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## SO‘ZBOSHI

**AJOU SCI** xalqaro ilmiy jurnalining ushbu soni siz, hurmatli o‘quvchilar, olimlar va tadqiqotchilar e’tiboriga havola etilayotganidan mamnunmiz. Bugungi globallashuv va raqamli transformatsiya jarayonlarida ilm-fan va innovatsiyalar jamiyat taraqqiyotining ajralmas omiliga aylangan. Ayniqsa, ta’lim, texnologiya, axborot tizimlari, muhandislik, tabiiy fanlar va ijtimoiy yo‘nalishlarda olib borilayotgan ilmiy izlanishlar ushbu o‘zgarishlarning muhim poydevoridir.

AJOU SCI jurnali zamonaviy ilmiy tadqiqotlarni keng ommaga yetkazish, turli sohalarda olib borilayotgan ilg‘or ishlanmalarni targ‘ib qilish, yosh va tajribali olimlar o‘rtasida ilmiy muloqot maydonini shakllantirishni o‘z oldiga maqsad qilgan. Jurnal sahifalarida e’lon qilinayotgan maqolalar bugungi kunning dolzarb muammolarini ilmiy asosda yoritadi, ularning yechimiga doir taklif va tavsiyalar beradi.

Mazkur son orqali siz yangi g‘oyalar, izlanishlar va ilmiy qarashlar bilan tanishasiz, ularning amaliy ahamiyatini anglaysiz va o‘z faoliyatingizda qo‘llash imkoniyatiga ega bo‘lasiz, degan umiddamiz.

Barcha mualliflarga ilmiy izlanishlaridagi muvaffaqiyatlar, o‘quvchilarga esa samarali o‘rganish va ilhom tilaymiz.

Hurmat bilan,

Tahrir hay’ati nomidan

*Toshkent shahridagi Adju Universiteti rektori*

**G.A. Muratov**

# 05.00.00 – TECHNICAL SCIENCES

* * *

# 05.00.00 - TEXNIKA FANLARI

* * *

# 05.00.00 – ТЕХНИЧЕСКИЕ НАУКИ

"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# AGROSANOAT MAHSULOTLARIDA NAMLIKNI NAZORAT QILISHNING ILMIY ASOSLARI

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***Annotatsiya.*** *Ushbu maqolada agrosanoat mahsulotlarida namlikning mahsulot sifatiga ta'siri va uni nazorat qilishning ilmiy asoslari tahlil qilingan. Namlik agrosanoat mahsulotlarining fizik, kimyoviy va biologik xususiyatlarini belgilab beruvchi asosiy omillardan biri hisoblanadi. Maqolada namlik darajasining mahsulotning saqlanish barqarorligi, oziq-ovqat xavfsizligi va texnologik jarayonlar samaradorligiga ta'siri ilmiy nuqtai nazardan yoritilgan. Shuningdek, namlikni o'lchash va nazorat qilish usullarining ahamiyati, ularning metrologik ta'minlanganligi hamda amalda qo'llanilishi masalalari ko'rib chiqilgan. Tadqiqot natijalari agrosanoat mahsulotlarida sifatni ta'minlash va yo'qotishlarni kamaytirishda namlik nazoratining muhimligini tasdiqlaydi.*

***Kalit so'zlar:*** *agrosanoat mahsulotlari, namlik, mahsulot sifati, namlikni nazorat qilish, o'lchash usullari, metrologik ta'minot, saqlash jarayoni.*

***Abstract.*** *This article provides a list of famous people who have died as a result of an accidental death. One of the main factors determining the physical, chemical and biological properties of low-calorie agrochemical masses is their chemical composition. Macroeconomics is more focused on technology development than on self-development and technological processes. Thus, the measurement conditions, their metrological security, as well as the measurement conditions were determined. Tadeusz Kosciuszko emphasizes the importance of improving the quality and efficiency of agro-industrial complexes.*

***Key words:*** *agro-industrial products, humidity, product quality, humidity control, measurement methods, Metrological supply, storage process.*

**Kirish.**

Hozirgi kunda agrosanoat mahsulotlari sifati va xavfsizligini ta'minlash qishloq xo'jaligi hamda oziq-ovqat sanoatining eng muhim ilmiy-amaliy masalalaridan biri hisoblanadi. Mahsulot sifatiga ta'sir etuvchi ko'plab omillar orasida namlik alohida o'rin tutadi, chunki u mahsulotning

fizik holati, kimyoviy tarkibi va biologik barqarorligini belgilab beruvchi asosiy parametr hisoblanadi.

Agrosanoat mahsulotlarida namlik darajasining me’yordan og‘ishi mahsulot massasining kamayishi yoki ortishiga, texnologik xususiyatlarining yomonlashuviga, mikroorganizmlar faolligining kuchayishiga va natijada mahsulot sifati pasayishiga olib kelishi mumkin. Ayniqsa, don, urug‘, un va ozuqa mahsulotlarida namlikning noto‘g‘ri boshqarilishi saqlash davrida issiqlanish, qoliplanish va biologik buzilish jarayonlarini tezlashtiradi. Shu bois namlikni aniq o‘lchash va doimiy nazorat qilish agrosanoat mahsulotlari sifatini ta’minlashda hal qiluvchi ahamiyatga ega.

Zamonaviy agrosanoat ishlab chiqarishda namlikni nazorat qilish nafaqat texnologik, balki metrologik nuqtai nazardan ham asoslangan bo‘lishi lozim. O‘lchash natijalarining ishonchliligi va aniqligi qo‘llanilayotgan o‘lchash usullari, asboblarning texnik holati hamda ularning metrologik ta’minlanganligiga bevosita bog‘liq. Shu nuqtai nazardan, namlikni nazorat qilishning ilmiy asoslarini o‘rganish, mavjud usullarni tahlil qilish va ularni takomillashtirish dolzarb ilmiy vazifa hisoblanadi.

Agrosanoat mahsulotlarida namlikni nazorat qilishning ilmiy asoslari deganda asosan quyidagi yo‘nalishlarga e’tibor qaratilgan bo‘ladi:

Fizika va kimyo asoslari. Bu yerda mahsulotdagi namlikni aniqlash uchun suvning fizik-ximiyaviy xossalari (qaynoq harorati, bug‘alanish, elektr o‘tkazuvchanlik, dielektrik xossalar) o‘rganiladi. Mahsulotning turli quvvatdagi suvni saqlash qobiliyati va uning strukturasi (masalan, urug‘, don, meva) tahlil qilinadi.

Metrologiya va o‘lchash usullari, namlikni aniq va takrorlanuvchan o‘lchash uchun sensorlar, namlik mikrometrlari, elektron va dielektrik uskunalarning ishlash prinsiplari o‘rganiladi. O‘lchash xatoligi, o‘lchash diapazoni va sensorlarning korrelyatsiyasi hisobga olinadi.

Biologik va texnologik ta’sirlar esa mahsulotdagi namlik uning siylashuvchanligi, zararli mikroorganizmlar faoliyati va saqlash muddatiga ta’sir qiladi. Mahsulotning namligi texnologiya jarayonida (qurutish, saqlash, qayta ishlash) qanday o‘zgarayotgani o‘rganiladi.

Statistik va matematik modellashtirishda namlikning o‘zgarishini prognoz qilish uchun statistik usullar va matematik modellar ishlatiladi. Bu modellar mahsulotni saqlash sharoitiga mos ravishda optimal namlik darajasini belgilashga yordam beradi.

Sanoat va nazorat amaliyotida ilmiy asoslar mahsulot sifatini nazorat qilish, yuqori samarali saqlash va qayta ishlash jarayonlarini samarali boshqarishga qaratilgan. Avtomatlashtirilgan nazorat tizimlari va sensor texnologiyalari bu jarayonlarni aniq va uzluksiz ta’minlaydi.

Ilmiy asoslar asosan namlikning fizik, ximiyaviy va biologik xususiyatlarini o‘rganish, uning sanoat jarayonida o‘zgarishini tahlil qilish va o‘lchash, modellashtirish va nazorat qilish usullarini ishlab chiqishga qaratilgan.

Ushbu maqolaning maqsadi agrosanoat mahsulotlarida namlikning mahsulot sifatiga ta’sirini ilmiy jihatdan asoslash, shuningdek, namlikni nazorat qilish usullari va ularning amaliy ahamiyatini yoritishdan iborat. Tadqiqot natijalari agrosanoat mahsulotlarini saqlash va qayta ishlash jarayonlarida sifatni oshirishga xizmat qiladi.

**Materiallar va tadqiqot usullari.**

Ushbu tadqiqot agrosanoat mahsulotlarida namlikning mahsulot sifatiga ta’sirini o‘rganishga qaratilgan bo‘lib, tadqiqot ob’ekti sifatida don va don mahsulotlari tanlab olindi.

Tadqiqot jarayonida asosiy e’tibor namlik darajasining mahsulotning fizik va texnologik sifat ko‘rsatkichlariga ta’sirini baholashga qaratildi.

**Tadqiqot materiallari.** Tadqiqotda turli navli bug‘doy donlari va ular asosida olingan don mahsulotlari namunalari qo‘llanildi. Namunalar standart talablarga muvofiq holda tanlab olinib, ularning bir xilligini ta’minlash maqsadida dastlabki tozalash va saralash ishlari amalga oshirildi. Barcha namunalar tajriba o‘tkazishdan oldin belgilangan harorat va namlik sharoitida saqlandi.

**Namlikni o‘lchash usullari.** Namlikni aniqlashda qiyosiy tahlil maqsadida laboratoriya va ekspress usullardan foydalanildi. Asosiy etalon usul sifatida termogravimetrik (quritish) usuli qo‘llanildi. Ushbu usulda namunalar belgilangan haroratda doimiy massagacha quritilib, massalar farqi orqali namlik miqdori hisoblab chiqildi.

Shuningdek, namlikni tezkor aniqlash uchun elektr va dielektrik usullarga asoslangan namlik o‘lchagichlardan foydalanildi. Ushbu usullar don namligini qisqa vaqt ichida aniqlash imkonini berib, ishlab chiqarish sharoitida qo‘llash uchun qulay hisoblanadi. Ekspress usullar natijalari etalon usul bilan taqqoslanib, o‘lchash xatoliklari va farqlari tahlil qilindi.

**Tajriba o‘tkazish tartibi.** Tajribalar turli namlik darajalarida (past, me’yoriy va yuqori) olib borildi. Buning uchun don namunalari sun’iy ravishda namlantirildi yoki quritildi va belgilangan vaqt mobaynida barqaror holatga keltirildi. Har bir namlik darajasi uchun o‘lchashlar kamida uch marta takrorlanib, o‘rtacha qiymatlar aniqlandi.

**Ma’lumotlarga ishlov berish usullari.** Olingan eksperimental ma’lumotlarga statistik ishlov berildi. O‘rtacha qiymat, standart og‘ish va nisbiy xatoliklar hisoblab chiqildi. Namlik darajasi bilan mahsulotning sifat ko‘rsatkichlari o‘rtasidagi bog‘liqlikni aniqlash maqsadida qiyosiy va korrelyatsion tahlil usullaridan foydalanildi.

**Metrologik ta’minlash.** O‘lchash vositalari tadqiqotdan oldin amaldagi metrologik talablarga muvofiq kalibrlandi. O‘lchash jarayonida tashqi omillar — harorat, atrof-muhit namligi va namunalar holati hisobga olindi. Bu esa olingan natijalarning ishonchliligi va qayta takrorlanishini ta’minladi.

**Adabiyotlar asosida ilmiy iqtiboslar va sharhlar.**

**1. Namlikning don mahsulotlari fizik xususiyatlariga ta’siri**

Gierz va hammualliflar (2024) o‘z tadqiqotlarida don namligining fizik parametrlarga ta’sirini tahlil qilib, quyidagi xulosaga keladilar [1]:

*“Moisture content significantly affects the dimensional and shape-related properties of grains, which must be considered in quality evaluation and processing technologies.”* (Gierz et al., 2024). Mualliflar fikricha, namlikning oshishi donning o‘lchamlari va shaklida o‘zgarishlarga olib keladi, bu esa texnologik jarayonlarda (qabul qilish, saralash, qayta ishlash) xatoliklarni keltirib chiqarishi mumkin. Ushbu xulosa agrosanoat mahsulotlarida namlikni doimiy va aniq nazorat qilish zarurligini ilmiy jihatdan asoslaydi.

**2. Namlik va mexanik sifat ko‘rsatkichlari o‘rtasidagi bog‘liqlik**

Acar (2025) bug‘doy donlarining qattiqlik indeksi va namlik darajasi o‘rtasidagi bog‘liqlikni tadqiq qilib, quyidagini ta’kidlaydi [2]:

*“An increase in moisture content leads to statistically significant changes in wheat hardness values, affecting milling and end-use quality.”* (Acar, 2025). Muallif xulosasiga ko‘ra, namlikning me’yordan og‘ishi donning texnologik sifat ko‘rsatkichlarini pasaytiradi. Bu esa namlikni mahsulot sifatini baholovchi muhim parametr sifatida qarash lozimligini ko‘rsatadi.

**3. Namlikning saqlash jarayonidagi ta’siri**

Ziegler va hammualliflar (2021) don mahsulotlarini saqlash jarayonlarini tahlil qilib, quyidagi ilmiy xulosaga kelganlar [3]:

*“Grain moisture is one of the most critical factors influencing storage stability, microbial activity and overall grain quality during storage.”* (Ziegler et al., 2021). Ushbu tadqiqotga ko‘ra, yuqori namlik sharoitida saqlangan mahsulotlarda mikrobiologik faollik kuchayib, sifatning keskin pasayishi kuzatiladi. Bu holat amaliyotda namlikni nazorat qilish tizimlarini takomillashtirish zarurligini ko‘rsatadi.

**4. Namlik nazorati va sifatni ta’minlash**

P.I. Kalandarov (2024) don mahsulotlarida namlik nazorati masalasini tahlil qilib, quyidagini ta’kidlaydi: *“Effective moisture control systems are essential for ensuring grain quality and minimizing post-harvest losses.”*(Kalandarov, 2024). Muallif xulosasiga ko‘ra, avtomatlashtirilgan va aniq namlik nazorati tizimlarini joriy etish mahsulot yo‘qotishlarini kamaytirish va sifatni barqaror saqlash imkonini beradi [4].

5. Namlikni o‘lchashda metrologik muammolar

Hunt va Neustadt (1966) klassik tadqiqotlarida namlikni o‘lchash aniqligiga ta’sir etuvchi omillarni tahlil qilib, shunday xulosa qiladilar:

“The accuracy of moisture determination depends not only on the method used, but also on calibration, sample condition and environmental factors [5].

Mualliflar fikricha, namlikni o‘lchashdagi xatoliklar mahsulot sifatini noto‘g‘ri baholashga olib kelishi mumkin. Shu sababli, o‘lchash vositalarining metrologik ta’minlanganligi muhim ilmiy va amaliy masala hisoblanadi.Tahlil qilingan ilmiy manbalar shuni ko‘rsatadiki: namlik agrosanoat mahsulotlari sifatiga bevosita ta’sir etuvchi asosiy parametr hisoblanadi; namlikning me’yordan og‘ishi fizik, mexanik va biologik buzilishlarga olib keladi; namlikni aniq o‘lchash va nazorat qilish metrologik jihatdan asoslangan bo‘lishi shart; zamonaviy namlik nazorati tizimlari mahsulot sifati va saqlanish barqarorligini ta’minlashda muhim ahamiyatga ega.

**Modellashtirish.**

Agrosanoat mahsulotlarida namlikning mahsulot sifatiga ta’sirini chuqur tahlil qilish maqsadida tadqiqotda matematik modellashtirish usuli qo‘llanildi. Modellashtirish namlik darajasi bilan mahsulotning asosiy sifat ko‘rsatkichlari o‘rtasidagi funksional bog‘liqlikni aniqlash, shuningdek, o‘lchash natijalarini prognoz qilish imkonini beradi.

**Modellashtirishning maqsadi va vazifalari.** Modellashtirishning asosiy maqsadi — agrosanoat mahsulotlarida namlik o‘zgarishi natijasida sifat ko‘rsatkichlarining qanday o‘zgarishini nazariy jihatdan asoslashdir. Shu maqsadda quyidagi vazifalar belgilandi:

- namlik darajasi bilan mahsulot sifat ko‘rsatkichlari o‘rtasidagi bog‘liqlikni ifodalovchi matematik model tuzish;
- eksperimental ma’lumotlar asosida model parametrlarini aniqlash;
- olingan model orqali mahsulot sifatiga ta’sir etuvchi namlik diapazonlarini baholash.

**Matematik modelning umumiy ko‘rinishi.** Tadqiqotda mahsulot sifati ko‘rsatkichi (Q) namlik darajasi (W) ning funksiyasi sifatida qaraldi. Ushbu bog‘liqlik quyidagi umumiy ko‘rinishda ifodalandi:

$$Q = f(W) \quad (1)$$

Amaliy hisob-kitoblar uchun ushbu funksiyaning soddalashtirilgan chiziqli va chiziqsiz shakllari qo‘llanildi. Chiziqli model quyidagicha ifodalandi:

$$Q = a + bW \quad (2)$$

bu yerda: a — doimiy koeffitsient, b — namlikning sifat ko‘rsatkichiga ta’sir darajasini ifodalovchi koeffitsient.

Ayrim holatlarda namlikning ta’siri chiziqsiz xarakterga ega bo‘lgani sababli kvadrat funksiyali model ham qo‘llanildi:

$$Q = a + bW + cW^2 \quad (3)$$

Bu model namlik me’yordan oshganda yoki kamayganda sifat ko‘rsatkichlarining keskin o‘zgarishini aniqroq ifodalash imkonini berdi.

Agrosanoat mahsulotlarida namlikni nazorat qilishda qo‘llaniladigan **ilmiy asoslar asosidagi matematik modellar** quyidagicha shakllantirilishi mumkin:

**1. Umumiy namlik balans modeli**

Mahsulotning namligi vaqt bilan o‘zgaradi va bu hodisani moddalar harakati qonuni bilan ifodalash mumkin:

$$\frac{dM}{dt} = k(M_{eg} - M) \quad (4)$$

Bu yerda: (M) — mahsulotdagi hozirgi namlik, %; ($M_{eq}$) — mahsulotning muhit bilan barqaror namligi (equilibrium moisture content), %; (k) — konveksiya/bug‘lanish koeffitsienti, 1/soat; (t) — vaqt, soat

Bu tenglama mahsulotning namligi muhitga moslashishi dinamikasini ko‘rsatadi.

**2. Bug‘lanish jarayoniga asoslangan model (Fick qonuni)**

Mahsulotdagi namlik tarqalishi diffuziya qonuni asosida ifodalanadi:

$$\frac{\partial M}{\partial t} = D\frac{\partial^2 M}{\partial x^2} \quad (5)$$

Bu yerda: (D) — namlikning diffuziya koeffitsienti, $m^2/s$; ($x$) — mahsulotning geometrik koordinatasi, m; (M) — namlik, ($\frac{\partial M}{\partial t}$) — vaqt bo‘yicha namlik o‘zgarishi.

Bu model asosan qurutish va saqlash jarayonlarida qo‘llaniladi.

**3. Dielektrik sensorlar bilan namlik o‘lchash modeli**

Elektron sensorlar orqali namlikni aniqlash uchun dielektrik xossalar bilan bog‘liq model qo‘llaniladi:

$$\varepsilon_r = \varepsilon_{dry} + aM \quad (6)$$

Bu yerda $\varepsilon_r$ — mahsulotning dielektrik konstantasi; $\varepsilon_{dry}$ — qurg‘oq mahsulotning dielektrik konstantasi; $a$ — suvning ta’sir koeffitsienti; (M) — namlik, %.

Bu model sensorlar signalini namlikka aylantirish uchun asos bo‘lib xizmat qiladi.

**4. Saqlash va zararli mikroorganizmlar modellari**

Mahsulotdagi namlik mikroblarning faoliyatiga ta’sir qiladi:

$$\frac{dN}{dt} = \mu(M) \cdot N \quad (7)$$

Bu yerda: (N) — mikroorganizmlar soni; $\mu(M)$ — namlikka bog‘liq o‘sish koeffitsienti; (t) — vaqt.

Bu model sanoatda sifat va xavfni prognoz qilish uchun qo‘llaniladi.

**5. Optimal namlikni boshqarish modeli**

Agar avtomatik nazorat tizimi mavjud bo‘lsa, uning matematik modeli kerekli namlikni saqlash uchun:

$$M_{target} = M_{eg} + K_p(M_{set} - M) + K_i \int (M_{set} - M)dt \quad (8)$$

Bu yerda: $M_{set}$ — maqsadli namlik, %; $K_p$, $K_i$ — PI-kontroler koeffitsientlari.

Bu real vaqtda namlikni avtomatik tarzda nazorat qilish imkonini beradi.

**Model parametrlarini aniqlash.** Model koeffitsientlari eksperimental ma’lumotlar asosida eng kichik kvadratlar usuli yordamida hisoblab chiqildi. Har bir namlik darajasi uchun olingan sifat ko‘rsatkichlari o‘rtacha qiymatlari modelga kiritildi. Model aniqligi determinatsiya koeffitsienti ($R^2$) orqali baholandi.

**Modelning adekvatligini baholash.** Olingan matematik modelning adekvatligi eksperimental natijalar bilan taqqoslash orqali tekshirildi. Hisoblangan qiymatlar bilan tajriba natijalari o‘rtasidagi farqlar tahlil qilinib, nisbiy xatolik qiymatlari aniqlandi. Model qanoatlanarli deb baholanishi uchun xatolik qiymati belgilangan me’yorlar doirasida bo‘lishi talab etildi.

**Modellashtirish natijalarining amaliy ahamiyati.** Taklif etilgan model namlikni nazorat qilish jarayonlarida mahsulot sifatiga ta’sirni oldindan baholash, optimal namlik diapazonlarini aniqlash hamda namlikni o‘lchash va boshqarish tizimlarini takomillashtirishda qo‘llanilishi mumkin. Modellashtirish natijalari agrosanoat mahsulotlarida sifatni ta’minlash va yo‘qotishlarni kamaytirishga xizmat qiladi.

