended learning will not produce effective results.

Assessment of blended learning quality.

Reliable assessment systems are necessary to evaluate the effectiveness of blended learning models. A lack of clear criteria and methods for evaluation can hinder quality improvement in education. By addressing these pedagogical challenges, it is possible to fully benefit from blended learning and make the educational process more effective.

Rotation Model of Blended Learning

The Rotation Model of blended learning consists of four sub-models:

Flipped Classroom Model

Station Rotation Model

Lab Rotation Model

Individual Rotation Model

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PSYCHOSOMATIC DISORDERS: ANCIENT AND MODERN PERSPECTIVES

Jurayev Sanjar Ramazonovich

Teacher of the Department of Social and Humanitarian Sciences,
Termez University of Economics and Service

Odiljonov Ozodbek Odiljonovich

Student Termez University of Economics and Service

Email-odiljonnorkulov0@gmail.com

ORCID ID [0009-0004-5765-8548](https://orcid.org/0009-0004-5765-8548)

Shukurov Fazliddin Abdinazarovich

Student Termez University of Economics and Service

ABSTRACT

Psychosomatic disorders represent a complex interplay between mind and body, where psychological factors significantly influence physical health. The concept of psychosomatic illness dates back to ancient civilizations, where disease was often viewed as a manifestation of spiritual or emotional imbalance. In modern medicine, psychosomatic disorders are recognized as conditions in which emotional stress or mental conflict leads to physiological dysfunctions. This paper explores the evolution of psychosomatic thought from ancient philosophical traditions to contemporary scientific models, focusing on mechanisms, clinical implications, and integrative approaches to treatment.

Keywords:

psychosomatic disorders, mind-body interaction, ancient medicine, stress, psychoneuroimmunology, holistic healing, emotional regulation

Relevance of the Topic

The relationship between the mind and body has fascinated physicians and philosophers for millennia. In today's world of increasing psychological stress, psychosomatic disorders have become more prevalent, affecting millions of people globally. Chronic stress, anxiety, and emotional trauma are now recognized as contributing factors to diseases such as hypertension, irritable bowel syndrome, peptic ulcers, migraines, and even autoimmune disorders.

The relevance of this topic lies in understanding that health is not merely the absence of physical disease but a dynamic balance between emotional, psychological, and physiological states.

Revisiting ancient perspectives and integrating them with modern neurobiological insights provides a more comprehensive approach to patient care and disease prevention.

INTRODUCTION

The term “*psychosomatic*” originates from the Greek words “psyche” (mind) and “soma” (body), emphasizing their interdependence. Ancient civilizations such as Egypt, India, Greece, and China viewed disease as an imbalance of spiritual, emotional, and physical energies. The Greek physician Hippocrates (460–370 BCE) emphasized that emotions such as anger or grief could directly influence bodily functions.

During the Middle Ages, this holistic view declined due to the dominance of religious interpretations of illness. However, with the rise of modern psychology and neurology in the 19th and 20th centuries, the psychosomatic concept was revived. Sigmund Freud and his followers suggested that repressed emotions could manifest as physical symptoms — a concept that later evolved into modern psychosomatic medicine.

Today, the field incorporates findings from psychoneuroimmunology, neuroendocrinology, and behavioral medicine, demonstrating the biological mechanisms through which mental states affect bodily health.

Main Body

1. Ancient Perspectives on Psychosomatic Health

In ancient times, medicine was inseparable from philosophy and spirituality.

- In Ancient Egypt, health was believed to depend on the harmony between the heart and the soul. Emotional distress was thought to disrupt this harmony, leading to physical illness.
- In Traditional Chinese Medicine (TCM), emotions were directly linked to organ systems: anger affected the liver, sadness the lungs, and fear the kidneys.
- In Ayurveda (India), disease arose from imbalances in the three doshas (Vata, Pitta, Kapha), which reflected physical and mental harmony.
- Greek philosophers such as Plato and Aristotle viewed health as the unity of body and soul, and Hippocrates' humoral theory associated emotions with body fluids — for example, excessive black bile leading to melancholy (depression).

These early approaches emphasized holism, a principle that remains central to psychosomatic medicine today.

2. Development of Psychosomatic Concepts in Modern Medicine

The modern era of psychosomatic medicine began in the early 20th century.

- Sigmund Freud (1856–1939) proposed that unconscious emotional conflicts could produce physical symptoms (conversion disorders).
 - Franz Alexander and the Chicago School (1930–1950s) identified specific “psychosomatic diseases,” such as ulcers, hypertension, asthma, and ulcerative colitis, which were linked to chronic emotional stress.
 - Hans Selye's stress theory (1936) introduced the concept of the General Adaptation Syndrome (GAS), showing how prolonged stress disrupts homeostasis and leads to disease.
 - The emergence of psychoneuroimmunology in the 1980s scientifically demonstrated that emotions and stress can influence immune responses, hormonal secretion, and neural activity.
- Thus, modern psychosomatic theory integrates biological, psychological, and social factors — the biopsychosocial model — as essential components of health and illness.

3. Mechanisms Linking Mind and Body

Psychosomatic disorders develop through several interrelated mechanisms:

- Neuroendocrine Pathways: Chronic stress activates the hypothalamic–pituitary–adrenal (HPA) axis, increasing cortisol levels, which suppress immune function and promote inflammation.
- Autonomic Nervous System (ANS): Prolonged emotional arousal can cause hypertension, tachycardia, and gastrointestinal disturbances.

- Immune Dysregulation: Emotional stress affects cytokine balance, contributing to autoimmune and inflammatory diseases.
- Cognitive and Emotional Factors: Negative thinking, anxiety, and repression of emotions alter pain perception and immune response.

These findings confirm that mental and physical health are deeply interconnected through physiological pathways.

4. Common Psychosomatic Disorders

The most frequently reported psychosomatic conditions include:

- Cardiovascular diseases: hypertension, coronary artery disease, arrhythmia
- Gastrointestinal disorders: irritable bowel syndrome, ulcers, gastritis
- Respiratory disorders: asthma, hyperventilation syndrome
- Dermatological conditions: eczema, psoriasis, urticaria
- Neurological and pain disorders: tension headaches, migraines, fibromyalgia

Patients often experience a vicious cycle: emotional distress causes physical symptoms, which in turn increase anxiety and perpetuate illness.

5. Modern Therapeutic and Preventive Approaches

Treatment of psychosomatic disorders requires a holistic, integrative approach:

1. Psychotherapy: Cognitive-behavioral therapy (CBT), psychoanalysis, and mindfulness-based therapies help patients recognize and manage emotional stressors.
2. Pharmacotherapy: Antidepressants, anxiolytics, and stress-modulating agents can reduce symptoms when combined with therapy.
3. Lifestyle interventions: Adequate sleep, balanced nutrition, and physical exercise improve resilience and reduce stress.
4. Mind-body techniques: Meditation, yoga, tai chi, and relaxation training restore balance between emotional and physiological systems.
5. Interdisciplinary collaboration: Cooperation among psychiatrists, neurologists, and general practitioners ensures comprehensive care.

Preventive strategies should focus on early identification of stress-related behaviors and promotion of psychological well-being.

Conclusion

The evolution of psychosomatic thought—from ancient holistic traditions to evidence-based modern medicine—demonstrates the timeless understanding that mind and body function as one system. Ancient healers intuitively recognized what modern science now confirms: emotions, thoughts, and beliefs profoundly affect physical health.

Today, psychosomatic medicine bridges the gap between psychology and physiology, offering integrative models that view the individual as a whole. Future directions include the expansion of psychoneuroimmunology, digital health interventions, and personalized psychosomatic therapies aimed at prevention and long-term wellness.

Ultimately, understanding psychosomatic relationships allows clinicians to treat not just the disease, but the person — addressing emotional, social, and biological dimensions of health.

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XALQ OG‘ZAKI IJODINING TARIXIY SHAKLLANISHI, TARAQQIYOTI VA UNING BOLA TARBIYASIDAGI AHAMIYATI

Buxoro davlat universiteti pedagogika kafedrası o‘qituvchisi
Umurova Ma’rifat Yoshiyevna (m.y.umurova@buxdu.uz)
Buxoro davlat universiteti 5-3TAR-23 guruh talabasi
Teshayeva Layloxon Alijon qizi

Ushbu maqolada o‘zbek og‘zaki folklorining shakllanishi va rivojlanishining tarixiy bosqichlari, uning janr xilma-xilligi va badiiy xususiyatlari o‘rganiladi. Yosh avlodni tarbiyalashda, milliy o‘ziga xoslikni shakllantirishda, shaxsning axloqiy va estetik fazilatlarini shakllantirishda folklorning roliga alohida e’tibor qaratilgan. XX asr yetakchi o‘zbek folklorshunoslarining asarlari tahlil qilinadi va og‘zaki folklorning ta’lim vazifasi aniqlanadi.

Kalit so‘zlar: folklor, xalq og‘zaki ijodi, ertak, doston, maqol, topishmoq, bolalar folklori, an’analar, ta’lim.

Kirish: Har bir xalqning madaniyati, ma’naviyati va milliy o‘ziga xosligini belgilovchi eng muhim omillardan biri – bu uning og‘zaki ijodidir. Xalq og‘zaki ijodi asrlar davomida avlodlardan avlodga og‘zaki tarzda o‘tib, xalqning dunyoqarashi, orzu-umidlari, ezgu g‘oyalari va hayotiy tajribalarini o‘zida mujassam etib kelgan. Doston, ertak, topishmoq, maqol, qo‘shiq, afsona va rivoyatlar kabi og‘zaki ijod namunalari xalq tafakkurining mahsuli sifatida nafaqat badiiy-estetik qadriyat, balki tarbiyaviy ahamiyatga ham ega.

Xalq og‘zaki ijodi tarixiy jarayonlarda xalqning ijtimoiy hayoti, turmush tarzi va ma’naviy qadriyatlari bilan chambarchas bog‘liq holda shakllanib, taraqqiy etgan. Ayniqsa, bu bebaho merosning bola tarbiyasidagi o‘rni beqiyosdir. Chunki og‘zaki ijod orqali bolalarga ezgulik, mehnatsevarlik, halollik, jasorat, vatanparvarlik kabi yuksak insoniy fazilatlar singdirilgan. Ertak va qo‘shiqlar orqali bolalar hayotni, insoniy munosabatlarni, yaxshilik va yomonlik mohiyatini anglaydilar.

Bugungi kunda xalq og‘zaki ijodining tarbiyaviy imkoniyatlaridan samarali foydalanish, uni maktabgacha ta’lim va umumta’lim tizimida keng qo‘llash, yosh avlodni milliy ruhda tarbiyalashda muhim omil hisoblanadi. Shu sababli xalq og‘zaki ijodining tarixiy shakllanishi, taraqqiyoti hamda uning bola tarbiyasidagi o‘rni va ahamiyatini o‘rganish dolzarb masalalardan biridir.

Xalq og‘zaki ijodi insoniyat madaniy taraqqiyotining eng qadimiy qatlamlaridan biri sifatida xalq tafakkuri, ma’naviy olami, urf-odatlar va dunyoqarashini o‘zida mujassamlashtirgan bebaho merosdir. Folklor san’ati xalq hayoti, orzu-intilishlari, mehnati, ijtimoiy munosabatlari va estetik didini aks ettiruvchi badiiy tizim bo‘lib, u asrlar davomida xalq tomonidan yaratilgan va avlodlardan avlodga og‘zaki ravishda o‘tib kelgan.

O‘zbek xalq og‘zaki ijodi o‘zining turli badiiy janrlari – ertak, doston, qo‘shiq, maqol, topishmoq, askiya, rivoyat, marosim qo‘shiqlari va boshqa shakllari orqali xalqning boy madaniy hamda ma’naviy tajribasini ifodalaydi. Ayniqsa, xalq og‘zaki ijodining bola tarbiyasidagi o‘rni beqiyosdir. U bolalarning ma’naviy kamoloti, nutq madaniyati, axloqiy fazilatlar va milliy o‘zlikni anglashini shakllantirishda muhim vosita sifatida xizmat qiladi.

Adabiyot tahlili va metodologiya: O'zbek folklorshunosligi fani XX asr boshlarida shakllanib, bugungi kunda mustaqil ilmiy yo'nalishga aylangan. Folklor atamasi 1846-yilda ingliz olimi Uilyam Toms tomonidan "xalq donoligi" ma'nosida ilmiy muomalaga kiritilgan. O'zbek folklorshunosligining shakllanishida G'ozim Olim Yunusov, Hodi Zarifov, M. Afzalov, F. Karomatov, M. Saidov, K. Imomov, R. Muhammadiyev singari olimlar muhim o'rin tutgan.

G'. O. Yunusov 1922-yilda Fozil Yo'ldosh o'g'li va Ergash Jumanbulbul o'g'lidan "Alpomish" dostonining parchasini yozib olib, o'zbek eposshunosligiga asos soldi. H. Zarifov esa folklorshunoslik fanining nazariy asoslarini ishlab chiqdi hamda V. M. Jirmunskiy bilan hamkorlikda "O'zbek xalq qahramonlik eposi" nomli fundamental tadqiqotni yaratdi.

Metodologik jihatdan ushbu tadqiqot taqqoslama-tarixiy, tahliliy va tizimli yondashuvlarga tayangan holda olib boriladi. Xalq og'zaki ijodi namunalarining tahlilida ularning badiiy, tarbiyaviy va ijtimoiy funksiyasi aniqlanadi. Shuningdek, janrlarning bola tarbiyasidagi psixologik-pedagogik ta'siri xalq pedagogikasi nazariyasi asosida o'rganiladi.

Muhokama Folklor san'ati insoniyatning madaniy merosi sifatida xalq hayoti, turmushi, mehnati va ruhiy kechinmalari bilan bevosita bog'liq bo'lib, inson tafakkurining tarixiy bosqichlarini badiiy ifodalaydi. O'zbek xalq og'zaki ijodi turli janrlarga bo'linadi va har bir janr o'ziga xos tarbiyaviy, estetik va ma'naviy funktsiyaga ega.

Doston va rivoyatlar Dostonlar va rivoyatlar xalqning tarixiy voqealari, qahramonlik an'analari va urf-odatlarini badiiy shaklda ifodalaydi. Masalan, "Alpomish", "G'iyosiy" kabi dostonlar orqali bolalar jasorat, fidoyilik, sadoqat va vatanparvarlik kabi fazilatlarni o'rganadilar. Rivoyatlar esa voqealarni sodda va ixcham shaklda hikoya qilib, tafakkur va xotira qobiliyatini rivojlantiradi.

Ertak va afsonalar Ertaklar xalq orzulari va axloqiy qadriyatlarini badiiy tarzda aks ettiradi. Unda yaxshilik va yomonlikning kurashi, ezgulikning g'alabasi orqali bolalarga axloqiy g'oyalar yetkaziladi. Bolalar ertaklar orqali to'g'rilik, mardlik, sabr-toqat, halollik kabi fazilatlarni o'zlashtiradi. Afsonalar esa tabiat hodisalari, inson va olam munosabatlari bilan bog'liq bo'lib, bolalarda tasavvur va fikrlash doirasini kengaytiradi.

Maqollar va hikmatli so'zlar Maqollar xalqning donoligi va hayotiy tajribasining ixcham badiiy ifodasi hisoblanadi. Masalan, "Odob – oltindan qimmat", "Mehnatdan kelsa boylik, turmush bo'lar chiroyli" kabi maqollar axloqiy qadriyatlarni, mehnatsevarlik va vatanparvarlik g'oyalarini targ'ib etadi. Hikmatli so'zlar esa bolalarni mulohaza yuritishga, mantiqiy tafakkurga o'rgatadi.

Topishmoqlar va tez aytishlar Topishmoqlar bolalarda mantiqiy fikrlash, kuzatuvchanlik va nutq aniqligini rivojlantiradi. Tez aytishlar esa talaffuzni mustahkamlash, og'zaki nutq tezligini oshirish va ijodiy tafakkurni rag'batlantirishga xizmat qiladi. Bu janrlar bolalarning tafakkur doirasini kengaytiradi va nutq madaniyatini shakllantiradi.

Qo'shiqlar va marosim qo'shiqlari Xalq qo'shiqlari ruhiy kechinmalarni, mehnat jarayonini va mavsumiy marosimlarni ifodalaydi. Masalan, "Sust xotin", "Choy momo" kabi marosim qo'shiqlari xalqning tabiat va hayot haqidagi qadimiy qarashlarini ifodalaydi. Bolalar bu qo'shiqlar orqali estetik zavq olish bilan birga, an'anaviy urf-odatlar va madaniyat bilan tanishadi.

Bolalar folklori — hazil-mutoyiba, askiya, ertak, qo'shiq va o'yin shakllaridan iborat bo'lib, bolalarning ijodiy fikrlashini, muloqot madaniyatini va jismoniy faoliyatini rivojlantiradi. Shu bilan birga, bolalar folklori orqali ularning axloqiy va ma'naviy tarbiyasi mustahkamlanadi.

Xalq pedagogikasining mujassamligi O'zbekiston folklor janrlarida xalq pedagogikasining barcha turlari — aqliy, axloqiy, mehnat, estetik va jismoniy tarbiya elementlari mujassam. Shu jihatdan folklor milliy tarbiya tizimining eng qadimiy va tabiiy shakli sifatida e'tirof etiladi.

Bundan tashqari, xalq og'zaki ijodi janrlarida xalq pedagogikasining barcha turlari – aqliy, axloqiy, mehnat, estetik va jismoniy tarbiya elementlari mujassam. Shu jihatdan folklor milliy tarbiya tizimining eng qadimiy va tabiiy shakli sifatida e'tirof etiladi.

Natija: O'zbek xalq og'zaki ijodi — bu xalqning tarixiy tafakkuri, axloqiy qarashlari, milliy qadriyatlari va estetik didining badiiy ifodasidir. Og'zaki ijod namunalarida jamiyatning turli davrlardagi hayotiy tajribalari, insoniy fazilatlari va madaniy qadriyatlari aks etadi. Shu sababli, xalq og'zaki ijodi nafaqat adabiy meros, balki tarbiyaviy va ma'naviy resurs sifatida ham katta ahamiyatga ega.

Har bir janrning o'ziga xos tarbiyaviy va estetik funksiyasi mavjud. Masalan, ertaklar va rivoyatlar bolalarda axloqiy qadriyatlarni shakllantirsa, maqollar va latifalar tafakkur va mulohaza yuritish qobiliyatini rivojlantiradi. Bu janrlar yosh avlodni milliy ruhda tarbiyalashda samarali vosita hisoblanadi.

Folklorshunoslik fani XX asr boshlaridan boshlab ilmiy tizim sifatida shakllangan. H. Zarifov, G'. O. Yunusov, M. Afzalov, R. Muhammadiyev kabi olimlarning tadqiqotlari sohaning nazariy asoslarini yaratgan bo'lib, xalq og'zaki ijodining turli janrlarini tizimli o'rganish, ularning tarbiyaviy va madaniy ahamiyatini aniqlashga xizmat qiladi.

Xalq og'zaki ijodi namunalaridan ta'lim-tarbiya jarayonida foydalanish bolalarda milliy g'urur, vatanparvarlik, halollik, mehnatsevarlik va boshqa ijobiy fazilatlarni shakllantiradi. Shu bilan birga, og'zaki ijod bolalarning nutqini rivojlantirish, tafakkurini kengaytirish va ijodiy fikrlash qobiliyatini oshirishda samarali vosita sifatida xizmat qiladi.

Tadqiqot shuni ko'rsatdiki, og'zaki ijod namunalarini darslarda va tarbiyaviy mashg'ulotlarda tizimli ravishda qo'llash nafaqat ma'naviy va madaniy rivojlanishga, balki o'quvchilarning individual ijodiy salohiyatini rivojlantirishga ham yordam beradi.

Yuqoridagi xulosalar shuni ko'rsatadiki, xalq og'zaki ijodi milliy merosni saqlash va yosh avlodni tarbiyalashda muhim vosita sifatida samarali ishlatilishi mumkin.

Xulosa: Xalq og'zaki ijodi o'zbek milliy madaniyati va ma'naviyatining ajralmas qismidir. U asrlar davomida xalq hayoti, turmush tarzi, orzu-intilishlari va dunyoqarashini o'zida mujassam etgan bebaho ma'naviy meros sifatida xalq tafakkurining eng yorqin ifodasidir. O'zbek folklori o'zining janr xilma-xilligi, badiiy mukammalligi va g'oyaviy yuksakligi bilan xalqning ijtimoiy hayoti, ruhiy dunyosi va axloqiy qadriyatlarini chuqur aks ettiradi.

Xalq og'zaki ijodi asarlarida insonparvarlik, mehnatsevarlik, halollik, vatanparvarlik, sabr-toqat, do'stlik, mehr-oqibat kabi umuminsoniy qadriyatlar tarannum etilgan. Shu bois folklor asarlari yosh avlodni ma'naviy barkamollikka, ezgulikka va yurtga sadoqat ruhida tarbiyalashda beqiyos ahamiyat kasb etadi. Ertak, maqol, topishmoq, doston, qo'shiq va afsonalar orqali bolalar hayotiy tajriba orttiradilar, milliy madaniyat va an'analar mohiyatini anglaydilar, o'z xalqining ma'naviy ildizlariga yanada yaqinlashadilar.

Bugungi globallashtirish sharoitida xalq og'zaki ijodiga bo'lgan e'tiborni kuchaytirish, uni yoshlar ma'naviy hayotining tarkibiy qismiga aylantirish nihoyatda muhimdir. Folklor an'analarini qayta tiklash, ularni ta'lim-tarbiya jarayoniga integratsiya qilish milliy o'zlikni saqlab qolish, yoshlarning

ma'naviy immunitetini mustahkamlash va ularni yot g'oyalardan asrashning samarali vositasi hisoblanadi.

Shu bois xalq og'zaki ijodini chuqur o'rganish, uni zamonaviy pedagogik yondashuvlar bilan uyg'unlashtirish, maktab va maktabgacha ta'lim tizimida keng qo'llash orqali yosh avlodni ma'naviy barkamol, milliy g'urur va vatanparvarlik ruhida tarbiyalash mumkin. Xalq ijodiy merosini asrab-avaylash va kelajak avlodga yetkazish – har birimizning ma'naviy burchimizdir.

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THE ROLE OF SKILLED PROFESSIONALS IN DEVELOPING THE INTELLECTUAL SERVICES MARKET

Miyassarov Davron Abdurashid ugli – researcher and basic doctoral candidate in the department of “Human Resource Management” at the Institute for Human Resources and Mahalla Development Management, Samarkand state university named after Sharof Rashidov

E-mail: davronmiyassarov93@gmail.com

ORCID 0009 – 0001 – 3681 – 3594

Phone: +99897–916–89–98

Abstract: *The intellectual services market is one of the key drivers of modern economic growth, innovation, and competitiveness. Skilled professionals play a crucial role in shaping, expanding, and maintaining this market by providing high-value services that require specialized knowledge, creativity, and analytical capability. This article examines the significance of skilled professionals in the development of the intellectual services market, explores their contribution to innovation and knowledge transfer, and analyzes the main challenges related to human capital development in this sector. The findings indicate that continuous education, digital competence, and global collaboration are essential to strengthening intellectual service capacities and ensuring sustainable economic advancement.*

Keywords: *skilled professionals, intellectual services, knowledge economy, innovation, human capital development, competitiveness, education, people.*

INTRODUCTION.

In the modern global economy, the intellectual services market has emerged as one of the most dynamic and influential sectors, directly shaping national competitiveness and innovation capacity. Unlike traditional markets that depend on physical resources and manual labor, the intellectual services market relies primarily on human intellect, creativity, and professional expertise. Services such as consulting, information technology, education, research, design, and legal advising have become essential components of economic development, contributing significantly to both productivity and the creation of knowledge-based value. Skilled professionals are therefore at the center of this transformation, as they possess the specialized competencies and analytical abilities required to generate innovative solutions and maintain high-quality service standards. Their intellectual contributions not only enhance organizational

efficiency but also foster technological advancement and social progress. In the context of the global knowledge economy, the development and sustainability of the intellectual services market depend heavily on the availability of such professionals who can integrate science, technology, and creativity into practical applications. Consequently, understanding the role of skilled professionals in developing the intellectual services market is essential for shaping effective education systems, labor policies, and innovation strategies that support long-term economic growth.

Main part.

The intellectual services market represents a sphere where the primary resource is human knowledge and creativity, making skilled professionals the cornerstone of its success. Unlike traditional production sectors, intellectual services are intangible and require deep analytical thinking, problem-solving ability, and innovation. Skilled professionals—such as consultants, IT engineers, economists, educators, researchers, designers, and legal experts—create intellectual value through the application of specialized knowledge to complex problems. Their expertise not only drives productivity and innovation within organizations but also enhances the overall competitiveness of national economies.

One of the defining characteristics of the intellectual services market is its reliance on continuous learning and knowledge exchange. Professionals in this sector must constantly update their skills to meet evolving technological and organizational demands. Rapid advancements in information and communication technologies, artificial intelligence, and automation have reshaped the structure of intellectual services, requiring specialists who can integrate digital tools with critical thinking and creativity. Consequently, professional development programs, online learning platforms, and academic-industry partnerships have become key instruments for maintaining the professional competence necessary to compete in a globalized market. In addition, the intellectual services market plays a pivotal role in promoting innovation and technology transfer. Skilled professionals act as mediators between scientific discoveries and their practical applications. For example, in research and development (R&D) sectors, engineers and scientists collaborate to transform theoretical knowledge into products, patents, and solutions that meet market needs. Similarly, consultants and analysts contribute to strategic decision-making by interpreting data and providing insights that enhance organizational efficiency. The intellectual contribution of such experts stimulates innovation ecosystems and strengthens the foundations of the knowledge economy.

Furthermore, the intellectual services market encourages international cooperation and global knowledge exchange. Skilled professionals often participate in transnational projects, online collaborations, and digital outsourcing, which facilitate the flow of ideas and expertise across borders. This global interaction helps developing countries accelerate their intellectual and technological development through exposure to advanced practices. However, this also leads to challenges such as “brain drain,” where talented professionals migrate to regions with better career opportunities. To counter this, governments and institutions must create favorable conditions for skilled labor retention, including attractive salaries, research funding, and professional growth opportunities.

Education systems play a decisive role in supplying the intellectual services market with qualified personnel. Universities and vocational training centers must align curricula with market needs, emphasizing creativity, communication, digital literacy, and critical thinking. Additionally, partnerships between educational institutions and businesses enable students to gain practical experience while still in training, thereby improving their employability in knowledge-based industries. Continuous reform of education policies is therefore essential to ensure that graduates possess the competencies demanded by modern intellectual markets.

Finally, the intellectual services market is closely tied to economic sustainability and innovation policy. Skilled professionals are key drivers of economic diversification, enabling the transition from resource-dependent economies to innovation-oriented ones. Their intellectual capital contributes to improved governance, effective management systems, and enhanced global competitiveness. Therefore, investing in human capital through education, training, and research incentives is not merely a social priority but an economic necessity.

In summary, the main factor behind the expansion and efficiency of the intellectual services market is the active participation of skilled professionals who apply their expertise to generate, manage, and distribute knowledge. Their contributions shape innovation ecosystems, stimulate technological advancement, and ensure the sustainable development of the knowledge economy on both national and global scales.

Conclusion.

The development of the intellectual services market is inseparably linked to the presence, competence, and creativity of skilled professionals. Their knowledge, analytical ability, and innovative mindset form the backbone of modern economies that increasingly depend on ideas rather than material resources. Skilled professionals not only provide specialized services but also act as catalysts of innovation, technology

transfer, and organizational transformation. Through their intellectual efforts, they enhance productivity, support sustainable growth, and contribute to building a competitive national economy.

To ensure the continued growth of the intellectual services market, governments, educational institutions, and private organizations must prioritize the cultivation of human capital. This includes strengthening systems of higher and professional education, investing in research and development, and promoting lifelong learning programs that keep specialists updated with global technological trends. Moreover, policies aimed at preventing brain drain and supporting talent retention are critical to maintaining a robust intellectual workforce.

Ultimately, the success of the intellectual services market depends on how effectively a country nurtures, empowers, and utilizes its skilled professionals. By fostering innovation-friendly environments, encouraging cross-sector collaboration, and integrating education with industry needs, nations can transform intellectual potential into sustainable economic and social progress. In this way, skilled professionals will continue to serve as the driving force behind the evolution of the global knowledge economy.

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TALABALARDA STRESSGA BARQARORLIKNI OSHIRISH VA STRESSNI KELITIRIB CHIQUARUVCHI OMILLAR

Erkinova Bashorat Sirojiddinovna

Samarqand davlat tibbiyot universiteti talabasi

Saidmuratova Shahrizoda Sayfiddinovna

Samarqand davlat tibbiyot universiteti talabasi

Baxodirov Javoxir Erkinovich

Samarqand davlat tibbiyot universiteti talabasi

Mavzuning dolzarbligi. Talabalik davri yoshlikning eng muhim bosqichlaridan biri bo'lib, o'quv jarayonlari davomida turli stress omillarining ta'siri talabaning salomatligi va ta'lim jarayonlariga jiddiy ta'sir ko'rsatadi. Stressning zararli ta'sirlarini o'rganish va stressga barqarorlikni oshirish bugungi kunda dolzarb masala hisoblanadi.

Tadqiqot maqsadi, Oliy o'quv yurtlari talabalarida stressga barqarorlikni oshirish imkoniyatlarini o'rganish hamda stressni keltirib chiqaruvchi omillarni aniqlash va ularni bartaraf etish bo'yicha samarali choralarni ishlab chiqish.