**Natijalar va muhokama.**

Tadqiqot jarayonida olingan eksperimental ma’lumotlar asosida agrosanoat mahsulotlarida namlik darajasi W bilan mahsulot sifati ko‘rsatkichi Q o‘rtasidagi bog‘liqlik tahlil qilindi. Namlikning turli qiymatlarida olingan sifat ko‘rsatkichlari matematik modellar yordamida qayta ishlandi va ularning o‘zaro bog‘lanish xarakteri aniqlandi.

**Model hisob-kitoblari natijalari.** Eksperimental ma’lumotlar asosida chiziqli model tuzildi. Hisob-kitoblar natijasida koeffitsientlar qiymatlari aniqlanib, b koeffitsienti manfiy qiymatga ega ekanligi kuzatildi. Bu holat namlik darajasi ortishi bilan mahsulot sifati ko‘rsatkichining pasayish tendensiyasini ifodalaydi. Determinatsiya koeffitsienti $R^2$ ning yuqori qiymati model bilan eksperimental ma’lumotlar o‘rtasida kuchli korrelyatsiya mavjudligini ko‘rsatdi.

Ayrim namlik diapazonlarida sifat ko‘rsatkichlarining o‘zgarishi chiziqli xarakterga to‘liq mos kelmagani sababli kvadrat funksiyali model ham qo‘llanildi. Ushbu model namlik me’yoriy qiymatdan oshganda sifatning keskin pasayishini aniqroq aks ettirdi. Xususan, yuqori namlik qiymatlarida $W^2$ hadining ta’siri ortib, sifat ko‘rsatkichining tez sur’atda yomonlashishi kuzatildi. Bu natijalar namlikning mahsulot sifatini belgilashda hal qiluvchi omil ekanligini ilmiy jihatdan tasdiqlaydi.

**Q–W bog‘liqligi tahlili.** Olingan natijalar shuni ko‘rsatadiki, namlik va sifat ko‘rsatkichi o‘rtasida aniq funksional bog‘liqlik mavjud. Namlik past yoki me’yoriy diapazonda bo‘lgan holatlarda mahsulot sifati nisbatan barqaror saqlanadi. Biroq namlik belgilangan me’yordan oshganda, sifat ko‘rsatkichlarida salbiy o‘zgarishlar keskinlashadi.

Bu holat don va don mahsulotlarida biologik faollikning oshishi, mikroorganizmlar rivojlanishi va fizik-mexanik xususiyatlarning o‘zgarishi bilan izohlanadi. Shu sababli, model natijalari namlikni optimal diapazonda ushlab turish mahsulot sifati uchun muhim ekanligini ko‘rsatadi. Тажриба натижалари жадвалда келтирилган.

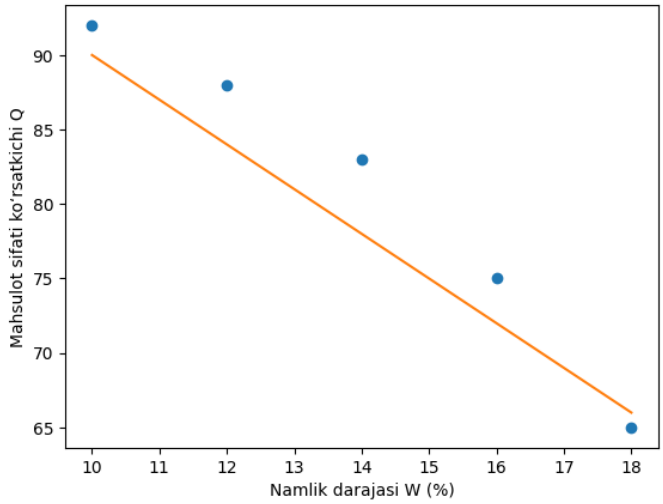
жадвал

Намлик даражасига боғлиқ ҳолда маҳсулот сифати кўрсаткичларининг экспериментал ва модел қийматлари

| Namlik darajasi W, % | Sifat ko‘rsatkichi Q (eksperimental) | Q (chiziqli model) | Q (chiziqsiz model) |
|---|---|---|---|
| 10 | 92 | 90 | 110 |
| 12 | 88 | 84 | 105 |
| 14 | 83 | 78 | 100 |
| 16 | 75 | 72 | 96 |
| 18 | 65 | 66 | 93 |

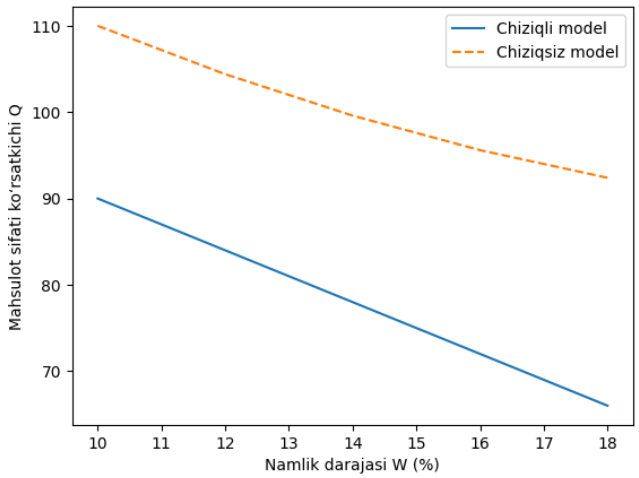
Jadvalda agrosanoat mahsulotlari uchun namlik darajasi oshishi bilan mahsulot sifati ko‘rsatkichining o‘zgarishi эksperimental natijalar va matematik modellar asosida keltirilgan. Эksperimental ma’lumotlar bilan hisoblangan qiymatlar o‘rtasidagi yaqinlik modellarning adekvatligini tasdiqlaydi.

Jadval ma’lumotlaridan ko‘rinib turibdiki, namlik darajasi 10 % dan 18 % gacha oshgan sari mahsulot sifati ko‘rsatkichi barqaror pasayib boradi. Эksperimental qiymatlar chiziqli model natijalariga past va o‘rta namlik diapazonida yaqin bo‘lib, yuqori namlik qiymatlarida chiziqsiz model sifatning keskin o‘zgarishini yaxshiroq aks эttiradi. Bu holat namlikning me’yordan oshishi mahsulotning fizik va biologik xususiyatlariga salbiy ta’sir ko‘rsatishini ilmiy jihatdan tasdiqlaydi.




*1-rasm. Mahsulot sifati ko‘rsatkichi (Q) ning namlik darajasi (W) ga bog‘liqligi (eksperimental ma’lumotlar va chiziqli model)*

1-rasmda namlik darajasi ortishi bilan mahsulot sifati ko‘rsatkichining pasayish tendensiyasi kuzatiladi. Eksperimental nuqtalar bilan chiziqli model natijalarining yaqin joylashishi namlik va sifat ko‘rsatkichi o‘rtasida aniq korrelyatsiya mavjudligini ko‘rsatadi. Bu holat namlikning mahsulot sifatiga salbiy ta’sir etuvchi asosiy omil ekanligini tasdiqlaydi.



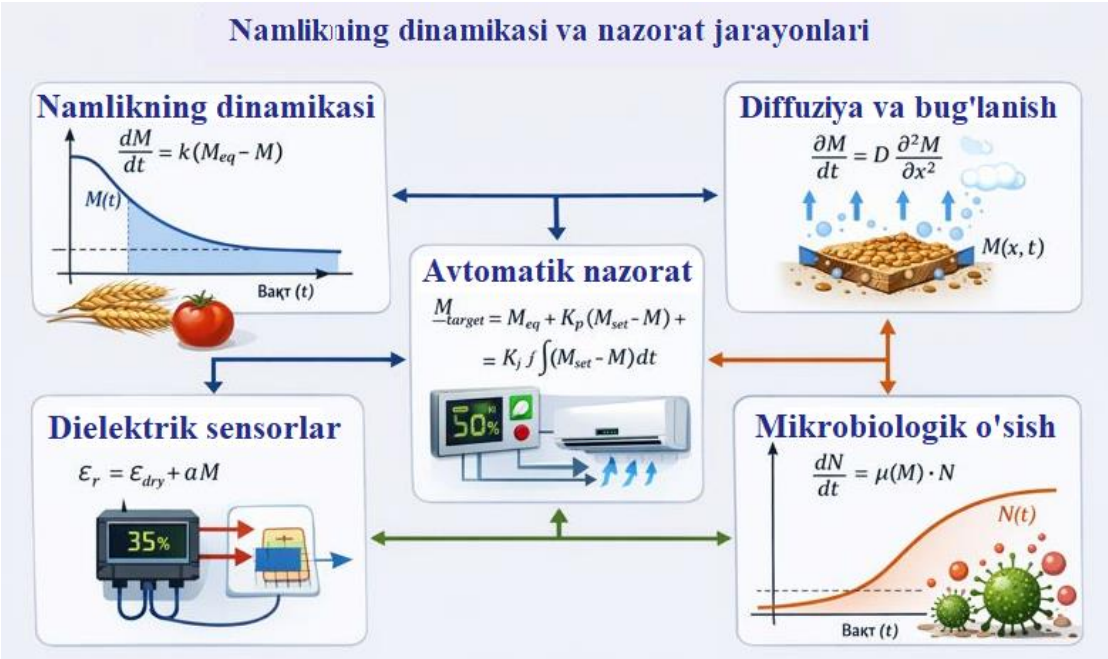

*2-rasm. Chiziqli va chiziqsiz modellar asosida Q–W bog‘liqligining taqqoslanishi.*

2-rasmda chiziqli va kvadrat funksiyali modellar asosida hisoblangan Q–W bog‘liqligi keltirilgan. Past va o‘rta namlik diapazonida chiziqli model qanoatlanarli natijalar beradi, yuqori namlik qiymatlarida esa chiziqsiz model mahsulot sifatidagi keskin o‘zgarishlarni yaxshiroq ifodalaydi. Bu esa namlikning me’yordan oshishi sifatning tez pasayishiga olib kelishini ko‘rsatadi.

Natijada:

- Olingan grafik natijalar namlik darajasi bilan mahsulot sifati o‘rtasida funksional bog‘liqlik mavjudligini tasdiqladi.
- Namlikning me’yordan oshishi mahsulot sifati ko‘rsatkichining chiziqsiz tarzda pasayishiga sabab bo‘lishi aniqlandi.
- Matematik modellashtirish natijalari amaliyotda namlikni optimal diapazonda nazorat qilish zarurligini ko‘rsatadi.

3-rasmda: Agrosanoat mahsulotlarida namlikning dinamikasi va avtomatik nazorat jarayonlari: matematik modellarni vizual ko‘rsatuvchi shakli keltirilgan.



3-rasm. Agrosanoat mahsulotlarida namlikning dinamikasi va avtomatik nazorat jarayonlari: matematik modellar

Bu yerda vizuallashtirish uchun quyidagi elementlar qo‘shiladi:

1. Mahsulotdagi namlikning vaqt bilan o‘zgarishi –*M(t)*
2. Bug‘lanish va diffuziya jarayoni –*M(x,t)*
3. Dielektrik sensor signallari bilan bog‘lanish – $\varepsilon_r(M)$
4. Mikrobiologik faoliyatga ta’sir –*N(t)*
5. Avtomatik nazorat modeli (PI-kontroler) – $M_{target}(t)$

**Natijalar muhokamasi**

Olingan natijalar adabiyotlarda keltirilgan ilmiy xulosalar bilan muvofiq keladi. Namlikning me’yordan ortishi mahsulot sifatiga salbiy ta’sir ko‘rsatishi haqidagi ilmiy fikrlar mazkur tadqiqot natijalari bilan tasdiqlandi. Modellashtirish natijalari namlikni nazorat qilish tizimlarida prognoz qilish, optimal rejimlarni tanlash va sifat yo‘qotishlarini kamaytirish imkonini beradi.

Shu tariqa, Q–W bog‘liqligini matematik modellashtirish agrosanoat mahsulotlari sifatini ta’minlashda samarali ilmiy vosita sifatida qaralishi mumkin. Shuningdek, ilgari olib borgan tadqiqotlarimiz asosida [6-8] yuqorida keltirilgan modellashtirishni joriy ətish maqsadida agrosanoat mahsulotlarni namligini jadal ravishda diskret va usluksiz usulida o‘lchaydigan namo‘lchagichlarini o‘lchash datchiklari bilan sxemalarini sintez qilish imkoniyatini yaratilishiga olib keladi.

**Xulosa**

Ushbu tadqiqotda agrosanoat mahsulotlarida namlikning mahsulot sifatiga ta’siri ilmiy jihatdan tahlil qilindi va eksperimental ma’lumotlar asosida matematik modellashtirish amalga oshirildi. Olingan natijalar namlik darajasi mahsulot sifati ko‘rsatkichlarini belgilab beruvchi asosiy omillardan biri ekanligini tasdiqladi.

Eksperimental tadqiqotlar natijasida namlikning ortishi bilan mahsulot sifati ko‘rsatkichlarida barqaror pasayish tendensiyasi kuzatildi. Chiziqli model past va o‘rta namlik diapazonida sifat o‘zgarishini qoniqarli ifodalasa, yuqori namlik qiymatlarida chiziqsiz model mahsulot sifatidagi keskin o‘zgarishlarni aniqroq aks ettirishi aniqlandi. Bu holat namlik me’yordan oshganda fizik, texnologik va biologik jarayonlar jadallashib, mahsulot sifati tez pasayishini ko‘rsatadi.

Modellashtirish natijalari asosida Q–W bog‘liqligining mavjudligi ilmiy jihatdan asoslandi hamda namlikning optimal diapazonidan chiqib ketishi mahsulot sifatiga salbiy ta’sir ko‘rsatishi isbotlandi. Bu esa agrosanoat mahsulotlarini saqlash, qayta ishlash va sifat nazorati jarayonlarida namlikni doimiy va aniq nazorat qilish zarurligini ko‘rsatadi.

Shuningdek, tadqiqotda namlikni o‘lchash usullarining metrologik ta’minlanganligi natijalarning ishonchliligida muhim o‘rin tutishi aniqlandi. O‘lchash vositalarini to‘g‘ri kalibrlash va tashqi omillarni hisobga olish namlikni baholashda xatoliklarni kamaytirish imkonini beradi.

Ushbu tadqiqot natijalari agrosanoat mahsulotlarida sifatni ta’minlash, yo‘qotishlarni kamaytirish va texnologik jarayonlarni optimallashtirishda namlik nazoratining ilmiy va amaliy ahamiyati yuqori ekanligini ko‘rsatadi. Taklif etilgan modellar va olingan xulosalar ishlab chiqarish amaliyotida hamda kelgusidagi ilmiy tadqiqotlarda qo‘llanilishi mumkin.

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# TEMIR YO‘L TRANSPORTI TIZIMINING INNOVATSION TRANSFORMATSIYASINI BAHOLASH VA RIVOJLANTIRISH

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***Annotatsiya.*** *Temir yo‘l transporti mamlakat iqtisodiyotida yuk va yo‘lovchi tashish, hududlararo aloqalarni mustahkamlash, tashqi savdo oqimlarini tezlashtirish va tranzit salohiyatini oshirishda muhim infratuzilmaviy tarmoq hisoblanadi. Bugungi raqamli iqtisodiyot sharoitida sohada innovatsion texnologiyalar, avtomatlashtirilgan boshqaruv tizimlari, elektron hujjat aylanmasi, sun’iy intellekt elementlari va Smart Railway yondashuvlarini joriy etish zarurati ortib bormoqda. Maqolada temir yo‘l transportida innovatsion transformatsiyani baholash mezonlari, mavjud muammolar, iqtisodiy samaradorlik omillari va rivojlantirish bo‘yicha takliflar asoslab berilgan.*

***Kalit so‘zlar:*** *temir yo‘l transporti, innovatsion transformatsiya, raqamlashtirish, Smart Railway, sun’iy intellekt, logistika, transport infratuzilmasi.*

Temir yo‘l transporti mamlakat iqtisodiyotining barqaror rivojlanishida strategik ahamiyatga ega bo‘lgan tarmoqlardan biridir. U sanoat mahsulotlari, qishloq xo‘jaligi yuklari, qurilish materiallari, eksport-import tovarlari va yo‘lovchilar harakatini ta’minlash orqali iqtisodiy jarayonlarning uzluksizligini kafolatlaydi. Shu sababli temir yo‘l transportida xizmatlar sifati, harakat xavfsizligi, tashish tezligi, xarajatlar samaradorligi va infratuzilmaning zamonaviyligi umumiy iqtisodiy raqobatbardoshlikka bevosita ta’sir ko‘rsatadi.

O‘zbekiston Markaziy Osiyoning muhim transport yo‘laklari kesishmasida joylashgani sababli temir yo‘l tizimini innovatsion rivojlantirish davlat iqtisodiy siyosatida alohida o‘rin tutadi. Xususan, milliy temir yo‘l tizimini isloh qilishda raqobat muhitini shakllantirish, tashish jarayonlariga xususiy sektorni jalb etish, biznes jarayonlarini raqamlashtirish, boshqaruvning zamonaviy usullarini joriy etish va tranzit salohiyatidan samarali foydalanish ustuvor vazifalar sifatida belgilangan. Bu holat sohada innovatsion transformatsiyani nafaqat texnik yangilanish, balki institutsional, moliyaviy va boshqaruv islohotlari bilan bog‘liq kompleks jarayon sifatida qarashni talab etadi.

Hozirgi sharoitda transport bozorida raqobat kuchaymoqda. Mijozlar uchun tashish xizmatlarining tezkorligi, narx shaffofligi, yuklarni kuzatish imkoniyati, elektron hujjatlar bilan ishlash qulayligi va xizmat ko‘rsatish madaniyati muhim mezonga aylanmoqda. An’anaviy boshqaruv usullari esa bunday talablarga to‘liq javob bera olmaydi. Shuning uchun temir yo‘l transportida raqamli platformalar, avtomatlashtirilgan dispetcherlik, ma’lumotlar bazasi, sun’iy

intellekt asosida prognozlash, elektron shartnoma va elektron yuk hujjatlarini keng joriy etish dolzarb vazifaga aylanmoqda.

Mavzuning dolzarbligi yana shundaki, innovatsion transformatsiya temir yo‘l tizimida xarajatlarni kamaytirish, aktivlardan foydalanish darajasini oshirish, vagon va lokomotivlar harakatini optimallashtirish, texnik xizmat ko‘rsatishni rejali tashkil etish, xavfsizlikni kuchaytirish hamda yo‘lovchi va yuk tashuvchilar uchun qulay xizmat muhitini yaratish imkonini beradi. Demak, temir yo‘l transportini innovatsion asosda baholash va rivojlantirish mamlakat transport-logistika salohiyatini oshirishning muhim ilmiy-amaliy yo‘nalishi hisoblanadi.

Tadqiqotning asosiy maqsadi temir yo‘l transporti tizimining innovatsion transformatsiyasini baholash, uning iqtisodiy, tashkiliy va texnologik ahamiyatini ochib berish hamda sohani rivojlantirish bo‘yicha amaliy takliflar ishlab chiqishdan iborat.

Tadqiqotda tizimli tahlil, taqqoslash, iqtisodiy umumlashtirish, institutsional yondashuv va mantiqiy tahlil metodlaridan foydalanildi. Tizimli yondashuv temir yo‘l transportini faqat rels, lokomotiv, vagon va stansiyalar yig‘indisi sifatida emas, balki infratuzilma, boshqaruv, moliya, raqamli texnologiyalar, kadrlar salohiyati, logistika va xizmatlar bozori bilan bog‘liq yagona kompleks tizim sifatida baholash imkonini berdi.

Taqqoslash metodi orqali an’anaviy boshqaruv usullari bilan raqamli va innovatsion boshqaruv mexanizmlari o‘rtasidagi farqlar o‘rganildi. Iqtisodiy umumlashtirish orqali raqamli texnologiyalarning xarajatlar, xizmatlar sifati, aktivlardan foydalanish va tashish jarayonlariga ta’siri baholandi. Mantiqiy tahlil asosida temir yo‘l transportida innovatsion transformatsiyaning asosiy mezonlari sifatida tezkorlik, xavfsizlik, shaffoflik, xarajatlarni optimallashtirish, axborot integratsiyasi, mijozlarga qulaylik va boshqaruv qarorlarining asoslanganligi tanlab olindi.
Innovatsion transformatsiyani baholashda quyidagi mezonlar asosiy ahamiyatga ega:

Jadval 1

Innovatsion transformatsiyani baholashda mezonlari

| **Baholash mezoni** | **Mazmuni** | **Kutiladigan natija** |
|---|---|---|
| Raqamlashtirish darajasi | Elektron hujjatlar, yagona ma’lumot bazasi va raqamli xizmatlar qamrovi | Ma’lumotlar tezligi va shaffofligi oshadi |
| Operatsion samaradorlik | Poyezd harakati, vagon aylanishi va stansiya operatsiyalarining muvofiqligi | Tashish vaqti va ortiqcha xarajatlar kamayadi |
| Xavfsizlik va ishonchlilik | Texnik holat monitoringi, kiberxavfsizlik va profilaktik nazorat | Avariya xavfi va tizimli uzilishlar qisqaradi |
| Mijozga yo‘naltirilganlik | Onlayn xizmatlar, elektron chipta, yukni kuzatish va murojaatlar tizimi | Xizmat sifati va mijozlar ishonchi kuchayadi |

Tahlillar shuni ko‘rsatadiki, temir yo‘l transportida innovatsion transformatsiyani amalga oshirish birinchi navbatda boshqaruv jarayonlarini tezkor va ma’lumotlarga asoslangan holatga o‘tkazadi. Raqamli boshqaruv platformalari poyezdlar harakati, vagonlar joylashuvi, yuk hujjatlari, stansiyalardagi operatsiyalar, texnik xizmat ko‘rsatish jarayonlari va moliyaviy hisob-kitoblarni yagona axborot maydonida kuzatish imkonini beradi. Bu esa boshqaruv qarorlarining kechikishini kamaytiradi va resurslardan oqilona foydalanishni ta’minlaydi.

Ikkinchidan, avtomatlashtirilgan tizimlar inson omili tufayli yuzaga keladigan xatolarni kamaytiradi. Qog‘oz hujjat aylanmasi, ma’lumotlarni qo‘lda kiritish, turli bo‘limlar o‘rtasida axborot almashinuvining sekinligi va hisobotlarning kech shakllanishi transport jarayonlarida ortiqcha vaqt sarfiga olib keladi. Elektron hujjat aylanmasi va integratsiyalashgan axborot tizimlari esa yuk tashish bo‘yicha arizadan tortib shartnoma, hisob-kitob va ijro nazoratigacha bo‘lgan jarayonlarni qisqa muddatda bajarishga yordam beradi.

Uchinchidan ma’lumotlar tahlili temir yo‘l transportida prognozlash imkoniyatlarini kengaytiradi. Masalan, yuk oqimini oldindan baholash, mavsumiy talabni aniqlash, vagon va lokomotivlardan foydalanish darajasini nazorat qilish, ta’mirlash muddatlarini rejalashtirish hamda stansiyalar yuklamasini optimal taqsimlash orqali tizimning umumiy samaradorligi oshadi. Bu yondashuv xarajatlarni kamaytirish bilan birga, xizmat ko‘rsatish barqarorligini ham ta’minlaydi.

To‘rtinchidan, innovatsion transformatsiya harakat xavfsizligini kuchaytirishga xizmat qiladi. Temir yo‘l infratuzilmasi, signalizatsiya, aloqa tizimlari, vagon va lokomotivlar texnik holatini raqamli monitoring qilish orqali ehtimoliy nosozliklarni oldindan aniqlash mumkin. Profilaktik nazorat va ma’lumotlarga asoslangan texnik xizmat ko‘rsatish usuli avariyaviy ta’mirlash xarajatlarini kamaytirib, tashish jarayonlarining uzluksizligini ta’minlaydi.

Beshinchidan, raqamli xizmatlar mijozga yo‘naltirilgan transport tizimini shakllantiradi. Yo‘lovchilar uchun elektron chipta, onlayn ma’lumot, qatnov jadvalini kuzatish, murojaatlar bilan ishlash va qulay to‘lov vositalari xizmatlar sifatini oshiradi. Yuk tashuvchilar uchun esa elektron ariza, yukni onlayn kuzatish, elektron yuk hujjatlari, shartnomalarning raqamli yuritilishi va “yagona darcha” tamoyili vaqtni tejaydi hamda biznes uchun qulay muhit yaratadi.

Oltinchidan, innovatsion transformatsiya temir yo‘l sohasining moliyaviy barqarorligiga ijobiy ta’sir ko‘rsatadi. Tashish tannarxini kamaytirish, tarif siyosatini iqtisodiy asosda shakllantirish, aktivlardan foydalanish samaradorligini oshirish va xarajat markazlari bo‘yicha aniq hisob yuritish korxona moliyaviy natijalarini yaxshilashga xizmat qiladi. Bu ayniqsa yirik transport korxonalarida boshqaruv hisobi, byudjetlashtirish va ichki nazorat tizimini kuchaytirish bilan bog‘liq.

Yettinchidan, O‘zbekiston temir yo‘l transportining xalqaro raqobatbardoshligini oshirishda raqamli integratsiya muhim o‘rin tutadi. Xalqaro transport koridorlari bo‘yicha elektron ma’lumot almashinuvi, tranzit yuklarni tez rasmiylashtirish, chegara va bojxona jarayonlarida raqamli hamkorlikni kuchaytirish mamlakatning logistika markazi sifatidagi mavqeini mustahkamlaydi. Natijada temir yo‘l transporti nafaqat ichki tashish tizimi, balki mintaqaviy iqtisodiy hamkorlikni rivojlantiruvchi strategik vositaga aylanadi.

Shu bilan birga, sohada hal etilishi zarur bo‘lgan muammolar ham mavjud. Ular qatoriga ayrim biznes jarayonlarida raqamlashtirish darajasining yetarli emasligi, axborot tizimlari o‘rtasida integratsiyaning to‘liq shakllanmagani, eskirgan texnik vositalar, kiberxavfsizlik talablarining ortishi va raqamli kompetensiyaga ega kadrlar tayyorlash zarurati kiradi. Demak, temir yo‘l transportida innovatsion transformatsiya faqat dastur yoki texnika joriy etish bilan

cheklanmaydi; u boshqaruv madaniyati, kadrlar salohiyati, moliyaviy intizom, huquqiy baza va strategik rejalashtirishni ham qamrab oluvchi kompleks jarayondir.

Tadqiqot natijalariga ko‘ra, temir yo‘l transporti tizimini rivojlantirish uchun quyidagi yo‘nalishlar ustuvor hisoblanadi: yagona raqamli boshqaruv platformasini bosqichma-bosqich kengaytirish; yuk va yo‘lovchi tashish jarayonlarida elektron hujjat aylanmasini to‘liq joriy etish; sun’iy intellekt asosida harakat jadvali, yuk oqimi, texnik xizmat va xarajatlarni prognozlash tizimini rivojlantirish; kiberxavfsizlik talablarini kuchaytirish; transport-logistika sohasi uchun raqamli ko‘nikmalarga ega mutaxassislar tayyorlash; xalqaro transport koridorlari bilan axborot almashinuvini integratsiyalash.

Xulosa qilib aytganda, temir yo‘l transporti tizimining innovatsion transformatsiyasi O‘zbekiston transport-logistika tizimini yangi sifat bosqichiga olib chiqishda muhim omil hisoblanadi. Raqamlashtirish, avtomatlashtirish, sun’iy intellekt, Smart Railway texnologiyalari va elektron hujjat aylanmasi sohada tezkorlik, shaffoflik, xavfsizlik va iqtisodiy samaradorlikni ta’minlaydi.

Innovatsion yondashuvlarni keng joriy etish temir yo‘l transportida yuk va yo‘lovchi tashish xizmatlari sifatini oshirish, infratuzilmadan samarali foydalanish, xarajatlarni kamaytirish, moliyaviy boshqaruvni kuchaytirish va xalqaro tranzit salohiyatini rivojlantirishga xizmat qiladi. Shu bois kelgusida temir yo‘l sohasini rivojlantirishda raqamli transformatsiyani kompleks yondashuv asosida amalga oshirish, zamonaviy texnologiyalarni bosqichma-bosqich joriy etish va inson kapitali sifatini oshirish ustuvor vazifa bo‘lib qoladi.

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# RAQAMLI TRANSFORMATSIYA SHAROITIDA TA'LIM XIZMATLARINI KO'RSATISH MEXANIZMLARINI TAKOMILLASHTIRISH: O'ZBEKISTON XUSUSIY TIBBIYOT UNIVERSITETLARI MISOLIDA QIYOSIY TAHLIL

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***Annotatsiya.*** *Raqamli transformatsiya tibbiyot universitetlarida ta'lim jarayonini tashkil etishga oid yondashuvlarni o'zgartirayotgan bo'lsa-da, raqamlashtirishning yuqori darajasi hamisha ham ta'lim xizmatlari sifati oshishi bilan birga kechmaydi. Tadqiqotdan maqsad O'zbekiston Respublikasi xususiy tibbiyot universitetlarining ta'lim xizmatlari samaradorligini kompleks baholash mezonlari tizimini ishlab chiqish va sinovdan o'tkazishdan iborat. Tadqiqot beshta nodavlat tibbiyot oliy ta'lim muassasasi faoliyatini qiyosiy tahlil qilish asosida o'tkazildi. Unda beshta mezonni o'z ichiga olgan mualliflik baholash tizimi ishlab chiqildi: ta'lim jarayonining sifati, raqamlashtirish darajasi, amaliyotga yo'naltirilgan kadrlar tayyorlash, talabalar va ish beruvchilar bilan o'zaro hamkorlik, shuningdek, boshqaruv samaradorligi. Natijalar shuni ko'rsatdiki, yuqori ko'rsatkichlar raqamli texnologiyalar ta'lim jarayoniga, amaliy tayyorgarlikka va boshqaruvga integratsiya qilingan universitetlarga xosdir. Taklif etilgan mezonlar tizimidan tibbiyot oliy ta'lim muassasalari faoliyatini kompleks baholash, ta'lim xizmatlari sifatining ichki monitoringini yuritish va boshqaruvga oid qarorlar qabul qilishda foydalanish mumkin.*

***Kalit so'zlar:*** *raqamli transformatsiya, ta'lim xizmatlari, tibbiyot universiteti, oliy ta'lim, raqamlashtirish, ta'lim sifati, baholash mezonlari, O'zbekiston.*

***Abstract.*** *Digital transformation is changing the organization of medical higher education, yet a high level of digitalization does not necessarily improve the quality of educational services. This study aims to develop and validate a comprehensive framework for evaluating the effectiveness of educational services provided by private medical universities in Uzbekistan. A comparative analysis of five private medical universities was conducted. The proposed evaluation framework includes five dimensions: educational process quality, digitalization of the learning environment, practice-oriented training, interaction with students and employers, and managerial effectiveness. The findings show that universities achieve better results when digital technologies are integrated into teaching, clinical training, and institutional management. The proposed framework can be applied for institutional self-assessment, quality assurance, and evidence-based management in medical higher education.*

***Key words:*** *digital transformation, educational services, medical university, higher education, digitalization, quality of education, evaluation criteria, Uzbekistan.*

***Аннотация.*** *Цифровая трансформация меняет подходы к организации образовательного процесса в медицинских университетах, однако высокий уровень цифровизации не всегда сопровождается повышением качества образовательных услуг. Цель исследования разработать и апробировать систему критериев комплексной оценки эффективности образовательных услуг частных медицинских университетов Республики Узбекистан. Исследование проведено на основе сравнительного анализа пяти негосударственных медицинских вузов. Разработана авторская система оценки, включающая пять критериев: качество образовательного процесса, уровень цифровизации, практико-ориентированную подготовку, взаимодействие с обучающимися и работодателями, а также эффективность управления. Результаты показали, что более высокие показатели характерны для университетов, где цифровые технологии интегрированы в образовательный процесс, практическую подготовку и управление. Предложенная система критериев может использоваться для комплексной оценки деятельности медицинских вузов, внутреннего мониторинга качества образовательных услуг и принятия управленческих решений.*

***Ключевые слова:*** *цифровая трансформация, образовательные услуги, медицинский университет, высшее образование, цифровизация, качество образования, критерии оценки, Узбекистан.*

**Kirish**

Bugungi kunda raqamli transformatsiya oliy ta’lim rivojlanishining asosiy yo‘nalishlaridan biri hisoblanadi. U nafaqat yangi axborot texnologiyalarining joriy etilishini qamrab oladi, balki ta’lim jarayonini tashkil etish, universitetlarni boshqarish hamda ta’lim faoliyati barcha ishtirokchilarining o‘zaro hamkorligiga doir yondashuvlarni ham o‘zgartirmoqda. Bu o‘zgarishlar, ayniqsa, tibbiyot ta’limida yaqqol namoyon bo‘ladi, zero bu sohada mutaxassis tayyorlash fundamental bilimlar, klinik amaliyot va zamonaviy sog‘liqni saqlash raqamli texnologiyalarini o‘zlashtirish uyg‘unligini talab qiladi [3].

So‘nggi yillarda tibbiyot universitetlari elektron ta’lim platformalari, o‘qitishni boshqarish tizimlari, raqamli kutubxonalar, simulyatsion texnologiyalar va masofaviy ta’lim shakllaridan foydalanish ko‘lamini sezilarli darajada kengaytirdi. Shu bilan birga, to‘plangan tajriba shuni ko‘rsatmoqdaki, raqamlashtirishning yuqori darajasi o‘z-o‘zidan ta’lim xizmatlari sifati oshganini anglatmaydi [8]. Zamonaviy infratuzilmaning mavjudligi har doim ham bitiruvchilar tayyorgarligining yaxshilanishi, talabalar qoniqishining ortishi yoki ta’lim jarayoni samaradorligining o‘sishi bilan birga kechavermaydi. Shu munosabat bilan tadqiqotchilarning diqqati asta-sekin raqamli texnologiyalarni joriy etish masalalaridan ulardan foydalanish natijalarini baholashga ko‘chmoqda [11].

Zamonaviy tadqiqotlar raqamli transformatsiya samaradorligi texnologiyalarni joriy etish ko‘lami bilan emas, balki ularning universitetning ta’lim va boshqaruv faoliyatiga qay darajada integratsiyalashgani bilan belgilanishini tasdiqlaydi. Ayrim mualliflar raqamli transformatsiyani universitet tizimining kompleks o‘zgarishi sifatida qarasa, boshqalari tibbiy ta’limni tahlil qilib, ta’lim jarayoni ishtirokchilarining tashkiliy tayyorgarligi va raqamli kompetensiyalari hal qiluvchi ahamiyatga ega ekanligini ta’kidlaydi. Tibbiyot universitetlarining raqamli rivojlanishiga bag‘ishlangan tadqiqotlar shuni ko‘rsatadiki, amalga oshirilayotgan o‘zgarishlar samaradorligini xolisona baholash eng murakkab vazifalardan biri bo‘lib qolmoqda [4, 7, 10].

Ushbu yo‘nalish jadal rivojlanayotganiga qaramay, raqamli transformatsiya sharoitida tibbiyot oliy o‘quv yurtlarining ta’lim xizmatlari samaradorligini baholash bo‘yicha yagona yondashuv hali shakllanmagan. Mavjud metodikalarning aksariyati yo raqamlashtirish darajasini baholashga, yo ta’lim sifatining an’anaviy ko‘rsatkichlariga yo‘naltirilgan. Bunda ta’lim jarayonining sifati, talabalarning amaliy tayyorgarligi, boshqaruv samaradorligi, raqamli ta’lim muhiti va ish beruvchilar bilan o‘zaro hamkorlik kabi o‘zaro bog‘liq jihatlar yetarlicha inobatga olinmayapti [5,6].

Shu boisdan mazkur tadqiqotning maqsadi – raqamli transformatsiya sharoitida O‘zbekiston Respublikasidagi xususiy tibbiyot oliy o‘quv yurtlarining ta’lim xizmatlari samaradorligini kompleks baholash mezonlari va indikatorlari tizimini ishlab chiqish hamda aprobatsiyadan o‘tkazishdir. Qo‘yilgan maqsadga erishish uchun tibbiyot yo‘nalishlari bo‘yicha ta’lim dasturlarini amalga oshirayotgan beshta xususiy tibbiyot universitetining faoliyati mualliflik baholash tizimi asosida qiyosiy tahlil qilindi.

**Tadqiqot materiallari va metodlari.** Tadqiqot 2026-yilning fevral–may oylarida O‘zbekiston Respublikasining beshta nodavlat tibbiyot oliy o‘quv yurti negizida o‘tkazildi: Toshkent shahridagi Xalqaro Kimyo universiteti, EMU universiteti, Profi universiteti, Alfraganus universiteti va “Impuls” tibbiyot instituti. Mazkur ta’lim muassasalarining tanlanishi ularning raqamli ta’lim texnologiyalarini faol joriy etayotgani va amalga oshirilayotgan ta’lim dasturlarining qiyoslanuvchanligi bilan izohlanadi.

Tadqiqot ketma-ket ikki bosqichni o‘z ichiga oldi.

Birinchi bosqichda mamlakatimiz va xorijiy ilmiy nashrlar, shuningdek, tadqiq etilayotgan universitetlarning ochiq materiallari (rasmiy veb-saytlar, ta’lim dasturlari, lokal normativ hujjatlar, raqamli ta’lim muhiti va o‘quv jarayonini tashkil etish to‘g‘risidagi ma’lumotlar) tahlil qilindi. Bu raqamli transformatsiya sharoitida ta’lim faoliyati samaradorligini baholashga doir eng keng tarqalgan yondashuvlarni aniqlash imkonini berdi.

Tahlil natijalari asosida beshta o‘zaro bog‘liq mezonni o‘z ichiga olgan mualliflik kompleks baholash tizimi ishlab chiqildi: bular ta’lim jarayonini tashkil etish sifati, ta’lim muhitini raqamlashtirish darajasi, talabalarning amaliyotga yo‘naltirilgan tayyorgarligi, talabalar va ish beruvchilar bilan o‘zaro aloqalar, shuningdek, tashkiliy-boshqaruv jarayonlarining samaradorligidir. Har bir mezon uchun tibbiyot universitetlari faoliyatining o‘ziga xos jihatlarini aks ettiruvchi miqdoriy va sifat ko‘rsatkichlari to‘plami shakllantirildi.

Ikkinchi bosqichda tadqiq etilayotgan oliy ta’lim muassasalari ishlab chiqilgan mezonlar tizimi bo‘yicha qiyosiy baholandi. Indikatorlarning qiymatlari ochiq ma’lumotlar tahlili asosida aniqlanib, uch bosqichli baholash shkalasiga o‘tkazildi (3 – yuqori daraja, 2 – o‘rta, 1 – past). Yakuniy ko‘rsatkich barcha mezonlar bo‘yicha to‘plangan ballar yig‘indisi sifatida hisoblanib, so‘ngra natijalar qiyosiy tahlil qilindi.

**Tadqiqot natijalari.** O‘zbekiston Respublikasidagi beshta xususiy tibbiyot oliy ta’lim muassasasi raqamli transformatsiya sharoitida ta’lim xizmatlarini ko‘rsatish samaradorligining turli jihatlarini aks ettiruvchi beshta mezon asosida qiyosiy baholandi. Yakuniy natijalar 1-jadvalda keltirilgan.

**1-jadval.**

**Ta’lim xizmatlari samaradorligining integral bahosi**

| Universitet | Yakuniy ball |
|---|---|
| EMU universiteti | **70** |
| Toshkent shahridagi Xalqaro Kimyo universiteti | **69** |
| Profi universiteti | **61** |
| Alfraganus universiteti | **55** |
| Impuls tibbiyot instituti | **50** |

Eng yuqori umumiy natijani EMU University (70 ball) qo‘lga kiritdi. Toshkent shahridagi Kimyo xalqaro universiteti (69 ball) undan biroz ortda qoldi. Profi University 61 ballik yakuniy natija bilan oraliq pog‘onani egalladi. Alfraganus University va Impuls Medical Institute esa mos ravishda 55 va 50 ball to‘pladi.

Batafsilroq tahlil shuni ko‘rsatdiki, natijalarning taqsimlanishi baholanayotgan mezonlarga qarab farqlangan (2-jadval).

**2-jadval.**

**Universitetlar ko‘rsatkichlarining barcha mezonlar bo‘yicha tafsiloti.**

| Mezon | Kimyo | EMU | Profi | Alfraganus | Impuls |
|---|---|---|---|---|---|
| Ta’lim sifati | 13 | 14 | 12 | 11 | 10 |
| Raqamlashtirish | 15 | 14 | 12 | 11 | 10 |
| Amaliy tayyorgarlik | 14 | 15 | 13 | 11 | 10 |
| O‘zaro hamkorlik | 13 | 14 | 12 | 11 | 10 |
| Boshqaruv | 14 | 13 | 12 | 11 | 10 |
| **Jami** | **69** | **70** | **61** | **55** | **50** |

Ta’lim jarayonini tashkil etish sifati ko‘rsatkichi bo‘yicha eng yuqori natijalarni EMU University (14 ball) va Toshkent shahridagi Kimyo xalqaro universiteti (13 ball) qayd etdi. Profi University 12 ball, Alfraganus University 11 ball, Impuls Medical Institute esa 10 ball to‘pladi.

Ta’lim muhitini raqamlashtirish darajasi bo‘yicha Toshkent shahridagi Kimyo xalqaro universiteti (15 ball) yetakchilik qildi, keyingi o‘rinlardan EMU University (14 ball), Profi University (12 ball), Alfraganus University (11 ball) va Impuls Medical Institute (10 ball) joy oldi.

Talabalarni amaliyotga yo‘naltirgan holda tayyorlashmezoni bo‘yicha maksimal ko‘rsatkichEMU University’da qayd etildi (15 ball). Toshkent shahridagi Xalqaro Kimyo universiteti 14 ball, Profi University – 13 ball, Alfraganus University – 11 ball, “Impuls” tibbiyot instituti – 10 ballga sazovor bo‘ldi.

Talabalar va ish beruvchilar bilan o‘zaro hamkorlikni baholash ham xuddi shunday ketma-ketlikni ko‘rsatdi: EMU University – 14 ball, Toshkent shahridagi Xalqaro Kimyo universiteti – 13 ball, Profi University – 12 ball, Alfraganus University – 11 ball, “Impuls” tibbiyot instituti – 10 ball.

Tashkiliy-boshqaruv jarayonlari samaradorligi mezoni bo‘yicha eng yuqori natijani Toshkent shahridagi Xalqaro Kimyo universiteti (14 ball) namoyon etdi, keyingi o‘rinlarni EMU University (13 ball), Profi University (12 ball), Alfraganus University (11 ball) va “Impuls” tibbiyot instituti (10 ball) egalladi.

**Muhokama.** Agar faqat yakuniy ballarga e’tibor qaratilsa, tadqiq qilinayotgan universitetlar o‘rtasidagi farqlar unchalik katta emasdek tuyulishi mumkin. Biroq, batafsil tahlildan so‘ng yaqin umumiy baholar ortida ta’lim faoliyatini rivojlantirishga qaratilgan turlicha yondashuvlar yashiringani ayon bo‘ladi. Va, aftidan, tadqiqotning asosiy natijasi ham aynan shu bo‘ldi. Universitetlar bir-biriga yaqin yakuniy ko‘rsatkichlarga turli yo‘llar bilan erishganlar: ayrimlari raqamli infratuzilmani rivojlantirishga, boshqalari esa o‘quv jarayonini tashkil etishni yoki talabalarning amaliy tayyorgarligini takomillashtirishga asosiy e’tiborni qaratgan.

Birinchi o‘rinlarni egallagan ikki universitet bunga yaqqol misol bo‘la oladi. Bir qarashda EMU University va Toshkentdagi Kimyo xalqaro universiteti o‘rtasida deyarli farq yo‘qdek — bor-yo‘g‘i bir ball. Biroq bunday natijaga erishilishining sabablari turlicha. Kimyo universiteti ta’lim muhitining raqamlashtirilgani bo‘yicha eng yuqori bahoni olgan bo‘lsa, EMU University alohida mezonlarning birortasida ham yetakchilik qilmagan. Uning ustunligi unchalik ko‘zga tashlanmasa-da, ancha barqaror ekani ma’lum bo‘ldi: baholashning deyarli barcha yo‘nalishlari bo‘yicha ancha yuqori ko‘rsatkichlarga erishilgan. Aftidan, aynan mana shu mutanosiblik eng yaxshi yakuniy natijani ta’minlagan.