Tadqiqot materiali va usullari. Tadqiqot Surxondaryo, Qashqadaryo va Samarqand viloyatlaridagi oliy ta'lim muassasalarida olib borildi. Unda jami 112 nafar 1-kurs talabalari ishtirok etdi. Ishtirokchilar eksperimental guruh (TG, 67 nafar) va nazorat guruhi (NG, 45 nafar)ga ajratildi. Talabalarining stress holatini baholash uchun maxsus anketa va "Talabalik davrining stress omillari" metodikasi qo'llanildi.

Tadqiqot natijalari:

- Talabalarda stressni keltirib chiqaruvchi 17 ta asosiy omil aniqlangan, jumladan, yangi muhitga moslashish, katta o'quv yuklamasi, moliyaviy muammolar, oiladan uzoqda yashash, shaxsiy hayot muammolari.
- Kichik kurs talabalari o'quv faoliyati bilan bog'liq stressogen omillarga ko'proq duch kelishi qayd etilgan.
- Eksperimental guruh talabalari psixokorreksiya amaliyoti natijasida stress darajasini pasaytirishga erishgan, nazorat guruhida esa bunday o'zgarish kuzatilmagan.

Xulosa. Stressga barqarorlikni oshirish talabalik davrida ta'lim jarayonlarining muvaffaqiyatli kechishini ta'minlaydi. Talabalarga stressni kamaytirish uchun jismoniy mashqlar, to'yib uxlash, kitob o'qish kabi usullar tavsiya etiladi. Tadqiqot natijalari stressni kamaytirishga qaratilgan chora-tadbirlarning samaradorligini ko'rsatdi. Stressning zararli va foydali jihatlarini aniqlash talabaning shaxsiy rivojlanishi va salomatligini mustahkamlashga xizmat qiladi.

THE ROLE OF ORGANIZATIONAL CULTURE IN COMPANY ACTIVITIES

Islamova Xurshida Rustam qizi

Master's student of Kimyo International University in Tashkent

ABSTRACT

This article is devoted to the analysis of organizational culture. Under the conditions of economic modernization, current scientific publications on theories and models of organizational culture were studied to determine ways of analyzing and developing organizational culture in companies. The study of organizational culture made it possible to gain a deeper understanding of how organizations function internally and adapt to changing external environments. The article begins with an analysis of empirical patterns observed in organizational cultures around the world and presents general conclusions about their manifestation in companies in Uzbekistan.

Keywords: organizational culture, employees, organizational effectiveness

INTRODUCTION

In the context of the transition of our country to a market economy, the most important and valuable resource of any organization is its employees—those who are hired with the primary goal of ensuring a stable position in the market and achieving sustainable development. In this regard, organizational culture serves as the most effective tool for purposeful management of personnel within the organization.

Organizational culture is closely linked to employee satisfaction and motivation. When employees feel part of a team and share common values, it directly affects their performance and productivity. Many organizations strive to develop and implement an effective organizational culture that contributes to success. Indeed, organizational culture gives a company a distinctive image in the eyes of clients, partners, and competitors—an important factor in ensuring competitiveness in the market. In the current stage of economic reforms in the Republic, increasing attention is being paid to the organization of labor in service enterprises and the rational use of factors that contribute to its development. Among such factors, scientific studies on the effective use of the inexhaustible capabilities inherent in human beings are particularly significant. The relevance of the topic arises from the need to organize, analyze, and develop organizational culture in enterprises that form the foundation of the service sector. The research problem addressed in the article is determining how organizational culture can be analyzed and developed in companies under conditions of economic modernization, especially within Uzbekistan's evolving market environment.

The purpose of this research is to analyze the organizational culture of companies under the conditions of economic modernization.

Research objectives:

- To analyze existing literature on the topic of organizational culture;
- To identify ways of developing organizational culture in modern business.

Literature review. It is generally accepted that the concept of “organizational culture” was first introduced by the German general and theorist Helmuth von Moltke. By this term, he referred to the moral norms, traditions, and behavioral standards among officers that gave strength and stability to the German army.

The systematic study of organizational culture began in the 1970s–1980s, when the works of the founders of this field appeared, including W. Ouchi, T. Peters, E. Schein, T. Deal, A. Kennedy, D. Denison, and Geert Hofstede.

In the 1980s, William Ouchi and Tom Peters, based on extensive research by leading economists, concluded that companies with strong organizational cultures tend to be more successful than those with weak ones. This finding led to increased global attention to the issue.

In 1980, American management professor Edgar Schein developed a model of organizational culture that made it possible to better define and analyze it, as well as to identify steps necessary for cultural change. According to Schein, organizational culture is influenced by both direct and indirect mechanisms. Direct mechanisms include roles, opinions, status, and environment; indirect mechanisms, while not acting directly, are crucial and include the company's mission, vision, formal guidelines, rituals, and structures. From this period onward, global interest in organizational culture increased significantly.

In 1982, Terrence Deal and Allan Kennedy proposed the first comprehensive model of organizational culture. They identified six interrelated cultural elements: history, values and beliefs, rituals and customs, corporate stories, hero figures, and cultural networks.

In 1990, Daniel Denison studied the relationship between organizational culture and key business indicators such as return on investment, sales growth, quality, innovation, and employee satisfaction. Dutch researcher Geert Hofstede conducted surveys in over 40 (later more than 60) countries, involving more than 160,000 managers and employees, examining their attitudes toward work, colleagues, leadership, and workplace problems. His analysis revealed significant differences in managerial behavior across nations: "Many differences in work values and attitudes are explained by national culture, as well as by employees' positions, professions, age, and gender."

In recent years, a number of dissertations have explored organizational culture in greater depth. Research by A.K. Gastev stands out for introducing new perspectives on this issue. He wrote: "An employee's general culture is a necessary condition for his or her production, labor, and organizational culture." From this, it follows that the organizational culture of a company is influenced by external factors—particularly the cultural development of society. Gastev demonstrated the relationship between an employee's general cultural level and his or her technical culture, production culture, and behavior within the work collective.

Research methodology. The study employed the induction, analysis, and comparison methods.

Research results. An analysis of scientific publications shows that organizational culture in global companies is a multidimensional phenomenon encompassing structural, behavioral, and symbolic elements. Several common characteristics can be observed across countries and regions.

First, global trends demonstrate a movement toward flexibility, innovation, and employee participation. In many developed economies, organizations tend to adopt decentralized structures that promote open communication, shared responsibility, and personal development. Such approaches enable organizations to respond effectively to complex and rapidly changing environments.

Second, the alignment of values between employees and organizations is increasingly recognized as essential. Research on corporate behavior indicates that when employees identify with their organization's mission and values, their motivation and performance levels rise. This alignment contributes to the creation of cohesive and adaptive cultures that support both individual and

collective success.

Third, there is a growing emphasis on ethical standards and corporate social responsibility as integral components of organizational culture. Globally, organizations are embedding ethical principles and social awareness into their operational and strategic processes. This reflects an understanding that sustainable success depends not only on financial outcomes but also on long-term social and environmental contributions.

From these observations, it can be concluded that organizational culture in the global context functions as a strategic asset that ensures adaptability, coherence, and long-term competitiveness.

In Uzbekistan, organizational culture has been shaped by historical, social, and economic factors. The transition to a market economy and increasing integration into global markets have led to gradual transformations in organizational values and management practices.

Traditionally, organizational culture in Uzbekistan has been characterized by collectivism, respect for authority, and strong interpersonal loyalty. Hierarchical relationships and formal communication patterns have played a central role in maintaining order and stability within organizations. While such characteristics promote reliability and discipline, they may also limit openness to innovation and participatory decision-making.

In recent years, however, the organizational environment in Uzbekistan has undergone significant changes. The expansion of private enterprises, foreign investment, and exposure to international standards have stimulated the emergence of more flexible and adaptive cultural models. Organizations are increasingly recognizing the importance of teamwork, professional development, and transparency.

At the same time, many Uzbek companies are striving to balance global management practices with local cultural values. This synthesis has resulted in the formation of hybrid organizational cultures that combine efficiency-oriented global norms with traditional principles of mutual respect, social harmony, and collective responsibility.

Conclusion. Through the inductive study of organizational culture worldwide and in Uzbekistan, several generalized conclusions can be drawn:

Global organizational culture prioritizes innovation, openness, and ethical responsibility, enhancing flexibility and competitiveness.

Uzbek organizational culture is in a state of transformation, gradually integrating global trends while preserving traditional social values.

The inductive analysis of organizational cultures across the world and within Uzbekistan shows that while globalization promotes the spread of common cultural elements such as openness, innovation, and ethical awareness, local traditions continue to have a significant influence on organizational behavior.

For companies in Uzbekistan, the ongoing challenge is to develop organizational cultures that integrate international best practices while maintaining harmony with national identity and social values. Such an approach enables organizations to achieve sustainable growth, internal cohesion, and competitiveness in the global economy.

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SINEKDOHA, O'XSHATISH VA KINOYA: ULARNING BADIY VA IFODA VOSITASI SIFATIDAGI O'ZARO BOG'LIQLIGI

Ilmiy rahbar: Egamberdiyeva I

ADCHTI dotsenti

Abdullayeva Go 'yo

ADCHTI talabasi

Annotatsiya: Ushbu maqolada badiiy adabiyotda qo'llaniladigan sinekdoha, o'xshatish va kinoya kabi badiiy va ifodaviy vositalarning o'zaro bog'liqligi tahlil qilinadi. Har uchala vosita ham tasviriylik, mazmun chuqurligi va muallifning estetik niyatini ifodalashda muhim o'rin tutadi. Maqolada sinekdoha — butun o'rniga qismni yoki qism o'rniga butunni ifodalash vositasi sifatida, o'xshatish — ikki narsa orasidagi o'xshashlikni taqqoslash orqali obrazlilik yaratish vositasi sifatida, hamda kinoya — yashirin ma'no orqali muallif munosabatini ifodalovchi vosita sifatida o'rganiladi. Ularning o'zaro uyg'unligi badiiy matnning ifoda kuchini oshiradi, estetik ta'sirini kuchaytiradi va o'quvchi tafakkurida yangi ma'no qatlamlarini yuzaga keltiradi.

Kalit so'zlar: sinekdoha, o'xshatish, kinoya, badiiy vosita, ifoda vositasi, tasviriylik, obrazlilik, estetik ta'sir, badiiy tahlil, stilistika.

Abstract: This article analyzes the interrelation of synecdoche, simile, and irony as artistic and expressive devices in literary texts. All three serve an essential role in enhancing imagery, semantic depth, and the author's aesthetic intention. The study examines synecdoche as a device expressing a whole through a part or a part through a whole; simile as a means of creating vivid imagery through comparison; and irony as a tool that conveys hidden meanings and authorial attitude. The interconnection of these stylistic devices enhances the expressive power of literary language, intensifies its aesthetic impact, and reveals deeper layers of meaning in the reader's perception.

Keywords: synecdoche, simile, irony, stylistic device, expressive means, imagery, figurativeness, aesthetic effect, literary analysis, stylistics.

Аннотация: В данной статье анализируется взаимосвязь синекдохи, сравнения и иронии как художественных и выразительных средств в литературных текстах. Все три средства играют важную роль в усилении образности, глубины содержания и эстетического замысла автора. В исследовании синекдоха рассматривается как средство выражения целого через часть или части через целое; сравнение — как способ создания яркого образа посредством сопоставления; ирония — как средство передачи скрытого смысла и авторского отношения. Взаимодействие этих стилистических средств усиливает выразительность художественного языка, повышает его эстетическое воздействие и раскрывает новые смысловые уровни в восприятии читателя.

Ключевые слова: синекдоха, сравнение, ирония, художественное средство, выразительное средство, образность, эстетическое воздействие, стилстика, литературный анализ, поэтика.

Badiiy adabiyotda ifoda vositalari — muallifning fikrini aniq, jonli va tasviriy tarzda yetkazish imkonini beruvchi asosiy elementlardir. Ular matnga nafaqat estetik go'zallik bag'ishlaydi, balki

o'quvchining tafakkurini rivojlantiradi, hissiy reaksiyasini uyg'otadi va matn mazmunidagi yashirin qatlamlarni ochib beradi.

Sinekdoxa, o'xshatish va kinoya kabi vositalar badiiy matnda turli funksiyalarni bajaradi: bir tomondan matnni ixcham va ritmik qiladi, boshqa tomondan esa chuqur ma'no, drammatizm va hissiy tasir yaratadi. Ularning birgalikda ishlatilishi esa matnni yanada murakkab, boy va ifodali qiladi.

Tadqiqotning maqsadi shundan iboratki, har bir vositaning nazariy asosini ochib berish, badiiy matnda praktik qo'llanilishini ko'rsatish va ularning o'zaro interaktiv bog'liqligini tahlil qilishdir.

Sinekdoxa va uning badiiy roli

Sinekdoxa — bu butunni qism orqali yoki qismni butun orqali ifodalash vositasi bo'lib, badiiy matnga ixchamlik, ritm va simvolik qatlam kiritadi. Bu vosita matnga ramziylik va metaforik chuqurlik qo'shadi.

Misol tariqasida, “Qo'l ostidagi ishchilar” iborasi faqat ishchilar guruhining bir qismini ko'rsatadi, lekin o'quvchi bu orqali butun jamiyat yoki butun ishchi toifasini tasavvur qiladi. Shu tarzda sinekdoxa o'quvchining tafakkurini rag'batlantiradi, matnni soddalashtiradi va diqqatni asosiy detalga qaratadi.

Bundan tashqari, sinekdoxa orqali ijtimoiy, tarixiy va madaniy kontekstlar ham matnga kiritilishi mumkin. Masalan, “boshi” so'zi faqat tana a'zosi sifatida emas, balki yetakchi yoki rahbar ma'nosida ishlatiladi, bu esa matnga simvolik qatlam qo'shadi. Shu bilan birga, sinekdoxa ko'pincha metaforalar bilan uyg'un ishlatiladi, bu esa matnning badiiy qiyofasini boyitadi va o'quvchi tafakkurini kengaytiradi.

O'xshatish va uning ifodaviy kuchi

O'xshatish — bu ikki ob'ekt yoki hodisa orasidagi o'xshashlikni taqqoslash orqali obraz yaratish vositasi. U matnga tasviriylilik, hissiy kuch va vizual boylik beradi. Masalan, “U yulduzdek porlab turardi” jumlasida inson yulduz bilan taqqoslanadi. Bu nafaqat uning tashqi ko'rinishi yoki yorqin tabiati haqida tasavvur beradi, balki o'quvchida ob'ektlar orasidagi metaforik bog'liqlikni tushunish imkonini yaratadi. Shu tarzda o'xshatish matnga jonlilik va ritm qo'shadi.

Badiiy matnda o'xshatish murakkab tushunchalarni soddalashtirishda, tabiiy hodisalarni hissiy jihatdan tasvirlashda, shuningdek, psixologik portretlarni yaratishda muhim vosita hisoblanadi. Masalan, inson ruhiy holatini tabiiy hodisalar bilan taqqoslash orqali o'quvchi ichki dunyoni yanada aniqroq anglaydi. Shu bilan birga, o'xshatish badiiy nutqni ritmik, estetik jihatdan boy qiladi va voqealarni jonli qiladi.

Kinoya va uning estetik roli

Kinoya — bu yashirin, qarama-qarshi ma'no orqali muallif fikrini ifodalash vositasi. U matnga ikkinchi qatlamdagi ma'no, drammatizm va tanqidiy tus beradi.

Masalan, “Sen juda aqli ekansan” jumlasida kontekstga qarab haqiqiy maqtov yoki kinoya sifatida tushunilishi mumkin. Kinoya matnga ijtimoiy, siyosiy yoki madaniy tanqidni yashirin tarzda kiritish imkonini beradi. Shu bilan birga, kinoya badiiy dialog va ichki monologlarda ishlatilganda, matnga jonlilik, subtil hazil va hissiy murakkablik qo'shadi.

Kinoya yordamida muallif matndagi voqealarni ikkiqat ma'noda ifodalaydi: bir tomondan soddalashtirilgan tasvir, ikkinchi tomondan esa yashirin yoki qarama-qarshi fikr. Bu vosita matnga o'quvchining tafakkurini kengaytiruvchi qatlam qo'shadi va matnni yanada mazmunli qiladi.

Ularning o'zaro bog'liqligi

Sinekdoxa, o'xshatish va kinoya ko'pincha birgalikda ishlatiladi, bu esa matnga murakkab ifodaviy qatlam va estetik boylik beradi.

- Sinekdoxa butunni yoki qismni ko'rsatadi,
- Kinoya yashirin tanqid yoki qarama-qarshi ma'no qo'shadi,
- O'xshatish esa ta'sirni vizual va hissiy jihatdan kuchaytiradi.

Masalan, bir dramatik voqeada muallif biror guruhni sinekdoxa orqali ifodalaydi, shu orqali jamiyatdagi muayyan holatni ko'rsatadi, kinoya yordamida tanqidiy nuqtai nazar qo'shadi, o'xshatish esa voqeani yanada jonli va tasviriy qiladi. Shu tarzda, ularning uyg'un ishlatilishi matnga bir nechta ma'no qatlamlari, obrazlilik va hissiy ta'sir qo'shadi.

Badiiy asar tahlilida bu vositalarning uyg'unligi muallifning badiiy maqsadini yanada samarali yetkazish, matnni o'quvchi tafakkurida boy va murakkab qilish imkonini beradi. Shu sababli, sinekdoxa, o'xshatish va kinoyaning o'zaro bog'liqligi badiiy adabiyot tahlili va stilistika nuqtai nazaridan juda muhimdir. Badiiy adabiyotda ifoda vositalari — matnga mazmuniy chuqurlik va estetik boylik beruvchi eng muhim vositalardir. Sinekdoxa, o'xshatish va kinoya har biri o'zining noyob funksiyasiga ega bo'lsa-da, ularning uyg'un ishlatilishi matnga murakkab ifodaviy qatlam qo'shadi. Sinekdoxa voqealarni ixcham tarzda tasvirlash, qism orqali butunni anglatish imkonini beradi. Bu vosita orqali muallif matndagi asosiy detalga e'tiborni qaratadi va o'quvchini tafakkurga chorlaydi. Shu bilan birga, sinekdoxa ramziy va metaforik qatlamlarni hosil qilishi bilan matnga estetik go'zallik va obrazlilik qo'shadi.

O'xshatish esa murakkab tushunchalarni tasviriy va hissiy jihatdan sodda tarzda ifodalash imkonini beradi. Masalan, insonning ichki holatini tabiiy hodisalar bilan taqqoslash orqali o'quvchi uning ruhiy dunyosini chuqurroq tushunadi. Bu vosita matnga jonlilik, vizual obrazlilik va ritm bag'ishlaydi.

Kinoya esa matnga ikkinchi qatlamdagi ma'no, dramatism va tanqidiy tus qo'shadi. Shu tarzda u voqealarni qarama-qarshi kontekstda ifodalaydi, o'quvchida tafakkur va hissiy reaksiyani uyg'otadi. Sinekdoxa, o'xshatish va kinoya birgalikda ishlatilganda, matn nafaqat ifodaviy va estetik, balki o'quvchi tafakkurini boyituvchi badiiy vositaga aylanadi.

Badiiy adabiyotda ko'pincha sinekdoxa, o'xshatish va kinoya asosiy e'tibor markazida bo'ladi. Biroq, matnni yanada boyitish uchun kam ishlatiladigan stilistik vositalarni ham ko'rib chiqish lozim. Masalan, antonomaziya — shaxs nomi orqali umumiy tushunchani ifodalash vositasi, o'quvchiga qiziqarli va ramziy ta'sir beradi. Shu bilan birga, asyndeton (bog'lovchisiz ro'yxatlar yoki jumlarlar) va polysyndeton (ko'p bog'lovchilar ishlatish) kabi sintaktik vositalar matnning ritmini o'zgartiradi va hissiy ta'sirni kuchaytiradi.

Stilistik vositalardan yana biri — paralelizm. Bu, jumlarlar yoki frazalarni struktura jihatdan takrorlash orqali ritmik va obrazli ifodani kuchaytiradi. Masalan, badiiy asarlarda voqealar yoki his-tuyg'ularni izchillik bilan ta'kidlash orqali o'quvchining diqqatini muhim detallarga qaratadi.

Shuningdek, hendiadik (ikki yoki undan ortiq so'zlarni "va" orqali birlashtirib, yagona tushuncha hosil qilish) va epifora (jumla oxirida so'z yoki frazani takrorlash) kabi vositalar ham kam ishlatiladi, ammo matnga estetik boylik va dramatik ta'sir qo'shadi. Bu vositalar bilan birga sinekdoxa, o'xshatish va kinoya ishlatilsa, matn nafaqat mazmunli, balki o'quvchi uchun qiziqarli va noodatiy badiiy tajribaga aylanadi.

Badiiy matnda ifoda vositalari faqat asosiy uchlik (sinekdoxa, o'xshatish, kinoya) bilan cheklanmaydi. Kam ishlatiladigan va noodatiy vositalar ham matnning estetik va semantik boyligini oshiradi. Masalan, litota — bu inkor orqali tasdiq qilish vositasi, ya'ni kamaytirish orqali kuchli ta'sir yaratadi. Masalan, "U oddiy qiz emas edi" jumlasini bilan muallif o'quvchida uning noyobligi haqidagi tasavvur uyg'otadi.

Bu noodatiy va kam ishlatiladigan vositalar, sinekdoxa, o'xshatish va kinoya bilan uyg'un qo'llanilganda, matnni nafaqat jonli va obrazli, balki tafakkurga boy, noodatiy va qiziqarli qiladi. Shu bilan birga, ularni tahlil qilish badiiy adabiyotning stilistik va semantik jihatlarini chuqur o'rganishga yordam beradi.

Xulosa

Badiiy adabiyotda ifoda vositalari — muallifning fikrini aniq, jonli va tasviriy tarzda yetkazishning eng muhim vositasi hisoblanadi. Ushbu maqolada sinekdoxa, o'xshatish va kinoya badiiy matnda qanday ishlatilishi va ularning o'zaro bog'liqligi tahlil qilindi. Tadqiqot natijalaridan ko'rinib turibdiki, har bir vosita o'zining noyob funksiyasiga ega, ammo ularning uyg'un ishlatilishi matnni yanada boy, mazmunli va ifodali qiladi.

Sinekdoxa matnga ixchamlik, simvolik ma'no va ritm beradi. Bu vosita qism orqali butunni yoki butun orqali qismini ifodalash orqali matnga metaforik chuqurlik va ramziylik qo'shadi. Shu orqali o'quvchi matndagi asosiy detalga e'tibor qaratadi va tafakkurini rivojlantiradi.

O'xshatish esa matnga jonlilik, vizual obrazlilik va hissiy kuch bag'ishlaydi. Murakkab tushunchalarni sodda va tushunarli usulda ifodalash, voqealarni jonli va ta'sirli qilishda o'xshatishning roli katta. Shu bilan birga, u matnga ritmik va estetik qiyofa beradi, o'quvchining tasavvurini boyitadi va hissiy jihatdan jalb qiladi.

Kinoya matnga yashirin ma'no, drammatizm va tanqidiy qatlam kiritadi. U matnga ikkinchi qatlamdagi ma'no beradi, voqealarni qarama-qarshi tusda ifodalaydi va o'quvchini tafakkurga chorlaydi. Kinoya yordamida muallif matndagi ijtimoiy, siyosiy yoki madaniy kontekstlarni yashirin tarzda yetkazadi, shuningdek, badiiy dialog va ichki monologlarda matnni yanada jonli va mazmunli qiladi.

Ularining o'zaro bog'liqligi esa matnga murakkablik, ko'p qatlamlilik va ifodaviy boylik qo'shadi. Sinekdoxa, o'xshatish va kinoya birgalikda ishlatilganda, matnning mazmuni yanada chuqurlashadi, o'quvchi tafakkurida yangi ma'no qatlamlari yuzaga keladi va badiiy tajriba boyitiladi. Shu sababli, badiiy tahlilda ularning uyg'un ishlatilishi muallifning badiiy maqsadini samarali yetkazish va matnni o'quvchi uchun tushunarli, jonli va ta'sirli qilish nuqtai nazaridan juda muhimdir.

Xulosa qilib aytganda, sinekdoxa, o'xshatish va kinoya — badiiy adabiyotning asosiy ifodaviy vositalari bo'lib, matnga estetik go'zallik, chuqur ma'no va hissiy ta'sir beradi. Ularining uyg'un ishlatilishi matnni jonli, murakkab va boy qiladi, o'quvchini tafakkurga va hissiyotga chorlaydi, shuningdek, badiiy asar tahlili va stilistika nuqtai nazaridan ularni chuqur o'rganish katta ilmiy ahamiyatga ega.

FOYDALANILGAN ADABIYOTLAR

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**QON TARKIBI PLAZMA OQSILLARI LIMFA RETIKULLYAR TIZIM
BIOKIMYOSI**

Xursanov Fayozbek

Fayozxursanov2006@gmail.com

+998937795306

Ochilov Diyorbek

Diyobek2307@gmail.com

+998200004820

Saydullayev Zayniddin

zayniddinsaydullayev7@gmail.com

Toshkent Davlat tibbiyot akademiyasi termiz filiali

Davolash fakulteti talabalari

Fan o'qituvchisi

Himmatova Yangikeldi Rahmatovna

+998915762547

Annotatsiya

Qonning o'rtacha miqdori katta odamda 5 l bo'lib, u tana massasining o'rtacha 7 % ini tashkil etadi. 1 kg tana massasiga o'rtacha 70 ml qon to'g'ri keladi. Probirkaga bir tomchi geparin moddasini tomizib, ustiga 2-3 ml qon quyib, sentrifugada bir necha minut davomida aylantirilsa, u ikki qismga: ustki qismida rangsiz qon plazmasiga, pastki qismida esa qonning qizil rangdagi quyuq qismi — shaklli elementlarga ajraladi. Shunday qilib, qon ikki qismdan iborat: birinchi qismi qonning suyuq qismi, ya'ni qon plazmasi, ikkinchi qismi qonning quyuq qismi, ya'ni shaklli elementlaridir.

🔴 Plazma Oqsilarining Asosiy Turlari : «Albumin» · Ulushi: 60% (eng ko'p miqdorda) · Asosiy vazifasi: Suvni qon tomirlarida ushlab turish · Qiziqarli fakt: Agar albumin bo'lmasa, suv to'qimalarga oqib, shish paydo bo'lardi! «Globulinlar – “Qo'riqchilar va Tashuvchilar”» · Alpha va Beta globulinlar: Vitaminlar va minerallarni tashiydi. Gamma globulinlar: Immunitet tizimining “askarlari” bo'lib, virus va bakteriyalarga qarshi kurashadi. [Fibrinogen] Vazifasi: Yaralangan joyda qon

ivishini ta'minlash. Qanday ishlaydi: Yaradan so'ng fibrinogen fibringa aylanib, "to'siq" hosil qiladi. Limfa-retikulyar tizim (LRT) — organizmning immunobiokimyoviy himoya tizimi bo'lib, u limfa tomirlari, limfa tugunlari, taloq, jigar, suyak ko'migi, timus va retikuloendotelial hujayralardan tashkil topgan. Uning asosiy vazifasi – metabolitlarni tashish, immun javobni shakllantirish va toksik moddalardan organizmni himoya qilishdir.

Kalit so'zlar: Limfa retikulyar tizimi, Qon, plazma oqsillari, Qon bog'liq kasaliklar, immun kasaliklari.

Kirish

Qon — bu organizmning ichki muhitini tashkil etuvchi maxsus suyuq to'qima bo'lib, u transport, regulyator, himoya, homeostatik va termoregulyatsion funksiyalarni bajaradi. Qonning biokimyoviy tarkibi organizmning fiziologik holatini, metabolik jarayonlar faolligini va patologik o'zgarishlarni aks ettiradi. Shu sababli qon biokimyosi diagnostika, patogenezni o'rganish va davolash jarayonida asosiy o'rinni egallaydi.

«Eritrotsitlar» Miqdori: erkaklarda 4,5–5,5 mln/mm³, ayollarda 4–5 mln/mm³. Asosiy komponenti: gemoglobin (~95 % quruq modda). Biokimyoviy tuzilma: Globin (oqsil qismi) Gem (Fe²⁺ tutuvchi protoporfirin halqasi) Vazifalari: Gaz tashish: O₂ bilan birikib oksihemoglobin, CO₂ bilan karbaminohemoglobin hosil qiladi. Kislota-ishqor muvozanati: Hb tampon tizimi hisoblanadi. Biokimyoviy metabolizm: glikoliz, pentozofosfat yo'li, Na⁺/K⁺ nasosi. «Leykotsitlar»

Miqdori: 4–9 × 10⁹/l

Tarkibi: Granulositlar: neytrofillar, eozinofillar, bazofillar Agranulositlar: limfotsitlar, monotsitlar Biokimyoviy faoliyati: Neytrofillar: lizosomal fermentlar (proteaza, mieloperoksidaza) bilan bakteriyalarni parchalash. Eozinofillar: gistaminaza orqali allergik reaksiyani kamaytiradi. Limfotsitlar: immunoglobulin va sitokin sintez qiladi. Monotsit/makrofaglar: fagotsitoz, detoksikasiya, sitokin ajratish. «Trombositlar»

Miqdori: 180–400 × 10⁹/l Hosil bo'ladi: suyak ko'migida megakaryotsitlardan. Tarkibida: fosfolipidlar, serotonin, Ca²⁺, ATP, ADP, tromboplastin. Biokimyoviy ahamiyati: Qon ivishida fosfolipid platformasi yaratadi. Tromboksen A₂ sintezi orqali tomir torayishiga yordam beradi. Oqsil

komponentlari: trombostenin (aktin va miozin analogi) – ivish paytida retraksiya hosil qiladi.

Proteinemiya: Qon zardobida normal oqsil 65-85 g/l (6.5%-8.5%) Gipoproteinemiya: Qon zardobidagi oqsil miqdori kamayishi. Alimentar oqsil yetishmovchiligida jigar patologiyalarida (plazma oqsillarining asosiy qismi jigarda sintezlanadi), buyrak kasaligida (albuminuriya tufayli), kuyish jarohatida, katabolizm kuchayganda (masalan: giperterioz), gidratasiya va boshqa holatlarda kuzatiladi. Giperproteinemiya: Qon zardobidagi oqsil miqdori ortishi. Nisbiy va mutloq turlari bor. Nisbiy giperproteinemiya degidratsiyada kuzatiladi. Mutloq giperproteinemiya infeksiyon kasalliklarda (gipergammaglobulinemiya) kuzatiladi.

Asosiy qism

QON BIOKIMYOSIGA OID KASALLIKLAR: Qon biokimyosiga oid kasalliklar — bu qon tarkibi va undagi kimyoviy moddalarning, ya'ni oqsillar, yog'lar, glyukoza, fermentlar, gormonlar hamda elektrolitlarning miqdoriy va sifat jihatdan o'zgarishi bilan kechadigan kasalliklardir. Ushbu o'zgarishlar organizmning ko'plab tizimlariga, xususan, yurak-qon tomir, jigar, buyrak, endokrin hamda nerv tizimlariga salbiy ta'sir ko'rsatadi.

Anemiyalar (qon yetishmovchiligi) qonda gemoglobin miqdorining kamayishi yoki eritrotsitlar sonining kamayishi bilan xarakterlanadi. Bu holat ko'pincha temir, B12 vitamini yoki folat yetishmovchiligi tufayli yuzaga keladi. Temir tanqis anemiyada gemoglobin sintezi buziladi, megaloblast anemiyada esa B12 vitamini yoki folat yetishmasligi natijasida yadro yetilishi sekinlashadi. Gemolitik anemiyada esa eritrotsitlar erta parchalanadi va natijada bilirubin miqdori oshadi. Giperlipidemiya qonda xolesterin, trigliserid va "yomon" xolesterin (LDL) miqdorining oshishi bilan kechadi. Bu holat yurak ishemik kasalligi, ateroskleroz va insult rivojlanishiga sabab bo'ladi. Aksincha, "yaxshi" xolesterin (HDL) miqdorining kamayishi yog'larning to'planishini tezlashtiradi. Qandli diabet — glyukoza almashinuvi buzilishi natijasida qonda shakar miqdori ortib ketishi bilan xarakterlanadi. Bu holatda insulin gormoni ishlab chiqilishi kamayadi yoki to'qimalar insulinga sezuvchanligini yo'qotadi. Natijada giperlikemiya, glyukozuriya, ketoatsidoz, diabetik nefropatiya va retinopatiya kuzatiladi. Gemofiliya — irsiy o'tuvchi kasallik bo'lib, qon ivish omillaridan biri (VIII, IX yoki XI faktor) yetishmasligi tufayli qon ivish jarayoni sekinlashadi. Natijada kichik jarohatlarda ham ko'p qon ketishi mumkin. Giperurikemiya yoki podagra qonda siydik kislotasi miqdorining ortib ketishi bilan kechadi. Bu purin almashinuvi buzilganda yoki

buyrak orqali siydik kislotasi yetarli darajada chiqarilmaganda yuzaga keladi. Oqibatda siydik kislotasi kristallari bo'g'imlarda to'planib, og'riqli yallig'lanish chaqiradi. Elektrolit disbalanslar qonda natriy, kaliy, kaltsiy, magniy va xlor miqdorining o'zgarishi bilan kechadi. Gipokalemiya yoki giperkalemiya yurak ritmini buzadi, giponatremiya esa hushdan ketish, mushak spazmlari va bosh og'riqlariga olib keladi. Giperbilirubinemiya va sariqlik holatlarida bilirubin almashinuvi buziladi. Bu jigar hujayralari shikastlanishi, eritrotsitlar parchalanishi yoki o't yo'llarining to'silib qolishi natijasida paydo bo'ladi. Gemolitik sariqlik eritrotsitlar parchalanishidan, parenximatoz sariqlik jigar zararlanishidan, obstruktiv sariqlik esa o't yo'llarining to'silishi tufayli yuzaga keladi. Gemokromatoz kasalligida qonda va to'qimalarda temir ortiqcha to'planadi. Bu jigar, yurak va endokrin tizim faoliyatiga zarar yetkazadi, oxir-oqibat jigar sirrozi yoki diabetga olib kelishi mumkin. Proteinopatiyalar oqsillar almashinuvi buzilishi bilan kechadi. Gipoproteinemiya holatida qon plazmasidagi oqsillar miqdori kamayadi, bu suvsizlanish yoki jigar kasalliklari natijasida bo'ladi. Paraproteinemiya esa patologik oqsillar ishlab chiqilishi bilan xarakterlanadi, masalan, mieloma kasalligida. Fermentopatiyalar esa ma'lum fermentlarning irsiy yoki orttirilgan yetishmovchiligi bilan bog'liq bo'ladi. Masalan, glyukoza-6-fosfatdehidrogenaza yetishmovchiligida eritrotsitlar tez parchalanadi, fenilketonuriyada esa fenilalanin almashinuvi buzilib, asab tizimi zararlanadi. Limfa tarkibi plazmaga o'xshash bo'lib, asosan suv (94–96%), oqsillar (2–6 g/l), glyukoza (3–4 mmol/l), laktat, piruvat, lipidlar, elektrolitlar (Na^+ , K^+ , Ca^{2+} , Cl^- , HCO_3^-), fermentlar (dehidrogenazalar, oksidazalar, fosfatazalar, lizozim) va immun komponentlardan (limfotsitlar, immunoglobulinlar, interferon, sitokinlar) iborat. Limfaning biokimyoviy tarkibi organizmning holatiga qarab o'zgaradi: masalan, yog'li ovqatdan so'ng limfada xylomikronlar ko'payadi, infeksiya vaqtida esa oqsillar va immunoglobulinlar miqdori oshadi. Biokimyoviy jihatdan limfa-retikulyar tizimning muvozanati buzilganda limfostaz (limfa oqimining to'xtashi), limfangit (limfa tomirlarining yallig'lanishi), immun yetishmovchilik, allergik reaksiyalar va limfoma kabi kasalliklar rivojlanadi. Shu sababli limfa-retikulyar tizimning normal faoliyati organizmning umumiy homeostazini saqlashda, metabolik moddalarning transportida va immun himoyada hal qiluvchi ahamiyatga ega. Limfa-retikulyar tizim (limfa tomirlari, limfa tugunlari, taloq, timus, suyak iligi va retikuloendotelial/fagotsitar hujayralar) kasalliklarida kuzatiladigan asosiy biokimyoviy o'zgarishlar quyidagilardan iborat: yallig'lanish va sitokin firtinasi bilan bog'liq biomarkerlarning o'sishi (CRP, interleykinlar), hujayra parchalanishi va hujayra almashinuvi tezligi oshishi natijasida LDH va urat darajalarining ko'tarilishi, fagotsitar tizimning (RES)

temir metabolizmi va ferritin darajasidagi o'zgarishlar hamda humorall immunitet komponentlaridagi (gammaglobulinlar) disbalans. Yallig'lanish va sitokin profil (biokimyoviy markerlar). Limfa tugunlarining yallig'lanishi (limfadenit) yoki sistemik limfoproliferativ reaksiyalarda sitokinlar (IL-1, IL-6, TNF- α va boshqalar) hamda akutsiz faza oqsillari (CRP, fibrinogen) yuqorilaydi; bu laboratoriya jihatdan yallig'lanish darajasini va klinik og'irlikni aks ettiradi. Sitokinlar hujayra metabolizmini, glikolitik yo'llarni va energiya almashuvini o'zgartiradi. Limfa oqimi buzilishi va metabolik oqibatlar. Lymfostaz (limfa oqimining to'xtashi) natijasida to'qima metaboliti yig'ilishi va oksidativ stress markerlarining oshishi kuzatilishi mumkin; bu holat lokal biokimyoviy muhitni o'zgartirib, yallig'lanishni davom ettiradi va proteolitik fermentlar faoliyatini oshiradi.

Xulosa

Xulosa qilib aytganda, qon biokimyosiga oid kasalliklar organizmning barcha metabolik jarayonlariga ta'sir etuvchi muhim patologik holatlar bo'lib, ularni erta aniqlash va to'g'ri davolash sog'liqni saqlashda katta ahamiyatga ega. Limfa-retikulyar tizim organizmning muhim himoya va metabolik tizimlaridan biri bo'lib, uning biokimyoviy faoliyati organizmning immun holatini, oqsil, yog' va uglevod almashinuvining muvozanatini ta'minlaydi. Limfa tarkibidagi oqsillar, fermentlar, immunoglobulinlar va fagotsitar hujayralar ichki muhitning barqarorligini saqlashda asosiy rol o'ynaydi. Tizim faoliyatining buzilishi oqibatida limfostaz, limfoma, immunitet yetishmovchiligi, o'sma jarayonlari va yallig'lanish kabi patologik holatlar vujudga keladi. Ularning biokimyoviy asosi — hujayra ichidagi metabolik reaksiyalarning buzilishi, fermentlar faolligining o'zgarishi hamda oqsil va lipid almashinuvining nomutanosibligidir. Zamonaviy biokimyo fanining yutuqlari limfa-retikulyar tizim kasalliklarining molekulyar mexanizmlarini chuqur o'rganish va yangi diagnostik hamda davolash usullarini ishlab chiqishda muhim ahamiyat kasb etadi. Shu bois bu tizimning biokimyosini chuqur o'rganish nafaqat nazariy, balki amaliy tibbiyot uchun ham katta ilmiy va klinik ahamiyatga ega.

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METHODOLOGY OF USING INNOVATIVE TECHNOLOGIES IN UZBEK LANGUAGE LESSONS

Jumatova Nasiba Saburovna

Associate Professor (acting),

Department of Philology and Languages, UMFT

PhD in Philology

Abstract: The article explores the methodology of integrating innovative technologies in Uzbek language lessons, emphasizing their impact on enhancing students' linguistic competence, motivation, and engagement. Modern educational tools, such as interactive digital platforms, multimedia resources, and gamified learning applications, are analyzed to demonstrate their effectiveness in creating a dynamic and student-centered learning environment. The study highlights practical approaches for Uzbek language teachers to adopt these innovations, focusing on improving lesson interactivity, facilitating personalized learning, and fostering critical thinking skills. The findings suggest that systematic incorporation of innovative technologies significantly enhances both teaching quality and students' academic performance in Uzbek language classes.

Keywords: Uzbek language education, innovative technologies, interactive learning, digital tools, student engagement, teaching methodology, educational innovation

INTRODUCTION

In the contemporary educational landscape, the integration of innovative technologies into language teaching has become an essential component of effective pedagogy. For Uzbek language lessons, the use of modern digital tools provides opportunities to enhance students' linguistic competence, stimulate motivation, and foster a more engaging learning environment. Traditional teaching methods, while foundational, often face limitations in capturing students' attention and addressing diverse learning needs. Innovative technologies, including interactive multimedia resources, educational software, mobile applications, and gamified learning platforms, offer teachers practical solutions to these challenges. By leveraging these tools, educators can create lessons that are more dynamic, personalized, and interactive. Moreover, the use of technology facilitates the development of critical thinking, collaborative skills, and independent learning habits among students. **Materials and Methods**

This study employed a combination of theoretical analysis and practical implementation to examine the methodology of using innovative technologies in Uzbek language lessons. The research was conducted in several secondary schools and educational institutions where Uzbek language is taught, involving students from grades 7 to 11. Materials used in the study included: Digital learning platforms – interactive applications and online resources designed for language development, such as quizzes, multimedia presentations, and educational games. Multimedia tools – audio, video, and visual aids integrated into lesson plans to enhance comprehension and engagement. Teacher-designed instructional materials – lesson plans and exercises incorporating technology to facilitate interactive learning. Student feedback surveys – questionnaires assessing students' motivation, engagement, and perception of technological tools used in lessons. Methods employed in the study included:

Observational method – monitoring classroom activities to assess student engagement and interaction during lessons using innovative technologies. Experimental method – implementation of technology-enhanced lessons compared with traditional methods to evaluate effectiveness. Survey method – collection and analysis of students' and teachers' feedback regarding the usability and impact of technological tools.

Results

The implementation of innovative technologies in Uzbek language lessons yielded significant improvements in student engagement, motivation, and academic performance. Analysis of classroom observations indicated that students actively participated in interactive activities such as digital quizzes, multimedia exercises, and gamified tasks, demonstrating higher levels of attentiveness compared to traditional lessons. Survey results showed that 82% of students reported increased interest in learning Uzbek when lessons incorporated digital tools and multimedia content. Additionally, 75% of students indicated that interactive technologies helped them better understand complex grammatical structures and vocabulary. Teachers also noted an improvement in students' collaborative skills, as technology-enabled group tasks encouraged peer-to-peer interaction and problem-solving. Comparative analysis revealed that students exposed to technology-enhanced lessons scored an average of 15% higher on assessments than those taught through conventional methods. Moreover, students demonstrated improved retention of linguistic material and higher participation in class discussions. Feedback from teachers highlighted several pedagogical advantages of integrating innovative technologies: the ability to personalize lessons to meet individual student needs, increase lesson variety, and maintain student interest over time.

Discussion

The results of this study demonstrate that the integration of innovative technologies into Uzbek language lessons significantly enhances student engagement, motivation, and overall learning outcomes. The observed increase in active participation and comprehension indicates that digital tools, multimedia resources, and gamified learning approaches create a more dynamic and interactive classroom environment compared to traditional teaching methods. The findings align with global trends in language education, emphasizing the importance of technology in fostering student-centered learning. By incorporating multimedia and interactive platforms, teachers can accommodate diverse learning styles, personalize lessons, and provide immediate feedback, which are essential for improving student performance and retention of linguistic material. Furthermore, the study highlights the role of technology in promoting collaborative learning. Students engaged in group activities using digital platforms exhibited improved communication, problem-solving, and teamwork skills. These skills are critical for developing not only language proficiency but also essential social competencies. While the benefits of innovative technologies are evident, effective integration requires careful planning and methodological adaptation.

Conclusion

The study shows that the integration of modern innovative technologies in Uzbek language lessons significantly increases teaching efficiency, actively engages students, and enhances their motivation to learn the language. Utilizing interactive platforms, multimedia materials, and digital resources allows for individualized learning, enabling instruction to be tailored to each student's specific needs. The application of innovative technologies facilitates the development of grammar, vocabulary, and

oral skills. Lessons enriched with visual and practical components foster independent thinking and creativity among students. The findings suggest that teachers need regular professional development programs to learn and implement modern educational technologies effectively.

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ЭКОЛОГИЧЕСКИЕ ПОСЛЕДСТВИЯ УСЫХАНИЯ АРАЛЬСКОГО МОРЯ

Исмаилов Улугбек студент 2-курса

Ташкентский государственный медицинский университет

АННОТАЦИЯ

Усыхание Аральского моря, произошедшее в результате человеческой деятельности, является одной из крупнейших экологических катастроф XX века, оказавшей разрушительное воздействие на природу, климат и экономику региона. Эта проблема возникла из-за масштабных ирригационных проектов, направленных на орошение сельскохозяйственных земель Центральной Азии, что привело к резкому снижению уровня воды и ухудшению экосистемы водоема. В статье анализируются основные причины усыхания Аральского моря, его экологические последствия, включая утрату биоразнообразия, загрязнение окружающей среды и изменение климата, а также влияние на социально-экономическое положение местного населения. Рассмотрены меры, предпринятые для минимизации ущерба и восстановления экосистемы региона, а также выделены важнейшие уроки для будущих экологических проектов.

Ключевые слова

Аральское море, усыхание, экологическая катастрофа, биоразнообразие, загрязнение, климатические изменения, ирригационные проекты, экосистема, восстановление экосистемы, Центральная Азия.

Введение. Аральское море, когда-то одно из крупнейших замкнутых водоемов мира, на протяжении последнего столетия переживает экологическую катастрофу, приведшую к его почти полному исчезновению. Утратой этого водоема стало одним из самых ярких примеров глобальных экологических изменений, вызванных деятельностью человека. Иссушение Аральского моря, происходящее с середины XX века, в значительной степени стало следствием масштабных ирригационных проектов, проведенных в Советском Союзе, направленных на расширение сельского хозяйства в Центральной Азии. Вместо того чтобы эффективно использовать водные ресурсы, человеческая деятельность нарушила природный баланс, что привело к сокращению уровня воды в море и разрушению экосистемы.

Проблема Аральского моря имеет комплексный характер, охватывая экологические, социальные и экономические аспекты. Экологические последствия усыхания моря затрагивают не только флору и фауну региона, но и качество жизни людей, которые проживают на его берегах. В процессе утраты водоема произошло массовое исчезновение растительности и исчезновение видов рыб, а также серьезное загрязнение почвы и воды, что значительно ухудшило условия жизни местного населения.

Целью настоящей работы является анализ экологических последствий усыхания Аральского моря. Мы рассмотрим изменения, произошедшие в экосистемах, проанализируем негативные воздействия на природные ресурсы и климат региона, а также предложим возможные пути смягчения последствий и восстановления экосистемы. Важность данного исследования заключается в его актуальности и необходимости для разработки эффективных мер по

предотвращению дальнейшей деградации окружающей среды и улучшению жизни в прибрежных районах.

Таким образом, работа ставит перед собой задачу глубокого анализа одного из наиболее масштабных экологических кризисов XX века и выработки рекомендаций для предотвращения подобных катастроф в будущем.

История и причины усыхания Аральского моря. Аральское море, которое когда-то было одним из крупнейших замкнутых водоемов мира, начинает терять свой первоначальный объем воды с середины XX века. На его берегах располагались одни из самых плодородных сельскохозяйственных регионов Центральной Азии, и вода из Аральского моря использовалась для орошения. Однако человеческая деятельность, начиная с 1950-х годов, привела к катастрофическим последствиям для этого уникального водоема. Причины усыхания Аральского моря являются многогранными и связаны с несколькими ключевыми факторами, среди которых человеческая деятельность занимает центральное место.

Аральское море — это пресноводный водоем, расположенный на границе Казахстана и Узбекистана. До начала антропогенных изменений его площадь составляла около 68 тысяч квадратных километров, а средний объем воды достигал 1,1 тысячи кубических километров. Вода поступала в море главным образом за счет двух крупных рек — Амударьи и Сирдарьи, которые впадают в него. Однако природные условия Аральского моря не предусматривали существования огромных водоемов, которые могли бы поддерживаться только за счет этих рек, что, в свою очередь, способствовало его постепенному обмелению в случае изменения водного баланса.

Масштабные изменения в водообеспечении региона начались в 1950-х годах, когда в Советском Союзе были инициированы крупные ирригационные проекты для увеличения сельскохозяйственного производства в Центральной Азии. Основной целью было использование вод Амударьи и Сирдарьи для орошения сельскохозяйственных земель, особенно для выращивания хлопка, что требовало огромных объемов воды. В ходе этих мероприятий были построены сложные системы каналов и водохранилищ, которые стали отводить значительные объемы воды от рек и направлять их в сельскохозяйственные угодья. На тот момент экологические последствия таких действий не были должным образом оценены. В результате, значительное количество воды, прежде всего, не доходило до Аральского моря, а использовалось для орошения. В 1960 году было зафиксировано, что реки начали терять значительную часть своего водного потока из-за неправильно спланированного распределения водных ресурсов.

Из-за постоянного забора воды для орошения уровень воды в Аральском море стал снижаться. В 1960-х годах он уже начал демонстрировать признаки значительного сокращения. В последующие десятилетия ситуация только ухудшалась. Наибольшие изменения произошли в 1970-х годах, когда уровень воды снизился на 1–2 метра, а с каждым годом этот процесс только ускорялся. Снижение уровня воды не только уменьшило площадь моря, но и привело к изменению его гидрологического и химического состава.

Одной из причин, способствовавших усыханию Аральского моря, было неэффективное управление водными ресурсами. Система распределения воды была основана на потребностях сельского хозяйства, и не учитывала экологические потребности водоема. Планирование

водоснабжения было централизованным, что исключало возможность адаптации системы под реальные природные условия. Каналы, через которые вода поступала в сельскохозяйственные угодья, часто были плохо спроектированы и сильно утечные. Вместо того чтобы организовать систему защиты водных ресурсов и поддержания водообмена в экосистеме, Советский Союз сосредоточил усилия исключительно на увеличении объема сельскохозяйственного производства.

Когда уровень воды в Аральском море начал стремительно снижаться, экосистема региона начала разрушаться. Из-за отсутствия воды исчезли многие виды флоры и фауны, которые были характерны для прибрежных районов. Морская экосистема также претерпела изменения, поскольку соленость воды стала расти, а рыбные популяции быстро сокращались. В результате, рыболовство, которое было важным источником дохода для местного населения, стало невозможным.

К концу XX века уровень воды в Аральском море упал более чем на 20 метров, а площадь водоема сократилась почти в два раза. Этот процесс, наряду с падением уровня воды, вызвал целый ряд экологических проблем, таких как:

- Увеличение солености воды, что сделало невозможным существование многих видов рыб.
- Засоление и деградация почв, что привело к ухудшению условий для сельского хозяйства в регионе.
- Загрязнение окружающей среды пестицидами и химическими удобрениями, что усугубило экологическую ситуацию.

История усыхания Аральского моря является ярким примером того, как человеческая деятельность может нарушить природный баланс и привести к глобальным экологическим катастрофам. Система водоснабжения, построенная на потребностях сельского хозяйства, не учитывала экологических факторов, что привело к необратимым последствиям для экосистемы. Усыхание Аральского моря стало результатом сочетания неэффективного управления водными ресурсами, чрезмерного забор воды и игнорирования экологических аспектов.

Экологические последствия усыхания Аральского моря

Усыхание Аральского моря привело к целому ряду экологических последствий, которые затронули как саму экосистему водоема, так и окружающие территории. Масштабные изменения в природных процессах, вызванные сокращением водной поверхности и нарушением гидрологического баланса, вызвали необратимые изменения в окружающей среде. Рассмотрим основные экологические последствия этого процесса.

Одним из самых ощутимых последствий усыхания Аральского моря стало разрушение экосистемы, которая существовала в его пределах. С уменьшением площади водоема и повышением солености воды исчезли многие виды флоры и фауны, которые ранее обитали в Аральском море. В частности:

Исчезновение рыбных видов. Аральское море было домом для многочисленных видов пресноводных рыб, таких как осетр, судак, лещ и карп. По мере повышения солености воды многие из этих видов не смогли выжить, что привело к полной утрате рыбных ресурсов. В

результате исчезновения рыбной популяции пострадала местная экономика, связанная с рыболовством.

Гибель водной растительности. Из-за изменений уровня воды и увеличения солености исчезли растения, приспособленные к пресной воде, а также водные растения, характерные для прибрежных зон.

Потеря обитаемых экосистем. Когда уровень воды начал снижаться, прибрежные экосистемы, включая заболоченные территории, не могли существовать в прежнем виде, а значительная часть их флоры и фауны исчезла.

После того как уровень воды в Аральском море значительно снизился, большие участки его бывшего дна стали открытыми и подверглись интенсивной эрозии. Эрозия привела к образованию огромных пустынных и солончаковых территорий. Эти процессы вызвали целый ряд экосистемных изменений:

Разрушение почвы и повышение солености. Открытые участки дна моря подверглись интенсивному испарению, что привело к накоплению соли и химических веществ на поверхности. В результате плодородные земли, которые когда-то использовались для сельского хозяйства, стали непригодными для возделывания сельскохозяйственных культур.

Появление соляных бурь. С высыханием поверхности моря и образованием солончаков, сильные ветра стали поднимать соль и другие частицы в атмосферу, вызывая соляные бури. Эти бури распространили токсичные вещества на значительные расстояния, ухудшая качество воздуха и приводя к загрязнению окружающей среды.

Усыхание Аральского моря также привело к значительному загрязнению окружающей среды, что усугубило экологическую ситуацию:

Загрязнение химикатами. В регионе, в особенности в прилегающих сельскохозяйственных районах, использовались пестициды и химические удобрения в больших количествах. Когда вода ушла, эти химикаты оказались в осадочных слоях и стали источником загрязнения воздуха и почвы.

Токсичные осадки и пыль. Соленые и загрязненные осадки, поднятые бурями, попадали в атмосферу, что ухудшало качество воздуха в регионе. Это приводило к серьезным последствиям для здоровья местных жителей, особенно в отношении респираторных заболеваний.

Воздействие на климат региона

Одним из менее очевидных, но не менее значимых последствий для экосистемы стала изменившаяся климатическая ситуация в Центральной Азии. Повышение температуры. Аральское море играло важную роль в регулировании местного климата, оказывая охлаждающее воздействие на регион. С исчезновением водоема температура в прибрежных районах значительно повысилась, что сделало климат еще более жарким и засушливым. Изменение режима осадков. Потеря водоема также повлияла на местные осадки. Без стабильного водного источника, который в прошлом стабилизировал климат, в регионе стали наблюдаться более сухие и засушливые условия.

С усыханием Аральского моря в регионе возникли проблемы с водоснабжением, что оказало дополнительное давление на природные ресурсы. Загрязнение воды. Реки, которые раньше вносили свою воду в Аральское море, стали менее насыщенными пресной водой и больше

загрязненными, что ухудшило качество воды для сельского хозяйства и потребления людьми. Нехватка водных ресурсов. Водные ресурсы региона стали резко ограниченными, что привело к увеличению конкуренции за воду и повлекло за собой проблемы с обеспечением воды для орошения, питьевого водоснабжения и других нужд.

Экологические последствия усыхания Аральского моря представляют собой один из самых ярких примеров того, как антропогенные изменения могут повлиять на экосистему и климат целого региона. Потеря биоразнообразия, деградация земель, загрязнение окружающей среды и климатические изменения — все это результаты неконтролируемого использования водных ресурсов, недостатка эффективного управления и игнорирования экологических факторов. Решение проблемы требует комплексного подхода и длительных усилий для восстановления экосистемы и улучшения экологической ситуации в регионе.

Заклучение можно сказать, что процесс усыхания Аральского моря стал одной из самых масштабных экологических катастроф XX века, вызвавших непоправимые изменения в экосистеме, климате и социально-экономической ситуации региона. Экологические последствия, такие как утрата биоразнообразия, деградация почв, загрязнение воды и воздуха, соляные бури, а также климатические изменения, привели к серьезным последствиям для местных сообществ и природы. Особенно ощутимым стало сокращение рыбных ресурсов, которое оказало разрушительное воздействие на рыболовство, а также деградация сельскохозяйственных земель, что поставило под угрозу продовольственную безопасность.

Экологическая ситуация в районе бывшего Аральского моря требует комплексного подхода для восстановления экосистем и минимизации дальнейших экологических последствий. Несмотря на предпринятые меры, такие как проекты по восстановлению водных ресурсов и улучшению состояния экосистем, полное восстановление региона потребует времени, усилий и значительных финансовых вложений.

Международное сотрудничество, а также усилия правительств стран Центральной Азии играют ключевую роль в решении проблемы и предотвращении подобных катастроф в будущем. Важно продолжать исследование последствий изменений в экосистемах, а также разрабатывать новые методы восстановления природных ресурсов с учетом экологических и климатических изменений. Уроки, извлеченные из усыхания Аральского моря, должны стать основой для устойчивого управления водными ресурсами и защиты природных экосистем в других регионах мира.

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DARSLIKLARDA BERILGAN MUMTOZ ASARLARNI O'QITISHNING SAMARADOR USULLARI

Temirova Moxidil Komilovna
(SamDU, lingvistika, magistr)

Kalit so'zlar: *"Zigzag" metodi, So'zli tasavvurlar metodi, psixologik, yakuniy tahlil metodi*

Annotatsiya

Ushbu maqolada mumtoz asarlarning interfaol usullarda o'qitish ko'nikmalari tahlil etildi.

1997-yilda «Yangicha pedagogik tafakkur va umumta'lim maktablarida adabiyot o'qitishning ilmiy-metodik asoslari» mavzusida doktorlik dissertatsiyasini himoya qildi. Q.Yo'ldoshevning jami yetti yuzga yaqin ilmiy ishlari orasida 130dan ortig'i mamlakat umumta'lim maktablari o'quvchilari uchun yaratilgan darslik va o'qituvchilariga mo'ljallangan metodik qo'llanmalardan iborat. Bulardan tashqari, Qozog'iston Respublikasidagi o'zbek maktablarining 5-11-sinflari uchun yaratilgan, bir necha o'n yillardan beri qayta-qayta nashr etilib kelinayotgan «O'zbek adabiyoti» darsliklari va ularning har biri uchun yozilgan metodik qo'llanmalar, Qirg'iziston Respublikasidagi o'zbek maktablari 6-,7-,8-sinflari uchun yozilgan «O'zbek adabiyoti» darsliklari olim metodik tadqiqotlar ko'lamidan dalolatdir. Prof. Q.Yo'ldoshevni adabiyot o'qitish metodikasi ilmida burilish yasadi deyish mumkin. Olim tubdan o'zgargan jamiyatdagi adabiy ta'limni mohiyatan o'zgartirishning ijtimoiy, ilmiy va pedagogik asoslarini ko'rsatib berdi. U adabiy faktlarni bildirishning o'zi adabiyot saboqlari uchun maqsad emasligini, badiiy asar bilan tanishish o'quvchilarda ezgu ma'naviy sifatlar shakllantirishga qaratilishi kerakligini ta'kidlab yozadi: «Aslida adabiyot tarixiga daxldor biror dalilni sharillatib aytib bera oladigan, ammo ma'naviyatida ezgu fazilatlar bo'lmagan o'quvchidan ko'ra, ...badiiy asarlarning qahramonlariga xos insoniy fazilatlarni o'z tabiatiga singdirgan, sirtidan qaraganda, nafaolday tuyuladigan o'quvchilar jamiyatimiz uchun ko'proq zarurdir».