Bu qonuniyat universitetlar reytingining o‘zidan ko‘ra muhimroq ko‘rinadi. So‘nggi yillarda oliy ta’limning raqamli transformatsiyasi ko‘pincha joriy etilgan platformalar, axborot tizimlari yoki elektron xizmatlar soni bilan o‘lchanib keldi. Bunday yondashuvni tushunsa bo‘ladi: ta’lim sifatidagi o‘zgarishlarni aniqlashdan ko‘ra raqamli yechimlarni sanash osonroq [1,2]. Biroq tadqiqotimiz natijalari muammoga biroz o‘zgacha nazar tashlashga undaydi. Raqamlashtirish darajasining yuqoriligi o‘z-o‘zidan universitetning ta’lim xizmatlari samaradorligi ham yuqori bo‘lishini anglatmaydi.

Tahlil davomida shunday savol tug‘ildi: nima uchun eng rivojlangan raqamli infratuzilmaga ega universitet mutlaq peshqadamga aylana olmadi? Albatta, bunga aniq-tiniq javob yo‘q. Shunday bo‘lsa-da, olingan ma’lumotlar shuni ko‘rsatadiki, bunda raqamli texnologiyalarning mavjudligi emas, balki ularning kundalik ta’lim amaliyotiga qay darajada joriy etilgani muhimroq ahamiyat kasb etadi. Agar raqamli vositalar o‘quv jarayonining uzviy qismiga aylansa, klinik tayyorgarlikni tashkil etishga ko‘maklashsa, o‘qituvchilar va talabalar o‘rtasidagi muloqotni osonlashtirsa, ularning ta’siri sezilarli bo‘ladi. Bordiyu ular asosan ma’muriy jarayonlarni avtomatlashtirish uchun qo‘llanilsa, ta’lim xizmatlari sifatiga qo‘shgan hissasi ancha kamtar ko‘rinadi [3].

Shu ma’noda, tadqiqot natijalari Bigdeli va hammualliflari chiqargan xulosalarga hamohangdir. Mualliflar raqamli transformatsiyani yangi texnologiyalarni joriy etish jarayoni sifatida emas, balki butun universitet ekotizimining o‘zgarishi deb biladi [6]. Bunday yondashuv bizning kuzatuvlarimizga ham yaqin bo‘lib chiqdi. Tadqiqotdagi universitetlarning hech biri faqat raqamli infratuzilmasi tufayligina yuqori integral bahoga erishmagan. Raqamli

yechimlarning o‘quv jarayonini tashkil etish, boshqaruv tizimi va talabalarning amaliy tayyorgarligi bilan qay darajada uyg‘unlashgani ancha muhim omil bo‘lib xizmat qildi.

Klinik tayyorgarlik bilan bog‘liq vaziyat ham bundan kam qiziqarli bo‘lib chiqmadi. Aynan shu mezon bo‘yicha universitetlar o‘rtasidagi farqlar eng yaqqol namoyon bo‘ldi. Bu, ehtimol, tibbiy ta’limning o‘ziga xosligi bilan bog‘liqdir. Boshqa ko‘plab ta’lim yo‘nalishlaridan farqli o‘laroq, bu sohada amaliy mashg‘ulotlarni raqamli texnologiyalar bilan to‘liq almashtirishning iloji yo‘q. Zamonaviy simulyatsion markazlar, virtual bemorlar va raqamli klinik ssenariylar ta’lim imkoniyatlarini sezilarli darajada kengaytirsa-da, ular klinikadagi ishlarni faqat to‘ldiradi, xolos. Shu sababli bo‘lsa kerak, klinik bazalarni rivojlantirishga va amaliyotni tashkil etishga ko‘proq e’tibor qaratgan universitetlar yuqoriroq yakuniy baholarni qo‘lga kiritdilar.

Bunday talqin Saed va hammualliflari tadqiqotining natijalariga ham zid kelmaydi. Mualliflar ta’kidlashicha, tibbiyot universitetining raqamli transformatsiyaga tayyorligi nafaqat uning texnik jihozlanishi bilan, balki ko‘proq o‘qituvchilar, talabalar va ma’muriyatning yangi texnologiyalardan kundalik faoliyatda foydalanishga tayyorligi bilan belgilanadi [7]. Bizning natijalarimiz esa bu xulosani to‘ldirish imkonini beradi. O‘rganilgan universitetlar misolida shuni aytish mumkinki, raqamli yetuklik, avvalo, raqamli yechimlarni bir-biriga qarshi qo‘yishda emas, balki ularni tibbiy ta’limning an’anaviy unsurlari bilan uyg‘unlashtira olish qobiliyatida namoyon bo‘ladi.

Yana bir jihat barcha mezonlar o‘zaro taqqoslanganidan keyingina ayon bo‘ldi. Yetakchilar qatoridan o‘rin olgan universitetlar alohida yo‘nalishlar bo‘yicha haddan tashqari yuqori ko‘rsatkichlarga ega emasligi ma’lum bo‘ldi. Shu bilan birga, ularda yaqqol zaif jihatlar deyarli kuzatilmadi. Aksincha, integral bahoning pasayishi ko‘pincha raqamlashtirish yoki amaliy tayyorgarlik darajasining pastligi bilan emas, balki ta’lim tizimi ayrim tarkibiy qismlarining notekis rivojlangani bilan bog‘liq edi. Bizningcha, bu kuzatuv katta amaliy ahamiyatga ega. Ba’zida universitet rahbariyati uchun allaqachon yaxshi rivojlangan yo‘nalishda maksimal natijaga erishishdan ko‘ra, zaif bo‘g‘inni bartaraf etish muhimroq bo‘lib chiqadi.

Albatta, o‘tkazilgan tadqiqot muayyan cheklovlarga ega. Tahlilga O‘zbekistondagi beshta xususiy tibbiyot oliy o‘quv yurti jalb etilgan, baholash esa ilmiy adabiyotlar va ochiq manbalar tahlili asosida ishlab chiqilgan mezonlar tizimi bo‘yicha amalga oshirilgan. Raqamli ta’lim muhiti rivojlanib borgani sari indikatorlar to‘plamiga, shubhasiz, aniqlik kiritilishi mumkin. Shunga qaramay, taklif etilgan yondashuv bir muncha barqaror tendensiyani ko‘rsatib berdi: ta’lim xizmatlari samaradorligi alohida raqamli yechimlar yoki qo‘llaniladigan texnologiyalar soni bilan shakllanmaydi. U ta’lim jarayoni, amaliy tayyorgarlik, raqamli muhit va boshqaruv mexanizmlari yagona tizimning o‘zaro bog‘liq unsurlari sifatida ishlay boshlagandagina vujudga keladi [9,10,11].

Aynan shuning uchun tibbiyot universitetining raqamli transformatsiyasini, bizningcha, mustaqil rivojlanish yo‘nalishi sifatida emas, balki ta’lim xizmatlari ko‘rsatishning butun modelini takomillashtirish vositasi sifatida ko‘rib chiqish maqsadga muvofiq. Bunday yondashuv diqqat markazini biroz o‘zgartiradi: endi universitetda qancha raqamli texnologiya joriy etilgani emas, balki ular bo‘lajak tibbiyot mutaxassislarini tayyorlash sifatini oshirishga qay darajada yordam berayotgani asosiy masalaga aylanadi.

**Xulosa**

O‘tkazilgan tadqiqot shuni ko‘rsatdiki, raqamli transformatsiya sharoitida ta’lim xizmatlari samaradorligi biron-bir yakka omil bilan belgilanmaydi. O‘zbekiston

Respublikasidagi beshta xususiy tibbiyot universitetini taqqoslash raqamlashtirish darajasi bir-biriga yaqin bo‘lgan taqdirda ham, ta’lim faoliyati natijalari sezilarli darajada farq qilishi mumkinligini ko‘rsatdi. Bu shuni anglatadiki, zamonaviy texnologiyalarni joriy etishning o‘zi mutaxassislar tayyorlash sifati oshishini kafolatlamaydi.

Boshqa bir xulosa esa yanada muhimroq. Unga ko‘ra, raqamli texnologiyalar raqamli infratuzilmaning mustaqil bir qismi sifatida qo‘llanmasdan, balki ta’lim jarayonini tashkil etish, talabalarni klinik tayyorlash va boshqaruv tizimiga integratsiya qilingan universitetlar yuqoriroq natijalarni namoyon etgan. Boshqacha aytganda, raqamli yechimlarning soni emas, balki ularning universitetning kundalik faoliyatiga qay darajada singib ketgani ahamiyatlidir.

O‘tkazilgan taqqoslash, shuningdek, ishning turli yo‘nalishlari mutanosib rivojlantirilganda barqaror natijalarga erishilishini ko‘rsatdi. Tadqiq etilgan universitetlarning hech biri bir vaqtning o‘zida barcha mezonlar bo‘yicha yetakchi bo‘lib chiqmadi, biroq aynan yaqqol ko‘zga tashlanadigan zaif tomonlarning yo‘qligi ayrim ta’lim tashkilotlariga yuqoriroq integral baho olish imkonini berdi. Bu tibbiyot universitetlari uchun ta’lim, tashkiliy va raqamli jarayonlarni izchil rivojlantirish resurslarni biron-bir yo‘nalishga jamlashdan ko‘ra samaraliroq strategiya ekanligini taxmin qilishga asos bo‘ladi.

Tadqiqotda taklif etilgan mezonlar va ko‘rsatkichlar tizimi uni tibbiyot oliy o‘quv yurtlari faoliyatini kompleks baholashda qo‘llash mumkinligini namoyon etdi. U nafaqat ta’lim tashkilotlarini qiyosiy tahlil qilish, balki boshqaruv qarorlarini qabul qilish va raqamli transformatsiya dasturlarini rejalashtirishda foydali bo‘lishi mumkin bo‘lgan, yanada takomillashtirishni talab qiladigan yo‘nalishlarni aniqlash imkonini ham beradi.

Shubhasiz, olingan natijalar tadqiq etilgan tanlanmaning o‘ziga xos xususiyatlarini aks ettiradi va universallikka da’vo qilmaydi. Shu bilan birga, ular tibbiyot universitetining raqamli transformatsiyasini, birinchi navbatda, ta’lim xizmatlarini ko‘rsatish mexanizmlarining o‘zgarishi sifatida ko‘rib chiqish maqsadga muvofiq, degan xulosaga kelishga imkon beradi. Bizningcha, aynan shunday yondashuv bo‘lajak tibbiyot mutaxassislarini tayyorlash sifatini barqaror oshirish uchun sharoit yaratadi.

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# 10.00.00 – PHILOLOGICAL SCIENCES

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# 10.00.00 - FILOLOGIYA FANLARI

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# 10.00.00 - ФИЛОЛОГИЧЕСКИЕ НАУКИ

"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# ВЕРБАЛИЗАЦИЯ КОНЦЕПТОВ «НАЦИЯ» И «ЛИЧНОСТЬ» В АНГЛИЙСКОЙ И УЗБЕКСКОЙ ЛИНГВОКУЛЬТУРАХ

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***Аннотация.*** *В статье рассматриваются особенности вербализации концептов «нация» и «личность» в английской и узбекской лингвокультурах. Актуальность исследования обусловлена возрастающим интересом к проблемам национальной идентичности и индивидуального самосознания в условиях глобализации. Цель работы заключается в выявлении лексико-семантических и фразеологических средств репрезентации указанных концептов и их сопоставительном анализе. В ходе исследования применялись методы когнитивно-лингвистического,сравнительно-типологического и контекстуального анализа. Результаты показывают, что в английской лингвокультуре доминирует индивидуалистическая модель интерпретации личности, тогда как в узбекской лингвокультуре концепты «нация» и «личность» тесно взаимосвязаны и отражают коллективистскую систему ценностей.*

***Ключевые слова:*** *концепт, лингвокультура, вербализация, нация, личность, сравнительный анализ.*

***Abstract.*** *The article examines the features of the verbalization of the concepts of "nation" and "personality" in English and Uzbek linguocultures. The relevance of the study is обусловлена the growing interest in issues of national identity and individual self-consciousness in the context of globalization. The aim of the research is to identify the lexical-semantic and phraseological means of representing these concepts and to conduct their comparative analysis. The study employs cognitive-linguistic, comparative-typological, and contextual analysis methods. The results demonstrate that the English linguoculture is characterized by an individualistic model of personality interpretation, whereas in the Uzbek linguoculture the concepts of "nation" and "personality" are closely interconnected and reflect a collectivist system of values.*

***Key words:*** *concept, linguoculture, verbalization, nation, personality, comparative analysis.*

***Аннотация.*** *Мазкур мақолада инглиз ва ўзбек лингвомаданиятида "миллат" ва "шахс" концептларининг вербаллашув хусусиятлари таҳлил қилинади. Тадқиқотнинг долзарблиги глобаллашув шароитида миллий идентификация ва шахсий ўзликни англаш*

*муаммоларига бўлган қизиқишнинг ортиши билан белгиланади. Ишнинг мақсади ушбу концептларнинг лексик-семантик ва фразеологик ифодаланиш воситаларини аниқлаш ҳамда уларни қиёсий таҳлил қилишдан иборат. Тадқиқотда когнитив-лингвистик, қиёсий-типологик ва контекстуал таҳлил методларидан фойдаланилди. Натижалар шуни кўрсатадики, инглиз лингвомаданиятида шахсни талқин қилишнинг индивидуалистик модели устувор бўлса, ўзбек лингвомаданиятида “миллат” ва “шахс” концептлари ўзаро чамбарчас боғлиқ бўлиб, жамоавий қадриятлар тизимини акс эттиради.*

***Калит сўзлар:*** *концепт, лингвомаданият, вербаллашув, миллат, шахс, қиёсий таҳлил.*

## Introduction

Современная лингвокультурология рассматривает язык как средство отражения национального сознания и культурных ценностей народа. Концепты выступают когнитивными единицами, структурирующими ментальное пространство этноса и находящими отражение в языковой системе.

Концепты «нация» и «личность» занимают особое место в концептуальной картине мира, поскольку они связаны с вопросами идентичности, социального взаимодействия и ценностных ориентиров общества. Их языковая репрезентация позволяет выявить особенности национального мировосприятия.

**Цель исследования** – выявить и сопоставить особенности вербализации концептов «нация» и «личность» в английской и узбекской лингвокультурах.

**Задачи исследования:**

- определить теоретические основы изучения концепта в лингвокультурологии;
- выявить основные языковые средства репрезентации концептов «нация» и «личность»;
- провести сопоставительный анализ полученных данных.

Научная новизна работы заключается в комплексном сравнительном анализе двух концептов в рамках двух различных лингвокультур с акцентом на их ценностно-семантические различия.

Проблема вербализации концептов является одной из актуальных в современной когнитивной лингвистике и лингвокультурологии. Основы теории концепта были заложены С. А. Аскольдовым, который рассматривал концепт как ментальное образование, отражающее обобщённые представления человека о мире.

Значительный вклад в развитие теории концептов внес В. И. Карасик, который определял концепт как ключевую единицу культуры, включающую понятийный, образный и ценностный компоненты. По мнению учёного, концепты вербализуются в языке через лексику, фразеологию и тексты.

Методы исследования концептов были подробно разработаны З. Д. Поповой и И. А. Стерниным, которые рассматривали концепт как сложную ментальную структуру, формирующуюся под влиянием культурного и исторического опыта народа.

В работах В. А. Масловой подчеркивается тесная связь языка и культуры: концепты отражают национальную картину мира и ценностные ориентиры общества. Теорию языковой личности развивал Ю. Н. Караулов, который рассматривал язык как средство выражения индивидуальных и национальных особенностей личности.

Таким образом, исследования этих учёных показывают, что концепты «нация» и «личность» являются важными элементами лингвокультуры и находят своё выражение в различных языковых средствах, отражающих культурные ценности и мировоззрение народа.

**Методы**

В исследовании использованы следующие методы:

- **Когнитивно-лингвистический анализ** – для выявления семантической структуры концептов;
- **Сравнительно-типологический метод** – для сопоставления языковых единиц двух языков;
- **Контекстуальный анализ** – для изучения функционирования концептов в текстах различных жанров;
- **Анализ паремиологических единиц** – для выявления культурно-ценностного компонента.

Материалом исследования послужили данные толковых словарей, фразеологических словарей, художественной литературы и публицистических текстов английского и узбекского языков.

**Результат**

**1. Вербализация концепта «нация»**

В узбекской лингвокультуре концепт «нация» тесно связан с понятиями «родина», «народ», «честь», «единство». Он выражается через такие языковые единицы, как:

- «миллат шаъни» (честь нации),
- «миллий қадрият» (национальные ценности),
- «эл-юрт» (народ, отчизна).

Паремиологический фонд также отражает коллективистскую направленность: «Эл бор бўлса, сен бор» (Есть народ – есть и ты).

В английской лингвокультуре концепт «nation» чаще соотносится с гражданской принадлежностью и государственностью. Типичными являются сочетания:

- national identity
- national pride
- serve the nation

Таким образом, в английском языковом сознании доминирует институциональный аспект, тогда как в узбекском — эмоционально-ценностный и коллективный.

**2. Вербализация концепта «личность»**

В английской лингвокультуре концепт «личность» представлен лексемами individual, personality, self-made man, independence. Эти единицы отражают ценность автономии и личной ответственности.

Например:

“Every man is the architect of his own fortune.”

В узбекской лингвокультуре личность рассматривается через призму нравственных качеств и общественного признания. Частотными являются выражения:

- «комил инсон» (совершенный человек),
- «одоб-ахлоқ» (мораль, воспитанность),
- «ҳурмат» (уважение).

Таким образом, если в английской картине мира личность интерпретируется как автономный субъект, то в узбекской – как социально и морально обусловленная категория.

**Обсуждение**

Вопрос вербализации концептов «нация» и «личность» занимает важное место в современных исследованиях когнитивной лингвистики и лингвокультурологии, поскольку язык является не только средством общения, но и отражением культурных ценностей, исторического опыта и мировоззрения народа. Концепты выступают своеобразными ментальными структурами, через которые человек воспринимает и осмысливает окружающую действительность. Их языковая репрезентация позволяет выявить особенности национальной картины мира и культурной идентичности.

В ходе исследования было установлено, что концепты «нация» и «личность» имеют сложную многокомпонентную структуру, включающую когнитивный, образный и ценностный аспекты. Когнитивный компонент отражает основное содержание концепта и связан с его понятийным значением. Образный компонент формируется через метафоры, символы и культурные ассоциации, закрепленные в языке. Ценностный компонент отражает культурные и социальные установки общества, определяющие отношение носителей языка к данным понятиям.

Анализ языкового материала показывает, что вербализация концепта «нация» в английской лингвокультуре тесно связана с идеями государственности, гражданской идентичности, национальной гордости и исторического наследия. В английском языке данный концепт выражается через такие лексические единицы, как *nation, homeland, patriotism, national identity*. Эти слова отражают представление о нации как о политическом и культурном сообществе людей, объединенных общей историей, языком и культурой. Кроме того, в английском дискурсе широко используются метафорические выражения и устойчивые словосочетания, подчеркивающие значимость национального единства и гражданской ответственности.

В узбекской лингвокультуре концепт «нация» имеет несколько иной семантический акцент. Он тесно связан с понятиями *миллат, ватан, халқ*, которые отражают не только политическое, но и культурно-историческое единство народа. В узбекском языке данный концепт часто вербализуется через пословицы, афоризмы и устойчивые выражения, в которых подчеркивается значение традиций, духовных ценностей и коллективной ответственности перед обществом. Таким образом, концепт «нация» в узбекской культуре обладает ярко выраженным культурно-историческим и духовным содержанием.

Концепт «личность» также имеет различные особенности вербализации в английской и узбекской лингвокультурах. В английской культурной традиции большое внимание уделяется индивидуальности человека, его самостоятельности и личной свободе. Это отражается в таких лексических единицах, как *personality, individuality, self-identity, independence*. Эти слова подчеркивают уникальность человека, его способность к самореализации и личной ответственности.

В узбекской лингвокультуре концепт «личность» тесно связан с моральными и социальными качествами человека. Такие слова, как *шахс, инсон, одоб, ҳурмат*, отражают представление о личности как о человеке, который уважает общественные нормы, традиции и ценности своего народа. В узбекской культуре важную роль играют такие

качества, как уважение к старшим, ответственность перед семьей и обществом, а также соблюдение моральных принципов.

Сопоставительный анализ показывает, что в обеих лингвокультурах концепты «нация» и «личность» обладают универсальными характеристиками, связанными с представлением о человеке как члене общества и носителе определённых культурных ценностей. Однако различия проявляются в степени акцентирования тех или иных аспектов этих концептов. В английской культуре более выражен индивидуалистический подход, тогда как в узбекской культуре преобладают коллективные и традиционные ценности.

Кроме того, вербализация данных концептов осуществляется через различные языковые уровни: лексический, фразеологический и текстовый. Лексические единицы формируют основное семантическое ядро концепта, фразеологизмы и пословицы отражают культурные и эмоциональные аспекты, а тексты и дискурсы позволяют выявить их функциональное использование в коммуникации.

Таким образом, результаты исследования подтверждают, что вербализация концептов «нация» и «личность» является важным инструментом отражения культурной специфики языка. Сопоставительное изучение этих концептов в английской и узбекской лингвокультурах способствует более глубокому пониманию особенностей национального мышления, культурных ценностей и коммуникативных традиций. Полученные результаты могут быть использованы в дальнейших исследованиях в области когнитивной лингвистики, лингвокультурологии и межкультурной коммуникации, а также в практике преподавания иностранных языков.

**Заключение**

Проведённое исследование показало, что вербализация концептов «нация» и «личность» является важным объектом изучения современной когнитивной лингвистики и лингвокультурологии. Эти концепты отражают ключевые ценности общества и формируют национальную картину мира, находя своё выражение в различных языковых средствах. Анализ научной литературы и языкового материала свидетельствует о том, что концепты представляют собой сложные ментальные образования, включающие понятийный, образный и ценностный компоненты.

Сопоставительное изучение английской и узбекской лингвокультур позволило выявить как универсальные, так и национально-специфические особенности вербализации концептов «нация» и «личность». В английской лингвокультуре данные концепты часто связаны с идеями индивидуализма, личной свободы, гражданской идентичности и самостоятельности личности. В узбекской лингвокультуре, напротив, значительное внимание уделяется коллективным ценностям, уважению к традициям, семье и национальному единству.

Результаты исследования показывают, что вербализация концептов осуществляется через различные языковые средства, такие как лексика, фразеологические единицы, метафоры, пословицы и устойчивые выражения. Эти средства отражают культурные особенности общества и формируют уникальную языковую картину мира каждого народа.

Таким образом, сопоставительный анализ вербализации концептов «нация» и «личность» в английской и узбекской лингвокультурах способствует более глубокому пониманию культурных ценностей, мировоззрения и менталитета представителей различных народов. Полученные результаты могут быть использованы в дальнейших

исследованиях в области лингвокультурологии, когнитивной лингвистики, межкультурной коммуникации, а также в практике преподавания иностранных языков.

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# ШАРЛОТТА БРОНТЕ И ОБРАЗ ЖЕНЩИНЫ В ВИКТОРИАНСКОМ ОБЩЕСТВЕ

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***Abstract.*** *The article explores the image of woman in the works of Charlotte Brontè within the socio-cultural and ideological context of Victorian England. Although Charlotte Brontè's novels have been extensively studied, female characters are often treated as secondary elements of narrative structure rather than as independent objects of scholarly analysis. This study aims to reconsider Brontè's female protagonists as central figures through whom the writer articulates a critical response to Victorian gender norms. The research focuses on the representation of women as active subjects who resist social, economic, and psychological constraints imposed by a patriarchal society. The methodological framework of the study combines literary analysis, linguistic-stylistic interpretation, biographical approach, and feminist literary criticism. The material for analysis includes the novels Jane Eyre, Shirley, and Villette, which are examined with particular attention to narrative strategies, character construction, and linguistic devices. The findings demonstrate that Brontè creates a new type of female image characterized by moral autonomy, psychological depth, and social consciousness. Her heroines challenge traditional ideals of femininity, such as obedience and self-sacrifice, and assert their right to personal dignity, emotional integrity, and independent choice. Special attention is paid to linguistic and narrative devices, including metaphor, antithesis, irony, and internal monologue, which function as tools for articulating proto-feminist ideas. The article argues that Charlotte Brontè's depiction of women not only reflects the realities of Victorian society but also transcends its historical boundaries, influencing the development of feminist literary tradition and contributing to modern discussions of gender identity, female agency, and psychological realism in literature.*

***Key words:*** *image of woman; feminism; female identity; gender roles; literary analysis; psychological realism.*

## Введение

Несмотря на достаточно широкую изученность творчества Шарлотты Бронте и её наиболее известного романа «Джейн Эйр», проблема женского образа в произведениях писательницы долгое время рассматривалась преимущественно как вспомогательный элемент романной структуры. Между тем обращение к данному аспекту позволяет глубже осмыслить эволюцию женского образа в английской литературе XIX века и определить место Ш. Бронте в истории викторианского романа [9: 45 - 60]. Современные исследования подчёркивают, что именно художественные модели XIX века во многом

подготовили эстетические и идеологические сдвиги литературы XX столетия, что придаёт анализу женских образов особую актуальность.

Шарлотта Бронте (1816 - 1855) сформировалась как писательница в условиях жёстко регламентированного викторианского общества, где женщина была лишена политических прав, экономической самостоятельности и доступа к полноценному образованию [6: 23 -25]. Биографические обстоятельства - ранняя смерть матери, утрата сестёр, опыт обучения в закрытых школах и работа гувернанткой оказали существенное влияние на мировоззрение писательницы [4: 45 - 60]. Публикация произведений под мужским псевдонимом Currer Bell свидетельствует о гендерных барьерах литературной среды и подчёркивает протестный потенциал её творчества [9: 112].

Викторианская идеология «ангела в доме», популяризированная К. Патмором, закрепляла представление о женщине как о существе, предназначенном исключительно для семейной и моральной сферы. На этом фоне художественный мир Шарлотты Бронте приобретает критическое звучание: её героини предстают не пассивными носительницами добродетели, а активными личностями, осознающими несправедливость социального порядка и стремящимися к внутренней и внешней свободе.

Целью данной статьи является анализ образа женщины в творчестве Шарлотты Бронте в контексте викторианского общества. В работе рассматриваются социальные и психологические аспекты женских образов, а также выявляются художественно-языковые средства, формирующие прото-феминистскую проблематику.

**Методы**

Методологическую основу исследования составляют литературоведческий и лингвостилистический анализ, позволяющие рассмотреть художественные тексты в их эстетическом и языковом своеобразии. Используются элементы историко-литературного и биографического методов, направленные на выявление связи между личным опытом писательницы и особенностями её художественного мира. Важное место занимает феминистская литературная критика, ориентированная на анализ гендерных отношений и механизмов социального подавления, отражённых в тексте.

Материалом исследования послужили романы Ш. Бронте «Джейн Эйр», «Шерли» и «Виллет», а также труды отечественных и зарубежных исследователей викторианской литературы.

**Результаты**

Анализ произведений Шарлотты Бронте показывает, что образ женщины в её романах формируется как сложный и многослойный художественный конструкт, находящийся в постоянном конфликте с социальными и гендерными нормами викторианской эпохи. В рамках идеологии «отдельных сфер» женщинам отводилась исключительно домашняя и морально-нравственная роль, тогда как публичная, интеллектуальная и экономическая сферы считались прерогативой мужчин. Бронте последовательно разрушает данный стереотип, изображая героинь как активных субъектов социальной, духовной и психологической жизни.

В романе «Джейн Эйр» главная героиня представлена как социально маргинализированная фигура сирота и гувернантка, вынужденная с ранних лет отстаивать своё человеческое достоинство в условиях классового и гендерного неравенства [1: 145 - 150]. Уже в эпизодах детства в Гейтсхеде и Ловуде формируется протестное сознание Джейн, направленное против несправедливости и подавления личности. Эти эпизоды

демонстрируют, что социальное угнетение женщин начинается задолго до вступления во взрослую жизнь и носит системный характер.

Отказ Джейн Эйр от неравноправного брака с Рочестером является ключевым моментом романа и отражает прото-феминистскую позицию героини. Высказывание «Я не птица; никакая сеть не опутывает меня: я свободное человеческое существо с независимой волей» символизирует сознательный разрыв с патриархальной моделью брака, в которой женщина лишается автономии [1: 256]. Метафора «сети» выполняет функцию образного обозначения социального и морального порабощения, тогда как противопоставление «птица как свободное существо» усиливает идею осознанного выбора и самоуважения.

Особое значение в структуре романа имеет образ Берты Мейсон «безумной жены на чердаке», которая интерпретируется исследователями как воплощение подавленной женской ярости и страха перед женской независимостью [5: 356 - 362]. Берта лишена голоса, свободы и социальной субъектности, что делает её символом крайней формы гендерного и колониального угнетения. Таким образом, в романе «Джейн Эйр» образ женщины представлен в двух полюсах: как путь к внутренней эмансипации (Джейн) и как трагический результат тотального подавления (Берта).

В романе «Шерли» Бронте переносит проблему женской идентичности в пространство социально-экономических конфликтов эпохи индустриальной революции. В центре внимания оказывается вопрос женского труда, финансовой зависимости и социальной уязвимости [2: 350–377]. Образ Кэролайн Хелстоун демонстрирует бесперспективность существования женщины, полностью зависящей от родственников и лишённой возможности профессиональной самореализации.

Шерли Килдар, напротив, обладает капиталом и формальной свободой, однако даже экономическая независимость не гарантирует ей подлинного равноправия. Её активная жизненная позиция, участие в общественных делах и филантропической деятельности постоянно сталкиваются с ожиданиями общества, ограничивающего женщину рамками «приличного поведения». Диалоги романа насыщены иронией и лексикой силы, что подчёркивает стремление Бронте разрушить стереотип о «слабом поле» и представить женщину как рационального и ответственного субъекта [9: 132].

Наиболее глубокое и новаторское воплощение женского образа представлено в романе «Виллет», где в центре повествования находится внутренняя жизнь героини Люси Сноу. Использование нарратива от первого лица позволяет Бронте детально воспроизвести психологическое состояние женщины, переживающей одиночество, эмоциональное подавление и социальную изоляцию [3: 112 - 118].

Внутренний монолог Люси Сноу раскрывает последствия длительного подавления чувств и желаний, вызванных религиозными и социальными ограничениями. Героиня вынуждена скрывать свои эмоции, что приводит к состояниям депрессии и внутреннего кризиса. Таким образом, Бронте поднимает проблему ментального здоровья женщины в патриархальном обществе, предвосхищая психологические и психоаналитические интерпретации литературы XX века.

**Обсуждение**

Полученные результаты позволяют утверждать, что Шарлотта Бронте формирует новый тип женского образа, сочетающий социальный протест и психологическую

сложность. В отличие от традиционных викторианских моделей, её героини наделены правом на сомнение, внутренний конфликт и самостоятельный выбор.

Исследователи отмечают значительное влияние Бронте на развитие женского романа и феминистской литературной традиции. Э. Шоуолтер подчёркивает, что Бронте создаёт «женский нарратив», в котором личный опыт становится формой социального высказывания [9: 115 - 120]. С. Гилберт и С. Губар интерпретируют образ Берты Мейсон как выражение подавленной женской ярости, что расширяет гендерную проблематику романов Бронте [5: 73 - 80].

Вирджиния Вулф рассматривала творчество Бронте как пример «письма изнутри женского опыта», подчёркивая его значение для формирования феминистского сознания [10: 45]. Современные интерпретации, включая постколониальные чтения романа «Джейн Эйр» в произведении Дж. Рис «Широкое Саргассово море», свидетельствуют о непреходящей актуальности художественного наследия Бронте [7: 10–15].

**Заключение**

Таким образом, творчество Шарлотты Бронте представляет собой важный этап в развитии женского образа в английской литературе XIX века. Писательница изображает женщин викторианского общества как многогранных личностей, способных к сопротивлению социальным и гендерным ограничениям. Использование лингвистических и психологических средств позволяет Бронте не только критиковать нормы своей эпохи, но и формировать прото-феминистский дискурс, сохраняющий актуальность в современном литературоведении.

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# LEXICAL-SEMANTIC STUDY OF FASHION AND DESIGN TERMS IN FRENCH AND UZBEK

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***Abstract.*** *This article conducts a lexical-semantic study of fashion and design terms in French and Uzbek. Fashion and design are rapidly developing industries on a global scale, and their terms are constantly being updated. The article studies the etymology, semantic features, and cultural context of fashion and design terms in French and Uzbek.*

***Key words:*** *fashion terms, design terminology, lexical-semantic research, cultural context, etymology, linguistic connections, semantic features, global fashion.*

***Annotatsiya.*** *Ushbu maqolada fransuz va o'zbek tillarida moda va dizayn atamalarining leksik-semantik tadqiqi amalga oshiriladi. Moda va dizayn sohalari global miqyosda tez rivojlanayotgan sohalar bo'lib, ularning atamalari ham doimiy ravishda yangilanib bormoqda. Maqolada fransuz va o'zbek tillaridagi moda va dizayn atamalarining etimologiyasi, semantik xususiyatlari va madaniy konteksti o'rganiladi.*

***Kalit so'zlar:*** *moda atamalari, dizayn terminologiyasi, leksik-semantik tadqiq, madaniy kontekst, etimologiya, lingvistik aloqalar, semantik xususiyatlar, global moda.*

***Аннотация.*** *В данной статье проводится лексико-семантическое исследование терминов, относящихся к моде и дизайну, на французском и узбекском языках. Мода и дизайн — это быстро развивающиеся отрасли в глобальном масштабе, и их терминология постоянно обновляется. В статье изучаются этимология, семантические особенности и культурный контекст терминов, относящихся к моде и дизайну, на французском и узбекском языках.*

***Ключевые слова:*** *термины, связанные с модой, терминология дизайна, лексико-семантические исследования, культурный контекст, этимология, лингвистические связи, семантические особенности, мировая мода.*

**Introduction.** Today, the fashion and design industries are developing rapidly on a global scale. These processes involve not only aesthetic and creative approaches, but also interactions between different languages and cultures. The French language is known for its rich history and traditions in the field of fashion and design, which has formed many modern terms and trends. The Uzbek language, on the other hand, is adopting new terminologies in its historical and cultural context, developing its own styles and concepts.

The purpose of this article is to study the lexical-semantic aspects of fashion and design terms in the French and Uzbek languages. This study will study the terminological connections, semantic features and cultural contexts between the two languages. It will also consider the difficulties and problems that arise in the process of translating French terms into Uzbek.

The article first of all analyzes the importance of the fashion and design industry and its role in modern society. Next, the main terms and their semantic meanings in French and Uzbek are presented. The etymology of these terms and their place in the cultural context are also considered. As a result, this study contributes to a deeper understanding of the linguistic connections between the two languages and allows us to look at the development of terminology in the field of fashion and design from a new perspective.

**Literature review.**

The fashion and design industries play an important role in modern society. These industries are of great importance not only aesthetically, but also economically and culturally. A lexical-semantic study of fashion and design terms in French and Uzbek helps to reveal the specific features of these industries and their cultural context.

In French, the term fashion (mode) appeared in the 18th century, when Paris became the fashion capital. In Uzbek, the term fashion became widespread at the end of the 20th century, during the period of independence. The development of fashion and design industries in Uzbekistan, along with national traditions, also includes global trends.

Lexical-semantic analysis studies the meaning of terms and their use in context. Fashion terms in French often reflect the uniqueness of French culture. For example, the term "haute couture" (high fashion) denotes the elite level of French fashion. In the Uzbek language, terms such as "clothing" or "design" are formed based on national traditions.

**Methodology.**

Several methods and approaches can be used in writing an article on the topic of lexical-semantic study of fashion and design terms in French and Uzbek. Identifying the main terms in the field of fashion and design and studying their alternatives in French and Uzbek. How to translate French terms into Uzbek and studying the difficulties in this process. Studying the etymology of fashion and design terms in French and Uzbek. Analyzing the significance of fashion and design terms in French and Uzbek culture. Through this approach, it is possible to understand in what social and cultural context the terms appeared. Studying how fashion and design terms are perceived and used among social groups. Identifying their semantic differences by comparing the equivalents of each term in two languages.

**Discussion.**

As a result of the analysis of the lexical units presented in the catalog, 8 main types of complex nominal word-composition were identified:

•Nom + en + Nom,

It was found that the greatest number of clothing names are formed according to the Nom + en

+ Nom type:

Sweat en coton - cotton sweatshirt Bonnet en laine - woolen hat

Rangers en cuir - leather hiking boots

T-shirt en jersey - T-shirt (knitwear) Sweat en molleton - sweatshirt (molton) Sac à dos en tissu

- backpack (fabric) Jogging en cuir - sweatpants, leather Basket en cuir - leather sneakers

Casquette en velours - corduroy cap Polo en cotton - cotton polo shirt Rangers en nylon - hiking boots, nylon

This fact can be explained by the desire to specify what fabric the thing is made of, and thus attract the reader's attention to this model. The preposition en implements the function of the Russian preposition "iz" and indicates the type of fabric. Thus, the formation of the type Nom + en + Nom is the most productive among the studied types of compound words.[1]

•Word formation of lexical units by the type

Nom + en + Nom + Adj is also quite productive:

Veste en denim brut - champagne-colored denim jacket Desert boots en cuir suedé - leather boots with suede inserts Bonnet en laine chinée — a patterned woolen hat

Sac en PVC perforé — a bag made of perforated In French:

Desert boots en cuir suedé — leather boots with PVC suede inserts Pull en laine jacquard — a woolen jacquard sweater

Doudoune en laine tartan — a down jacket with a tartan lining.

In this case, in addition to specifying the material, another characteristic is added, for example, the color or features of the fabric structure.

The following word-formation types also quite actively participate in the process of word-formation of complex nouns:

•Nom + Nom:

Pantalon cargo — cargo trousers Sac week-end — hiking backpack

Cardigan coupe-vent — windbreaker

•Nom + avec + Nom:

Parka avec capuche — storm jacket with a hood

•Nom + Adj:

Veste matelassée — quilted jacket

•Nom + Adj + en + Nom:

Pantalon multipoche en toile — fabric trousers with pockets

•Nom + à + Nom + Adj:

Pull à col roulé — sweater with a collar

Among the analyzed names, a significant place is occupied by the category Expansions diverse (complex common lexical units):

Chaussure nordique en cuir pleine fleur — insulated plain leather boots Blouson en drap de laine doublé — drape windbreaker with wool lining Sac à dos 100% laine — 100% wool backpack

Basket semi-montante en toile de coton — high-top cotton sneakers

[1] https://multijournals.org/index.php/excellencia-imje/article/view/3512

Doudoune réversible 100% polyamide — double-sided down jacket (100% polyamide) Doudoune sans manches en flanelle rayée — striped flannel sleeveless down jacket Sweat en coton à col ronde — cotton sweatshirt with a round collar

This indicates a tendency to develop a written verbal vestimentary code: the names of clothes in catalogs have a complex structure, including the name of the clothes themselves and an additional descriptive component used for the purpose of the most accurate categorization of the designated type of clothing, in speech However, as a rule, such a descriptive component is absent. In other words, with the modern diversity of clothing items, in order to accurately define a particular name (in this case, an item of clothing), an increasingly precise description is required to fully reflect its essence. Another trend in the modern French language is the desire to form bilingual lexical units consisting of nouns from French and English (rangers, basket, jogging, t-shirt, etc.). The share of such compound words is quite large, which emphasizes the significant influence of the English language on the formation of the vocabulary of the LSP "Fashion"[2] in Polo en cotton - cotton polo shirt Jogging en cuir

- sweatpants, leather T-shirt en jersey - T-shirt (knitwear) Polo en cotton - cotton polo shirt Basket en cuir - leather sneakers

Sweat en molleton - sweatshirt (molton)

It is impossible not to mention the high frequency of such a way of replenishing the vocabulary of the LSP "Fashion" as borrowing lexical units (in this study in 100% of cases from the English language):

sweat – sweatshirt rangers - hiking boots T-shirt - T-shirt jogging – sweatpants basket – sneakers polo - polo shirt desert boots - boots

Interesting is the absence of articles in front of absolutely all names. Perhaps this is due to the desire for a more laconic sound, as well as the influence of the English language. In addition, it is worth paying attention to the graphic component of the analyzed material (frequent use of capital letters). Presumably, this can be explained by the desire of the editors of periodicals and catalogs to attract the attention of their readers to certain items of clothing.

Here’s a suggested table structure for your article on the "Lexical-semantic study of fashion and design terms in French and Uzbek." You can fill in the specific terms and their meanings as needed.

| Term | Language | Translation | Semantic Field | Examples of Usage |
|---|---|---|---|---|
| Style | French | Style | Fashion | "Le style est très important dans la mode." |
| Fashion | French | Mode | Fashion | "La mode change chaque saison." |
| Fabric | French | Tissu | Design | "Le tissu utilisé est de haute qualité." |
| Color | French | Couleur | Design | "Cette couleur est très tendance." |
| Trend | Uzbek | Trend | Fashion | "Bu trend bu yil juda mashhur." |
| Design | Uzbek | Dizayn | Design | "Uning dizayni juda chiroyli." |
| Textile | Uzbek | Matolar | Design | "Matolarni tanlashda ehtiyot |

[2] https://multijournals.org/index.php/excellencia-imje/article/view/3512

| | | | | |
|---|---|---|---|---|
| | | | | bo'lish kerak." |
| Aesthetic | Uzbek | Estetik | Design | "Estetik ko'rinish muhimdir." |

The subject of study of cognitive linguistics are various concepts that form our consciousness and reflect modern reality. The relevance of the study of concepts is confirmed by a significant number of studies in Russian, English, French and other foreign languages, conducted in this scientific field (see the works of Agarkova N.E.: The concept of "money" as a fragment of the English linguistic picture of the world (based on the American version of the English language) [1]; Adonina L.V.: "The concept of woman in the Russian linguistic consciousness" [2]; Usacheva A.N.: "Linguistic parameters of the concept of "health status" in modern English" [3], etc.). The study of the concepts of a single language allows us to understand the culture of a people at different stages of its formation. Concepts are mental images, the totality of which constitutes the semantic space of a language. It is the semantic space that allows us to study the national character and culture of a particular people. Information transmitted through concepts certainly has a linguistic binding, and in this case it makes sense to talk about the lexical-semantic field as a verbal linguistic reflection of a particular concept. In particular, the concept of "Fashion", which refers to a special type of mental formations - socio- cultural regulatory concepts, has repeatedly become the subject of research.

Thus, O.V.Chursina[3] defines the phenomenon of fashion as one of the important components of the socio-cultural life of society. The concept of "Fashion" refers to current concepts that undergo changes under the influence of public experience and knowledge, in accordance with modern socio- cultural circumstances, practical and spiritual-mental needs of society, the level of development of national and world civilization. This concept is realized in the linguistic space with the help of the lexical-semantic field "Fashion". Fashion extends to various areas of social life, but is mainly identified with the production of clothing and accessories. The choice of the language of the study (French) is explained by the wide development of the fashion industry in France. Being the recognized capital of world fashion, France retains the palm in the sphere of publishing and popularization of glossy fashion magazines, online clothing catalogs and Internet sites of various luxury and designer brands. Fashion appears to be a unique phenomenon from the point of view of its multifaceted interpretation, possessing such discursive characteristics as "activity", "activity", "independence", "variability", "inconstancy", etc. It is the characteristics indicated above (variability, inconstancy) that are of the greatest interest, since they allow us to establish the latest trends in the development of the language by studying the vocabulary of the LSP “Fashion”, presented in periodicals and online publications about fashion.