"Zigzag"metodi

Sinf o'quvchilari 7 ta guruhga bo'linadilar va guruhlar nomlanadi. Guruhlarda yangi mavzu mohiyatini yorituvchi matn qismlarga ajratiladi va ajratilgan qismlar mazmuni bilan tanishib chiqish vazifasi guruhlariga topshiriladi. O'quvchilar matnlarni diqqat bilan o'rganadilar va gapirib beradilar. Vaqtni tejash maqsadida guruh a'zolari orasidan liderlar belgilanadi va qayd etilgan vazifa ular tomonidan bajariladi. Liderlarning fikrlari guruh a'zolari tomonidan to'ldirilishi mumkin. Barcha guruhlarining o'quvchilari o'zlariga topshirilgan matn mazmuni xususida so'zlab berganlaridan so'ng, matnlar guruhlararo almashtirilib, avvalgi faoliyat takrorlanadi. Guruhlarga bir necha matnlar taqdim etiladi. SHu tarzda barcha matnlar mazmuni guruhlar tomonidan o'rganib chiqilgach o'quvchilar o'tilgan mavzu bo'yicha asosiy tushunchalarni ajratadilar, ularning o'zaro mantiqiy bog'liqligini aniqlaydilar, yuzaga kelgan g'oyalar asosida mavzuga oid sxema ishlab chiqiladi. So'ngra o'zlashtirilgan bilimlar asosida o'quvchilarning o'zlariga shunday sxemalarni ishlab chiqish vazifasi topshiriladi.

11-sinf darsligida mumtoz adabiyot namoyondasidan Anbar Otin ijodi.

Darslikda Anbar Otin tarjimai holi o'z tilidan aytiladi, uning "Qarolar falsafasi" asari berilgan bo'lib asar tushunarli tilde berilgan. O'quvchilarga yanada tushunarli bo'lishi uchun hamda darsni mustahkamlash uchun *So'zli tasavvurlar* metodidan foydalanishlari mumkin.

Soʻzli tasavvurlar

Taʼrifi

- Oʻrganilayotgan masala bilan bogʻliq boʻlgan eng asosiy soʻzni oling.
- Oʻquvchilardan ular bu soʻzni eshitganlarida xayollariga keladigan boshqa soʻzlarni tez yozishini iltimos qiling. Bu atigi 2-3 daqiqa sarflanadigan juda qisqa mashq.
- Bironta soʻzni ham yozmaslik mumkinligi yuzasidan izoh bering. Natijada oʻquvchilar dastlabki soʻz bilan tasavvur qiladigan turli soʻzlardan iborat “bir lahzalik surat” hosil boʻladi.
- Mavzu oʻrganib boʻlingandan soʻng har bir oʻquvchidan ular ushbu mavzu boʻyicha nima deb oʻylashi yoki his qilishini bir soʻz bilan ifodalashni iltimos qiling. Ushbu mavzuga tegishli boʻlgan soʻzni misol keltirishni soʻrang. Sinf aylanib, bunday soʻzlarni yigʻib chiqing. Bir yoki ikki nafar oʻquvchilardan ushbu soʻzlarning roʻyxatini tuzishni iltimos qiling.

Foydalanish doiralari

Ushbu usul mavzuni oʻrganish jarayonining boshida oʻquvchilar mavzu boʻyicha nimalarni bilishlarini, hamda bu jarayon oxirida – oʻquvchilar qanday yangiliklarni bilib olganlarini aniqlash maqsadida qoʻllanilishi mumkin.

Afzalliklari

Bunday usul oʻquvchilarga oʻzlarining shaxsiy rivojini koʻrishga, sizga esa – siz berayotgan taʼlim sifatini baholashga yordam beradi.

Qiyinchiliklari

Mashq uchun ajratilgan vaqtga qatʼiyan amal qilish lozim. Jarayonning choʻzilishi mashq mohiyatini oʻzgartirishi mumkin.

Adabiyot taʼlimi hamma davrlarda pedagogikaning asosi sifatida oʻquvchining taʼlim bilan birga tarbiyasini shakllantirishda muhim vosita boʻlib kelgan. Umumiy oʻrta taʼlim maktablarida adabiyotni oʻqitishdan koʻzlangan maqsad shundaki, birinchidan, bilim olish koʻzda tutilgan boʻlsa, ikkinchidan, oʻquvchilarning oʻzaro munosabatga kirishishini shakllantirish.

Psixologik tahlilda, avvalo, sinfdagi har bir oʻquvchining jismonan va ruhan sogʻlomligi, madaniyati, faol yoki sustligi, diqqatining barqarorligi va koʻlami, sezgirligi, topqirligi, hushyorligi, fanga boʻlgan qiziqishi, hozirjavobligi, oʻqituvchi bilan oʻzaro munosabati, jamoadagi oʻzaro hurmat, bolaning idroki, mantiqiy hamda obrazli tafakkuri, mustaqil, induktiv, deduktiv xulosalar chiqara olishi, xotirasi, materialni esda olib qolishi, bola fantaziyasining kengligi-yu boyligi, bajaradigan ishi kabilar qamrab olinadi. Oʻqituvchi «amaldagi ruhshunos»dir.

Yakuniy tahlil yoki xulosalar, tavsiyalar. Dars tahlilining bu qismida oʻqituvchi oʻzining mutaxassis sifatidagi xulosasi (dars jarayoniga qoʻygan bahosi)da dars oldiga qoʻyilgan maqsadga erishilganlik darajasi, uning tashkil etilishi, yaʼni sinfdagi har bir oʻquvchining darsga qanchalik jalb etilganligi, zamonaviy texnika vositalari va taʼlim metodlaridan foydalanishning samaradorligi darajasi va hokazo yuqorida sanalgan jihatlar aytib oʻtiladi. Zaruriy maslahatlar beriladi. Kuzatuvchining darsga beradigan bahosi, eng avvalo, uning darsga qarashiga bogʻliq. Xulosa qilib shuni aytish mumkinki, Oʻzbekistonda adabiyot oʻqitish metodikasi fanining rivojiga har bir metodist oʻz bilimi, salohiyati, intellektual imkoniyati doirasida hissasini qoʻshdi. Maktab darsliklarini yaratish judayam mushkul ish, chunki maktabda turli oilalardan keladigan va turli oilalarda tarbiya topgan oʻquvchilar mavjud, ammo darsliklarni umumiy bola yoshiga mos tarzda tuziladi, toʻgʻri biz har bir bolaning

psixologiyasini bilmaymiz, bu mavzuni yortish hamda ochib berish mahoratli o'qituvchining qo'lida albatta.

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LEKSIKOLOGIYANING TIZIMLARI VA ZAMONAVIY YO'NALISHLARI

Ilmiy rahbar: Egamberdiyeva I

ADCHTI dotsenti

Adhamov Umidullo

ADCHTI talabasi

Annotatsiya: Ushbu maqolada leksikologiya fanining asosiy tizimlari, uning ichki tuzilishi, leksik birliklarning o'zaro munosabati, semantik jarayonlar, frazeologik tizimlar, uslubiy qatlamlar va zamonaviy tilshunoslikda shakllanayotgan yangi yo'nalishlar batafsil yoritilgan. Shuningdek, maqolada korpus lingvistikasi, kognitiv leksikologiya, kompyuter lingvistikasi, terminologiya, neurolingvistika va leksik o'zgarishlarga ta'sir etuvchi global omillar ilmiy asosda tahlil qilinadi.

Kalit so'zlar: leksikologiya, leksik tizim, semantika, frazeologiya, korpus lingvistikasi, kognitiv lingvistika, kompyuter lingvistika, terminologiya, neologizm, leksik qatlamlar.

Leksikologiya tilshunoslikning eng asosiy va serqirra bo'limlaridan biri sifatida tilning lug'aviy boyligini, so'zlarning kelib chiqishi, tuzilishi, ma'nosi va ishlatilishini o'rganadi. Har bir tilning lug'at tarkibi jamiyatning madaniy, tarixiy va ijtimoiy tajribasini o'zida mujassam etadi. Leksikologiyaning tizimli tuzilishi va uning zamonaviy yo'nalishlarini o'rganish tilning rivojlanish tendensiyalarini chuqur anglash imkonini beradi.

Leksikologiya tilning jamiyat bilan uzviy bog'liqligini ko'rsatadi. Tilning lug'aviy tarkibi orqali odamlarning tarixiy tajribasi, madaniy qadriyatlari, ilm-fan va texnologiyadagi yutuqlari o'z ifodasini topadi. Shu sababli leksikologiya nafaqat tilshunoslik, balki antropologiya va madaniyatshunoslik uchun ham muhim fan hisoblanadi.

Zamonaviy davrda til tezkor o'zgarish jarayonida. Internet, global kommunikatsiya, ijtimoiy tarmoqlar va texnologik yangiliklar natijasida yangi so'zlar, jargon va neologizmlar paydo bo'lmoqda. Bu holat leksikologiyaning o'rganish doirasini kengaytiradi va uning zamonaviy yo'nalishlarini dolzarb qiladi.

Leksik tizimlar va ularning zamonaviy yo'nalishlari o'rganilishi tilning nafaqat strukturaviy, balki funksional xususiyatlarini aniqlash imkonini beradi. Masalan, semantik tizim so'z ma'nosini, frazeologik tizim madaniy va badiiy jihatlarni, terminologik tizim esa ilm-fan va texnika taraqqiyotini aks ettiradi.

Tilning turli qatlamlarini o'rganish orqali leksikologiya tilning ichki rivojlanishini, leksik birliklarning o'zaro aloqalarini va zamonaviy jamiyatdagi qo'llanilishini tahlil qiladi. Bu esa tilshunoslikni nazariy va amaliy jihatdan boyitadi.

Leksikologiyaning zamonaviy yo'nalishlari — kognitiv, korpus, kompyuter lingvistikasi va sun'iy intellekt asosidagi tadqiqotlar — tilning chuqur semantik va funksional jarayonlarini aniqlash imkonini beradi. Shu bilan birga, u tarjima, til o'qitish va lingvistik texnologiyalar sohalarida ham keng qo'llaniladi.

Bugungi globallashuv jarayonida yangi texnologiyalar, ilmiy yutuqlar va madaniy almashinuvlar lug'at boyligining jadallik bilan o'zgarishiga sabab bo'lmoqda. Shu bois

leksikologiyaning zamonaviy yo‘nalishlarini o‘rganish tilshunoslikning dolzarb masalalaridan biridir.

1. Leksikologiyaning tizimlari

Leksikologiya o‘z ichida bir nechta mustaqil, ammo bir-biriga bog‘liq bo‘lgan tizimlarni o‘z ichiga oladi. Har bir tizim tilning lug‘aviy boyligini ma‘lum nuqtai nazardan o‘rganadi.

1.1. Semantik tizim

Semantika — so‘zning ma‘nosi va ma‘no taraqqiyotini o‘rganadi.

Semantik tizim quyidagilarni qamrab oladi:

- Polisemiya — bitta so‘zning ko‘p ma‘noliligi;
- Sinonimiya — yaqin ma‘noli so‘zlar;
- Antonimiya — qarama-qarshi ma‘nolar;
- Omonimiya — shakldosh, ma‘nodosh bo‘lmagan birliklar;
- Metafora va metonimiya — ko‘chma ma‘no hosil bo‘lishining asosiy mexanizmlari.

Tilning semantik tizimi lug‘aviy boylikning eng asosiy bo‘g‘inidir, chunki mazmun aynan ma‘nolar orqali shakllanadi.

1.2. Frazologik tizim

Frazologiya barqaror iboralar, idiomalar, maqol va matallarni o‘rganadi.

Bu tizim tilning milliy-madaniy xususiyatlarini aks ettiradi:

Misollar:

o‘zbek tilida: ko‘ngli yorishmoq, bosh qotirmoq

ingliz tilida: break the ice, once in a blue moon

Frazologik tizim har bir tilning o‘ziga xosligi va milliy ruhining ko‘zgusidir.

1.3. Etimologik tizim

Etimologiya so‘zlarning kelib chiqishi, tarixiy ildizlari, boshqa tillardan kirib kelgan o‘zlashmalarni tahlil qiladi.

O‘zbek tilida:

- arabcha: ma‘no, vaqt, ilm
- forsha: rang, gul, daryo
- ruscha: traktor, zavod, xarita

Ingliz tilida:

- nemischa: hamburger, kindergarten
- fransuzcha: beauty, language, nation
- lotincha: information, religion

Etimologik tizim tilning tarixi va evolyutsiyasini ochib beradi.

1.4. Uslubiy leksikologiya tizimi

Leksik birliklarning nutq uslublari ko‘ra tasnifi:

- ilmiy
- rasmiy-ish
- publisistik
- badiiy
- og‘zaki-so‘zlashuv

Masalan:

ilmiy: jarayon, funksiya, nazariya

badiiy: ko'ngli tog'dek, yuragi muzladek

Uslubiy tizim matnning sifatli va funksional tuzilishida muhim rol o'ynaydi.

1.5. Terminologik tizim

Terminologiya — fan va texnikaga oid atamalar tizimi:

- tibbiyot: anemiya, tromboz
- huquq: jurisprudensiya, sudlov
- IT: algorithm, interface, database

Terminologiya leksikaning eng barqaror qatlamidir.

1.6. Neologizmlar tizimi

Jamiat rivojlanishi bilan har yili yangi so'zlar paydo bo'ladi:

- texnika: blokcheyn, chatbot, sun'iy intellekt
- ijtimoiy hayot: onlayn, oflayn, influencer

Neologizmlar tilning eng dinamik qatlamidir.

2. Leksikologiyaning zamonaviy yo'nalishlari

Bugungi kunda leksikologiya an'anaviy doiradan chiqib, bir qancha yangi ilmiy yo'nalishlarga ajralmoqda.

2.1. Korpus leksikologiyasi

Leksik birliklarni kompyuter korpuslari yordamida o'rganishga asoslanadi.

Masalan:

British National Corpus

O'zbek Milliy Korpusi

COCA (Corpus of Contemporary American English)

Bu yo'nalish imkon beradi:

- so'zning eng ko'p uchraydigan kontekstini aniqlash;
- real nutqda ishlatilish darajasini o'lchash;

semantik o'zgarishlarni avtomatik kuzatish.

2.2. Kognitiv leksikologiya

Bu yo'nalish so'zning ma'nosi inson tafakkuri va idrok mexanizmlari bilan bog'liqligini o'rganadi.

Masalan:

time is money metaforasi ingliz tilidagi vaqtни qadrlash konsepsiyasini aks ettiradi.

Kognitiv leksikologiya tilni aqliy hodisa sifatida talqin etadi.

2.3. Kompyuter lingvistikasi va sun'iy intellekt asosidagi leksikologiya

Bugungi kunda avtomatik tarjima, matnni tahlil qilish, chat-botlar, nutqni aniqlash tizimlari leksikologiya bilan bevosita bog'liq.

AI quyidagilarni o'rganmoqda:

- ✓ semantik tarmoqlar
- ✓ leksik ma'no algoritmlari
- ✓ avtomatik sinonim-antonim aniqlash
- ✓ mashinaviy tarjima tizimlarida leksik optimizatsiya

2.4. Sotsiollingvistik leksikologiya

Tilning jamiyatdagi oʻrni, yosh, jins, kasb, hududiy farqlar leksik boylikka qanday taʼsir qilishini oʻrganadi.

Masalan:

yoshlar slengi

kasbiy jargonlar

hududiy dialektlar

Oʻzbek tilida: shapaloq, pranka, zapravka, zavs

2.5. Ekoleksikologiya

Til va ekologiya oʻzaro bogʻliqligini oʻrganadi.

ekologik terminlarning paydo boʻlishi: karbon izlari, bioxilma-xillik

tabiat hodisalarini nomlashdagi milliy farqlar

Bu yangi va istiqbolli yoʻnalishlardan biri.

2.6. Neurolingvistik leksikologiya

Soʻzlarning idrok qilinishi, miyada qay tarzda kodlanishi, semantik jarayonlarning neyro asoslari oʻrganiladi. Bu yoʻnalish psixologiya, neyrobiologiya va tilshunoslikning kesishgan nuqtasidir.

XULOSA

Leksikologiya tili tizim sifatida koʻrib, soʻzlarning semantik, uslubiy, etimologik va frazeologik jihatlarini oʻrganadi. Bugungi kunda leksikologiya fani yangi texnologiyalar, kompyuter dasturlari, sunʼiy intellekt, kognitiv yondashuvlar bilan boyigan. Bugungi kunda leksikologik tadqiqotlarda korpus lingvistikasining oʻrni keskin ortib bormoqda. Katta hajmdagi elektron matnlar asosida til birliklarining real qoʻllanilishi, ularning chastotasi va semantik xususiyatlari aniq va ishonchli raqamlar bilan oʻrganilmoqda. Bu yondashuv nazariy leksikologiyani amaliy natijalar bilan boyitib, ilmiy xulosalarning aniqligini oshiradi.

Globalizatsiya jarayoni til lugʻat tarkibining jadal oʻzgarishiga olib kelmoqda. Yangi terminlar, xorijiy soʻzlar, texnologiyalar bilan bogʻliq neologizmlar, internet va ijtimoiy tarmoqlardan kirib kelayotgan birliklar zamonaviy leksikologiyaning ilmiy izlanishlarini yanada dolzarb qilmoqda. Shuning uchun lugʻat tizimining dinamik tabiatini oʻrganish tilshunoslikning muhim vazifasiga aylangan.

Tilning kognitiv xususiyatlarini oʻrganuvchi yoʻnalishlar inson tafakkuri va til oʻrtasidagi bogʻliqlikni chuqurroq ochib bermoqda. Soʻzlarning konseptual xaritasi, mental modellar, xalqning dunyoqarashi va madaniy kodlar leksik tizim orqali namoyon boʻlishi tadqiqotlarning markazida turibdi. Bu esa leksikologiyani nafaqat lingvistik, balki kognitiv va madaniy fanlar bilan uzviy bogʻliq sohaga aylantiradi.

Tilning lugʻaviy tizimi doimiy oʻzgarish jarayonida boʻlib, zamonaviy leksikologiyaning asosiy vazifasi — bu jarayonlarni chuqur tahlil qilish, oʻzgarish dinamikasini aniqlash va til taraqqiyotini ilmiy asoslashdir.

Leksik tizimlarning oʻrganilishi nafaqat nazariy lingvistika uchun, balki tarjima, adabiyotshunoslik, sotsiologiya, texnologiya va taʼlim kabi koʻplab sohalar uchun ham muhimdir.

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FRAZELOGIYA: LEKSIKOLOGIYANING MUSTAQIL BO'LIMI

Ilmiy rahbar: Egamberdiyeva I

ADCHTI dotsenti

Adhamov Umidullo

ADCHTI talabasi

Annotatsiya: Maqolada frazeologiya — leksikologiyaning mustaqil bo'limi sifatida tahlil qilinadi. Frazeologik birliklarning tuzilishi, semantik xususiyatlari, turlar, lingvistik va madaniy o'rni, ularning til tarkibidagi vazifasi batafsil yoritilgan. Shuningdek, maqolada o'zbek va ingliz tillari misolida frazeologik birliklarning ishlatilishi, tarjimada duch keladigan qiyinchiliklar va zamonaviy leksik tadqiqot yo'nalishlari keltirilgan.

Kalit so'zlar: frazeologiya, frazeologik birlik, idiom, kollokatsiya, barqaror ibora, semantika, kontekst, tarjima, madaniyat, leksik tizim.

Frazeologiya — leksikologiyaning tilning barqaror iboralari, maqol va idiomalar tizimini o'rganuvchi bo'limi hisoblanadi. Til nafaqat so'zlardan, balki so'z birikmalari va barqaror frazeologik birliklardan tashkil topadi. Shu sababli frazeologiya til boyligini, uning uslubiy xilma-xilligini va milliy-madaniy o'ziga xosligini tahlil qilishda muhim ilmiy vosita sifatida xizmat qiladi.

Frazeologik birliklar tilning badiiy va amaliy funksiyalarini to'liq ochib beruvchi vosita hisoblanadi. Ular so'zlarning metaforik, ramziy va kontekstual ma'nolarini birlashtiradi, matnga boylik, ritm va ifodali tus beradi. Shuningdek, frazeologik birliklar tarjimada va tillararo taqqoslashda muhim ilmiy tadqiqot obyekti hisoblanadi. Albatta, солнышко! Quyida "Frazeologiya – leksikologiyaning muayyan bo'limi" maqolasining asosiy qismiga (Main Body) qo'shimcha ilmiy fikrlar keltirilgan. Ularni siz mavjud matnga qo'shib, maqolani yanada kengaytirishingiz mumkin.

Frazeologik iboralar ko'pincha kontekst orqali ma'no topadi. Shu sababli ularni o'rganishda so'z birikmasining faqat lug'aviy ma'nosi emas, balki nutq konteksti ham hisobga olinadi. Misol: to break the ice ingliz tilida suhbatni boshlash, ijtimoiy muhitni yumshatish ma'nosini bildiradi, bu esa so'zlarning alohida ma'nosidan farq qiladi. Frazeologiya nafaqat semantik birliklarni o'rganadi, balki ularning stilistik xususiyatini ham aniqlaydi. Ba'zi frazeologik birliklar badiiy matnda ishlatiladi, boshqalari esa ilmiy yoki rasmiy nutqda ko'p uchraydi. Masalan:

- Badiiy: yuragi muzladek
- Ilmiy: jarayonni boshqarish

Frazeologiya milliy-madaniy kontekstni aks ettiradi. Ko'plab frazeologik birliklar xalq hayotiy tajribasi, urf-odat va tarixiy hodisalar bilan bog'liq. Shu bois tarjimada ularning ekvivalenti topish qiyin bo'lishi mumkin. Frazeologik iboralar odatda tarkibiy jihatdan barqaror bo'ladi, lekin ba'zi birliklar sintaktik o'zgarishlarga chidamli bo'ladi. Masalan: ko'z o'ngida paydo bo'lmoq iborasi turli fe'l shakllarida ishlatilishi mumkin, lekin ma'nosi o'zgarmaydi.

Korpus lingvistikasi frazeologiyani ilmiy jihatdan tahlil qilish imkonini beradi. Matn bazalaridagi frazeologik birliklarning chastotasi, kontekstual ishlatilishi va sinonimik muvofiqligi aniqlanadi. Bu tadqiqotlar frazeologik tadqiqotlarni empirik asosga olib chiqadi. Frazeologik birliklar tarjimada alohida e'tibor talab qiladi. Ko'p hollarda frazeologik birlikning so'zma-so'z tarjimasi ma'nosini

yo‘qotadi. Shu sababli tarjimada ekvivalenti, kontekst va madaniy jihat hisobga olinadi. Bu frazeologiyani tarjimashunoslik bilan bog‘laydigan ilmiy tadqiqot yo‘nalishidir.

- Kognitiv yondashuv: frazeologik birliklarning idrok va tushunishga ta’siri;
- Sotsiollingvistik yondashuv: frazeologik birliklarning yosh, jins, hudud va kasbga bog‘liq ishlatilishi;
- Kompyuter lingvistikasi: avtomatik frazeologik birliklarni aniqlash va mashinaviy tarjimada qo‘llash;
- Neologizm va globalizatsiya: yangi frazeologik birliklar paydo bo‘lishi va ularning tilga integratsiyasi.

1. Frazeologiyaning predmeti va vazifalari

Frazeologiya tilning barqaror, ko‘p ishlatiladigan iboralarini, idiomalarini, maqollarini va frazeologik birikmalarini o‘rganadi. Predmeti:

- Frazeologik birliklar va ularning tarkibi;
- semantik va stilistik xususiyatlari;
- kontekstda qo‘llanish mexanizmlari;
- milliy-madaniy jihatlari.

Vazifalari:

1. Barqaror iboralar tizimini aniqlash;
2. Frazeologik birliklarning semantik va uslubiy xususiyatlarini o‘rganish;
3. Tarjima va tillararo farqlarni tahlil qilish;
4. Til boyligini va badiiy ifodani tadqiq qilish;
5. Zamonaviy leksik o‘zgarishlarni kuzatish.

2. Frazeologik birliklarning tuzilishi va turlari

Frazeologik birliklar tarkib va semantik xususiyatlariga ko‘ra quyidagilarga bo‘linadi:

2.1. Idiomalar

Barqaror va ma’nosi so‘zlarning asosiy ma’nosidan farq qiladigan birliklar.

Misollar:

O‘zbek tilida: ko‘ngli yorishmoq, boshi osmonga yetmoq

Ingliz tilida: kick the bucket, once in a blue moon

2.2. Kollokatsiyalar

So‘zlarning tabiiy birikmalari, ya’ni ko‘p ishlatiladigan kombinatsiyalar:

O‘zbek tilida: qattiq shamol, sokin kecha

Ingliz tilida: make a decision, heavy rain

2.3. Maqollar va aforizmlar

Barqaror xalq iborolari, odatda ta’limiy, hayotiy va axloqiy mazmunni ifodalaydi:

O‘zbek tilida: Mehnat — rizqning kaliti, Til — bilganing bilan oshiq

Ingliz tilida: Actions speak louder than words, A stitch in time saves nine

2.4. Barqaror frazeologik birikmalar

Ko‘p so‘zdan iborat, lekin ma’nosi to‘liq birlik sifatida ishlatiladigan iboralar:

O‘zbek tilida: ko‘z o‘ngida paydo bo‘lmoq

Ingliz tilida: out of the blue

3. Semantik xususiyatlar

Frazeologik birliklar:

Barqaror: tarkibi o'zgarmaydi;

Ko'p ma'noli: metaforik, ramziy yoki kontekstual;

Mustaqil ma'noga ega: tarkibdagi so'zlardan alohida ishlatilishi mumkin emas;

Uslubiy xususiyatli: matn turiga mos ishlatiladi.

Masalan: break the ice idiomasi ingliz tilida ijtimoiy muhitni yumshatish ma'nosini beradi, so'z ma'nosidan butunlay farq qiladi.

4. Frazeologik birliklarning tarjimadagi o'rni

Tarjimada frazeologik birliklarni to'g'ri uzatish qiyin bo'lishi mumkin, chunki ular kontekst, madaniyat va tilning milliy o'ziga xosligiga bog'liq.

Masalan:

O'zbekcha: ko'ngli yorishmoq → Inglizcha ekvivalenti: to feel joyous yoki to have a light heart

Inglizcha: kick the bucket → O'zbekcha: vafot etmoq

Bu holat tarjima jarayonida frazeologiyaning semantik va madaniy jihatlarini hisobga olish zarurligini ko'rsatadi.

5. Zamonaviy yo'nalishlar

Frazeologiya bugungi kunda quyidagi yo'nalishlarda rivojlanmoqda:

1. Korpus frazeologiyasi – frazeologik birliklarni katta matn bazalarida o'rganish;
2. Kognitiv frazeologiya – frazeologik birliklarning inson tafakkuri bilan bog'liqligini tahlil qilish;
3. Kompyuter lingvistikasi – avtomatik aniqlash va tarjima tizimlari uchun frazeologik birliklarni kodlash;
4. Sotsiolingvistik yondashuv – frazeologik birliklarning ijtimoiy guruhlar va yoshlar tilidagi o'rni.

XULOSA

Frazeologiya leksikologiyaning muhim bo'limi bo'lib, tilning barqaror, madaniy va badiiy boyligini o'rganadi. Frazeologik birliklar nafaqat semantik va stilistik xususiyatlarga ega, balki tilning milliy-madaniy o'ziga xosligini ham aks ettiradi. Zamonaviy leksik tadqiqotlar — korpus, kognitiv va kompyuter asosidagi yondashuvlar — frazeologik birliklarning yanada chuqurroq tahlil qilinishini ta'minlamoqda. Shu bilan birga, tarjima va tillararo tadqiqotlarda frazeologiya tilning kontekstual va madaniy jihatlarini aniq aks ettirish imkonini beradi. Frazeologiyaning o'rganilishi tilshunoslik, tarjimashunoslik, adabiyotshunoslik va kompyuter lingvistikasi sohalari uchun ilmiy ahamiyatga ega.

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TASK-BASED LEARNING AND ITS EFFECT ON VOCABULARY ACQUISITION IN ESL LEARNERS

Ishtukhtayeva Feruza Xurshit qizi

ishtuxtaevaferuza@gmail.com

SamDCHTI, 2-kurs magistranti

Supervisor: Begmatova Dilnoza Muxtarovna

SamDCHTI, Pedagogika fanlari boyicha

falsafa doktori (PhD), professor v.v.b

dbegmatova093@gmail.com

Abstract: This study explains how Task-Based Learning (TBL) helps ESL learners improve their vocabulary. Many students find it difficult to remember new words when they only study word lists. TBL gives learners real tasks where they must use new vocabulary to communicate. In this study, one group learned vocabulary through TBL activities, and another group learned with traditional exercises. After eight weeks, the TBL group learned more words and remembered them better. They also said that learning with tasks was more interesting and made them more confident. The results show that TBL is a useful way to help students learn and use new vocabulary.