Like any other lexical-semantic field, which is a hierarchically organized system of lexically and semantically identical units, the LSP "Fashion" consists of a large number of microfields, such as "Jewelry", "Footwear", "Children's clothing", "Women's clothing", "Clothes for pregnant women", etc. Interest in fashion in the modern world is rapidly growing. Fashion is transformed every season, dictating new styles and trends. Under the influence of processes occurring in society, the leading role of globalization, fashion becomes cosmopolitan, the boundaries between men's and women's clothing are often erased, more and more often this or

[3] https://multijournals.org/index.php/excellencia-imje/article/view/3512

that thing acquires the characteristic of "unisex", national traditional costume becomes a thing of the past, fashion becomes universal. However, along with the above processes, it is worth noting another trend: increasing interest in men's suits and men's fashion in general. An impeccable "look", trendy items and accessories are the key to a man's success and prosperity. In accordance with the latest trends in French society, the online version of the magazine "Men's Health (France)" (October 2014) was chosen to study the current state of the language of the LSP "Fashion". This magazine presents new clothing models that are relevant for autumn-winter 2014-2015, and also gives advice on the compatibility and selection of items. Using the continuous sampling method, it was established that the vocabulary that forms the LSP “Fashion” in this magazine combines both simple words (derivative and non-derivative): gilet, maillot, anorak, salopettes, chemise, bikini, voile, cravate, pantalon, béret, casquette, broches, chaîne, bottes, and complex words: jupe fendue, talons hauts, chemise à manches longues, survêtement, manteau de fourrure, etc. According to the word formation methods, the studied lexical units were distributed as follows: in the course of the study, only one word formed by the suffix method was identified, which indicates a decrease in the productivity of this word formation method in modern French:

*casque – casquette (cap, cap)*

The prefix method, with the help of which such a lexical unit as survêtements (outerwear) was formed, also does not seem productive.

However, special attention should be paid to compound words, names of clothing, which formed the basis of the vocabulary of the LSP "Fashion".[4] The work of the French linguist Michel Mathieu-Colas "Typologie des noms composés français" [6] was chosen as the basis for the classification of compound words, in which the author proposes a new classification of compound words for linguistic science, dominating the language system at the current stage of its development and functioning. In a broad sense, this classification covers more than 700 types of compound words, but 17 basic types were identified, allowing for a detailed study.

**Conclusion.**

This article presents a lexical-semantic study of fashion and design terms in French and Uzbek. Terminological analysis, translation methods, etymological and cultural studies approaches, as well as sociolinguistic and comparative methods were used in the research process.

The results showed that, although fashion and design terms in French and Uzbek are related, there are important semantic differences between them. While French terms often reflect global fashion trends, Uzbek equivalents are formed taking into account local culture and traditions. This, in turn, allows for a deeper understanding of cultural exchange and terminological adaptation between the two languages. The study also found that the acceptance and use of terms in social contexts is also important. There was a widespread use of French terms among the younger generation and professional designers, and an increased demand for localized versions in Uzbek. This process, in turn, indicates the impact of the global fashion industry on local culture.

In conclusion, the lexical-semantic study of fashion and design terms in French and Uzbek helps to better understand the terminological connections and cultural contexts between the two languages. The results of this study can serve as a basis for future scientific research.

[4] https://multijournals.org/index.php/excellencia-imje/article/view/3512

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# THE ETHICS OF PROVERBS: HOW ENGLISH AND UZBEK PROVERBS TEACH RESPECT, HONOR, AND ETIQUETTE

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***Abstract.*** *This study examines the ethical dimensions of English and Uzbek proverbs that convey values of respect, honor, and etiquette. Proverbs, as condensed expressions of cultural wisdom, function not only as linguistic artifacts but also as moral guidelines shaping social behavior. Drawing on comparative paremiological and cognitive-semantic analysis, the paper explores how two linguocultures encode ethical concepts through figurative and metaphorical patterns. The results reveal both universal moral frameworks and culturally specific expressions reflecting individualistic (English) and collectivistic (Uzbek) orientations. The study underscores the pedagogical and intercultural significance of proverbs in preserving moral traditions and fostering mutual understanding among nations.*
***Key words:*** *Proverbs, ethics, respect, honor, etiquette, paremiology, cognitive semantics, English, Uzbek.*

***Annotatsiya.*** *Ushbu maqola - hurmat, nomus va odob kabi qadriyatlarni ifodalovchi ingliz va o‘zbek maqollarining axloqiy o‘lchovlarini tahlil qiladi. Maqollar xalq donishmandligining ixcham ifodasi sifatida nafaqat til birliklari, balki ijtimoiy xulq-atvorni shakllantiruvchi axloqiy ko‘rsatmalar sifatida ham xizmat qiladi. Tadqiqot qiyosiy paremiologik va kognitiv-semantik tahlil asosida ikki xil lingvomadaniyatda axloqiy tushunchalarning qanday qilib obrazli va metaforik shakllarda ifodalanishini o‘rganadi. Natijalar umumiy axloqiy me’yorlar bilan bir qatorda, ingliz tilidagi individualistik va o‘zbek tilidagi jamoaviy (kollektivistik) yo‘nalishlarni aks ettiruvchi madaniy xususiyatlarni ham namoyon qiladi. Tadqiqot maqollar orqali axloqiy an’analarni saqlab qolish hamda xalqlar o‘rtasida o‘zaro tushunishni mustahkamlashdagi pedagogik va madaniyatlararo ahamiyatini ta’kidlaydi.*
***Kalit so‘zlar:*** *Maqollar, axloq, hurmat, nomus, odob, paremiologiya, kognitiv semantika, ingliz tili, o‘zbek tili.*

**Introduction.** Language is a moral reservoir in which societies store their ethical ideals, social norms, and behavioral expectations. Among its richest forms, the proverb stands as a linguistic mirror of a nation's collective wisdom. Proverbs are not simply ornamental expressions; they perform the didactic function of transmitting moral and social codes from one generation to the next.

Ethics—derived from the Greek ethos, meaning “character” or “moral custom”—is deeply embedded in the linguistic and cultural systems of every society. In both English and Uzbek traditions, ethical values such as respect, honor, and etiquette serve as the foundation of human relationships. Each culture articulates these values through proverbs that instruct individuals on proper conduct, respect for elders, and maintenance of social harmony.

The present study investigates how English and Uzbek proverbs express these ethical categories, asking the following questions:

1. What linguistic and conceptual strategies are used to encode respect, honor, and etiquette in English and Uzbek proverbs?

2. How do cultural and social differences influence the ethical interpretations of these proverbs?

3. What pedagogical and intercultural functions do such proverbs perform?

By addressing these questions, this paper contributes to the growing field of linguocultural paremiology, demonstrating how proverbs reflect the moral consciousness of their respective speech communities.

**Methods.**

The study employs a comparative paremiological method, integrating linguocultural and cognitive-semantic approaches. A corpus of 100 English and 100 Uzbek proverbs was compiled from published paremiological sources. Proverbs were selected based on their ethical orientation, frequency of use, and relevance to the thematic fields of respect, honor, or etiquette. The analysis proceeded through semantic classification, conceptual metaphor identification, and cross-cultural comparison.

Data Collection

A corpus of 100 English and 100 Uzbek proverbs was compiled from published paremiological sources:

English sources include Mieder (2004), Norrick (1985), and the *Oxford Dictionary of English Proverbs* (2008).

Uzbek sources include Rashidova (2021), Karimov (2005), and oral folklore collections of the Uzbek Academy of Sciences.

Proverbs were selected based on three criteria:

1. Their ethical or moral orientation;
2. Frequency of use in speech or literature;
3. Relevance to the thematic fields of respect, honor, or etiquette.

**Analytical Framework**

The analysis proceeded in three stages:

1. **Semantic classification** – grouping proverbs by dominant ethical theme;
2. **Conceptual metaphor identification** – based on Lakoff & Johnson’s (1980) *Conceptual Metaphor Theory*;
3. **Cross-cultural comparison** – contrasting English and Uzbek imagery, value orientation, and communicative function.

This method allows both structural (linguistic) and functional (cultural) interpretation of ethical meanings.

**Results**

**Semantic Classification of Ethical Proverbs**

The first stage of analysis revealed that both English and Uzbek proverbs are rich in moral content, yet they differ in emphasis and cultural orientation. Three major semantic domains were identified: **Respect**, **Honor**, and **Etiquette (Manners)**.

**Respect-related proverbs** emphasize social balance and moral reciprocity.

*English:* “Give respect, take respect.” / “Courtesy costs nothing.”

*Uzbek:* “Kattaga hurmat – kichikka izzat.” / “Hurmat bilan izzat topilar.”

*Meaning:* Respect is portrayed as a moral exchange — mutual and necessary for social harmony.

**Honor-related proverbs** highlight moral integrity and reputation as a core of personal or communal identity.

*English:* “A good name is better than riches.” / “He that loses his honor loses himself.”

*Uzbek:* “Nomus – insonning yuzidir.” / “Obro‘ oltindan qimmat.”

*Meaning:* Honor is conceptualized as a priceless value that defines a person’s moral worth.

**Etiquette-related proverbs** focus on the external expression of internal virtue — behavior, speech, and manners.

*English:* “Manners maket h man.” / “A kind word opens iron gates.”

*Uzbek:* “Odob – inson ziynati.” / “Odamni kiyimi emas, odobi bezaydi.”

*Meaning:* Manners are moral adornment — visible indicators of ethical upbringing.

This classification shows that both cultures consider moral behavior as the foundation of humanity, but the **English system** tends toward *individual self-discipline*, while the **Uzbek system** stresses *social interdependence* and *respect for hierarchy*.

**Conceptual Metaphor Identification**

Using **Lakoff and Johnson’s (1980)** framework, several recurring metaphorical mappings were observed:

| Ethical Concept | Dominant Metaphor | Example Proverbs | Interpretation |
|---|---|---|---|
| **Respect** | RESPECT IS A LADDER / BALANCE | “Give respect, take respect.” / “Kattaga hurmat – kichikka izzat.” | Respect sustains social equilibrium and hierarchy. |
| **Honor** | HONOR IS TREASURE / CLOTHING | “A good name is better than riches.” / “Nomus – insonning yuzidir.” | Honor is valuable and must be guarded like wealth or dignity. |
| **Etiquette** | ETIQUETTE IS CLOTHING / LIGHT | “Manners maketh man.” / “Odob – inson ziynati.” | Manners reflect the inner purity and social elegance of a person. |

These metaphors reveal that both languages treat moral qualities as *visible, tangible possessions*, linking ethics to sensory and material imagery.

While English proverbs emphasize **moral autonomy** (self-earned respect, inner balance), Uzbek proverbs project **collective morality** (external decorum, social harmony).

**Cross-Cultural Comparison**

The comparative analysis highlights both **universal moral convergence** and **cultural divergence**:

| Dimension | English Proverbs | Uzbek Proverbs |
|---|---|---|
| **Moral focus** | Individual ethics, personal | Communal ethics, collective dignity |

| Dimension | English Proverbs | Uzbek Proverbs |
|---|---|---|
| | responsibility | |
| **Form of respect** | Reciprocity (“Give respect, take respect”) | Hierarchy (“Respect the elder, love the younger”) |
| **View of honor** | Internal moral conscience | Social and family-based reputation |
| **Etiquette emphasis** | Politeness and verbal tact | Behavioral discipline and modesty |
| **Underlying worldview** | Individualism | Collectivism |

The findings demonstrate that English proverbs encode self-respect and moral autonomy typical of Western ethics, while Uzbek proverbs express social interdependence and reverence for tradition, typical of Eastern moral systems.

**Summary of Results**

The analysis confirms that:

Both English and Uzbek proverbs share **universal moral archetypes**—respect, honesty, and good manners.

They differ in **conceptual framing**: English → self-centered morality; Uzbek → community-centered morality.

Cognitive metaphors serve as the bridge linking **linguistic form** and **ethical meaning.**

**Discussion.** The linguistic expressions of ethics in proverbs reveal deeply rooted cultural metaphors. In English, ethics often derive from contractual reciprocity, while Uzbek ethics emphasize respect for hierarchy and community. Both traditions use shared image schemas such as BALANCE, CLOTHING, and TREASURE to symbolize justice, etiquette, and honor respectively.

ыProverbs serve as moral pedagogy in both cultures—used by parents, teachers, and elders to teach discipline, humility, and respect. Understanding ethical proverbs enhances intercultural competence and moral literacy.

**Conclusion.** Proverbs are moral blueprints reflecting a society’s ethical consciousness. English and Uzbek proverbs both emphasize respect, honor, and etiquette, but from different cultural standpoints. English sayings favor individual integrity and self-respect, while Uzbek ones highlight collective responsibility and social harmony. Despite these differences, both traditions uphold moral behavior as the true measure of humanity.

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# AKSIOLOGIK YONDASHUV TUSHUNCHASI VA UNING TA'LIMDAGI METODOLOGIK O'RNI

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***Annotatsiya.*** *Biz mazkur maqola ta'limdagi oddiy axborot berishdan ko'ra o'quvchi ma'naviyatini boyituvchi aksiologik yondashuvning metodologik jihatini tahlilga tortdik. Fikrimizcha, aksiologiya qadriyatlar haqidagi fan bo'lib qolmay, bo'lajak boshlang'ich sinf o'qituvchilarining kasbiy dunyoqarashini tubdan o'zgartiruvchi vositadir. Maqolada talabalarda kitob o'qish ehtiyojini shakllantirish va buni ularning ichki qadriyatiga aylantirish yo'llari ko'rib chiqilgan. Buning uchun insoniylik va aniq tartibga asoslangan usullardan foydalanib, mutolaani talaba hayotining ajralmas qismiga aylantirish masalasi tahlil qilingan. Tadqiqotning o'ziga xosligi shundaki, u kitob mutolaasini shaxsning axloqiy qiyofasini belgilovchi asosiy mezon sifatida taqdim etadi.*

***Kalit so'zlar:*** *aksiologik tamoyillar, qadriyat, ta'lim, mahorat, mutolaa, boshlang'ich ta'lim metodikasi, insonparvarlik, kasbiy yetuklik, zamonaviy maktab.*

***Abstract.*** *In this article, we move beyond the routine delivery of information to analyze the methodological impact of the axiological approach in enriching a student's inner world. We believe that axiology is more than just a study of values; it is a transformative tool that can fundamentally reshape the professional outlook of future primary school teachers. The paper explores ways to foster a genuine need for reading among students, turning it into a core personal value. By utilizing humanistic methods and a structured framework, we analyze how reading can become an inseparable part of a student's life. The uniqueness of this study lies in presenting book reading as a key benchmark that defines an individual's moral character.*

***Key words:*** *axiological principles, value, education, mastery, reading, primary education methodology, humanism, professional maturity, modern school.*

***Аннотация.*** *В этой статье мы отошли от простого изложения учебной информации и сосредоточились на методологической силе аксиологического подхода, который обогащает духовный мир ученика. По нашему мнению, аксиология это не просто теория о ценностях, а реальный инструмент, способный в корне изменить профессиональное мировоззрение будущих учителей начальных классов. В работе*

*рассматриваются способы пробуждения у студентов искренней тяги к чтению, чтобы книга стала для них внутренней ценностью. Мы проанализировали, как через человечный подход и четкую систему сделать чтение неотъемлемой частью жизни студента. Особенность исследования в том, что оно представляет чтение книг как главный критерий, определяющий нравственный облик человека.*

***Ключевые слова:*** *аксиологические принципы, ценность, образование, мастерство, чтение, методика начального образования, гуманизм, профессиональная зрелость, современная школа.*

**Kirish.**

Inson tafakkurining boyib borishi natijasida fan ham bosqichma-bosqich rivojlanib boradi. Har bir sohada bo‘lganidek, pedagogika fanida ham uni yangi g‘oyalar, qarashlar bilan boyitishga xizmat qilish asosiy vazifalardan hisoblanadi. Aksiologik yondashuv esa ta’lim nazariyasining ana shunday muhim metodologik negizlaridan bo‘lib, u V.A.Slastyonin[5], I.F.Isaev[6] kabi olimlar tomonidan chuqur nazariy asoslangan. Aksiologik yondashuv pedagogik faoliyatda shaxsning qadriyatlari, maqsadlari asosida o‘quv jarayonini tashkil etish prinsiplari majmuasidir. U ta’lim jarayonida o‘quvchining shaxsiy, ijtimoiy va madaniy qadriyatlarini shakllantirishga qaratilgan strategiya sifatida xizmat qiladi. Aksiologik yondashuv shuni ta’kidlaydiki, har bir pedagogik qaror o‘quvchining axloqiy va estetik qadriyatlariga, shuningdek, uning kasbiy hamda shaxsiy rivojlanishiga bog‘liq bo‘lishi kerak.

Ta’limda aksiologik yondashuvning metodologik o‘rni shundaki, u pedagogik jarayonni qadriyatlar markazida tashkil etadi. Bu yondashuv orqali o‘quvchida kitobxonlik madaniyati, ijodiy fikrlash, tanqidiy tafakkur va shaxsiy motivatsiya kabi ko‘nikmalar rivojlantiriladi. Shu bilan birga, aksiologik yondashuv pedagogga o‘quvchilarning individual xususiyatlarini hisobga olish, ularni shaxsiy va ijtimoiy jihatdan rivojlantirish imkonini beradi.

Tadqiqotlar shuni ko‘rsatadiki, aksiologik yondashuvni qo‘llash orqali boshlang‘ich sinf o‘quvchilarida o‘qishga qiziqish va kitobxonlik madaniyatini shakllantirishda samarali natijalarga erishish mumkin. Bu yondashuv pedagogik faoliyatda metodik innovatsiyalarni qo‘llash, interfaol metodlar va didaktik o‘yinlarni integratsiyalash orqali o‘quvchilarning shaxsiy va intellektual rivojlanishiga ijobiy ta’sir ko‘rsatadi. Aksiologik yondashuvning boshlang‘ich sinf o‘qituvchilari tayyorlashdagi amaliy o‘rni shundan iboratki, u kelajakda pedagogning kasbiy qadriyatlarini shakllantirishga xizmat qiladi. Bu jarayonda o‘qituvchi o‘zining kasbiy motivatsiyasini, ijodiy yondashuvini va metodik kompetensiyasini rivojlantiradi, shuningdek, o‘quvchilarning kitobxonlik madaniyati, tanqidiy tafakkuri va ijodiy fikrlash ko‘nikmalarini rivojlantirishga tayyor bo‘ladi. Pedagogik aksiologiya fanining asosiy vazifasi – pedagogik jarayonda insonparvarlik an’analarining rivojlanishi, pedagogning o‘z dunyoqarashiga asoslanishi hamda kasbiy-pedagogik munosabatlar mazmunini ochib berishga yo‘naltirilgan ta’limiy mashg‘ulotlarni tashkil etishdan iborat[7].

Shu nuqtayi nazardan, aksiologik yondashuv pedagogik jarayonni shaxsiy va ijtimoiy qadriyatlar asosida rejalashtirishni taqozo etadi. Shu bilan birga, pedagogik qadriyatlar shaxsning jamiyatda mustaqil hayot kechirishini ta’minlashga, kasbiy faoliyatida malakali bo‘lishiga,

[5] Сластёнин В. А., Исаев И. Ф., Шиянов Е. Н. Педагогика. Учебное пособие. - Москва, 2002–2006.С.35.
[6] Исаев И. Ф. Профессионально-педагогическая культура преподавателя. Учебное пособие. - Москва: Академия, 2004.С.56.
[7] Mardonov Sh. va boshqalar, 2013, B. 4, 141-b.

dunyoqarashini boyitishga va unda ijtimoiy munosabatlar madaniyatini shakllantirishga xizmat qiladi[8]. Ushbu yondashuvni ta’lim jarayoniga integratsiyalash pedagogik innovatsiyalarni qo‘llash, interfaol va kreativ metodlarni joriy etish, shuningdek, o‘quvchilarda mustaqil fikrlash va mas’uliyatni rivojlantirish imkonini beradi. Natijada, aksiologik yondashuv o‘qituvchi hamda o‘quvchi o‘rtasidagi pedagogik muloqotni boyitadi va ta’lim jarayonining samaradorligini oshiradi. Shu jihatdan qaraganda, aksiologik yondashuvni boshlang‘ich sinf pedagogikasida mustaqil va tizimli yondashuv sifatida qo‘llash, o‘quvchilarda kitobxonlik madaniyati va shaxsiy qadriyatlarni shakllantirishda muhim poydevor bo‘lib xizmat qiladi.

Bilamizki, aksiologik yondashuv pedagogik tadqiqotlarning ajralmas qismi bo‘lib, bu ikki tushuncha – qadriyatlar va ularni shakllantirish jarayoni – o‘zaro chambarchas bog‘liqdir, degan qarashlar mavjud. Bu yondashuvning birligi esa pedagogik vaziyat va uni yuzaga keltiruvchi omillarni – oilaviy hamda maktab muhiti, o‘qituvchining kasbiy va shaxsiy sifatlarini tadqiq etishdan iborat. Tadqiqotchi N.O.Haydarov ta’kidlaganidek, har qanday pedagogik tizimning samaradorligi uni tashkil etuvchi barcha komponentlarning, ya’ni maqsadi, mazmuni, metodlari, vositalari va o‘quvchi shaxsiy qadriyatlarining o‘zaro uyg‘unligiga bog‘liq[9].

Aniq pedagogik vaziyatlarda shakllantirilgan o‘quv jarayoni, metodik va didaktik vositalar asosida yaratilgan faoliyat shakli o‘quv jarayoni tahlilida, shuningdek, kitobxonlik madaniyati hamda shaxsiy qadriyatlarning rivojlanishidagi o‘zaro bog‘liqlikni ochib beradi. Bu nafaqat o‘quvchilarning bilim va ko‘nikmalarini shakllantirishga, balki ularning ijtimoiy va madaniy qadriyatlarini rivojlantirishga xizmat qiladi va pedagogik jarayonda o‘quvchilar motivatsiyasini, tanqidiy fikrlashini rag‘batlantiradi.

Aksiologik yondashuv pedagogik jarayonda qadriyatlarga yo‘naltirilgan faoliyatni tashkil etish uchun muhim asos bo‘lib xizmat qiladi. Bu yondashuvning asosiy tamoyillari bo‘lajak boshlang‘ich sinf o‘qituvchilarida kitobxonlik madaniyatini shakllantirishda ham dolzarb ahamiyatga ega.