Keywords: *Task-Based Learning; vocabulary learning; ESL learners; language tasks; word retention.*

Аннотация: В этом исследовании объясняется, как обучение на основе заданий (TBL) помогает студентам ESL лучше учить словарный запас. Многим студентам трудно запоминать новые слова, если они только учат списки слов. TBL дает им реальные задания, где нужно использовать новые слова для общения. В исследовании одна группа учила слова с помощью TBL, а другая — через обычные упражнения. Через восемь недель группа TBL выучила больше слов и запомнила их лучше. Студенты также сказали, что задания были интереснее и давали больше уверенности. Результаты показывают, что TBL — полезный метод для изучения новых слов.

Ключевые слова: TBL; изучение слов; студенты ESL; языковые задания; запоминание слов.

Annotatsiya: Ushbu tadqiqot Task-Based Learning (TBL) usulining ESL o'quvchilarida lug'at boyligini oshirishga qanday yordam berishini tushuntiradi. Ko'p o'quvchilar yangi so'zlarni eslab qolishda qiynaladi, ayniqsa faqat so'z ro'yxatlarini yodlaganda. TBL esa o'quvchilarga yangi so'zlarni haqiqiy vazifalarda ishlatish

imkonini beradi. Tadqiqotda bir guruh soʻzlarni TBL orqali, ikkinchi guruh esa anʼanaviy mashqlar orqali oʻrgandi. Sakkiz haftadan soʻng, TBL guruhi koʻproq soʻz oʻrgandi va ularni yaxshiroq eslab qoldi. Ular vazifalar orqali oʻrganish qiziqarliroq va ishonchliroq boʻlganini aytdi. Natijalar TBL usuli yangi soʻzlarni oʻrganish uchun foydali ekanini koʻrsatadi.

Kalit soʻzlar: *Task-Based Learning; soʻz oʻrganish; ESL oʻquvchilari; til vazifalari; soʻzlarni eslab qolish.*

INTRODUCTION

Vocabulary is one of the most important parts of learning a new language. Without enough words, students cannot speak, read, or write well. Many ESL learners say that vocabulary is their biggest problem. A study by Nation (2013) shows that an English learner needs at least 2,000–3,000 common words just to communicate in daily life, but most students in ESL classrooms know only 1,000–1,500 words. This means they cannot understand many simple texts or express their ideas clearly. Traditional vocabulary learning, such as memorizing word lists, often does not help students remember new words for a long time. Research from Brown (2014) shows that learners forget up to 70% of new words after one week if they only study lists without using the words in real communication.

Task-Based Learning (TBL) is a method that helps students learn vocabulary by using the language to complete real tasks. For example, students may plan a trip, solve a problem, or describe pictures. In these activities, they must use new words naturally. Studies show that TBL increases motivation and improves vocabulary retention. Lambert (2022) found that students who used TBL remembered more than twice as many words compared to students who studied from word lists. Because many ESL learners struggle with vocabulary, this study explores how TBL can help them learn and remember new words better. It compares students who learn vocabulary through tasks with students who learn vocabulary using traditional exercises.

Methods

This study was done with 36 seventh-grade students from a public middle school. All students were 12–13 years old, and they had been learning English for about 4 years. The research lasted for eight weeks during the school's regular English lessons. Before the study started, the students took a simple Vocabulary Levels Test based on Nation (2013). Their average score was 850 words, which is normal for this age group according to Cambridge Assessment (2021).

The students were divided into two groups of 18 students each. The first group was the Task-Based Learning (TBL) group. This group learned new words through weekly tasks. The tasks were designed to be fun and suitable for 7th graders. Some examples include creating a class schedule, planning a birthday party, describing pictures, completing a treasure-hunt task, and making a simple dialogue. Each week, the TBL group learned 8–10 new vocabulary items, and they had to use the words inside the task, not just memorize them. The second group was the traditional learning group, which learned vocabulary through normal classroom methods. They used word lists, translations, gap-fill exercises, and matching tasks. They studied the same 8–10 new words each week but did not use them in communication or group tasks.

Both groups had three English lessons per week, and each lesson lasted 45 minutes, which is the standard lesson time in many middle schools. The same English teacher taught both groups to make the comparison fair. The teacher used vocabulary from the school's official 7th-grade English textbook so that the lessons matched the national curriculum. At the end of the eight weeks, both groups took the same vocabulary test again to see how many new words they had learned. One week after the post-test, the students took a short retention test to check how many words they still remembered. Research shows that younger learners forget new words quickly if they do not use them actively (Brown, 2014), so this extra test helped measure real learning. Students also wrote short comments about how they felt during the study. They answered simple questions such as: "Was this method easy?", "Did you enjoy learning?", and "Did you remember the words better?" These comments helped the researcher understand how the students experienced each learning method.

Results

The results of the study showed a clear difference between the two groups of seventh-grade students. The group that learned vocabulary through Task-Based Learning (TBL) improved much more than the group that learned vocabulary through traditional classroom methods. After eight weeks, the TBL group learned an average of 42 new words. The traditional group learned an average of 18 new words. This means that the TBL group learned more than twice as many words as the traditional group. The TBL group also remembered more of the words during the follow-up retention test. One week after the post-test, the TBL group remembered about 72% of the new words. The traditional group remembered only about 39%. This shows that students who used words in real tasks could keep the words in their memory for a longer time.

Students' comments supported the test results. Many students in the TBL group said that learning with tasks was more enjoyable and helped them remember the words because they used them while talking, planning, and working in groups. They also said they felt more confident using English during the tasks. Students in the traditional group said it was difficult to remember the word lists, and they sometimes forgot the meanings quickly. The test scores and student reflections together show that Task-Based Learning helped seventh-grade students learn and remember vocabulary more effectively than traditional methods. Using the words in real-life tasks made learning easier, more meaningful, and more enjoyable for the students.

Discussion

The results of the study show that seventh-grade students learned vocabulary better when they used Task-Based Learning (TBL). The students in the TBL group learned more words and remembered them longer because they used the new vocabulary inside real tasks. When students use words in speaking, planning, or group work, the words become more meaningful to them. This helps the brain remember the words more easily. Research also shows that young learners learn faster when they connect new words with real actions and situations, and the results of this study support that idea.

The traditional group did not learn as many words because they mostly memorized word lists and did simple exercises. Many students said that this method was boring and difficult. They often forgot the words because they did not use them in real communication. This matches earlier studies that show that vocabulary learned through memorization often disappears quickly if it is not used in context.

Students in the TBL group also reported higher motivation. They said the tasks were fun, active, and helped them work with classmates. Some students mentioned that the tasks made them feel more confident speaking English, even if they made mistakes. This is important because confidence helps students practice more, and more practice leads to better learning.

Although TBL was more effective, some students said that tasks sometimes took more time and required group cooperation. A few students felt shy speaking in front of others, but this problem decreased over time as they became more comfortable. This shows that TBL requires practice and teacher support, especially at the beginning.

Overall, the discussion suggests that TBL is a strong and effective method for teaching vocabulary to seventh-grade ESL learners. It helps students understand, use, and remember new words better than traditional methods. Using tasks makes learning more meaningful, enjoyable, and active for young learners. At the same time, teachers should guide students and help them work together so that all learners benefit from the tasks.

Conclusion

This study shows that Task-Based Learning (TBL) is a very effective method for helping seventh-grade ESL students learn new vocabulary. The students who learned through tasks improved more than the students who learned through traditional exercises. The TBL group learned more words, remembered them longer, and felt more confident using English. This shows that using vocabulary in real-life tasks helps young learners understand the meaning of words and keep them in their memory. The study also shows that students enjoy learning more when they are active and working together. The tasks made the lessons more interesting and fun, so students were motivated to learn. When students are motivated, they try harder, practice more, and learn faster. Traditional methods, like memorizing word lists, did not give the same level of motivation or long-term learning. However, the study also suggests that teachers play an important role in making TBL successful. Some students needed help working in groups or understanding how to complete the tasks. With the teacher's guidance, the tasks became easier and more enjoyable. This means that TBL works best when teachers support students and create a positive learning environment.

In general, the conclusion of this research is clear: Task-Based Learning helps seventh-grade ESL students learn vocabulary in a more meaningful, enjoyable, and effective way. Future studies can look at how TBL can improve other skills, such as speaking, reading, and writing. Using TBL regularly in middle school classrooms can help young learners develop stronger language skills and feel more confident using English.

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INSON TANASINING NORMAL MIKROFLORASI VA UNING AHAMIYATI VA VAZIFALARI. DISBAKTERIOZ.

Xursanov Fayozbek

Toshkent Davlat tibbiyot instituti termiz filiali talabasi

Fayozxursanov2006@gmail.com

+998937795306

Ilmiy Rahbar: Ahmedova Saodat

+998912321114

Annotatsiya: Tish milkida tosh hosil bo'lishida aktinomitsetlarning (*A. viscosus*, *A. Is-raeli*) ta'siri katta. Toshlarining ko'payishi parodontoz kasalligiga Olib keladi. Og'iz bo'shlig'ida nomaxsus himoya omillari (so'lak, shilliq va shilliq Osti q av at hujayralarining to'siqlik xossalari) ham mavjud. So'lak tarkibida Kucbli bakteriostatik va bakteritsid xususiyatga ega moddalar (lizotsim, Fermentlar, S IgA va boshqalar) bo'ladi. Shunga qaramay, og'iz bo'shlig'ini Toza saqlashning asosiy omili bu og'iz bo'shlig'I gigiyenasi hisoblanadi, Ya'n I kuniga ovqatlangandan so'ng tishlarni tish pastasi bilan 2-3 marta Yuvish va yilda 1-2 marta toshlardan tozalash kerak. Norm ada ichki va o'rta quloqda mikroblar bo'lmaydi. Tashqi quloq yo'lida yog' bezlari yaxshi rivojlangan, ular sekreti hisobiga quloqda kir yig'iladi. Sog'lom odamlar qulog'ida ichaq tayoqchasi, *Proteus*, nopatogen *Stafilokokk* va *Korinebakteriyalar*, achitqi zamburug'lari uchraydi. A lloxton mikrofloraga *Staph.aureus*, *Str.pigenes*, *Ps.aeruginosa*, *Aspergillus fumigatus*, *A.niger*, *A.terreus* kabi mikroorganizmlar kirishi Mumkin.

Kalit so'zlar: Karies, Tishlardagi tosh, Ichak mikroflorasi, Teri mikroorganizmlari, Qin mikroflorasi.

Kirish.

Teri doim tashqi muhit ta'sirida bo'lishiga qaramay, undagi Mikroorganizmlar turi va miqdori organizmdagi boshqa biotatlarga Nisbatan ko'p emas. Odatda 1 sm² terida 02— J O' mikroorganizm aniqlanadi. B ularga asosan *S taphyococcus epidermidis* va *Ssaprophyticus*, Sarsinalar, mikrokokklar, difteroidlar, zamburug'lar,

streptokokklar, batsilla Va korinebakteriyalar kiradi. Mikroorganizmlar kichik bo'lishiga qaramay normal teri ichiga kira Olmaydi, chunki terida mexanik to'siq omillari ham mavjud. Agar teri Shikastlanib, unga tushgan shartli-patogen yoki patogen mikroblar tezda Ko'payib, mahalliy himoya kuchlarini yenga olsagina, u yerda yiringli, Zamburug'li va virusli yallig'lanish jarayonlari yuzaga keladi va infeksiya O'chog'iga aylanadi. alloxtion Og'iz bo'shlig'I mikroblariga enterobakteriyalar Mikroflorasi (Escherichia, Klebsiella, Enterobacter, Proteus turkumlari), Ps. Aeruginosa, spora hosil qiluvchi bakteriyalar (Bacillus, Clostridium turkumlari) kiradi. Og'iz bo'shlig'idagi mikroorganizmlarning ko'pchiligi (70%) tish kirida Uchraydi. 1 mg quruq tish kirida 250 mln. Mikrobo'ladi. Og'iz Bo'shlig'idagi mikroorganizmlar miqdori og'iz bo'shlig'I gigiyenasi, Odamning yoshi, ovqat ratsioni va boshqa omillarga bog'liq. Bu omillar Hisobiga mikrobiotsenoz muvozanati buzilsa, kariyes (tish chirishi), pulpit, Parodontit, stomatit kabi kasalliklar paydo bo'ladi. Masalan, kariyesni, Asoslan, Str. Mutans va L. casei lar qo'zg'atadi, ular uglevodlarni sut Kislotasigacha parchalaydi. Natijada so'lakning ishqoriy muhiti nordon Muhitga aylanadi, tish emali yemiriladi va kariyes rivojlanadi. Bundan Tashqari, nordon muhitda zamburug'lar rivojlanadi va lab bichilishiga Sabab bo'ladi.

Asosiy Qism:

Nafas yo'larining autoxton mikroorganizmlariga asosan «quyidagilar Kiradi: Staph, epidermidis, Staph, saprophyticus, difteroidlar, streptokokklar, Korinebakteriyalar, saprofit grammanfiy diplokokklar, Str. Mitis va Bact. Fragilis. Alloxtion mikroblarga Staph, aureus, Str. Pyogenes, Str. Pneumoniae, M. lacunata, H. influenzae, adenoviruslar va boshqalar misol Bo'la oladi. Sovuq qotish, surunkali vitaminlar yetishmasligi, nafas yo'larining Shikastlanishlari, immun tizim faoliyatining susayishi natijasida nafas Yo'laridagi shartli-patogen va patogen mikroblar har xil kasalliklar (nafas yo'larining o'tkir kataral yallig'lanishi, bronxit, zotiljam va Boshqalar)ning kelib chiqishiga sabab bo'ladi. Меърий ичак микрофлорасининг сифатий ва миқдорий бузилишлари «дисбактериоз» ёки «дисбиоз» термини билан номланади. Bu termin tibbiyot Amaliyotiga 1916 yili A.Nisole tomonidan kiritilgan. Disbakterioz- ingliz Tilida – bakteriyalarning ortiqcha o'sib ketishi sindromi (bacterial overgrowth Syndrome), nemis tilida esa – bakteriyalarning hato o'rnashishi (bakterielle Fehlbesiedlung) deb nomlanadi. Disbakterioz mustaqil nozologik shakl bo'lmay, Klinik-laborator sindrom sifatida ko'riladi. Uning paydo bo'lishida turli – Tuman sabablar mavjudligi aniqlangan; - odamning ovqatlanish turi, yoshi, yil Fasli, atrof- muhit holati, surunkali kasalliklar

mavjudligi, oshqozon ichak tizimi, ichakning jarohatlanishi bilan kechuvchi o'tkir ichak Infeksiyalari, surunkali kolitlar va enterokolitlar, nospesifik yarali Kolitlar, ichak invaziyalari, uzoq vaqt antibiotiklar, gormonlar va nur Bilan davolanish patologiyasi va x.k. Chaqloqlarda va ko'krak yoshidagi Bolalarda ichak disbakteriozi chala tug'ilganlik, sun'iy ovqatlantirishga Erta o'tish, hamda onadagi patologiyalar (homiladorlik davridagi og'ir toksikoz Holat, mastitlar va b.k.) natijasida paydo bo'ladi. Normal ichak mikroflorasi 450 dan ortiq mikroorganizmlardan tashkil topib, hujayin organizmining metabolizmida va ichakda kolonizasion rezistentlikni shakllanishida ishtirok etadi. Ichakning mikroblar to'plami makroorganizmda moddalar almashinuvi jarayonlarining holatini aniqlaydi, bir tomondan, biologik faol birikmalarni zararsizlantirib, hazm bo'lmagan ozuqa moddalarini o'zlashtirsa, ikkinchi tomondan V gurux vitaminlarini, vitamin K, nikotin, folin va askorbin kislotalarni, ayrim fermentlarni sintezlaydi. Makroorganizmning immunobiologik reaktivligini shakllanishida mikrofloraning muhim o'rni e'tirof qilinadi, buning natijasida organizmda umumiy immunoglobulinlar miqdori boshqariladi. Shunday qilib, me'yoriy ichak mikroflorasining o'ziga xos - himoya, modda almashinuv, immun faollashtiruvchi vazifalari aniqlangan va ularning birortasining izdan chiqishi metabolizmning buzilishiga, natijada mikronutrientlarning - vitaminlarning, mikroelementlarning, mineral moddalarning etishmovchiligiga, hamda immun holatning pasayishiga, bu esa makroorganizm a'zo va tizimlarida qaytmas jarayonlarni kelib chiqishiga sabab bo'ladi. Homiladorlik davrida qinda glikogen miqdori oshib borganligi Tufayli laktobakteriyalar hayot faoliyati uchun qulay sharoit yuzaga keladi. Ushbu davrda bakteroidlar, spora hosil qilmaydigan qat'iy anaeroblar va Aerob Gram (+) sharsimon va Gram (-) tayokchasimon bakteriyalar soni kamayadi. Bu o'zgarishlar homiladorlikning 3 trimestrida eng yuqori nuqtaga ega bo'ladi.

Tug'ruk qin mikroflorasi tarkibini sifat va miqdor jihatdan O'zgarishlariga sabab bo'ladi; spora hosil qilmaydigan Gram (-) anaerob Bakteroidlar, esherixiyalar ko'payib, lakto- va bifidobakteriyalar soni Kamayadi. Tug'ruqdan 3-4 kun o'tgach, vaginal mikroflora buzilishlari turli Xil asoratlarda rivojlanishini engillashtiradi. Lekin bu mikroflora O'zgarishlari tranzitor bo'lib, tug'rukdan 6 hafta o'tgach me'yorgacha Tiklanadi. Vaginal mikrofloraning asosiy vakillaridan bo'lgan laktobakteriyalar Mikroaerofillar bo'lib, ayollar qinida ularning *L.acidophilus*, *L.fermentum*, *L.crispatus*, *L.jensenii*, *L.gasseri* turlari ko'p uchraydi. Sog'lom ayollarda Laktobakteriyalar faqat qinda uchramay, balki uretraning distal Bo'limlarida ham topiladi. Uroepitelial hujayralarda joylashgan Laktobakteriyalar siydik-tanosil traktining pastki bo'limlarini Uropatogen bakteriyalar kolonizasiyasidan himoya

qiladi. Laboratoriyaga olib kelingan najasning chukur kismidan 1 g tortib, vaginal suyuqlik Bo'lsa 1 ml olamiz va 9ml bufer eritmasida aralashtiriladi. Bu ham aerob, ham anaerob Bakteriyalarning bir tekis tarqalishi va ularning tirik saqlanishi uchun sharoit yaratadi. Bu eritmalarni 101 dan 1010 darajasigacha suyultiriladi va ularning har biridan tegishli Oziqa muhitlariga turli aerob, hamda anaerob mikroorganizmlarni ajratib olish uchun Ekiladi Anaerob bakteriyalar normal ichak mikroflorasining 98-99% ni, aerob flora esa 1- 2% ni tashkil qilishini hisobga olinib, ularni o'stirishda kimyoviy modda tutadigan gaz Paketchalari joylashtirilgan mikroanaerostatdan foydalanish mumkin(anaerob Bakteriyalarni ajratib olish usullariga qaralsin). Gr (-) spora hosil qilmaydigan qat'iy anaerob bakteriyalar natriy-azid qo'shilgan Qonli va bakteroidlar uchun agarlarda o'stirildi. Inkubasiya vaqti 350C da 72 soat Bu oziq Muhitlarda bakteroidlar yaxshi o'sadi. Bakteroidlar kulrang, to'q jigarrang, qora Koloniyalar hosil qilib, shakli – grammanfiy polimorf tayoqcha, spora hosil qilmaydi, Katalaza manfiy. Bakteroidlar qat'iy anaerob hisoblanib, anaerostatlarda 2-4 kun O'stiriladi. Gram (+) qat'iy anaerob bakteriyalar “Blourokko” va “Hime-dia” firmasining “Bifidobakteriyalar uchun agar” oziq muhitlarida 37,50 -380S da 48 soat anaerob sharoitda O'sadi. Bifidobakteriyalar disk ko'rinishdagi koloniyalar hosil qiladi. Bu agarda boshqa Anaeroblar ham o'sishi mumkin. Shuning uchun koloniyalardan surtma tayyorlanib ko'rildi.

Xulosa: Inson tanasining normal mikroflorasi — organizmning tabiiy himoya tizimining ajralmas qismi bo'lib, teri, og'iz bo'shlig'i, ichak, nafas yo'llari va urogenital tizimda muvozanatli holda yashovchi millionlab mikroorganizmlardan iborat. Bu mikroflora patogen mikroblarning ko'payishini cheklab, immunitetni kuchaytiradi, hazm jarayonida ishtirok etadi, vitaminlar (K, B guruhleri) sintezini ta'minlaydi va homeostazni saqlab turadi. Normal mikrobiota tarkibining buzilishi — disbakterioz — antibiotiklar, stress, infeksiyalar yoki noto'g'ri ovqatlanish ta'sirida rivojlanib, hazm buzilishlari, intoksikatsiya, immunitet pasayishi va infeksiyon kasalliklarga moyillikni oshiradi. Shuning uchun mikrofloraning barqarorligi inson salomatligi uchun muhim omil hisoblanadi. Umuman olganda, normal mikroflora organizmni himoya qilish, metabolik jarayonlarni qo'llab-quvvatlash va immun tizim barqarorligini ta'minlashda hal qiluvchi ahamiyatga ega. Disbakteriozni erta aniqlash va to'g'ri davolash esa organizmning umumiy funksional holatini tiklashda muhim o'rin tutadi.

Foydalanilgan adabiyotlar:

1. Mikrobiologiya, immunologiya va virusologiya Muhamedov

2. “Mikrobiologiya, immunologiya va virusologiya Aliyev
3. “Mikrobiologiya, immunologiya va virusologiya” Muallif: A. A. Abdujabborov
4. “Mikrobiologiya va immunologiya” Muallif: Sh. N. Egamov
5. “Tibbiy mikrobiologiya va immunologiya” Muallif: Sh. A. To‘xtayev

TOG' JINSLARINING UMUMIY G'OVAKLIGINI ANIQLASH VA STANDART, TALABLARI

Muminov Anvar Sultonovich Geologiya-mineralogiya fanlari nomzodi Laboratoriya mudiri

"O'ZLITINEFTGAZ" AJ Toshkent, O'zbekiston

Umarov Shaxzod Akbarovich Texnika fanlari nomzodi "O'zbekiston standartlari instituti" davlat
muassasasi, Toshkent, O'zbekiston

Norqulov Navro'zbek Mirsalim o'g'li muhandis "O'ZLITINEFTGAZ" AJ Toshkent, O'zbekiston

Tog' jinslari — yer qobig'ini tashkil qiluvchi asosiy materiallardan biri bo'lib, ularning fizik-mexanik xossalarini o'rganish tabiiy resurslardan samarali foydalanish va xavfsiz muhandislik ishlarini tashkil qilishda muhim hisoblanadi. Tog' jinslarining hajmi ularning zichligi, mustahkamligi, hajmiy og'irligi va boshqa xossalarini aniqlashda asosiy ko'rsatkich hisoblanadi. Shu bois, tog' jinslarining hajmini aniqlashda qo'llaniladigan usullar va ularni standartlashtirish muhim ilmiy-amaliy vazifa sanaladi.

Umumiy g'ovaklik koeffitsientini hisoblash quyidagi formula yordamida amalga oshiriladi:

$$m_{\pi} = (1 - Y_o / Y_M) \cdot 100 \%,$$

bu yerda m_{π} - jinsning umumiy g'ovakligi; Y_o - tog' jinslarining umumiy zichligi;

Y_M - jinsning mineralogik zichligi.

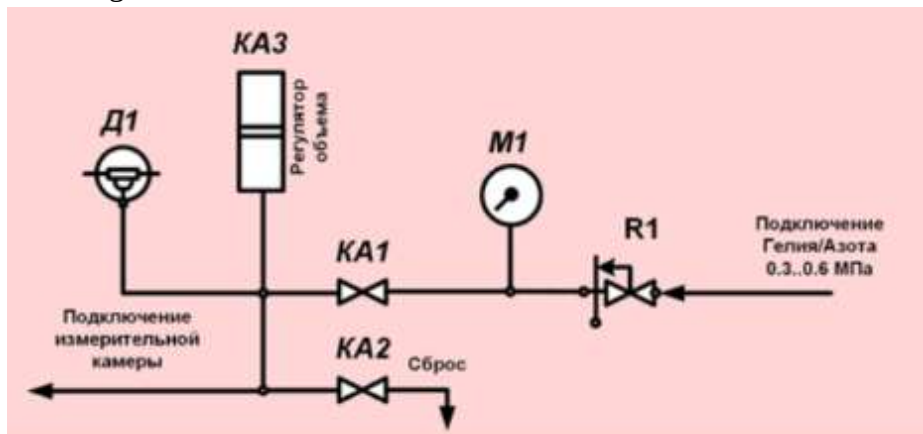


Ochiq g'ovaklikning ta'rifi

Olingan va quritilgan tosh namunalari aniq tarozida tortiladi va standart namunalarning uzunligi va diametrining o'lchov ma'lumotlari bilan birga PIK-P o'rnatish kompyuteriga kiritiladi.

PIK-P tog' jinsi namunasini o'z ichiga olgan kamerada bosimning pasayishi printsipi asosida ishlaydi, chunki hajm ma'lum miqdorda kengayadi. Qurilma diametri 30 mm bo'lgan silindrsimon tog' jinsi namunalarning g'ovakligini o'lchash uchun tog' jinsi ushlagichlari bilan to'liq ta'minlangan.

Tog' jinsi uzunligi va diametri kompyuterga ulangan raqamli kaliper yordamida aniqlanadi. Porozlik o'lchovlari avtomatik ravishda amalga oshiriladi. Shlangi diagramma 1-rasmda ko'rsatilgan.



2-rasm - Shlangi diagramma R1 - bosim regulyatori; M1 - bosim o'lchagich; D1 - bosim sensori; KA1...KA3 – avtomatik klapanlar

G'ovak hajmini o'lchash Boyl qonunida belgilangan geliy kengayish printsipi yordamida amalga oshiriladi. Boyl qonuni shuni ko'rsatadiki, ideal gazning bosimi (P) uning hajmiga (V) ko'paytirilsa, doimiy qiymat (doimiy haroratda) hosil bo'ladi. Boyl qonuni, tog' jinsi tahlilida qo'llaniladigan, ma'lum bosim va haroratga ega bo'lgan gazning kengayishiga asoslangan noma'lum hajmni aniqlash qobiliyatini anglatadi. Shuning uchun, P1, P2 va V2, V1 ni bilish quyidagi formula yordamida hisoblanishi mumkin:

$$V1 = \frac{P2 \cdot V2}{P1}$$

Qurilma tizimning ichki hajmini ma'lum miqdorda o'zgartirishi mumkin, bu esa namuna kamerasidagi bosimning pasayishiga olib keladi. Dastur kamera bosimining o'zgarishi asosida namunaning g'ovak hajmini hisoblab chiqadi. Har bir kamera metall kalibrlash qo'shimchalari bilan jihozlangan. Bosim regulyatori R1 tajribadan tajribagacha gaz bosimining barqarorligini ta'minlaydi. Regulyator R1 0,28-0,3 MPa ortiqcha bosimga o'rnatiladi, bu M1 bosim o'lchagichi tomonidan nazorat qilinadi. KA1 klapan tajribadan oldin kamera gaz etkazib beradi. Valf avtomatik ravishda dasturiy ta'minot tomonidan boshqariladi.

Vana KA2 tajriba oxirida bosimni kamaytirishni ta'minlaydi. KA2 dasturiy ta'minot tomonidan avtomatik ravishda boshqariladi.

Valf KA3 ichki hajmni tartibga soladi. KA3 - bu silindr bo'lib, uning pistonini kamera hajmini belgilangan miqdorda tartibga soladi. Hajm o'zgarishining kattaligi o'lik hajmni kalibrlashda hisoblanadi. KA3 avtomatik ravishda dasturiy ta'minot tomonidan boshqariladi. Bosim sensori D1 teshik hajmini hisoblash uchun kamera bosimini o'lchaydi.

Tog' jinslarining ochiq g'ovakligi suyuqlik bilan to'yinganlik usuli (I. A. Preobrajenskiy usuli) yordamida ham aniqlanadi.

Buning uchun og'irliklar, qalay ko'prik, 100 ml stakan, shisha qo'ng'iroqli kavanoz va maydalangan shisha tiqinli vakuum pompasi va yupqa neylon ip bilan analitik muvozanat kerak. Olingan va quritilgan namunaning massasi uni analitik tarozida tortish orqali aniqlanadi. Tajriba davomida massani aniqlashning aniqligi 0,001 g. Taroziga solingandan so'ng, namuna idishga joylashtiriladi,

vakuum qurilmasi qopqog'i ostiga qo'yiladi va ishchi suyuqlikdan 3-5 mmHg qoldiq bosimgacha alohida evakuatsiya qilinadi.