Aksiologik yondashuvning asosiy tamoyillari quyidagilardan iborat:

birinchidan, gumanizm va subyektlilik tamoyili ta’lim jarayonida o‘quvchi shaxsining markaziy o‘rinda turishini nazarda tutadi. Qadriyatlar tashqaridan majburlash orqali emas, shaxs tomonidan mustaqil ravishda tan olinib, o‘zlashtiriladi. Shu nuqtayi nazardan, bo‘lajak o‘qituvchining kitobxonlik madaniyati uning o‘zini rivojlantirishga bo‘lgan ichki ehtiyoji va shaxsiy tanloviga aylanishi lozim. Shuningdek, olima N.E.Shurkovaning ta’kidlashicha, tarbiyaviy maqsad “…bola shaxsining o‘z-o‘zini rivojlantirish, o‘z hayotini qadriyatlar yordamida qurish qobiliyatini yaratish” dan iboratdir[10]. Bu esa pedagogik jarayonda qadriyatlarni faqatgina axborot sifatida uzatish emas, balki shaxsiy ma’no berish orqali anglash lozimligini bildiradi. Bo‘lajak o‘qituvchining kitobxonlik madaniyati uning o‘zini rivojlantirishga bo‘lgan ichki ehtiyoji va shaxsiy tanloviga aylanishi lozim;

ikkinchidan, tizimlilik tamoyili qadriyatlarni shakllantirish jarayonini ta’limning barcha elementlarini: maqsad, mazmun, metod, vositalar va natijani qamrab oluvchi yagona tizim sifatida ko‘radi. Shu sababli, kitobxonlik madaniyatini shakllantirish faqat adabiyot darslari bilan cheklanmay, balki pedagogika, psixologiya va boshqa fanlar hamda tarbiyaviy ishlar orqali kompleks tarzda amalga oshirilishi kerak;

[8] Ziyomuhamedov B., Xodjayev B., Mardonov Sh. Pedagogika. – Toshkent: Fan va texnologiya, 2017. – B. 129.
[9] Haydarov N.O. Pedagogik tizimlarni loyihalash. – T.: Fan va texnologiya, 2018. – B. 65.
[10] Щуркова Н. Е. Педагогическая технология. Учебное пособие. – М.: Педагогическое общество России, 2005. – Б. 75.

uchinchidan, integratsiya va komplekslilik tamoyili qadriyatlarning shaxsning bilim, his-tuyg‘u va amaliy faoliyatining birligida shakllanishini nazarda tutadi. Ular hayot va faoliyat bilan uyg‘unlashadi. O‘qituvchi kitobxonlik qadriyatini o‘z kasbiy faoliyatiga darslarni tayyorlash, bolalar bilan muloqot, metodik ishlar – integratsiya qilishi va kitobxonlikni amaliy harakatga aylantirishi muhimdir;

to‘rtinchidan, dialektik bog‘liqlik tamoyili ijtimoiy qadriyatlar va shaxsiy qadriyatlar o‘rtasidagi doimiy o‘zaro ta’sir va uyg‘unlikni ta’minlaydi. Shu sababli, bo‘lajak o‘qituvchining kitobxonlik qiziqishi o‘z navbatida, jamiyat uchun muhim bo‘lgan madaniy qadriyatlarga xizmat qilishi lozim.

Olim B.A.Adizovning fikricha, kasbiy pedagogik tayyorgarlik sifati faqat bilim bilan belgilanmay, balki o‘qituvchining shaxsiy-kasbiy qadriyatlar tizimi va uning barcha komponentlarining uyg‘unligiga bog‘liqdir[11].

Xulosa qilib aytganda, aksiologik yondashuvning metodologik asoslarini o‘rganish shuni ko‘rsatadiki, mazkur yondashuv ta’lim jarayonida faqatgina bilim berish bilan cheklanib qolmay, balki bo‘lajak o‘qituvchilarning ma’naviy-axloqiy qiyofasini shakllantirishda muhim o‘rin tutadi. Aksiologik tamoyillarning tatbiq etilishi bo‘lajak boshlang‘ich sinf o‘qituvchilarida kitobxonlik madaniyatini shakllantirish jarayonida quyidagi jihatlarning ustuvorligini belgilaydi:

- kitobxonlikka nisbatan barqaror shaxsiy va ijtimoiy motivatsiyaning yuzaga kelishi, mutolaaning inson kamolotidagi eng oliy qadriyat sifatida anglanishi;

- pedagogik faoliyatda kitob bilan ishlash malakasining oddiy texnik ko‘nikma emas, balki muhim kasbiy qadriyat (aksiologik kompetensiya) darajasiga ko‘tarilishi;

- talabalarda badiiy va ilmiy matnlarni tahlil qilishda ijodiy-tanqidiy yondashuvning rivojlanishi.

Mazkur yondashuvning metodologik o‘rni shundaki, u bo‘lajak o‘qituvchini o‘z qadriyatlarini anglashga va o‘quvchilarga kitobxonlikni ma’naviy ehtiyoj sifatida yetkazib berishga tayyorlaydi.

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[11] Adizov B. A. Boshlang‘ich sinf o‘qituvchilarini kasbiy-pedagogik tayyorlashning didaktik asoslari: Ped. fan. dok. ... diss. avtoref. – T.: 2005. – B. 18.

"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# THE LINGUOCULTURAL DIMENSIONS OF THE CONCEPT FRIENDSHIP: EVIDENCE FROM ENGLISH AND UZBEK

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***Abstract.*** *The present study explores the linguocultural dimensions of the concept friendship as manifested in the English and Uzbek linguistic worldviews. Drawing on the theoretical framework of cognitive linguistics and linguoculturology, the research examines how friendship is conceptualized, evaluated, and culturally framed through paremiological units, phraseological expressions, and stable metaphoric models in the two languages. The study adopts a qualitative comparative methodology grounded in Conceptual Metaphor Theory and cultural-semantic analysis. The findings reveal that while English and Uzbek share a set of universal conceptual features—such as loyalty, support, trust, and value—each language encodes friendship through culturally specific metaphors and axiological priorities. English tends to conceptualize friendship as a personal relationship based on emotional affinity and individual choice, whereas Uzbek foregrounds friendship as a moral obligation rooted in collectivist values, social harmony, and ethical responsibility. The article argues that the concept of friendship functions as a key cultural constant reflecting national mentality, social norms, and ethical ideals embedded in language.*

***Key words:*** *friendship, linguoculture, concept, cognitive linguistics, paremiology, English, Uzbek.*

***Annotatsiya.*** *Mazkur tadqiqot ingliz va o'zbek lingvistik dunyoqarashlarida do'stlik konseptining lingvomadaniy jihatlarini o'rganishga bag'ishlangan. Kognitiv tilshunoslik va lingvomadaniyatshunoslikning nazariy asoslariga tayangan holda, tadqiqot do'stlik konseptining ikki tilda paremiologik birliklar, frazeologik ifodalar hamda barqaror metaforik modellar orqali qanday konseptualizatsiya qilinishi, baholanishi va madaniy jihatdan talqin etilishini tahlil qiladi. Tadqiqotda Konseptual metafora nazariyasi va madaniy-semantik tahlilga asoslangan sifat jihatdan qiyosiy metodologiya qo'llanildi. Natijalar shuni ko'rsatadiki, ingliz va o'zbek tillarida do'stlik konsepti sadoqat, qo'llab-quvvatlash, ishonch va qadriyat kabi universal konseptual belgilarni o'z ichiga olsa-da, har bir til do'stlikni madaniy jihatdan xos metaforalar va aksiologik ustuvorliklar orqali ifodalaydi. Ingliz tilida do'stlik ko'proq hissiy yaqinlik va individual tanlovga asoslangan shaxsiy munosabat sifatida konseptualizatsiya qilinsa, o'zbek tilida u jamoaviy qadriyatlar, ijtimoiy hamjihatlik va axloqiy mas'uliyatga asoslangan ma'naviy majburiyat sifatida talqin etiladi. Maqolada do'stlik konsepti tilda mujassam bo'lgan milliy mentalitet, ijtimoiy me'yorlar va axloqiy ideallarni aks ettiruvchi muhim madaniy konstanta sifatida namoyon bo'lishi asoslab beriladi.*

***Kalit so‘zlar:*** *do‘stlik, lingvomadaniyat, konsept, kognitiv tilshunoslik, paremiologiya, ingliz tili, o‘zbek tili.*

***Аннотация.*** *Настоящее исследование посвящено изучению лингвокультурных аспектов концепта дружба в английской и узбекской языковых картинах мира. Опираясь на теоретические положения когнитивной лингвистики и лингвокультурологии, в работе анализируется, каким образом концепт дружбы концептуализируется, оценивается и культурно интерпретируется посредством паремиологических единиц, фразеологических выражений и устойчивых метафорических моделей в двух языках. В исследовании применяется качественная сравнительная методология, основанная на теории концептуальной метафоры и культурно-семантическом анализе. Полученные результаты показывают, что, несмотря на наличие общих универсальных концептуальных признаков — таких как верность, поддержка, доверие и ценность, — английский и узбекский языки репрезентируют дружбу через культурно специфические метафоры и аксиологические приоритеты. В английском языке дружба преимущественно осмысливается как личностное отношение, основанное на эмоциональной близости и индивидуальном выборе, тогда как в узбекской лингвокультуре она выступает как моральное обязательство, укоренённое в коллективистских ценностях, социальной гармонии и этической ответственности. В статье обосновывается положение о том, что концепт дружбы функционирует как ключевая культурная константа, отражающая национальный менталитет, социальные нормы и этические идеалы, закреплённые в языке.*

***Ключевые слова:*** *дружба, лингвокультура, концепт, когнитивная лингвистика, паремиология, английский язык, узбекский язык.*

## 1. Introduction

In contemporary linguistics, increasing attention has been devoted to the study of culturally significant concepts as key units of linguistic consciousness and national worldview. Among such concepts, *friendship* occupies a central place due to its universal human relevance and its deep entrenchment in ethical, emotional, and social experience. Despite its apparent universality, friendship is far from being a homogeneous notion across cultures; rather, it is shaped by historically formed values, social structures, and cultural norms, all of which are reflected and preserved in language.

Within the paradigm of cognitive linguistics and linguoculturology, concepts are viewed as mental formations that mediate between language, culture, and human experience (Lakoff & Johnson, 1980; Kövecses, 2010). Language not only names social relationships but also interprets, evaluates, and metaphorically structures them. Proverbs, idioms, and stable expressions serve as particularly rich sources for uncovering the axiological and cognitive dimensions of culturally salient concepts such as friendship.

The English and Uzbek languages represent two linguocultural systems shaped by different historical trajectories, social structures, and philosophical traditions. English, influenced by individualism and liberal social values, often emphasizes personal choice and emotional closeness in friendship. Uzbek, rooted in collectivist traditions and ethical norms of communal life, conceptualizes friendship as a moral duty characterized by loyalty, sacrifice, and long-term

commitment. A comparative analysis of these two languages therefore provides valuable insights into both universal and culture-specific features of the friendship concept.

The aim of this article is to investigate the linguocultural realization of the concept *friendship* in English and Uzbek through a cognitive-semantic and paremiological lens. The study seeks to identify dominant conceptual metaphors, evaluative components, and culturally marked meanings associated with friendship in both languages.

**2. Literature Review**

The theoretical foundations of this study lie at the intersection of cognitive linguistics, linguoculturology, and paremiology. The notion of *concept* has been extensively discussed in linguistic scholarship, particularly within Russian and European traditions. Concepts are commonly defined as complex mental structures that integrate cognitive, emotional, and cultural components (Stepanov, 2004; Karasik, 2009).

Conceptual Metaphor Theory, developed by Lakoff and Johnson (1980), has played a pivotal role in understanding how abstract concepts are structured through metaphorical mappings grounded in embodied experience. Subsequent studies have demonstrated that metaphors are not merely linguistic ornaments but reflect culturally specific ways of thinking (Kövecses, 2010). This approach has been widely applied to the analysis of social and ethical concepts, including love, freedom, honor, and friendship.

Within linguoculturology, scholars emphasize the role of language in preserving cultural values and collective experience. Karasik (2009) argues that culturally significant concepts are best studied through discourse, phraseology, and paremiology, as these domains encapsulate normative judgments and value orientations. Paremiological units, in particular, are regarded as repositories of folk wisdom and ethical norms, reflecting centuries of cultural experience (Permyakov, 1988).

According to Cheng Chen (2015), “A *friend* emerges through interpersonal interaction within society and represents a complex form of social experience shared across cultures. In the context of cross-cultural communication, friendships play a significant role in various spheres, including politics, economics, translation, business, and other areas of social interaction.”

Considering these, most researchers claim that in political and diplomatic contexts, interpersonal friendships between leaders or representatives can facilitate dialogue, reduce tensions, and promote more effective negotiations. In economics and business, friendship-based networks frequently influence partnerships, decision-making processes, and long-term cooperation, especially in cultures where personal relationships are valued alongside formal agreements.

Moreover, in translation and intercultural mediation, the concept of friendship contributes to empathy and cultural sensitivity, enabling more accurate interpretation of meanings and intentions. Friendly interpersonal relations help individuals navigate cultural differences, overcome stereotypes, and build sustainable social connections. Therefore, friendship functions not only as a private emotional experience but also as an important sociocultural mechanism that supports communication, cooperation, and integration in an increasingly globalized world.

Research on the concept of friendship has been conducted in various linguistic contexts. Studies in English often highlight metaphors such as FRIENDSHIP IS A JOURNEY or FRIENDSHIP IS A BOND, emphasizing emotional closeness and shared experience (Kövecses, 2002). In Turkic and Central Asian linguistic traditions, friendship is frequently linked to moral

values such as fidelity, honor, and mutual responsibility, as reflected in proverbs and folklore (Ismoilov, 2016).

Comparative studies of English and Uzbek remain relatively limited, particularly within a cognitive-linguistic framework. Existing research tends to focus on lexical equivalence rather than deeper conceptual and axiological structures. This gap underscores the relevance of the present study, which seeks to provide a systematic linguocultural comparison of the friendship concept in the two languages.

## 3. Methodology

The study employs a qualitative, descriptive-comparative methodology grounded in cognitive-semantic analysis. The research material consists of English and Uzbek paremiological units, idioms, and stable expressions related to friendship. The data were collected from authoritative proverb dictionaries, phraseological compilations, and explanatory dictionaries in both languages.

The analysis proceeds in several stages. First, linguistic units expressing the concept of friendship are identified and classified. Second, their semantic and evaluative components are examined to determine dominant conceptual features. Third, underlying conceptual metaphors are reconstructed following the principles of Conceptual Metaphor Theory. Finally, the results are compared across languages to identify universal and culture-specific patterns.

The study adopts a linguocultural approach, viewing language as a reflection of national mentality and cultural values. Particular attention is paid to axiological markers, metaphorical imagery, and normative judgments embedded in the analyzed units. This approach allows for a deeper understanding of how friendship is not only named but also culturally interpreted and morally evaluated.

## 4. Results

### 4.1. Core Conceptual Features of Friendship

The analysis reveals that both English and Uzbek conceptualize friendship as a positive and socially valued relationship characterized by trust, loyalty, and mutual support. These shared features suggest a universal cognitive core of the friendship concept. For instance, English proverbs such as *“A friend in need is a friend indeed”* emphasize reliability and support, while Uzbek equivalents like *“Do‘st boshga kulfat tushganda bilinadi”* convey a similar evaluative meaning.

However, beyond this shared core, the languages diverge in their emphasis and cultural framing. English expressions frequently highlight emotional closeness and personal affinity, whereas Uzbek units stress moral obligation and long-term commitment. This difference reflects broader cultural orientations toward individualism and collectivism.

### 4.2. Dominant Conceptual Metaphors

In English, friendship is commonly conceptualized through metaphors of journey, bond, and support. Expressions such as *“We have come a long way together”* or *“A strong bond of friendship”* suggest a dynamic, evolving relationship based on shared experiences. These metaphors foreground emotional connection and personal choice.

In Uzbek, friendship is often metaphorically associated with kinship, treasure, and moral foundation. Proverbs like *“Do‘st — aka-ukadan aziz”* (‘A friend is dearer than a brother’) elevate friendship to the level of familial obligation. Another frequent metaphor is FRIENDSHIP IS A TREASURE, as in *“Yaxshi do‘st — bebaho boylik”*, emphasizing its enduring value and ethical significance.

It should be noted that, even though there are some differences in approaches, both cultures place great value on the friendship and metaphors and proverbs are shaped based on their experiences.

### 4.3. Axiological Orientation

The axiological analysis indicates that Uzbek paremiology places stronger emphasis on loyalty, sacrifice, and constancy. Friendship is portrayed as a lifelong bond that requires patience and moral integrity. Betrayal of friendship is severely condemned, reflecting the high ethical status of the concept in Uzbek culture.

English proverbs also value loyalty but allow for a more pragmatic view of friendship. Expressions such as *“Friends come and go”* suggest an acceptance of change and individual autonomy. This does not imply a lack of value but rather a different cultural understanding of social relationships.

## 5. Discussion

The findings demonstrate that the concept of friendship functions as a linguocultural mirror reflecting broader societal values and cultural norms. While the universal aspects of friendship attest to shared human experience, the differences reveal culturally specific models of social interaction and moral responsibility.

The English conceptualization aligns with a worldview that prioritizes individual choice, emotional compatibility, and personal development. Friendship is seen as flexible and evolving, shaped by shared interests and experiences. In contrast, the Uzbek model emphasizes stability, moral duty, and collective harmony. Friendship is not merely a personal preference but a socially regulated and ethically charged relationship.

These differences have important implications for intercultural communication. Misunderstandings may arise when speakers from different cultures interpret friendship through their own conceptual frameworks. Awareness of linguocultural differences can therefore enhance cross-cultural understanding and communication.

## 6. Conclusion

This study has examined the linguocultural dimensions of the concept *friendship* in English and Uzbek through a cognitive-semantic and paremiological approach. The analysis has shown that friendship constitutes a complex conceptual structure integrating universal human values with culturally specific meanings.

While both languages share core features such as trust and support, they differ in their metaphorical models and axiological priorities. English emphasizes emotional closeness and individual choice, whereas Uzbek foregrounds moral obligation, loyalty, and social responsibility. These differences reflect distinct cultural worldviews and social norms encoded in language.

The findings contribute to the growing body of research on linguocultural concepts and underscore the importance of language as a medium of cultural knowledge. Further research may extend this analysis to other languages or explore the diachronic evolution of the friendship concept in different cultural contexts.

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“ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS”

# “BIR KECHA FOJIASI” QISSASIDA YOZUVCHI USLUBINING O‘ZIGA XOSLIGI

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***Annotatsiya.*** *Ushbu maqola XX asrning taniqli adibi Shuhrat (G‘ulom Alimov)ning qissalari tadqiqiga bag‘ishlangan. Maqolada yozuvchining “Bir kecha fojiasi” qissasi tahlilga tortilgan va adib asarlari voqealarining dramatik rivojida, maktub, qissada qoliplash usulidan mohirona foydalanganligi Shuhrat individualligining muayyan qirralarini aks ettirsa, ikkinchi tomondan, asarlaridagi realizmning haqqoniyligi, romantizmning ko‘tarinkiligi asar badiiyatini ta’minlaganligi ochib berilgan. Shungdek, maqolada yangicha badiiy-estetik qarashlar asosida Shuhrat qissasining syujeti, kompozitsiyasi, bosh qahramonning individual tabiati, ularning badiiy tafakkurdagi o‘rnini nazariy asoslash, yozuvchi romanlaridagi badiiy g‘oya va tasvir haqqoniyligi, folklorizm va adabiy ta’sir, tarixiy haqiqatning badiiy talqini, poetik nutq, ifodada shakliy ixchamlik, falsafiy mushohada teranligi, mantiqiy izchillik, badiiyat mezonlarining poetik tasvirdagi vazifalari qissalari misolida tahlil va talqin qilingan.*
***Kalit so‘zlar:*** *Qissa, individuallik, hayotiy voqelik, realizm, haqqoniylik, ijodiylik, romantizm.*

***Abstract.*** *This article is devoted to the study of the stories of the famous writer of the 20th century Shuhrat (Ghulom Alimov). The article analyzes the writer's story "The Tragedy of One Night" and reveals that the writer's skillful use of the method of modeling in the dramatic development of the events of his works, in letters and stories, reflects certain aspects of Shuhrat's individuality, and on the other hand, the truthfulness of realism in his works, the exaltation of romanticism, ensure the artistry of the work. Also, the article analyzes and interprets the plot and composition of the story "Shuhrat" based on new artistic and aesthetic views, the individual nature of the main character, their theoretical justification in artistic thinking, the authenticity of the artistic idea and image in the writer's novels, folklorism and literary influence, artistic interpretation of historical truth, poetic speech, formal conciseness in expression, depth of philosophical observation, logical consistency, and the functions of artistic criteria in poetic image on the example of stories.*
***Key words:*** *Story, individuality, reality, realism, truthfulness, creativity, romanticism.*

**Kirish.**

Qissa bosh qahramon taqdiri vositasida hayotning u yoki bu qirralarini o‘rta epik shaklda rivoyaviy usul bilan aks ettiruvchi asardir [Boboyev, 2002]. Shuhratning “Bir kecha fojiasi” qissasi xuddi shunday asarlar sirasiga kiradi. Asar qahramonlarining individualligi masalasi muhim ilmiy-nazariy masalalardan biridir. Shuhrat *“Bir kecha fojiasi”* qissasida inson qismatini Nazokat ruhiy-psixologik kechinmalarini tasvirlash orqali ochib beradi.

**Adabiyotlar tahlili va metodlar**.

Ma’lumki, hayotiy voqelik badiiy asar syujeti uchun asos hisoblanadi. Lekin yozuvchilar hayotda ro‘y bergan biror muhim voqeani qalamga olganlarida shu voqeaga turli nuqtayi nazardan va, avvalo, o‘zlarining badiiy maqsadlaridan kelib chiqqan holda shunday asarlar yaratishlari mumkin. Bunday asarlar faqat syujet chiziqlari bilangina emas, balki qahramonlarining xarakteri bilan ham bir-biridan keskin farqlanishi mumkin. Bu yozuvchining pozitsiyasi va mahoratiga bog‘liq masaladir. Hayotiy voqelikning ijodkor tomonidan g‘oyaviy va badiiy tafovutlanishi natijasida adabiyotda yangi tiplar, yangi obrazlar olami maydonga kelishi mumkin.