Keyin ishchi suyuqlik asta-sekin namuna idishiga 0,5 sm chuqurlikka botirilguncha kiritiladi. Namuna ishchi suyuqlik bilan to'liq to'yingangacha evakuatsiya davom ettiriladi. Bu namunaning sirt rangidagi o'zgarish sifatida ko'rinadi. Kapillyar emdirish tugagandan so'ng, namuna idishidagi suyuqlik darajasi namuna yuzasidan 2-3 sm gacha ko'tariladi va keyin havo pufakchalari namunadan chiqmaguncha evakuatsiya qilinadi. Keyin havo vakuum kamerasiga kiritiladi. Atmosfera bosimi ishchi suyuqlikni namunaning havosiz teshiklariga qo'shimcha ravishda majbur qiladi. To'yingan namuna ishchi suyuqlikdan chiqariladi va ortiqcha suyuqlik chiqariladi. Buning uchun namunani shisha slaydga qo'ying va suyuqlik izlari qolmaguncha va sirt shaffof bo'lmaguncha uni quruq yuzaga bir necha marta aylantiring. Ishchi suyuqlik bilan to'yingan namunaning massasi uni analitik tarozida tortish yo'li bilan aniqlanadi. Namunani neylon ip bilan bog'lang va uni ishchi suyuqlikda torting. Buni amalga oshirish uchun shkala ustidagi ishchi suyuqlik bilan to'ldirilgan kichik chashka bilan ko'prik qo'ying. Namuna suyuqlikka botiriladi va muvozanat nurining kancasidan ip bilan osiladi. Neylon ipning massasi (M_n) aniqlanadi. Tog' jinslarining ochiq g'ovaklik koeffitsienti quyidagi formula bo'yicha hisoblanadi:

$$K_{\Pi} = \frac{M_2 - M_1}{M_2 - M_3 + M_n} \cdot 100 \%,$$

bu erda: K_{Π} – ochiq g'ovaklik koeffitsienti, %; M_1 – havodagi quruq namunaning massasi, g; M_2 – havodagi ishchi suyuqlik bilan to'yingan namunaning massasi, g; M_3 – ishchi suyuqlikdagi suyuqlik bilan to'yingan namunaning massasi, g; M_n – neylon ipning massasi, g. Tog' jinslarining ochiq g'ovakligi qiymati aniqlik bilan hisoblanadi 0,1 %:

Standartlar va talablar

Tog' jinslari g'ovaklik hajmini o'lchashda xalqaro va milliy standartlarga amal qilish muhimdir. Masalan:

- **ASTM D4404** — tog' jinslari zichligini va g'ovaklik hajmini o'lchash bo'yicha Amerika standarti.
- **GOST 28570-90** — Rossiya federatsiyasining tog' jinslari g'ovakligi va zichligini aniqlash usullari standarti.
- Milliy standartlar esa turli mamlakatlarda o'ziga xos talablarni o'z ichiga oladi. Standartlar namunalar tayyorlash, o'lchash sharoitlari, uskunalar, natijalarni qayta ishlash va hisoblash usullarini belgilaydi. Bu qoidalar natijalarning ishonchliligi va taqqoslanishini ta'minlaydi.

Foydalanilgan adabiyotlar

1. "Geotexnika (Gruntsunoslik)" – N. Maxmudov, A. Hamidov.
2. "Tog' jinslari mexanikasi" – R. Yunusov, J. Fayziyev.
3. Oliy ta'lim uchun "Geologiya asoslari" darsliklari.
4. Tog' jinslari geologiyasi va geomekanikasi – V.M. Kartashov.

**SOME DIFFICULTIES OF USING THE MOTHER TONGUE IN THE
ENGLISH**

**INGLIZ TILIDA ONA TILIDAN FOYDALANISHDAGI BAZI
QIYINCHILIKLAR**

Termiz State Pedagogical Institute Faculty of Languages

*Student of the educational direction "Foreign language in preschool and primary
education: English language" 403-group*

Safarova Sevinch

Teacher of Termiz State Pedagogical Institute

Eshquvvatova Gulasal

Annotation: This study investigates the challenges associated with the use of the mother tongue (L1) in English as a Foreign Language (EFL) classrooms. While strategic use of L1 can offer benefits such as facilitating comprehension, reducing anxiety, and promoting deeper engagement, its overuse or inappropriate application can impede language acquisition. This paper explores the common difficulties encountered by both teachers and students, including reliance on translation, interference with target language production, and the potential for creating a dependency on L1. Through a review of relevant literature and empirical evidence, this article aims to provide insights into the effective and balanced integration of L1 in EFL instruction, offering practical recommendations for educators seeking to optimize language learning outcomes.

Keywords: Mother Tongue, L1, English as a Foreign Language (EFL), Classroom, Translation, Language Acquisition, Interference, Dependency, Language Teaching, Pedagogy.

Annotatsiya: Ushbu tadqiqot ingliz tilini xorijiy til sifatida o'qitish (EFL) sinflarida ona tilidan (L1) foydalanish bilan bog'liq muammolarni o'rganadi. Ona tilidan strategik foydalanish tushunishni osonlashtirish, xavotirni kamaytirish va chuqurroq ishtirokni rag'batlantirish kabi afzalliklarni taqdim etishi mumkin bo'lsa-da, undan haddan tashqari foydalanish yoki noto'g'ri qo'llash tilni o'zlashtirishga to'sqinlik qilishi mumkin. Ushbu maqola o'qituvchilar va talabalar tomonidan duch keladigan umumiy qiyinchiliklarni o'rganadi, jumladan tarjimaga tayanish, maqsadli tilni ishlab chiqarishga aralashish va ona tiliga qaramlikni yaratish potentsiali. Tegishli adabiyotlar va empirik dalillarni ko'rib chiqish orqali ushbu maqola EFL o'qitishida

ona tilini samarali va muvozanatli integratsiyalash haqida tushuncha berishni maqsad qiladi va til o'rganish natijalarini optimallashtirishga intilayotgan o'qituvchilar uchun amaliy tavsiyalar beradi.

Kalit so'zlar: Ona tili, L1, Ingliz tili xorijiy til sifatida (EFL), Sinf xonasi, Tarjima, Tilni o'zlashtirish, Aralashuv, Qaramlik, Til o'qitish, Pedagogika.

INTRODUCTION

The role of the mother tongue (L1) in second language acquisition (SLA) has been a subject of ongoing debate. While some researchers advocate for its complete exclusion from the English as a Foreign Language (EFL) classroom, others recognize its potential as a valuable pedagogical tool. This paper examines the specific difficulties encountered by teachers and students when using L1 in EFL contexts. It argues that while L1 can provide scaffolding and facilitate comprehension, its uncritical application can hinder the development of independent language skills. This paper will explore the challenges of over-reliance on translation, linguistic interference, and the creation of L1 dependency, ultimately offering recommendations for a more balanced and effective approach to L1 use in EFL instruction.¹

Many studies were conducted to find out the impacts of using mother tongue in teaching and learning English. They seemed to focus much on the positive effects rather than the negative ones. It can be seen that English skills can be improved better if they are taught in an only English environment. We listen and respond to what we hear around us and then we succeed in mastering our mother tongue. As a result, the proponents of monolingual approach, we believe that second language learning follows a process similar to first language learning, claim that exposure is essential in learning English.²

In other words, learners of English should be exposed to an English environment as much as possible to become master in English. Thus, using the students' mother tongue prevents learners from getting familiar with listening and speaking in English and that too much use of the mother tongue deprives the learners of input in English. Students need to have opportunities to remind and reuse what they have obtained and foster their skills. That means if lecturers use mother tongue

¹ Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press. (Relevant for understanding the role of social interaction and scaffolding in learning, which can be connected to L1 use.)

² Atkinson, D. (1987). The mother tongue in the classroom: A neglected resource? *ELT Journal*, 41(4), 241-247. (A classic article that challenges the traditional prohibition of L1 in the classroom).

when teaching English, students will have fewer chances to listen and speak English so it very hard for their speaking and listening skills to be improved.³ The more specific you are, the better I can assist you. In the meantime, here are some general difficulties often associated with using the mother tongue in English language learning:

Interference: The structures and rules of the L1 can negatively influence the learner's production and comprehension of English. This can manifest in errors in grammar, pronunciation, vocabulary, and sentence structure.

Over-reliance on Translation: Learners may become overly dependent on translating from L1 to English, which can hinder their ability to think directly in English and develop fluency.

L1 Dependency: Excessive use of L1 can create a reliance on it, making it difficult for learners to function independently in English. They may struggle to understand authentic English materials or participate in conversations without constant translation.

Reduced Exposure to English: When L1 is used frequently in the classroom, learners have less opportunity to hear and use English, which can slow down their progress.

Inhibition of Active Participation: Some students may be hesitant to speak English if they know they can rely on their L1, which can limit their opportunities for practice and feedback.

Teacher-Related Challenges: Teachers may lack the training or resources to effectively integrate L1 into their lessons, leading to inconsistent or inappropriate use.

Creating Unequal Opportunities: In multilingual classrooms, using one student's L1 may disadvantage students who do not share that language.

Code-Switching Issues: While code-switching can be a useful strategy, it can also be used inappropriately or excessively, leading to confusion or hindering the development of English proficiency.

Difficulty in Understanding Abstract Concepts: Sometimes, direct translation of abstract concepts from L1 to English can be misleading or inaccurate, leading to misunderstandings.

Pronunciation Difficulties: L1 pronunciation habits can interfere with the acquisition of accurate English pronunciation.

CONCLUSION

In conclusion, while the mother tongue can serve as a valuable tool in the EFL classroom, its uncritical or excessive use presents several challenges. Over-reliance on

³ Cook, V. (2001). Second language learning and language teaching (3rd ed.). Arnold. (A comprehensive overview of SLA, including discussion of L1 influence).

translation, linguistic interference, and the potential for creating L1 dependency can impede language acquisition. By understanding these difficulties and implementing strategies to mitigate their impact, educators can harness the benefits of L1 while fostering greater independence and fluency in English. Further research is needed to explore the nuanced effects of L1 use in diverse EFL contexts.⁴

This paper has explored the specific difficulties associated with the integration of the mother tongue in English as a Foreign Language instruction. While acknowledging the potential benefits of L1 for scaffolding and comprehension, this analysis highlights the risks of over-translation, linguistic interference, and the development of unhealthy L1 dependency. To address these challenges, we recommend that teachers receive targeted training in the strategic and judicious use of L1, focusing on clarification rather than direct translation. Furthermore, students should be encouraged to engage with authentic English materials and develop strategies for independent language learning. Future research should investigate the long-term effects of different L1-based pedagogical approaches on student outcomes and attitudes towards English. Ultimately, a balanced and informed approach to L1 use is crucial for maximizing the effectiveness of EFL instruction.

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⁴ [https://www.scribd.com/document/613463745/The-Pros-and-Cons-of-using-Mother-Tongues-in-English-Teaching-~-:text=mother%20tongue%20in%20English%20class.&text=with%20students%20in%20their%20own,student%20rapport%20in%20the%20class.&text=using%20crude%20and%20inaccurate%20translation,246;%20Harbord%2C1992\).&text=lesser%20opportunities%20for%20L2%20speaking,learn%20things%20including%20another%20language.](https://www.scribd.com/document/613463745/The-Pros-and-Cons-of-using-Mother-Tongues-in-English-Teaching-~-:text=mother%20tongue%20in%20English%20class.&text=with%20students%20in%20their%20own,student%20rapport%20in%20the%20class.&text=using%20crude%20and%20inaccurate%20translation,246;%20Harbord%2C1992).&text=lesser%20opportunities%20for%20L2%20speaking,learn%20things%20including%20another%20language.)

[opportunities%20for%20L2%20speaking,learn%20things%20including%20another%20language.](#)

PROBLEMS IN THE FIELD OF TRANSLATION

Scientific Supervisor: **Egamberdiyeva Irodaxon**

Student: **G'ayrataliyeva Nilufar**

Andijan state institute of foreign language

Abstract: *This paper examines the major problems translators encounter in their work, including semantic ambiguity, cultural gaps, idiomatic expressions, and stylistic variations. By analyzing these challenges through practical examples and theoretical frameworks, we aim to provide insights into the complexities of translation and suggest approaches for overcoming these obstacles. The study emphasizes that translation is far more than literal word replacement—it is a nuanced process of meaning reconstruction across linguistic and cultural boundaries.*

Keywords: *Translation, linguistic barriers, cultural transfer, semantic equivalence, idiomatic expressions, untranslatability, translation strategies, cross - cultural communication.*

Translation has been a fundamental human activity throughout history, serving as a bridge between languages, cultures, and civilizations. However, despite centuries of practice and theoretical development, translation continues to present significant challenges that even experienced professionals struggle to resolve completely. The difficulty lies not in the mechanical process of substituting words from one language to another, but in the complex task of transferring meaning, nuance, cultural context, and stylistic features across linguistic boundaries. The famous Italian saying "traduttore, traditore" (translator, traitor) captures a persistent concern about translation—that something essential is always lost or betrayed in the transfer from source to target language. While this pessimistic view may be overstated, it highlights a genuine problem: perfect equivalence between languages is rarely achievable. Every translator faces moments where the source text resists straightforward translation, forcing difficult decisions about what to preserve, what to adapt, and what must inevitably be sacrificed [1;42].

One of the most fundamental challenges in translation involves semantic equivalence. Words in different languages rarely map onto each other with perfect precision. Even seemingly simple vocabulary items can carry different ranges of meaning, connotations, and associations across languages.

Consider the English word "home." In many contexts, it might be translated into Russian as "дом" (dom), which can mean both "house" and "home." However, Russian also has "домой" (domoy, meaning "homeward") and various expressions that capture the emotional warmth associated with "home" in English. The translator must choose which aspect of "home" to emphasize based on context—the physical structure, the emotional concept, or the directional sense of returning [2;93].

Polysemy presents another layer of difficulty. A single word in the source language may have multiple related meanings, but the target language might use different words for each meaning. The English word "spring" can refer to a season, a coiled metal object, a water source, or a jumping motion. A translator working from English must determine which meaning applies in context and select the appropriate equivalent in the target language, where these concepts might be represented by entirely unrelated words. False friends—words that look or sound similar across languages but

have different meanings—create additional traps for translators. The Spanish word "embarazada" resembles the English "embarrassed" but actually means "pregnant." Such deceptive similarities can lead to serious translation errors if translators rely on surface resemblance rather than verified meaning. Perhaps the most intriguing problems in translation arise from cultural specificity. Every language contains words and expressions that are deeply embedded in a particular cultural context, making them difficult or impossible to translate with a single equivalent in another language.

The Japanese concept of "komorebi"—the sunlight that filters through tree leaves—has no single - word equivalent in English. A translator must choose between a lengthy descriptive phrase or simply borrowing the Japanese term and providing explanation. Similarly, the Danish word "hygge" refers to a specific quality of coziness and comfortable conviviality, but English lacks a precise counterpart [3;73].

Cultural references pose constant challenges. When translating literature, translators encounter references to historical events, social customs, foods, clothing, and institutions that may be unfamiliar to target readers. Should the translator explain these references in footnotes, replace them with culturally equivalent items from the target culture, or leave them as they are and trust readers to infer meaning from context? Each approach has advantages and drawbacks. Food terminology demonstrates these challenges clearly. Italian pasta varieties have specific names -penne, rigatoni, farfalle—that are increasingly borrowed into other languages because no equivalent terms exist. But lesser - known regional dishes may require descriptive translation that inevitably flattens the cultural specificity of the original term.

Idioms represent a special category of translation difficulty because their meaning cannot be derived from the literal meanings of their component words. Every language contains thousands of fixed expressions whose figurative meanings must be learned as whole units. The English idiom "it's raining cats and dogs" conveys heavy rain, but translating this literally into most languages would produce nonsense. French uses "il pleut des cordes" (it's raining ropes), while Greek says "βρέχει καρεκλοπόδαρα" (it's raining chair legs). The translator must recognize the idiom in the source language and find a functionally equivalent idiom in the target language, or else replace the idiom with a non - idiomatic expression that conveys the same meaning [4;61].

Metaphors and similes also require careful handling. Some metaphorical systems are cross - linguistically common—anger as heat appears in many languages—but others are language - specific. The conceptual metaphors that structure thought in one language community may not align with those in another, forcing translators to reconceptualize comparisons and imagery.

Proverbs present similar difficulties. While many cultures share common wisdom, they express it through different images and formulations. The English proverb "don't count your chickens before they hatch" advises against premature confidence, but other languages express the same warning differently. A translator might find an equivalent proverb in the target language or might explain the sentiment in non - proverbial terms.

Languages differ not only in vocabulary and grammar but also in their stylistic resources and conventions. What constitutes formal versus informal language, what degree of directness is appropriate in different contexts, and how emphasis is conveyed—all these vary across linguistic communities. German academic writing traditionally employs longer, more complex sentences than English academic prose. When translating scholarly work from German to English, translators often

break long sentences into shorter ones to match English conventions, but this risks losing some of the careful logical connections that German syntax makes explicit [5;74].

Forms of address create consistent difficulties. Languages like French, Spanish, and Russian maintain formal and informal second - person pronouns, while English uses "you" for all situations. When translating from English into these languages, translators must interpret social relationships and contexts to decide which form is appropriate—information that may not be explicit in the English source.

Register mixing poses another challenge. A text that deliberately combines formal and colloquial elements, or that uses archaic language for ironic effect, may be difficult to recreate in translation. The translator must identify the stylistic strategy in the source and find ways to achieve similar effects using the different stylistic resources of the target language.

Technical translation introduces domain - specific problems. Scientific, legal, and medical texts require translators to master specialized terminology and often to navigate differences in conceptual frameworks between cultures. Legal translation is particularly problematic because legal systems differ across countries. A term like "common law" refers to a specific legal tradition that doesn't exist in many countries. When translating legal documents, translators must often include explanatory glosses or use approximate equivalents while noting the lack of perfect correspondence.

Medical terminology presents different challenges. While much medical vocabulary is based on Greek and Latin roots and thus is similar across European languages, explanations for patients often require culturally sensitive adaptation. Disease concepts, treatment approaches, and the social dimensions of illness all vary across cultures. Languages structure information differently, creating problems that go beyond vocabulary. Some languages mark distinctions that others leave implicit, while other languages combine concepts that elsewhere are separated.

Aspect and tense systems vary considerably. Russian verbs consistently mark perfective versus imperfective aspect, forcing translators working from English into Russian to make explicit decisions about whether actions are completed or ongoing—distinctions that English often leaves ambiguous. Word order differences can create translation challenges, especially in literary texts where word order contributes to emphasis and style. Some languages allow flexible word order for stylistic purposes, while others have relatively fixed patterns. Translators must find alternative means of creating emphasis when direct word - order transfer is impossible.

The problems outlined in this paper demonstrate that translation is a complex cognitive and cultural task that extends far beyond linguistic competence. Translators must be not only bilingual but also bicultural, understanding the conceptual systems, cultural references, stylistic conventions, and pragmatic norms of both source and target communities. Despite these challenges, translation remains essential to human communication and cultural exchange. While perfect translation may be unattainable, skilled translators develop strategies for navigating the problems discussed here—through cultural adaptation, functional equivalence, explanatory additions, and creative reconceptualization. They learn when to prioritize literal accuracy and when to sacrifice surface form to preserve deeper meaning.

Future research in translation studies should continue exploring these problems through empirical investigation of translator decision-making processes and through the development of more sophisticated theoretical frameworks that account for the full complexity of translation as a

communicative act. As our world becomes increasingly interconnected, the work of translators becomes ever more vital, and understanding the challenges they face helps us appreciate the skill and creativity required for effective translation.

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THE ROLE OF MID-LEVEL MEDICAL PERSONNEL IN THE HEALTHCARE SYSTEM AND MODERN REQUIREMENTS

Zuhra Norbutayevna Normurodova,
Deputy Director for Academic Affairs,
Sergeli Abu Ali ibn Sino Medical College

Annotation

This scientific article analyzes the functional role of mid-level medical personnel in ensuring the sustainable development of the healthcare system, as well as their professional competencies and modern requirements. It also examines the existing challenges in the training process of these specialists and proposes recommendations aimed at improving the quality of education in medical colleges.

Annotatsiya

Ushbu ilmiy maqolada sog'liqni saqlash tizimining barqaror rivojlanishida o'rta bo'g'in tibbiyot xodimlarining funksional o'rni, ularning kasbiy kompetensiyalari, zamonaviy talablar va kadrlar tayyorlash jarayonidagi muammolar tahlil qilingan. Shuningdek, tibbiyot texnikumlaridagi ta'lim sifatini oshirish bo'yicha takliflar ishlab chiqilgan.

Keywords: mid-level medical personnel, healthcare, medical college, nursing, competencies, simulation-based training.

INTRODUCTION

On a global scale, healthcare systems are currently facing a range of demographic, social, and epidemiological challenges. In this context, mid-level medical personnel represent a key force at the primary level of healthcare, ensuring the provision of high-quality and continuous medical services to the population. The World Health Organization (WHO) has also identified the improvement of mid-level healthcare workers' professional qualifications as a global priority.

This article is devoted to the scientific analysis of the training process of mid-level medical specialists in medical colleges, the competencies required of them, and the existing challenges in this sphere.

Main Part

1. The Functional Role of Mid-Level Medical Personnel in the Healthcare System

Mid-level medical specialists constitute one of the most essential structural layers of the healthcare system. Their activities require not only practical skills, but also a high sense of responsibility, strong communication abilities, and the capacity to make quick decisions in emergency situations. Research indicates that one of the main determinants of healthcare service quality is the effective performance and professional preparedness of mid-level personnel. Their functional duties are broad and encompass the following areas:

1.1. Provision of Primary Medical Care

Mid-level medical workers serve as the primary executors of first-contact medical services. They conduct initial patient examinations and perform practical procedures such as measuring vital signs—blood pressure, body temperature, pulse, and respiratory rate. Moreover, they are responsible for carrying out preventive measures aimed at reducing disease prevalence, promoting sanitary-hygienic

practices, and encouraging healthy lifestyle habits among the population. These activities increase the importance of primary healthcare in maintaining overall public health.

1.2. Supporting the Treatment Process

One of the most responsible aspects of their activity is organizing and implementing treatment processes in accordance with physicians' instructions. They accurately and timely administer prescribed procedures, ensure correct use of medications, and monitor patients' responses to treatment. Regular patient care, continuous assessment of their condition, and timely communication of any changes to the physician have a direct impact on treatment effectiveness. Likewise, mid-level personnel act as a connecting bridge between the patient and the physician, ensuring continuity within the medical process.

1.3. Acting in Emergency Situations

In emergency cases—such as cardiac arrest, respiratory failure, loss of consciousness, or trauma—the promptness of mid-level personnel can become critical to life-or-death outcomes. They follow established protocols for providing first aid, initiate resuscitation measures when necessary, and ensure the safe transportation of the patient to a medical facility. These competencies require strong training and contribute significantly to the stability and responsiveness of the healthcare system.

1.4. Psychological Support

Medical care is not limited to physical interventions; a patient's psychological condition also plays a crucial role in the recovery process. Therefore, mid-level medical workers must be able to communicate properly with patients and their families, conduct conversations aimed at reducing stress, and offer emotional support. Strengthening the patient's trust in the treatment process and alleviating fear or anxiety can greatly enhance treatment outcomes. Hence, providing psychological assistance is an integral component of their professional duties.

Mid-level medical personnel perform extensive and multifaceted functions, and their role at every stage of the healthcare system is invaluable. The diversity of tasks they undertake requires not only practical expertise but also well-developed communication skills, responsibility, and the ability to make swift decisions. Therefore, their training must be based on high-quality, modern, and systematic educational approaches.

2. Modern Competencies and Professional Requirements (Expanded)

In the context of the rapidly evolving modern healthcare system, mid-level medical personnel are required to possess not only traditional practical skills but also a wide range of advanced competencies, such as digital literacy, communication culture, and analytical thinking. The rapid modernization of medicine, the introduction of new diagnostic technologies, and the global shift in patient-care standards have significantly increased the demand for higher professional training among these specialists. The modern competencies of mid-level healthcare workers can be examined across the following key areas.

2.1. Professional and Practical Competencies

Professional-practical competencies serve as the foundational pillar for mid-level medical personnel and represent the main criteria for delivering qualified and reliable healthcare services. The most essential of these competencies include:

- **In-depth knowledge of physiology, anatomy, and pharmacology:** Understanding the structure and functions of the human body, as well as the mechanisms of action of

medications, is necessary for organizing medical procedures correctly, assessing patient conditions, and performing interventions safely. These competencies enable mid-level specialists to make quick and accurate decisions in clinical situations.

- **Mastery of standard procedures:** Performing injections, infusions, dressings, monitoring vital signs, and carrying out various clinical procedures in accordance with established protocols form the core of practical competency. Specialists who master these skills contribute significantly to ensuring patient safety.
- **Elements of clinical thinking and analytical approach:** Although mid-level staff carry out physician-directed tasks, they must also think independently when monitoring patient status and identifying changes. An analytical approach is crucial for understanding clinical processes, recognizing early warning signs, and initiating urgent measures when necessary.

2.2. Information and Communication Literacy

Digital technologies have become an inseparable part of modern healthcare. Therefore, mid-level medical personnel must achieve information and communication literacy at a contemporary standard.

- **Working with electronic medical records:** Accurate input, updating, and management of patient information increase the transparency and precision of medical processes. Personnel capable of working with digital documentation significantly improve institutional efficiency.
- **Interpreting digital diagnostic equipment data:** Today, laboratory and instrumental examination results are recorded through automated systems. Understanding these results, analyzing them, and communicating relevant information to physicians is an essential responsibility of mid-level staff.
- **Supporting online consultation processes:** As telemedicine expands, patients increasingly receive medical assistance remotely. Mid-level healthcare workers play an important role in providing technical support, transferring information, and maintaining communication with patients during these consultations.

2.3. Personal Competencies

Medical personnel are distinguished not only by their professional skills but also by their personal qualities. These traits play a crucial role in communicating effectively with patients, working efficiently within a team, and adhering to professional ethical standards.

- **Communication skills:** Clear, sincere, and trustworthy communication with patients and their families is an integral part of the treatment process. Effective communication enhances the patient's mental state and improves the overall quality of care.
- **Stress resilience:** Unexpected situations frequently occur in the medical field. Therefore, the ability to maintain self-control and make sound decisions under stress is extremely important for medical personnel.
- **Ability to work in a team:** Healthcare is built upon multidisciplinary teamwork. The harmonious cooperation of mid-level personnel with physicians, other medical staff, and technical personnel significantly improves the quality of medical services.
- **Adherence to ethical and deontological principles:** Ensuring patient confidentiality, maintaining professional secrecy, and treating patients with respect and dignity are among the fundamental ethical obligations of healthcare workers.

3. Training Qualified Personnel in Medical Colleges: Challenges and Solutions

Training competent mid-level medical personnel in medical colleges is of strategic importance for the sustainable development of the healthcare system. However, the existing educational system still does not fully meet the requirements of modern medicine. Scientific analysis of current challenges and the proposal of practical solutions contribute to improving the quality of mid-level specialist training and advancing it to a new level.

3.1. Current Challenges

Although medical colleges strive to improve the educational process, several systemic shortcomings remain, including:

- **Insufficient practical training hours:** Professional skills are primarily developed through hands-on practice. However, in many colleges, the time allocated for practical training is insufficient compared to theoretical classes. This slows down students' adaptation to real clinical settings.
- **Lack of simulation equipment:** Simulation-based training is one of the most effective methods in modern medicine. The absence of specialized mannequins, virtual simulators, and realistic learning environments limits the development of students' clinical skills, potentially affecting the quality and safety of future medical care.
- **Educational programs not fully aligned with labor market needs:** New competencies required in healthcare—such as digital literacy, telemedicine, and communication skills—are often inadequately reflected in curricula. As a result, graduates frequently require additional retraining in practical workplaces.
- **Low alignment with international standards:** WHO protocols, European nursing standards, and advanced practices from countries like South Korea and Turkey are not fully integrated into educational programs. Differences in standards reduce graduates' competitiveness in the international labor market.

3.2. Proposed Solutions

Addressing the above challenges requires a systematic and modern approach. The following solutions can elevate the educational process in medical colleges:

1. **Increase the number of simulation centers:** Simulation-based training helps create environments that closely replicate real clinical conditions. Students can safely practice complex clinical scenarios, including resuscitation, procedures, injections, and diagnostics. Expanding simulation centers equipped with modern technologies significantly improves the quality of medical education.
2. **Implement a dual-education system:** The dual-education model allows students to combine academic studies with practical work. This approach, proven effective internationally, enables students to acquire robust skills in real clinical settings, ensuring they graduate ready for independent practice.
3. **Strengthen international collaboration:** Integrating WHO protocols, European nursing education standards, and advanced curricula from countries such as Turkey, South Korea, and Japan broadens students' knowledge. Seminars and training sessions conducted by foreign specialists bring the training system closer to global requirements.
4. **Retrain and enhance teacher qualifications:** The quality of professional education largely depends on the knowledge of instructors. Educators familiar with modern medical technologies and

international protocols contribute to a more effective system. Therefore, regular participation in experience-sharing programs, internships, and professional development courses is essential.

Conclusion

The effectiveness of the healthcare system is directly linked to the competence of mid-level medical personnel. Modern requirements demand the development of not only professional and practical skills but also communication abilities and proficiency in information technologies. By modernizing the educational process in medical colleges in accordance with international standards, it is possible to train highly qualified, responsible, and compassionate healthcare workers who meet the needs of society.

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MAKTABGACHA YOSHDAGI BOLALAR NUTQINI HAR TOMONLAMA RIVOJLANTIRISHDA ART-TERAPIYANING AHAMIYATI

Toshkent Kimyo Xalqaro Universiteti
Logopediya yoʻnalishi MSPD-1U talabasi
Abdullayeva Ugiloy Djurayevna

Annotatsiya: Maqolada art-terapiyaning bolalar nutqini rivojlantirishdagi oʻrni va ahamiyati tahlil qilinadi. Sanʼatga asoslangan bu metod bolalarda emotsional barqarorlikni shakllantirish, muloqot koʻnikmalarini rivojlantirish, soʻz boyligini kengaytirish va psixologik toʻsiqlarni yengishda samarali vosita sifatida tavsiflanadi. Tadqiqot 5–6 yoshli bolalarda art-terapiya ayniqsa tasviriy faoliyat orqali nutq rivoji hamda emotsional holatni korreksiya qilishda yuqori natija berishini koʻrsatadi. Metodning ijodiy, oʻyinli va kompleks xususiyati bolaga oʻzini erkin ifoda etish, fantaziyasini rivojlantirish va nutqiy faolligini oshirish imkonini beradi.

Kalit soʻzlar: art-terapiya, nutq rivoji, tasviriy faoliyat, emotsional barqarorlik, bolalar psixologiyasi, ijodkorlik, kommunikatsiya, mayda motorika, psixokorreksiya.

Аннотация: В статье рассматривается значение арт-терапии в развитии речи детей дошкольного возраста. Метод, основанный на художественной деятельности, помогает укреплять эмоциональное состояние ребенка, развивать коммуникативные навыки, расширять словарный запас и преодолевать психологические барьеры. Особое внимание уделено эффективности арт-терапии у детей 5–6 лет, где изобразительная деятельность способствует коррекции эмоциональных нарушений и стимулирует речевую активность. Комплексный и игровой характер метода обеспечивает свободное самовыражение, развитие воображения и повышение уверенности ребенка.

Ключевые слова: арт-терапия, развитие речи, изобразительная деятельность, эмоциональная устойчивость, детская психология, творчество, коммуникация, мелкая моторика, коррекция.

Abstract: The article examines the role and effectiveness of art therapy in developing children's speech. This art-based method supports emotional stabilization, enhances communication skills, enriches vocabulary, and helps overcome psychological barriers. The study highlights that for children aged 5–6, art therapy—especially visual art activities—significantly contributes to both speech development and emotional correction. Its creative, playful, and holistic nature encourages free self-expression, imagination growth, and increased speech activity in children.

Keywords: art therapy, speech development, visual arts, emotional stability, child psychology, creativity, communication, fine motor skills, correction.

Soʻnggi yillarda psixologiya va logopediya sohalarida art-terapiya metodlarining ahamiyati sezilarli darajada ortib bormoqda. Zamonaviy korreksion pedagogika nutq nuqsonlariga ega bolalarni reabilitatsiya qilishda faqat anʼanaviy logopedik mashgʻulotlar bilangina cheklanib qolmay, balki ularning shaxsiy, hissiy va ijodiy rivojlanishini taʼminlovchi innovatsion yondashuvlardan foydalanishni talab etmoqda. Shunday metodlardan biri — art-terapiya boʻlib, u bolalarda nutq faoliyatini faollashtirish, emotsional holatini barqarorlashtirish, oʻz fikrini erkin ifoda etish va muloqot koʻnikmalarini shakllantirishda samarali vosita hisoblanadi. Art-terapiya — bu sanʼat orqali

davolash va shaxsni o'z-o'zini anglashga yo'naltiruvchi psixoterapevtik yo'nalish bo'lib, u bolalarning nutqiy, hissiy va ijodiy salohiyatini ochib berishga yordam beradi. Logopedik jarayonda art-terapiya usullarining qo'llanilishi nutq buzilishining sabablarini yumshatish, bolaning ichki kechinmalarini ifoda etish va u orqali kommunikativ faoliyatini rivojlantirishga imkon beradi. Ayniqsa, rang, qum, musiqa, haykaltaroshlik, qo'l mehnati, rasm va dramatisatsiya elementlaridan foydalanish bolalarda ijobiy emotsional fonni yaratadi, logopedik mashg'ulotlarni yanada qiziqarli va samarali qiladi.

Bolaning nutqini rivojlantirish – bir vaqtning o'zida murakkab jarayon bo'lib, uning muvaffaqiyati ko'p hollarda hatto dastlab unchalik sezilmaydigan omillarga ham bog'liq. Eng yaxshi natijalarga erishish uchun logoped-defektologlar har xil yoshdagi bolalar bilan ishlashda maxsus metodlardan foydalanadi. Shunday usullardan biri – art-terapiya. Keling, mutaxassislarni bu uslub nimasi bilan jalb etishi va uning bolalar nutqini rivojlantirishdagi foydasini ko'rib chiqamiz.

Art-terapiya – bu bolalar rivojlanishiga qaratilgan kompleks yondashuv bo'lib, mashg'ulotlar psixologik, pedagogik va tibbiy omillarni o'z ichiga oladi, ammo asos san'atga tayanadi. Mazkur metodika nafaqat maktabgacha yoshdagi bolalarda, balki kattalarda ham muvaffaqiyatli qo'llaniladi. Terapevtik vosita sifatida quyidagilar ishlatiladi:

- Tasviriy san'at
- Loydan yasash
- Kollaj va applikatsiyalar yaratish
- O'yinlar
- Terapevtik ertaklar
- Musiqa va qo'shiq aytish
- Raqslar

Bolalar uchun san'at — bu o'zini ifoda etish, his-tuyg'ularini va istaklarini namoyon qilish vositasi. Ammo bu jarayonda bola yolg'iz bo'lmaydi: pedagog faol ishtirok etadi, bolaning faoliyatini tahlil qiladi, uning ehtiyojlari va xususiyatlarini aniqlaydi. Mashg'ulotlar mavjud qiyinchiliklarni bartaraf etish, xulq-atvorni to'g'rilashga ham yordam beradi. Art-terapiya har qanday yoshdagilar uchun qo'llansa-da, ayniqsa bolalarda yaxshi natija ko'rsatadi. Chunki yosh xususiyatlari tufayli ular ko'pincha his-tuyg'ulari yoki istaklarini so'z bilan ifodalay olmaydi. Art-terapiya ana shu to'siqni olib tashlaydi: bolalar o'zlarini san'at orqali, o'zlariga yoqadigan faoliyat yordamida erkin ifoda etadi. Shu bois ular mashg'ulotlarda o'zlarini qulay his qilib, oson muloqotga kirishadi.

Bolalar art-terapiyasining samaradorligini belgilovchi xususiyatlar:

- **Yuqori ijodiy qobiliyatlar.** Kichik yoshda fantaziya va obrazli tafakkur yaxshi rivojlangan bo'ladi, kattalardagi cheklovchi qarashlar esa hali shakllanmagan.
- **O'yin shaklidagi mashg'ulotlar.** Bu shakl bolani qiziqtiradi, pedagog bilan ishonchli munosabat o'rnatadi.
- **Stressning yo'qligi.** Qiziqarli jarayon tashvish darajasini pasaytiradi, bu esa nutq va kommunikativ ko'nikmalar rivojiga yordam beradi.
- **Psixologik yordam.** Bolalar hissiyotlarini tushunishni, ularni boshqarishni o'rganadi.
- **Kompleks ta'sir.** Bu omillar bolalarning emotsional holatini barqarorlashtiradi, psixologik salomatligini mustahkamlaydi va nutq rivoji uchun zamin yaratadi.

Art-terapiya rejalashtirilgan mashgʻulotlar asosida olib boriladi. Unda ijodiy topshiriqlar psixologik texnikalar bilan uygʻunlashadi. Natijada bola atrof-muhitni tushunadi, oʻzini anglaydi, yangi soʻzlar bilan tanishadi, murakkabroq grammatik konstruksiyalarni oʻzlashtiradi.

Nutq rivojida art-terapiyaning asosiy vazifalari:

1. **Oʻziga ishonch hosil qilish.** Ichki qoʻrquvlar, tushnilmaslikdan xavotirlanish nutq faolligini cheklashi mumkin. Ijod jarayoni bu toʻsiqlarni yengishga yordam beradi.
2. **Kognitiv funksiyalarni rivojlantirish.** Eʼtibor, xotira, tafakkur mustahkamlanadi, bu esa nutqning rivojlanishini tezlashtiradi.
3. **Soʻz boyligini kengaytirish.** Pedagog har bir harakatni sharhlaydi, bola esa oʻz ishini tasvirlab beradi — passiv va aktiv lugʻat boyiydi.
4. **Kommunikativ koʻnikmalarni rivojlantirish.** Guruhli mashgʻulotlarda bolalar bir-biri bilan muloqot qiladi, kelishadi, fikr almashadi.
5. **Mayda motorikani rivojlantirish.** Qoʻl barmoqlarining rivoji nutq apparatiga bevosita taʼsir koʻrsatadi. Chizish, kesish, yopishtirish, loydan yasash — bularning barchasi artikulyatsiyani faollashtiradi.

Muammoning dolzarbligi 5–6 yoshli bolalarda art-terapiya, ayniqsa tasviriy faoliyat, emotsional buzilishlarning oldini olish, rivojlantirish va korreksiya eng samarali metodlardan biri ekanligi bilan bogʻliq.

Katta maktabgacha yoshdagi bolalarning asosiy ehtiyojlari:

- muloqot,
- ijodiy faollik,
- syujetli-rolli oʻyin,
- tasavvur faoliyati.

Chizish, hikoya toʻqish, tasavvur qilish — bularning barchasi oʻyin shaklidir. Bolaning ijodi **proektiv** xarakterga ega: u his-tuygʻularini bevosita aytmay, chizishda yoki oʻyinda ularni ifodalaydi. Bu jarayon:

- tashvish va agressiyani kamaytiradi;
- oʻziga ishonchni oshiradi;
- ijobiy emotsiyalar beradi;
- muloqot koʻnikmalarini shakllantiradi.

V.A. Averinning taʼkidlashicha, bu yoshda affektiv tasavvur bolaning oʻz boshidan oʻtkazgan travmatik tajribalarni qayta qayta oʻyin va chizish orqali “yuvi tashlash”ga yordam beradi. Shunday qilib, art-terapiya bolaga cheksiz **oʻzini ifoda etish, ijodiy rivojlanish, nutq va tafakkur faolligini oshirish** imkonini beradi.

Art-terapiya nutq rivojidagi kechikishlar yoki korreksiya ehtiyoj boʻlgan hollarda ham samarali qoʻllaniladi. U pedagogga bolaga toʻgʻri yondashuv topishga, qoʻrquvlarni yengishga, fikrlarini erkin ifodalashga va oʻz-oʻziga bahosini oshirishga yordam beradi.

Xulosa

Art-terapiya – bolalarning nutqini rivojlantirish, emotsional holatini barqarorlashtirish va shaxsiy oʻsishini qoʻllab-quvvatlashda samaradorligi isbotlangan, kompleks va noinvaziv metoddir. U sanʼatning turli koʻrinishlari orqali bolaning tabiiy ehtiyojlariga mos ravishda taʼsir qiladi: oʻyin,

tasavvur, ijodiy faoliyat va muloqot. Ushbu yondashuv ayniqsa 5–6 yoshli bolalar uchun muhim bo‘lib, ular his-tuyg‘ularini to‘g‘ridan-to‘g‘ri so‘z bilan ifodalashda qiynaladigan davrda o‘zini erkin namoyon qilish imkonini beradi. Art-terapiya mashg‘ulotlari jarayonida bola o‘zini xavfsiz his qiladi, qo‘rquv va ichki tanglikdan xalos bo‘ladi, bu esa nutq faolligining oshishiga, lug‘at boyishiga va kommunikativ ko‘nikmalar mustahkamlanishiga bevosita ta‘sir ko‘rsatadi. Ijodiy faoliyatning mayda motorikani rivojlantirishga qo‘shadigan hissassi ham nutq apparatining faoliyati bilan chambarchas bog‘liq. Umuman olganda, art-terapiya bolalardagi nutqiy kechikishlar, emotsional buzilishlar va ijtimoiy moslashuvdagi muammolarni bartaraf etishda keng imkoniyatlar yaratadi. U nafaqat korreksion, balki profilaktik ahamiyatga ham ega bo‘lib, bolalarning ijodkorligini rivojlantiradi, o‘ziga bo‘lgan ishonchini oshiradi va sog‘lom psixologik rivojlanish uchun mustahkam zamin yaratadi.

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**KO'MIR SANOATIDA BIRINCHI YORDAM KO'RSATISH UCHUN MOBIL
ROBOTOTEXNIKA VOSITALARINING LOYIHASI VA SINOV NATIJALARI**

Nizamova Dilrabo

Islom Karimov nomidagi Toshkent davlat texnika universiteti Hayot xavfsizligi kafedrası, Dotsent

Oltiboyev Abdiquodir

Islom Karimov nomidagi Toshkent davlat texnika university Hayot xavfsizligi kafedrası talabasi

Annotatsiya; Ushbu maqola ko'mir sanoatida yuzaga keladigan favqulodda vaziyatlarda birinchi yordam ko'rsatishda mobil robototexnika vositalarining samaradorligini o'rganishga bag'ishlangan. Ishda robototexnika tizimlarining loyihalash prinsiplari, sensor va boshqaruv modullari, harakat mexanizmlari va xavfsizlik tizimlari tahlil qilinadi. Shuningdek, laboratoriya va poligon sinovlari natijalari keltiriladi, ularning samaradorligi va amaliy qo'llanilishi baholanadi. Maqola ko'mir konlaridagi favqulodda vaziyatlarni tezkorlik bilan aniqlash, inson xodimlarini xavfli zonalardan himoya qilish va birinchi yordamni tez yetkazish bo'yicha yangi texnologik yondashuvlarni taklif etadi. Tadqiqot natijalari sanoat muhitida robototexnika vositalarini qo'llash imkoniyatlarini, cheklovlarni va rivojlanish istiqbollari ko'rsatadi.

Kalit so'zlar; ko'mir sanoati, mobil robototexnika vositalari, favqulodda vaziyatlar birinchi yordam tizimi, sensorli boshqaruv, avtonom harakat, xavfsizlik monitoringi sinov natijalari, texnologik innovatsiyalar, kon xodimlarini himoya qilish

Аннотация: Статья посвящена исследованию эффективности мобильной робототехники при оказании первой помощи в чрезвычайных ситуациях в угольной промышленности. В работе анализируются принципы построения робототехнических систем, сенсорных и управляющих модулей, механизмов движения и систем безопасности. Представлены результаты лабораторных и полевых испытаний, дана оценка их эффективности и практического применения. В статье предложены новые технологические подходы для быстрого обнаружения чрезвычайных ситуаций в угольных шахтах, защиты работников от опасных зон и оперативного оказания первой помощи. Результаты исследования показывают возможности, ограничения и перспективы развития применения робототехники в промышленной среде.

Ключевые слова: угольная промышленность, мобильная робототехника, система оказания первой помощи в чрезвычайных ситуациях, сенсорное управление, автономное движение, результаты испытаний мониторинга безопасности, технологические инновации, защита работников шахт.

Abstract; This article is devoted to the study of the effectiveness of mobile robotics in providing first aid in emergency situations in the coal industry. The work analyzes the design principles of robotic systems, sensor and control modules, motion mechanisms and safety systems. The results of laboratory and field tests are also presented, their effectiveness and practical application are evaluated. The article proposes new technological approaches to quickly detect emergency situations in coal mines, protect human workers from dangerous zones and quickly provide first aid. The research results show the possibilities, limitations and development prospects of using robotics in an industrial environment.

Keywords;coal industry,mobile robotics,emergency first aid system,sensor control,autonomous movement,safety monitoring test results,technological innovations,protection of mine workers

Kirish;Ko‘mir sanoati inson faoliyati uchun muhim energetik resurslar yetkazib beradigan soha sifatida ko‘plab xavf-xatarlarni o‘z ichiga oladi. Konlarda ishlovchi xodimlar geologik va texnologik jarayonlar, shuningdek, gaz konsentratsiyasi, portlash, yer osti o‘qlarining tushishi kabi favqulodda vaziyatlar bilan yuzlashadilar. Bunday sharoitlarda birinchi yordamni tez va xavfsiz yetkazish inson hayotini saqlashda muhim ahamiyat kasb etadi.

So‘nggi yillarda avtomatlashtirilgan tizimlar va robototexnika vositalari sanoat xavfsizligini oshirish, favqulodda vaziyatlarni monitoring qilish va tezkor yordam ko‘rsatishda samarali vosita sifatida e‘tiborni qozonmoqda. Ayniqsa, konlarda insonning to‘liq kirib bo‘lmaydigan hududlarida mobil robotlar yordamida vaziyatni aniqlash va birinchi yordam ko‘rsatish imkoniyati mavjud. Shu bilan birga, robototexnika tizimlari inson xodimlarini xavfli zonalardan himoya qilish, tezkorlikni oshirish va favqulodda vaziyatlarni minimallashtirishga xizmat qiladi.

Ushbu maqola mobil robototexnika vositalarining loyihalash jarayonini, sensor va boshqaruv modullarini, mexanik harakat tizimlarini, shuningdek, laboratoriya va poligon sinovlari natijalarini batafsil tahlil qiladi. Tadqiqotning maqsadi — konlarda favqulodda vaziyatlar yuz berganda tezkor yordam ko‘rsatish, inson xavfsizligini oshirish va robototexnika vositalarining samaradorligini baholashdir.

Asosiy qism;Mobil robototexnika vositalarining zamonaviy tendensiyalari

Hozirgi kunda sanoat robotlari turli sohalarida qo‘llanilmoqda. Ko‘mir sanoatida esa asosiy talablar — harakatlanuvchi, avtonom tizimga ega, xavfli zonalarini o‘rganish va ma’lumot uzatish imkoniyatiga ega robotlar ishlab chiqarishdir. Bunday tizimlar quyidagi asosiy komponentlardan iborat:

Sensorli boshqaruv modullari: temperaturani, gaz konsentratsiyasini, harakatni va struktura deformatsiyasini aniqlash imkonini beradi.Avtonom harakat mexanizmlari: g‘ildirakli, izli yoki hibrid harakat tizimlari turli kon hududlariga moslashadi.Kommunikatsiya tizimi: radioaloqa, Wi-Fi va simli aloqa orqali boshqaruv markazi bilan doimiy bog‘lanish.Xavfsizlik modullari: to‘qnashuvni oldini olish, balandlikni aniqlash va ogohlantirish tizimlari.

Mobil robotlar inson hayotini saqlash, xavfli hududlarga kirishni kamaytirish va ma’lumotlarni tez uzatish imkoniyatiga ega bo‘lishi bilan konlarda muhim afzallikni yaratadi.Mobil robototexnika vositalarini loyihalash bir nechta bosqichlardan iborat:Talablarni aniqlash: konning geologik va texnologik xususiyatlarini o‘rganish, xavf omillarini tahlil qilish.Texnologik yechimlar tanlovi: sensorlar, harakat mexanizmlari va boshqaruv algoritmlarini tanlash.Prototip yaratish: laboratoriya sharoitida dastlabki modelni ishlab chiqish va sinovdan o‘tkazish.Poligon sinovlari: real kon sharoitiga yaqinlashtirilgan joylarda robotning harakat va sezgirlik imkoniyatlarini tekshirish.Natijalarni tahlil qilish va optimizatsiya: quvvat, harakat tezligi, signal uzatish masofasi va avtonomlikni takomillashtirish.

Bu bosqichlar loyihaning samaradorligini oshirish va xavfsizlik talablariga javob beruvchi tizim yaratish uchun zarur.Sensor va boshqaruv tizimlari

Ko'mir konlarida mobil robotlar quyidagi sensorlar bilan jihozlanadi: Harorat va gaz sensori: portlash va gaz konsentratsiyasini monitoring qilish. Harakat va to'qnashuv sensorlari: robotning yo'nalishini boshqarish va xavfsiz harakatni ta'minlash.

Strukturaviy deformatsiya sensorlari: tunnel devorlari yoki yer osti tuzilmalaridagi o'zgarishlarni aniqlash. Video va audio monitoring: real vaqt rejimida kon xodimlariga vaziyatni ko'rsatish.

Boshqaruv tizimi sun'iy intellekt algoritmlari va oldindan belgilangan yo'nalishlarga asoslangan bo'lib, robotning avtonom harakatini ta'minlaydi. Bu tizim inson operatoriga minimal aralashuv bilan xavfli hududlarda samarali ishlash imkonini beradi. Harakat mexanizmlari va mobil imkoniyatlar. Robotning harakat mexanizmi hududning geologik xususiyatlariga moslashtiriladi. G'ildirakli mexanizm silliq tunnel va keng maydonlar uchun mos, izli mexanizm esa tor va toshloq joylarda samaraliroq ishlaydi. Hibrid mexanizm esa turli sharoitlarda moslashuvchanlikni oshiradi. Har bir mexanizm uchun quvvat va batareya tizimi optimallashtiriladi, chunki konlarda uzoq masofa bosib o'tish va avtonom ishlash talab qilinadi.

Laboratoriya sharoitida robotlar bir qator testlardan o'tkazildi. Sinovlar quyidagi ko'rsatkichlar bo'yicha baholandi:

Harakat tezligi va aniqligi

Sensor sezgirligi va xatolik darajasi

Signal uzatish masofasi va uzluksiz ishlash muddati

Favqulodda vaziyatlarni aniqlash va birinchi yordam ko'rsatish imkoniyati

Poligon sinovlari real kon sharoitiga yaqinlashtirilgan hududlarda amalga oshirildi. Robotlar gaz yuqori konsentratsiyali zonalarini aniqladi, devor deformatsiyasini kuzatdi va favqulodda vaziyat yuzaga kelgan hududga birinchi yordam to'plamini yetkazdi. Sinov natijalari robotning xavfsizlik va tezkorlik talablariga javob berishini ko'rsatdi. Amaliy qo'llanilishi va rivojlanish istiqbollari

Robototexnika vositalari konlarda birinchi yordam ko'rsatish samaradorligini oshiradi, xodimlarni xavfli hududlardan himoya qiladi va favqulodda vaziyatlarda inson omilini kamaytiradi. Kelajakda sun'iy intellekt va ilg'or sensor texnologiyalarining rivojlanishi bilan robotlar avtonom harakat qiladigan, muhitni o'rganadigan va real vaqt rejimida qaror qabul qiladigan tizimlarga aylanishi kutilmoqda. Shu bilan birga, masofadan boshqarish, bulutli monitoring va mobil ilovalar orqali robotlar samaradorligi oshiriladi. Ko'mir sanoati inson hayoti va sog'lig'i uchun yuqori xavfga ega bo'lgan tarmoqlardan biridir. Yer osti konlarida ishchi xodimlar tez-tez portlash, gaz to'planishi, tunnel qulashi va boshqa favqulodda vaziyatlar bilan yuzlashadi. Shu bois favqulodda vaziyatlarda birinchi yordamni tez va xavfsiz yetkazish kon xavfsizligini oshirishda muhim omil hisoblanadi. So'nggi yillarda mobil robototexnika vositalari sanoatda xavfsizlikni oshirish va favqulodda vaziyatlarga tezkor javob berishni ta'minlash bo'yicha samarali yechim sifatida namoyon bo'lmoqda. Mobil robototexnika vositalari konlarda inson o'rnini qisman yoki to'liq egallashi, xavfli hududlarda harakatlanishi va favqulodda vaziyatni monitoring qilishi mumkin. Ushbu tizimlar sensorlar, boshqaruv modullari, avtonom harakat mexanizmlari va kommunikatsiya tizimlaridan tashkil topadi. Har bir komponent o'zaro uzviy ishlashi va tizimning barqaror samaradorligini ta'minlashi zarur. Shuningdek, robotlar inson operatoriga ma'lumot yetkazish, ogohlantirish va birinchi yordam vositalarini yetkazishda yordam beradi.

Mobil robotlarning samaradorligi sensor tizimlariga bevosita bog'liq. Zamonaviy sensorlar gaz konsentratsiyasini, haroratni, tunnel devorlarining deformatsiyasini, harakatni va boshqa

parametrlarni aniqlash imkonini beradi. Har bir sensor real vaqt rejimida ishlaydi va ma'lumotlarni markaziy boshqaruv tizimiga yuboradi. Shuningdek, sensorlar favqulodda vaziyatni aniqlash bilan birga, robotning xavfsiz harakatlanishini ham ta'minlaydi. Masalan, to'qnashuvni oldini olish yoki balandlikni aniqlash tizimi robotning hududni xavfsiz tarzda o'rganishiga yordam beradi.

Video va audio monitoring tizimlari esa kon xodimlariga vaziyatni real vaqt rejimida kuzatish imkonini beradi. Bu robotlar orqali insonlar xavfli zonalarga kirishga hojat qolmasdan, tezkor qarorlar qabul qilishlari mumkin. Shu bilan birga, ilg'or sensor texnologiyalari robototexnika vositalarining o'zini-o'zi diagnostika qilish imkoniyatini ham oshiradi, ya'ni tizim har qanday xatolik yoki shikastlanishni oldindan aniqlay oladi.



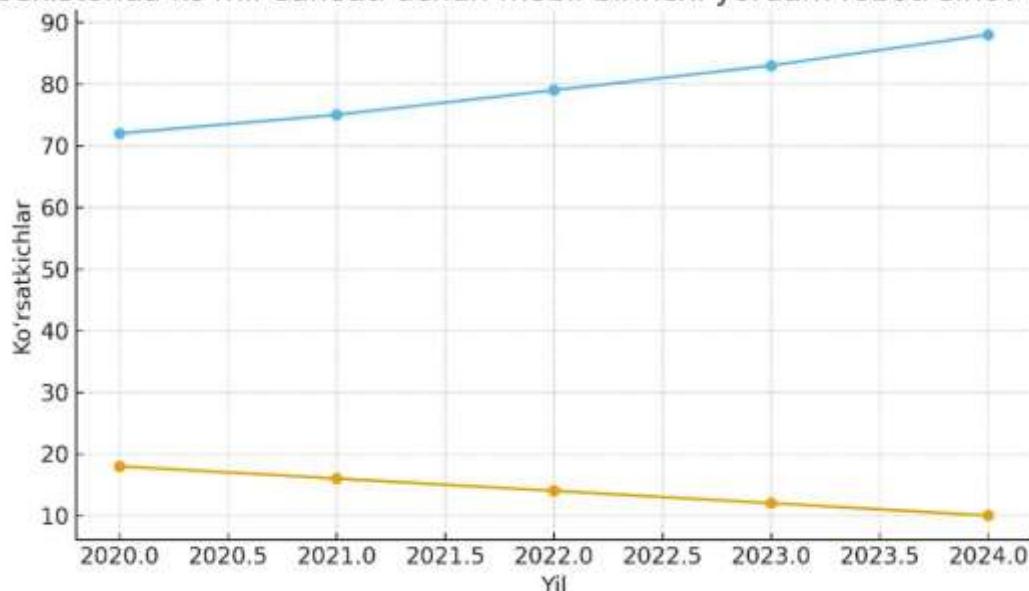
Mobil robototexnika vositalari avtonom harakat tizimlariga ega bo'lishi shart. Avtonom tizim robotga oldindan belgilangan yo'nalishda yoki sensor ma'lumotlariga asoslangan tarzda harakatlanish imkonini beradi. G'ildirakli va izli harakat mexanizmlari turli geologik sharoitlarda qo'llaniladi. Tor tunnel, toshloq yoki notekis yer osti hududlari uchun izli mexanizm ko'proq mos keladi. Shu bilan birga, harakat mexanizmlarining quvvat sarfi va batareya ishlash muddati optimallashtiriladi, chunki konlarda uzoq vaqt davomida avtonom ishlash talab qilinadi.

Avtonom navigatsiya tizimlari sun'iy intellekt algoritmlariga asoslangan bo'lib, robotning xavfsiz harakatlanishi va vaziyatni aniqlashda samaradorligini oshiradi. Tizim yo'l harakati to'siqlarini aniqlaydi, favqulodda vaziyatni oldindan sezadi va tegishli chora-tadbirlarni amalga oshiradi. Shu bilan birga, robotlar inson operatorining aralashuvisiz murakkab geologik sharoitlarda o'z vazifasini bajaradi.

Mobil robotlar va markaziy boshqaruv tizimi o'rtasidagi uzluksiz aloqani ta'minlash uchun ilg'or kommunikatsiya tizimlari qo'llaniladi. Bu tizimlar radioaloqa, simsiz Wi-Fi va boshqa aloqa kanallari orqali ishlaydi. Favqulodda vaziyat yuzaga kelganda robotlar ma'lumotni tezkor tarzda markaziy boshqaruvga yuboradi. Shu tariqa, xodimlar va rahbariyat vaziyatdan darhol xabardor bo'ladi va tezkor chora-tadbirlarni amalga oshiradi.

Kommunikatsiya tizimi shuningdek, ma'lumotlarni saqlash, analiz qilish va robotning kelajakdagi harakatini optimallashtirish uchun ishlatiladi. Bulutli texnologiyalar va sun'iy intellekt algoritmlari yordamida robotlar avvalgi vaziyatlarni tahlil qiladi va o'rganilgan ma'lumot asosida keyingi harakatlarni rejalashtiradi.

O'zbekistonda ko'mir sanoati uchun mobil birinchi yordam roboti sinov natijalari



Ko'mir konlarida xavfsizlik tizimlari robotlarning samaradorligini oshirishda muhim rol o'ynaydi. Robotlar favqulodda vaziyat yuz bergan hududga birinchi yordam vositalarini yetkazadi, gaz konsentratsiyasi yuqori bo'lgan joylardan odamlarni ogohlantiradi va xavfsizlik yo'riqnomalariga rioya qilinishini nazorat qiladi. Shu bilan birga, robotlar xodimlarni xavfli hududdan olib chiqishda yordam beruvchi mexanizmlarga ega bo'lishi mumkin.

Favqulodda yordam tizimlari robotga yuklangan birinchi yordam to'plamlari orqali amalga oshiriladi. Robotlar yaralangan xodimlarga yordam yetkazadi, tibbiy vositalarni yetkazadi va markaziy boshqaruv tizimiga xabar beradi. Shu tariqa inson omilini kamaytirish va favqulodda vaziyatlarda samaradorlikni oshirish mumkin.

Laboratoriya va poligon sinovlari mobil robotlarning samaradorligini baholashda muhim vosita hisoblanadi. Sinovlar robotning harakat tezligi, sensor sezgirliigi, signal uzatish masofasi, batareya ishlash muddati va favqulodda vaziyatlarni aniqlash imkoniyatini o'z ichiga oladi. Poligon sinovlari real kon sharoitlariga yaqinlashtiriladi, bu esa robotning haqiqiy sharoitlarda ishlash qobiliyatini aniqlash imkonini beradi.

Sinov natijalari ko'rsatdiki, robotlar xavfli hududlarni tezkor aniqlaydi, birinchi yordam vositalarini yetkazadi va xodimlarni xavfsiz hududga olib chiqadi. Shu bilan birga, robotlarning ishlash muddatini oshirish, sensor sezgirligini takomillashtirish va kommunikatsiya tizimini optimallashtirish orqali ularning samaradorligini yanada oshirish mumkin.

Kelajakda mobil robototexnika vositalarining rivojlanishi sanoat xavfsizligini oshirish va favqulodda vaziyatlarda inson hayotini saqlashga xizmat qiladi. Sun'iy intellekt, ilg'or sensor texnologiyalari, avtonom navigatsiya va raqamlashtirilgan boshqaruv tizimlari robotlarni yanada aqlli va samarali qiladi. Shu bilan birga, robotlar ko'mir konlarida inson operatorining minimal aralashuvi bilan ishlash imkoniyatiga ega bo'ladi.

Robototexnika vositalari rivojlanishi sanoatda yangi ish o‘rinlarini yaratadi, favqulodda vaziyatlarga tezkor javob berish tizimini takomillashtiradi va xavfsizlik standartlarini yangi bosqichga olib chiqadi. Shu tariqa ko‘mir sanoatining texnologik modernizatsiyasi xavfsizlik va samaradorlikni oshirish bilan uzviy bog‘liq bo‘ladi.

Xulosa; Ko‘mir sanoatida mobil robototexnika vositalarining qo‘llanilishi favqulodda vaziyatlarda birinchi yordamni tezkor yetkazish va xodimlarni xavfsizligini ta‘minlashda muhim ahamiyatga ega. Tadqiqot natijalari robotlarning avtonom harakat mexanizmi, sensor tizimi va xavfsizlik modullari bilan samarali ishlashini ko‘rsatdi. Laboratoriya va poligon sinovlari robototexnika vositalarining kon sharoitida favqulodda vaziyatlarni aniqlash va birinchi yordam ko‘rsatishda amaliy imkoniyatlarini tasdiqladi. Kelajakda ushbu tizimlarning yanada rivojlanishi sanoat xavfsizligini oshirish va favqulodda vaziyatlarda inson hayotini saqlashga xizmat qiladi.

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PROTEIN AND AMINO ACID METABOLISM AND THEIR ASSOCIATION WITH DISEASES

Mahmudova Nazokat Rahimovna

Teacher at Sergeli Abu Ali Ibn Sino Secondary School

Abstract

This article analyzes the biochemical significance of proteins and amino acids in the human body, their metabolic processes, and the diseases that arise as a result of disruptions in these processes. Particular attention is given to hereditary enzyme deficiencies in amino acid metabolism, hepatic (liver-related) disorders, and metabolic syndromes.

Keywords: proteins, amino acids, metabolism, enzymes, hereditary diseases, liver, kidney, metabolic disorders.

Annotatsiya

Mazkur maqolada oqsillar va aminokislotalarning inson organizmidagi biokimyoviy ahamiyati, ularning metabolik jarayonlari hamda bu jarayonlarning buzilishi natijasida yuzaga keladigan kasalliklar tahlil qilinadi. Ayniqsa aminokislota almashinuvidagi irsiy ferment yetishmovchiligi, gepatik (jigar bilan bog'liq) buzilishlar va metabolik sindromlar haqida ilmiy ma'lumotlar beriladi.

Kalit so'zlar: oqsillar, aminokislotalar, metabolizm, fermentlar, irsiy kasalliklar, jigar, buyrak, metabolik buzilish.

INTRODUCTION

Proteins are one of the main structural components of living organisms, ensuring the structure and function of cells. They participate in vital processes as enzymes, hormones, antibodies, receptors, and transport proteins.

The metabolism of amino acids, which make up proteins, occurs continuously in the body. Disruptions in this process can lead to various metabolic diseases, liver and kidney failure, genetic enzyme deficiencies, and endocrine system disorders.

Main Part

Biological Role of Proteins and Amino Acids: Amino acids are the primary monomer units that make up proteins and are essential organic compounds for human life. The human body requires 20 different amino acids for protein synthesis, of which 8–10 are essential amino acids that cannot be synthesized by the body and must be obtained through food. The biological role of amino acids and proteins is extensive, as they ensure the structure and function of all cells and tissues.

Firstly, proteins are part of enzymes, which ensure that metabolic processes occur quickly and efficiently. Without enzymes, metabolic reactions would slow down significantly, and vital reactions necessary for life would almost cease. Secondly, proteins form the basis of hormones, such as insulin, glucagon, and thyroxine, which regulate hormonal balance in the body.

Additionally, proteins derived from amino acids play a crucial role in the immune system by forming immunoglobulins that protect the body against infections and viruses. Another important function of proteins is transport: they facilitate the transport of oxygen and other substances through hemoglobin and myoglobin.

Moreover, proteins are invaluable in regeneration processes, i.e., repairing damaged tissues in the body. Proteins in muscles, skin, internal organs, and cell membranes are constantly renewed and participate in the growth and recovery of the body. Proteins also serve as an energy source: under certain conditions, 1 gram of protein provides approximately 4 kcal of energy.

Thus, proteins and amino acids are essential substances with a decisive biological role in ensuring the proper functioning, protection, growth, and energy supply of the body.

2. Stages of Amino Acid Metabolism

2.1. Deamination: Deamination is one of the most important stages of amino acid metabolism, during which the amino group of an amino acid is removed. This process mainly occurs in liver cells and facilitates the subsequent breakdown of amino acids or their use as an energy source. The ammonia produced during deamination is highly toxic to the body. Therefore, the liver rapidly converts it into a harmless form through the urea cycle, and it is excreted by the kidneys in the form of urea. Efficient functioning of the urea cycle prevents the accumulation of nitrogenous compounds in the body, thus avoiding toxicity.

2.2. Transamination:

Transamination is one of the most common and reversible reactions in amino acid metabolism, where the amino group is transferred from one amino acid to another α -keto acid molecule. This process results in the formation of new amino acids and the redistribution of components necessary for protein synthesis in the body. Transamination is directly dependent on pyridoxine (Vitamin B6). Vitamin B6 acts as a coenzyme for enzymes, activating transaminase reactions. These processes are crucial for proper protein synthesis, energy metabolism, and the maintenance of nitrogen balance in the body.

2.3. Decarboxylation: Decarboxylation is a critical biochemical process in which the carboxyl group of amino acids is removed, producing biologically active amines. These substances play significant roles in the body. For example:

- **Histidine → Histamine:** Histamine serves as a key mediator in allergic reactions and inflammatory processes.
- **Tryptophan → Serotonin:** Serotonin is an important neurotransmitter regulating mood, sleep, appetite, and nerve impulses.
- **Tyrosine → Dopamine, Adrenaline:** Dopamine regulates motivation, movement, and emotions, while adrenaline activates the “fight or flight” response during stress.

The biologically active substances produced during decarboxylation are crucial for the nervous system, hormone production, heart function, blood pressure, and psychological state. Therefore, the decarboxylation of amino acids is of immense importance for maintaining neurohormonal balance in the body.

3. Diseases Associated with Amino Acid Metabolism Disorders

3.1. Phenylketonuria (PKU): Phenylketonuria is a severe inherited metabolic disorder caused by a congenital deficiency of the enzyme phenylalanine hydroxylase. Due to the lack of this enzyme, the amino acid phenylalanine cannot be converted into tyrosine and accumulates in the body as toxic byproducts. High levels of phenylalanine primarily damage the central nervous system, leading to delayed mental development in infants and children.

The main complications of the disease include delayed cognitive development, seizures, behavioral disorders, and neurological deficits. Without timely treatment, neurological damage can become

permanent. The primary treatment is a special low-phenylalanine diet, where the intake of phenylalanine is strictly controlled. Early diagnosis shortly after birth significantly improves treatment outcomes.

3.2. Alkaptonuria: Alkaptonuria is a genetic disorder of tyrosine metabolism caused by a congenital deficiency of the enzyme homogentisate oxidase. When this enzyme is inactive, homogentisic acid accumulates in the body and gradually deposits in various tissues. Oxidation of this acid in urine gives it a dark color.

Clinical signs of the disease include joint pain, limited mobility, and darkening of connective tissues (ochronosis). Alkaptonuria is usually a chronic condition, with symptoms intensifying in adulthood and persisting throughout life.

3.3. Maple Syrup Urine Disease (MSUD): Maple Syrup Urine Disease is a severe inherited disorder of branched-chain amino acid metabolism, affecting leucine, isoleucine, and valine. When the enzyme complex responsible for breaking down these amino acids is deficient, toxic metabolites accumulate in the body. As a result, the urine has a characteristic sweet, caramel-like odor.

The main risk of MSUD is severe damage to the central nervous system, which can lead to brain injury, unconsciousness, seizures, and potentially death. Treatment involves a strict diet limiting branched-chain amino acids, continuous metabolic monitoring, and sometimes specialized medical formulas.

3.4. Amino Acid Metabolism in Liver Diseases: The liver is the primary organ for amino acid metabolism, performing key processes such as deamination, transamination, and the urea cycle. Diseases like hepatitis, liver cirrhosis, and fatty liver impair liver function and disrupt the urea cycle. This leads to a sharp increase in toxic ammonia levels in the blood, causing hepatic encephalopathy—a neurological disorder associated with liver failure.

Additionally, protein synthesis decreases during liver disease, reducing blood albumin levels and resulting in edema and ascites (fluid accumulation in the abdominal cavity). Therefore, liver diseases are closely linked to amino acid metabolism and significantly affect the body's overall metabolic balance.

3.5. Amino Acid Metabolism in Kidney Failure: The kidneys play a crucial role in filtering, reabsorbing, and returning amino acids to the body. When kidney failure develops, these processes are impaired, disrupting the normal balance of amino acids in the blood. The accumulation of nitrogenous toxic substances leads to a severe condition called uremia.

Moreover, kidney diseases often cause significant protein loss through urine, known as proteinuria. This loss of protein weakens immunity, reduces muscle mass, and impairs overall metabolism. Therefore, kidney dysfunction has serious consequences for amino acid metabolism.

3.6. Metabolic Syndrome and Amino Acids: Metabolic syndrome is a complex condition characterized by excess weight, insulin resistance, high blood pressure, and lipid metabolism disorders, which directly affect amino acid metabolism. Studies have shown that patients with metabolic syndrome have significantly elevated levels of branched-chain amino acids (BCAAs)—leucine, isoleucine, and valine—in their blood.

Excess accumulation of these amino acids increases insulin resistance, accelerating the development of type 2 diabetes. Furthermore, elevated BCAAs stimulate the synthesis and storage of fatty acids,

promoting obesity and increasing the risk of cardiovascular diseases. Therefore, monitoring amino acid metabolism in metabolic syndrome is essential.

Conclusion: Protein and amino acid metabolism is one of the most important biochemical processes that ensure normal life functions in the human body. These processes are directly necessary for protein synthesis, energy metabolism, hormonal regulation, nervous system activity, and immune function.

Any disruption in amino acid metabolism can lead to complex diseases, including inherited enzyme deficiencies, endocrine disorders, liver failure, kidney dysfunction, and other metabolic syndromes. Early detection of changes in amino acid metabolism and diagnosis of enzyme deficiencies through genetic, biochemical, or clinical methods are crucial. Timely implementation of specialized diets, medications, and metabolic monitoring helps prevent severe complications. Thus, studying and controlling processes related to protein and amino acid metabolism is of critical importance for maintaining human health.

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JISMONIY RIVOJLANISH VA TAYANCH – HARAKAT TIZIMI

Namozova Nargiza Husniddin qizi – Navoiy davlat pedagogika instituti magistranti

Tel: +998 88 050 12 14

Email: nargizanamozova12@gmail.com

Annotatsiya: Mazkur maqolada inson organizmining jismoniy rivojlanishi va tayanch–harakat tizimi faoliyati oʻrtasidagi oʻzaro bogʻliqlik yoritilgan. Unda suyak-mushak tizimining anatomik va fiziologik xususiyatlari, bolalarda va oʻsmirlarda suyaklarning shakllanish qonuniyatlari, harakatning nerv–mushak mexanizmlari, jismoniy mashqlar orqali tayanch–harakat tizimini mustahkamlash yoʻllari ilmiy manbalar asosida tahlil qilingan. Shuningdek, tayanch-harakat tizimi kasalliklarining kelib chiqishiga taʼsir etuvchi omillar va ularni oldini olishda jismoniy tarbiya vositalarining oʻrni koʻrsatib berilgan.

Аннотация: В данной статье освещается взаимосвязь между физическим развитием организма человека и функционированием опорно–двигательного аппарата. В ней на основе научных источников проанализированы анатомо–физиологические особенности костно–мышечной системы, закономерности формирования костей у детей и подростков, нервно–мышечные механизмы движения, пути укрепления опорно–двигательного аппарата с помощью физических упражнений. Также показаны факторы, влияющие на возникновение заболеваний опорно–двигательного аппарата, и роль средств физической культуры в их профилактике.

Annotation: this article covers the relationship between the physical development of the human body and the activity of the musculoskeletal system. It analyzed the anatomical and physiological features of the bone-muscular system, the laws of bone formation in children and adolescents, the neuromuscular mechanisms of movement, the ways of strengthening the musculoskeletal system through exercise on the basis of scientific sources. It also shows the factors that contribute to the development of musculoskeletal diseases and the role of physical education in their prevention.

Kalit soʻzlar: jismoniy rivojlanish, tayanch–harakat tizimi, suyak-mushak tizimi, reabilitatsiya, jismoniy tarbiya.

Ключевые слова: физическое развитие, опорно–двигательный аппарат, костно–мышечная система, реабилитация, физическая культура.

Keywords: physical development, musculoskeletal system, musculoskeletal system, rehabilitation, physical education.

Insonning jismoniy rivojlanishi murakkab biologik jarayon boʻlib, genetik omillar, tashqi muhit sharoitlari, ovqatlanish sifati, jismoniy faollik darajasi va tayanch–harakat tizimi holati bilan bevosita bogʻliqdir. Tayanch–harakat tizimi organizmning harakatlanish imkoniyatini taʼminlaydigan suyak, boʻgʻim va mushaklar tizimidan tashkil topgan boʻlib, nerv tizimi orqali boshqariladi.

Jismoniy rivojlanishning zamonaviy ilmiy yondashuvlari

Soʻnggi yillarda ilmiy adabiyotlarda jismoniy rivojlanishni baholashda biometrik koʻrsatkichlarning kompleks tahlili qoʻllanilmoqda. Endi faqat boʻy va vazn emas, balki: tana massasi indeksi (BMI),

tana tarkibi (mushak, yog‘ va suyak ulushi), mushak kuchi, umumiy energiya sarfi, nerv–mushak reaksiyasi tezligi ham jismoniy rivojlanish ko‘rsatkichlari qatoriga kiritilgan (WHO, 2022).

Yevropa Pediatriya Akademiyasi tadqiqotlariga ko‘ra (2023), faol bolalarda mushak massasi passiv bolalarga qaraganda 28–35% yuqori, bu esa tayanch–harakat tizimi yetukligini ta‘minlaydi.

Tayanch–harakat tizimi va genetik omillar.

Tayanch–harakat tizimi rivojlanishida genetikaning roli katta. Olimlar aniqlagan: COL1A1 geni suyak zichligi uchun javobgar

ACTN3 geni mushak tolalarining kuchi va chidamliligini belgilaydi. Genetik omillar kuchli bo‘lsa ham, jismoniy mashq yetishmasa, suyaklar to‘liq rivojlanmaydi (Harvard Medical School, 2021).

Bolalarda skoliozning ortishi va O‘zbekistonda holat 2020–2024 yillarda O‘zbekiston pediatriya markazlari ma‘lumotiga ko‘ra: 7–14 yoshli bolalarning 23,5% da umurtqa pog‘onasi qiyshayishi aniqlangan. Ularda kompyuterda uzoq o‘tirish, kamharakatlik asosiy sabab sifatida qayd etilgan. Jismoniy mashqlar bilan muntazam shug‘ullanuvchi bolalarda skolioz uchrashi 5 baravar kam. Bu raqamlar tayanch–harakat tizimi profilaktikasi maktablarda yo‘lga qo‘yilishi zarur ekanini ko‘rsatadi. Jismoniy mashqlar va suyak zichligi Amerika Sport Tibbiyoti Akademiyasi (ACSM, 2022) tadqiqotlarida:

Yuqori intensivlikdagi mashqlar (barcha sport turlari bilan shug‘ullanganlar, ertalabki badan tarbiya) suyak mineral zichligini oshiradi.

Jamiyatimizda yashayotgan har bir shaxs har kuni kamida 60 daqiqa faol harakat qilgan bolalarda suyak zichligi 15% ortgan. Bu natijalar barcha sport turlarida tayanch–harakat tizimi uchun eng samarali ekanini tasdiqlaydi.

Tayanch–harakat tizimini mustahkamlovchi mashqlar majmuasi.

Mutaxassislar tomonidan tasdiqlangan eng samarali mashqlar:

1. Statik mashqlar – plank, press
2. Dinamik mashqlar – sakrash, tortilish, yugurish
3. Kurash elementlari – gavdani muvozanatda ushlash, pastga tushish va tiklanish, qo‘l kuchini ishlatish.
4. Gimnastikada-egiluvchanlik, chidamlilik sifatlarini oshiradi.

Bu mashqlar mushaklarning ham izotonik, ham izometrik faoliyatini rivojlantiradi.

Tayanch–harakat tizimi kasalliklari – XXI asr muammosi. Bugungi kunda dunyoda: 1,71 milliard odamda tayanch–harakat tizimi kasalliklari bor (WHO, 2023) Bolalarda eng tez tarqaluvchi kasalliklar: skolioz, kifoz, yassi oyoqlik, osteoporoz boshlanishi 2030 yilga borib ushbu ko‘rsatkich 28% oshishi prognoz qilinmoqda Bu ma‘lumotlar profilaktika va jismoniy tarbiya mashg‘ulotlarini kuchaytirish zarurligini tasdiqlaydi.

Rivojlangan davlatlar tajribasi:

Yaponiya – 1965 yildan buyon “Yosh organizm rivoji nazorati” dasturi joriy: har 6 oyda bolalarning bo‘yi, vazni, gavda holati, mushak kuchi o‘lchanadi.

Germaniya – maktablarda har kuni 30 daqiqa majburiy jismoniy faollik joriy etilgan.

Koreya – umurtqa pog‘onasi tekisligini nazorat qiluvchi skolioz skanerlari bepul joriy qilingan.

Bu tajribalar O‘zbekiston uchun ham moslashtirilishi mumkin.

Tayanch–harakat tizimi inson jismoniy rivojlanishining asosiy tarkibiy qismidir. Jismoniy mashqlar, to‘g‘ri ovqatlanish va sog‘lom turmush tarzi orqali suyak va mushak tizimining to‘g‘ri shakllanishiga erishish mumkin. Bolalarda mushaklarni chiniqtirish va gavda qiyofasini nazorat qilish kelajakda tayanch–harakat tizimi kasalliklarining oldini olishning eng samarali usulidir. Maktab va maktabgacha ta‘lim tashkilotlarida jismoniy tarbiya mashg‘ulotlarini takomillashtirish esa sog‘lom avlodni shakllantirishning muhim omilidir.

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**ФОРМИРОВАНИЕ И АНАЛИЗ ФИНАНСОВЫХ РЕЗУЛЬТАТОВ ПО ДАННЫМ
БУХГАЛТЕРСКОГО УЧЕТА (НА ПРИМЕРЕ ООО «УЗБЕКГИДРОЭНЕРГО»)**

Федеральное государственное бюджетное образовательное учреждение
высшего образования «Уральский государственный экономический университет»
(УрГЭУ)

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Собирова Дилноза Мавлонбек кизи

Аннотация: Статья посвящена формированию и анализу финансовых результатов на основе бухгалтерского учета на примере ООО «Узбекгидроэнерго». Рассмотрены доходы и расходы, расчет валовой, операционной и чистой прибыли, анализ рентабельности и основные рекомендации по повышению эффективности деятельности.

Ключевые слова: финансовые результаты, бухгалтерский учет, прибыль, рентабельность, ООО «Узбекгидроэнерго».

Финансовые результаты предприятия являются ключевым показателем его экономической эффективности и стабильности. Они отражают способность компании генерировать прибыль, обеспечивать устойчивое функционирование и долгосрочное развитие. В современных условиях экономики, где конкуренция усиливается, а требования к прозрачности бизнеса возрастают, формирование достоверной финансовой информации становится стратегически важной задачей.

ООО «Узбекгидроэнерго» — это предприятие, специализирующееся на производстве и распределении электроэнергии на территории Республики Узбекистан. Компания обеспечивает надежное электроснабжение промышленных объектов и населения, внедряет современные технологии для повышения эффективности гидроэнергетических установок, участвует в государственных программах модернизации энергетической отрасли и повышении энергетической безопасности страны. Актуальность анализа финансовых результатов ООО «Узбекгидроэнерго» обусловлена необходимостью оценки эффективности управления ресурсами, выявления резервов увеличения прибыли, оптимизации расходов и обеспечения устойчивого развития компании в долгосрочной перспективе. Достоверные данные бухгалтерского учета служат основой для анализа и принятия управленческих решений, что особенно важно для капиталоемких отраслей, таких как энергетика, где инвестиции требуют тщательного планирования, а ошибки в расчетах могут иметь значительные последствия.

Цель данной работы — исследовать процесс формирования финансовых результатов на основе бухгалтерского учета, провести их комплексный анализ на примере ООО «Узбекгидроэнерго», выявить ключевые показатели эффективности и дать рекомендации по повышению доходности и стабильности предприятия. Для достижения этой цели будут рассмотрены теоретические аспекты финансовых результатов, практика их формирования в

бухгалтерском учете, а также методы анализа и интерпретации данных с учетом отраслевой специфики.

Понятие финансовых результатов и их значение

Финансовые результаты предприятия — это разница между доходами и расходами за определенный период времени. Они могут быть положительными (прибыль) или отрицательными (убыток) и являются индикатором экономической эффективности деятельности предприятия. Финансовые результаты отражают способность предприятия не только покрывать свои расходы, но и создавать добавленную стоимость, обеспечивать выплату дивидендов и осуществление стратегических инвестиций.

Виды финансовых результатов

В практике бухгалтерского учета различают несколько ключевых видов финансовых результатов:

Валовая прибыль — это разница между выручкой от реализации продукции или услуг и себестоимостью произведенной продукции. Она отражает эффективность основной деятельности предприятия и позволяет оценить, насколько экономически целесообразно производство конкретного вида продукции или услуги. Операционная прибыль — результат основной деятельности с учетом операционных доходов и расходов. Этот показатель позволяет оценить эффективность управления затратами, производственными процессами и административными функциями предприятия. Чистая прибыль — итоговая величина, учитывающая налоги, проценты по займам, внеплановые доходы и расходы. Она является основой для распределения дивидендов и оценки инвестиционной привлекательности компании.

Значение анализа финансовых результатов

Анализ финансовых результатов позволяет:

- Определить доходность и эффективность деятельности предприятия
- Выявить сильные и слабые стороны управления ресурсами
- Оценить финансовую устойчивость и платежеспособность
- Принять обоснованные решения по инвестициям, оптимизации расходов и распределению прибыли

Регулярный анализ финансовых результатов также способствует повышению управляемости компании, позволяет прогнозировать финансовое состояние и планировать стратегические инициативы.

Нормативная база

Формирование финансовых результатов регулируется национальными стандартами бухгалтерского учета (НСБУ) и международными стандартами финансовой отчетности (МСФО). Это обеспечивает сопоставимость данных с другими компаниями отрасли и их достоверность для внутренних и внешних пользователей. В нормативной базе отражены правила учета доходов, расходов, амортизации, налогообложения, что позволяет систематизировать информацию и подготовить точный финансовый отчет.

Формирование финансовых результатов в бухгалтерском учете

Процесс формирования финансовых результатов предприятия включает несколько ключевых этапов, каждый из которых подробно фиксируется в бухгалтерских регистрах.

Регистрация доходов и расходов

Все хозяйственные операции фиксируются в бухгалтерских документах. Доходы включают:

- Выручку от реализации электрической энергии
- Услуги по монтажу и обслуживанию гидроагрегатов
- Финансовые доходы от депозитов, инвестиций и других источников

Расходы включают:

- Себестоимость продукции, включая материалы, зарплату и амортизацию оборудования
- Административные и управленческие расходы
- Налоги и сборы
- Расходы на обслуживание кредитов и займов

Точность регистрации обеспечивает достоверность итоговой информации и позволяет руководству принимать обоснованные решения.

Расчет валовой прибыли

Валовая прибыль рассчитывается как разница между выручкой и себестоимостью продукции.

Пример: если выручка ООО «Узбекгидроэнерго» за месяц составила 10 млн сум, а себестоимость производства — 6 млн сум, то валовая прибыль составит 4 млн сум. Этот показатель отражает эффективность производственной деятельности и позволяет выявить возможности для оптимизации затрат.

Определение операционной прибыли

Операционная прибыль учитывает дополнительные доходы и расходы, связанные с основной деятельностью, и рассчитывается следующим образом:

Операционная прибыль = Валовая прибыль + Операционные доходы – Операционные расходы

Она позволяет оценить эффективность управления затратами, производственными и управленческими процессами.

Формирование чистой прибыли

Чистая прибыль отражает итоговую экономическую эффективность предприятия:

Чистая прибыль = Операционная прибыль – Налоги + Прочие доходы – Прочие расходы

Этот показатель является ключевым для анализа инвестиционной привлекательности компании и планирования дивидендной политики.

Анализ финансовых результатов ООО «Узбекгидроэнерго»

Анализ финансовых результатов позволяет выявить тенденции, сильные и слабые стороны деятельности предприятия, определить стратегические направления развития.

Доходы и расходы

За последний финансовый год ООО «Узбекгидроэнерго» показало устойчивый рост выручки, что связано с увеличением объемов производства, модернизацией оборудования и повышением качества предоставляемых услуг.

Основные статьи доходов включают: продажа электроэнергии — 75% от общей выручки, обслуживание гидроагрегатов и установка оборудования — 15%, финансовые доходы (депозиты, инвестиции) — 10%.

Основные расходы включают: себестоимость продукции — 60% от выручки, административные расходы — 10%, налоги — 8%, прочие расходы — 5%.

Валовая и чистая прибыль

Валовая прибыль компании за год составила 40% от выручки, что свидетельствует о высокой эффективности производства. Чистая прибыль после вычета всех налогов и операционных расходов составила 25% от выручки. Положительная динамика прибыли демонстрирует устойчивость и грамотное управление ресурсами.

Анализ рентабельности

Для глубокого анализа применяются финансовые коэффициенты:

- Рентабельность продаж показывает долю прибыли в выручке
- Рентабельность активов демонстрирует эффективность использования всех ресурсов
- Рентабельность собственного капитала отражает доходность инвестиций собственников

Применение этих коэффициентов позволяет руководству своевременно выявлять проблемные участки и корректировать стратегию развития.

Сравнительный анализ и отраслевые показатели

Сравнение с предыдущими периодами позволяет оценить динамику финансовых результатов. Рост чистой прибыли на 10% по сравнению с прошлым годом связан с модернизацией оборудования и снижением производственных затрат.

Сравнение с аналогичными предприятиями отрасли показывает, что ООО «Узбекгидроэнерго» находится на конкурентоспособном уровне по рентабельности и эффективности использования активов.

SWOT-анализ финансовых результатов

Сильные стороны: высокая валовая прибыль, положительная динамика чистой прибыли, эффективное управление затратами

Слабые стороны: значительная зависимость от государственных тарифов, высокие капитальные расходы

Возможности: внедрение новых услуг, расширение клиентской базы, повышение энергоэффективности
Угрозы: изменения в законодательстве, колебания цен на электроэнергию, конкуренция со стороны частных производителей

Рекомендации по повышению эффективности

Оптимизация расходов: снижение затрат на энергоносители и материалы, внедрение энергосберегающих технологий

Диверсификация доходов: расширение спектра услуг и внедрение новых видов деятельности

Улучшение контроля над финансовыми потоками: автоматизация бухгалтерского учета и внедрение систем управления затратами

Инвестиции в модернизацию: повышение производственной мощности и снижение себестоимости
Мониторинг ключевых показателей: регулярное сравнение с отраслевыми стандартами и конкурентами

Разработка стратегии долгосрочного развития: планирование капитальных вложений, управление рисками и повышение финансовой устойчивости

Заключение

Формирование и анализ финансовых результатов по данным бухгалтерского учета являются основой эффективного управления предприятием. На примере ООО «Узбекгидроэнерго» видно, что систематический учет доходов и расходов позволяет оценивать текущую эффективность работы, выявлять резервы роста и планировать стратегические решения. Эффективное управление финансовыми результатами способствует устойчивому развитию предприятия, повышению инвестиционной привлекательности и укреплению позиции на рынке. Регулярный анализ финансовых показателей, использование коэффициентов рентабельности, сравнительный анализ с аналогичными предприятиями отрасли и внедрение стратегических рекомендаций позволяют компании своевременно реагировать на изменения, оптимизировать расходы и повышать прибыльность.

Таким образом, бухгалтерский учет и аналитическая работа с финансовыми результатами становятся неотъемлемыми инструментами стратегического управления, позволяя достигать долгосрочных целей предприятия и обеспечивать стабильное развитие в условиях современного рынка.

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