Asar adibning “Men bu qissamni sevishganlar va sevishmoq niyatida yurganlarga bag‘ishlayman” [Shuhrat, 2019] - degan epigrafi bilan boshlangan. Yozuvchi nega bunday epigraf tanlaganini qissa o‘qish davomida anglagandek bo‘lamiz. Qissa qahramoni Nazokat shaxsiyatida ayol ruhiyatiga uyg‘un his-tuyg‘ular mohiyati yoritiladi.

**Natijalar va muhokama.**

Har bir adib ijodida tasvir uslubi turlicha yo‘sinda bo‘lgani kabi, Shuhrat ijodiga xos xususiyatlar: xarakterlarni individuallashtirishda, asar qahramonlarining tashqi ko‘rinish chizgilari, ruhiyatida ro‘y beradigan o‘zgarishlar, qahramon portreti, voqealarning dramatik rivojiga alohida ahamiyat berishda yaqqol namoyon bo‘ladi. Adib qissaning boshlanmasidayoq o‘quvchiga asar qahramoni Nazokatning boshiga tushgan kulfatning hissiy-ta’sirchanlik tasvirini beradi, bu asarning ta’sirchanligini oshirishga xizmat qilgan: *“Hammasi erining o‘limidan boshlandi”* [Shuhrat, 2019]. Adib shundan so‘ng Nazokatning qisqa, lekin go‘zal, tinch-totuvlikda turmush o‘rtog‘i bilan o‘tkazgan damlar tasvirini chizadi *“...eri bir qaraganda ko‘zga cho‘g‘dek yonib tashlanadigan xushqomat, kelishgan bo‘lmasa ham ko‘ngli ochiq, qalbi, fe’l-atvori chiroyli edi. Ikki yil yashab “siz”ini “san” qilmadi, yalab-yulqadi, sevib erkaladi. Bozor-o‘charni birga qilib, og‘irini o‘zi ko‘tarib olardi. Ovqatga hozirlik ko‘rgan Nazokat “ko‘nglingiz nima tusaydi?” desa, oldidagi ikkita so‘yloq tishini ko‘rsatib, “sizga yoqqanni!” deb bag‘riga bosib qo‘yardi”), “Er qilganda oqi oq, qizili qizil bo‘lib tovlanadigan” [*Shuhrat, 2019*]* Nazokat avval yolg‘iz suyanchig‘i bo‘lgan turmush o‘rtog‘i mehmonga ketib, birpasda mazasi bo‘lmay qaytib kelib, yotmay-turmay Allohga omonatini topshirishidan chigirtkadek holga tushib qolgan bo‘lsa, yolg‘iz qizini yaslidan gripp yuqtirib, otasining orqasidan shoshib ketishidan Nazokat yerparchin bo‘ldi. Bir oydan ziyod yotib qolgan Nazokatning ko‘nglini ko‘taradigan ota-onasi ham yoshligida bevaqt ajal tufayli tashlab ketgan bo‘lib pochchasining qo‘lida keraksizdek katta bo‘lgani yetmagandek, hayotning bu zarbasi uni butkul gangitib qo‘ydi. *“Chidadi-yu, olqindiday bo‘lib qoldi. Jimjildog‘iga sig‘magan uzugi o‘rta barmog‘iga kattalik qiladi. Kulsa tirjayganga o‘xshaydi” [*Shuhrat, 2019*], “Ertalab so‘lib, olti oy ko‘rpa-yostiq qilib yotgan bemordek sarg‘ayib turdi. Bir necha kun dori ichsa ham uxlolmay yurdi”[*Shuhrat, 2019]. Adibning bosh qahramon haqidagi bu tasvir chizgilari ularning tashqi va ichki obrazi olamini namoyon etishga xizmat qilgan. “Badiiy adabiyotning markaziy muammosi – xarakter yaratish, adabiyotga yangi

odam obrazini olib kirish. Yozuvchi ko‘targan masalaning jiddiyligi, pozitsiyaning aniqligi, asarning zamonaviyligi oqibat-natijada avtorning xarakter yaratishdagi san’atkorligiga bog‘liq. Asarda to‘laqonli shaxs, hayajonli hatti-harakat, qiziqarli insoniy taqdir bor ekan, demak unda jiddiy gap bor. Realistik xarakter o‘zining tabiiyligi, ishontirish kuchi bilangina tirik. Xarakterga ulkan ma’no singdirish bilan barobar unga jon ato etish ham nihoyatda muhim”[Normatov,1978]ligini hisobga olgan Shuhrat, qissa so‘ngigacha shu pozitsiyada qoladi.

Asar qahramonlarining individual tabiati badiiy ijodda muhim ahamiyat kasb etadi. To‘g‘ri, hayotiy voqelik badiiy asar syujeti uchun asos bo‘ladi, lekin adibning ijodiy niyati ijrosi mazmunga, muallifning poetik tafakkuriga bog‘liq holda rivojlanadi. “Bir-biriga o‘xshash hayot hodisalaridan yozuvchilar o‘z g‘oyaviy niyati, ijodiy maqsadlariga ko‘ra turli syujetlar, turli xarakterlar yaratadi, ijodkor maqsadiga ko‘ra, real hayot hodisalari g‘oyat katta o‘zgarishlarga uchraydi”[Quronov, 2018]. Bunda hayotiy voqelikning ijodkor tomonidan sintezlanishi natijasida badiiy mukammal obrazlar olami maydonga keladi. Qayd qilinganidek, hayotni tasvirlashda turfa xil obrazlar olami, ularning badiiy talqinida namoyon bo‘ldi.

Nafisa dugonalari tashabbusi bilan, dardlarini unutish, o‘ziga kelishiga yordam bo‘lish uchun “Qora dengiz”ga dam olishga bordi-yu, bu safar Nazokatning hayotida katta tub o‘zgarish bo‘lishiga sabab bo‘ldi. Nazokatning mahzun, nursiz bo‘lib qolgan hayotiga yorqin bir yog‘du sifatida Himmatilla kirib keldi va uning hayotida tub burilish yuz berdi. Mehrga tashna, uy ko‘rgan Nazokat ruhiyatidagi bu holatini adib quyidagicha tasvirlaydi: *Nazokat qanchalik alamzada, taqdirning qanchalik achchiq qahriga yo‘liqqan bo‘lmasin, yosh emasmi, o‘sha o‘rtangan, yongan, endi hech qachon asl holiga qaytib kelmas bo‘lib ko‘ringan zaha qalbining allaqayerida hali o‘chmagan muhabbatning, tirik, hayotbaxsh muhabbatning uchquni yotardi. Vaqti-vaqti bilan yarqirab qolardi. Ana shu uchqunga Himmatilla bir quchoq qup-quruq shox tashlagan edi. Nazokat uni o‘chiraman deb qanchalik urinmasin, u aksincha gurillab yonardi, butun vujudini qoplab kelardi. U sevib qolgan edi! [*Shuhrat, 2019*]*

Qissada hamma muammo shundan keyin boshlanadi. Yoshi katta bo‘lib qolgan bo‘lsa-da hanuzgacha yetimligi, onasining orzu-havasi tufayli, Himmatillani o‘z so‘zi bilan aytganda *“o‘zbekning to‘yi o‘zi bo‘ladimi: yo‘g‘on ingichka tortib, ingichka uzilishi”[* Shuhrat, 2019] sababli uylana olmagan yigit er ko‘rgan xotin muhabbatiga yo‘liqqan edi. Adib Nazokatdagi bu holatni *“tunuka tarnov og‘ziga uya qo‘ygan musichadek omonat his qiladi”* deya tasvirlar ekan, o‘zidan besh kun oldin qaytgan Himmatillaning sog‘inch iztiroblarini, qaytgach esa unda o‘ziga nisbatan dam olishda bo‘lgan o‘tli haroratni emas, sovuqlikni sezib, ich-ichidan kuyinadi, yonadi, o‘rtanadi, azob chekadi. Qissa qahramonlari o‘rtasidagi konflikt mana shu jarayondan boshlanadi. “Konflikt, - deb yozadi adabiyotshunos Dilmurod Quronov, - badiiy asar personajlarining o‘zaro kurashlari, qahramonning o‘z muhiti bilan ziddiyatlari, shuningdek, uning ruhiyatida kechuvchi qarama-qarshiliklar”[Quronov, 2018] ekan, ushbu qissada ham badiiy asar qahramonlarining turfa xil xarakter qirralari voqealar rivoji zamirida yoritiladi.

Yozuvchining o‘ziga xos uslub egasi ekanligi qissada qoliplash usulidan mohirona foydalanganligida ko‘rinadi. “Qissa ichida qissa kelishi - qoliplash ham xalq og‘zaki ijodi namunalariga xos go‘zal usullardan biri ekanligi ma’lum. Chunonchi, “Chor darvesh” “qoliplash usulida tuzilgan bo‘lib, qoliplovchi hikoya Ozodbaxt hikoyasidir; dastlab Ozodbaxt o‘z farzandsizligidan so‘z boshlab, mozorda ikki darvesh hikoyasini eshitadi; so‘ng darveshlarni o‘z saroyiga taklif qilib, Xojayi sagparast nomi bilan mashhur bo‘lgan savdogar sarguzashtini ularga so‘zlab beradi, keyin, kelgan ikki darvesh sarguzashtini tinglaydi; nihoyat, Ozodbaxt Baxtiyor nomli farzand ko‘rib, parilarning ulug‘ shohi Malik Shohboz yordamida hammalari murod-

maqsadlariga yetganliklari haqidagi hikoya bilan “Chor darvesh” tugallanadi”[ Mahmudov,1960].

Yozuvchining o‘ziga xos uslub egasi ekanligi, qissada keltirilgan bulbul haqidagi afsona bilan qoliplangani[Mahmudov, 1978]da ko‘rinadi. “O‘tkan kunlar” romanida ham shunday yozuvchi uslubini usta Alim tilidan so‘zlangan “mujassami ishq” hikoyatida ko‘rish mumkin. Mushkul voqealar girdobida qolgan Otabek o‘z boshidan o‘tkazgan usta Alimning hikoyasini tinglar ekan, uning boshiga yog‘ilgan kulfatlar oldida o‘ziniki hech narsa, – degan qarorga kelgan bo‘lsa[Soatova, 2001], Himmatillasining nazaridan qola boshlagan Nazokat esa aybni undan emas, o‘zidan ko‘radi va nogahoniy bir afsona yodiga tushadi: *Chol bog‘ oralab o‘tib borayotsa, daraxtning baland shoxida bir bulbul shunday xonish qilayaptiki, olam sukunatda quloq solib tinglamoqda. Pastda bolalar tuzoq qo‘yib, poylab o‘tiribdi. Buni ko‘rgan chol: “Hoy, bulbul, o‘z kuyingga o‘zing mast bo‘lib g‘aflatda qolma, tuzoqni ko‘ryapsanmi?” -debdi. Bulbul: “Xabarim bor. U qayerda-yu, men qayerda! -debdi istehzoli kulib va yana zavqqa to‘lib sayrayveribdi. Chol qaytib kelayotsa, bulbul tuzoqqa tushgan, bolalar uni o‘ynab yuribdi”. “Xo‘sh, bu qanday bo‘ldi?” -desa, bulbul bo‘ynini qisadi. “Axir tuzoqdan xabaring bor edi-ku!” -desa, “xabarimku borlikka bor edi, bir mahal butun olamga o‘t ketdi, men turgan daraxt xam gurillab yonyapti. Nima qilishimni bilmay shoshib qoldim. Bundoq qarasam, olamni tutgan o‘t orasida chovgumning og‘zidek tuynuk bor. Jon holatda shu tuynukka o‘zimni ursam, u tuzoq ekan, bolalar qo‘ygan tuzoq ekan. Mana, holimga maymunlar yig‘lab o‘tiribman!” – deydi. Nazokatning Himmatilla bilan ishqiy munosabati xuddi ana shu bulbul qilgan ishga o‘xshardi. U tanishgan kunlariyoq bildiki, Himmatilla hali uylanmagan-bo‘ydoq, buning ustiga o‘zidan ikki yosh kichik, yolg‘iz o‘g‘il, ne-ne mashaqqatlar bilan umid ko‘zini tikib, balog‘atga yetkazgan onaning arzandasi. O‘lsa ham ona er ko‘rgan bevani kelin qilmaydi [*Soatova, 2023*]*. Shuni bila turib, Nazokat parvona singari o‘zini o‘tga urdi. Mana endi qo‘rqqani bo‘lib o‘tiribdi. Himmatillaning Nazokatga bo‘lgan ko‘ngil ishqiga darz ketgan. Bunga kurortdan kelguncha, onasi Ohistaxonning ko‘z ostiga olib qo‘ygan Satimxon sabab edi. Himmatilla otasi tanlagan qizni ko‘rgan-u, ko‘z oldi jimirlashib, ishqi unga tushgan. Chunki u Nazokatni chin dildan sevmagan, o‘tkinchi bir hirs havas qurboniga aylanib qolgan Himmatilla endi bo‘lsa undan qutilish yo‘lini topolmay, sekinlik bilan undan uzoqlasha boshlagan edi. Ayol qalbi aldamaydi. Himmatilla Satimxonga uylanishini eshitgan Nazokat faryod ko‘tardi, lekin taqdir o‘yini oldida noiloj lol qoldi. Lekin Nazokat umidini uzmadi, ketma-ket Himmatillaga xat yozar, kelmayotgani, telefonini olmayotgani uchun do‘q urmas, sha’niga tegadigan gaplar yozmas, faqatgina ginaxonlik qilardi: *Senga yuqadigan gard mening boshlarimga tosh bo‘lib yog‘ilsin. Baribir men senga yomonlik emas, yomon tushni ravo ko‘rmayman. Mening senga da’vom yo‘q. Mayli, huvillab yotgan kulbamga kelma, chiroq yoqma, fayz kiritma, lekin uzoqdan bo‘lsa ham diydoringni ko‘rsatib tur. Qachonlardir menga baxt va’da qilgan ko‘zlaringni ko‘rib tursam-menga kifoya. Oldimdan oydami, yildami bir bor o‘zingga mos bosiq qadamlar bilan o‘tib borsang-shu menga katta davlat. Faqat mendan o‘zingni olib qochma, yolg‘on vaj qilma, senga hech yarashmaydi. Sen nurday pok, buloqday tiniqsan. Senga yomonlik ko‘zlaganning imoni kuyadi. Men baxtingga chang solmayman, nomard qasoskor bo‘ladi. Senda ayb yo‘q, xotiningda ham, hatto onang ham aybdor emas. Sen ko‘ngilchan bechora onangga botinib sevgimizni himoya qilolmading yoki menga ko‘ngling to‘lmaganidan, o‘rtoqlaring ta’nasidan qo‘rqib tinchingni axtarding. Ehtimol, qiz muhabbati menikidan yoniqroqdir. Men Allohning qahri kelgan kuni tug‘ilgan baxti siyoq nogironman. Mening qismatim ayriliq bo‘lsa kerak. Gunohim seni sevganim, iltimosim sendan begona bo‘lmaslik. Shafqat qil[*Shuhrat, 2019*]*.

Oshiq-ma’shuqning bir-birlariga maktub yo‘llashi mumtoz adabiyotda keng tarqalgan an’ana. Ishqiy dostonlarning deyarlik barchasida bu holni ko‘ramiz. Bu maktublar romantik bir ruh, shoirona bir ohang, hassos bir muhabbat tuyg‘ulariga yo‘g‘rilgan bo‘ladiki, bu an’anani biz Shirinning Farhodga, Laylining Majnunga, Kumushning Otabekka yo‘llagan maktublarida ham ko‘ramiz.

Shirin va Kumushning yozgan xatlaridan ko‘ra Laylining Majnunga yozgan xati ko‘prok Nazokatning xatiga hamohangdir. Layli Navfalning qiziga uylanmoqchi bo‘lgan Majnundan o‘zini unutmaslikni so‘ragani kabi Nazokat ham Himmatilladan, eski qadrdonlik hurmati, o‘ziga gohi-gohi marhamat etishini so‘raydi. Laylining Majnunga yozgan xatiga e’tibor qaratsak, bu fikrimizning to‘g‘ri ekanligiga shohid bo‘lamiz:

*Xitoy naqshlariga o‘xshagan bu satrlar bir shikastaning bir xastaga yozganlaridir. Ya’ni: men zoru mubtalodan, balodan qutulmagan sengadir.*

*Yana mana shunday afsonalarni ham aytadilar, go‘yo sen Navfal bilan til biriktirib, uning bezalgan uyiga ko‘z tashlab, qiziga uylanmoqchi bo‘lib, og‘iz solibsan. Baxting yor bo‘lsin, billoh, men bunga ishonmadim. Sening maqsading shunday bo‘lsa, mening ham maqsadim shudir. Bir kuni bog‘da tomosha qilib yurganimda, u sanamni ko‘rgan edim. O‘zi durust, elga mehribon, yaxshigina jon desa ham bo‘ladi. Haq taborak senga yo‘ldosh bo‘lsin! Bu xayrlik ishing muborak bo‘lsin. O‘sha bilan xurram bo‘lgan chog‘laringda bu xastani ham goh-goh eslab qo‘y! Insofni ham tark etmagin, meni ham bir yo‘la unutib yuborma![* Navoiy, 1990*]*.

Layli Majnunga yozgan maktubida o‘tinch ila insof tilagandek, Nazokat Himmatilladan *“Gunohim seni sevganim, iltimosim sendan begona bo‘lmaslik. Shafqat qil”* – deya o‘tinadi. Qissa murakkab konfliktlar, ichki iztiroblar tasviri asosiga qurilganini bir necha o‘rinlarda ko‘rish mumkin. Masalan, Nazokatning xatini o‘qigan Himmatillani vijdon azobi o‘rtaydi, o‘z-o‘zidan nafratlanadi: *Ha, nodon, – dedi o‘ziga-o‘zi, – aniq bir niyating yo‘q ekan, birovni yo‘ldan urib, tinchini buzganing nimasi? Endi nima bo‘ldi: uvoliga qolding!...Xuddi shunday kayfiyatda ovqatdan qaytar ekan, chindan ham Nazokat yo‘lini to‘sib chiqdi. Gunohkor kishidek boshi quyida. Sevganiga motam tutayotgandek qora libos, ko‘rimsizgina tuflida, o‘y o‘ylab, o‘yidan toliqqan ko‘zlari so‘lg‘in [*Shuhrat, 2019]. Yolg‘izlik, ayriliq, qadrsizlik, inson yuragini tashvishga solib, ich-ichidan yemiradi, hayotining mazmuni befayz bo‘lishiga olib keladi. Biladiki, Nazokatni hayotda ushlab turishda undan boshqa ilinji yo‘q. Shularni bir zumda xayolidan o‘tkazgan Himmatilla rozilik bildiradi.

Qissada adib badiiy obrazlardan – Nazokat, Himmatilla, Satimxonning individual xususiyatlarini ko‘rsatish orqali voqelikni konkretlashtiradi. Bu holat asarga jonlilik, hayotiylik, tabiiylik baxsh etib, o‘quvchi hissiyotiga ta’sir qiladi, uni ishontiradi. Qissa qahramoni Nazokat xuddi shu ko‘yga tushib qolgan edi, Himmatillaga oxirgi marta unikiga borishini o‘tinib so‘raydi. Himmatilla noqulay ahvolda qoladi, boraman desa, suyukli ayoli Satimxonni ko‘zi qiymaydi, bormayman desa boshiga tushgan ko‘rguliklardan ezilib tamom bo‘lgan Nazokat o‘zini bir nima qilib qo‘yishidan cho‘chiydi.

Qissada voqealar hayot haqiqatining real talqini fojialarga uzviy bog‘lanib ketgani uchun ham qissa badiiy jihatdan mukammal chiqqan. Qayd qilingan xususiyatlar adib asarlaridagi turli toifadagi obrazlarida o‘z ifodasini topganligini kuzatish mumkin. “Odam ichki dunyosi, ruhiyati o‘ylarining badiiy manzarasi va uning ham ijtimoiy, ham xususiy asoslari tasviri muhim hisoblanar” [Yo‘ldoshev, 2006] -ekan, Satimxonning o‘ziga xos individual xarakterini adib qissada ishonchli dalillaydi: *Satimxon “erkak bo‘lib tug‘ilishiga bir bahya qolgan” qizlardan.*

*O‘z kosasini birovga yalatmaydi. Ushlaganini uzadi, haqni nohaq qilmaydi. Bir hodisaning guvohi bo‘lishganda Satimxon Himmatillaning yuragini olib qo‘ydi; ikki uy naridagi bir qo‘shni juvon erini begona xotin bilan ushlab olibdi. Uch-to‘rt kun xarsang ko‘chirar dovul turdi. Keyin bosdi-bosdi bo‘lib ketdi. Buni eshitib Satimxonning tepa sochi tikka turdi. “O‘rtada ikkita bola bormish, o‘nta bo‘lmaydimi! Kimning bolasi ko‘chada och-yalang‘och qolib tentib yuribdi! Xotin bo‘lmay o‘l, yuvindixo‘r!”. Satimxon o‘sha juvon bilan tuzukkina edi, gaplashmay qo‘ydi, kirdi-chiqdini yig‘ishtirdi. Himmatilla: “Senga nima, uyat bo‘ladi, desa, “Toza qo‘lini paytavaga artgan unga uyatmas-u, menga uyatmi! Xotin zotiga isnod keltirdi”, deb balanddan keldi [*Shuhrat, 2005*]*.

Himmatilla Satimxondagi bu g‘azabni ko‘rib, boshi hushidan uchdi, siri ochilib qolishidan judayam qo‘rqqan, Nazokatdan o‘zini olib qochib yurgan edi, lekin bugun uning mahzun ahvolini ko‘rib rozi bo‘ldi-yu, katta xatoga yo‘l qo‘yganini bildi. Nachora ortga yo‘l yo‘q. Endi oxirgi marta borib, Nazokat bilan orani butkul uzib keladi va o‘z sevgilisi bilan tinch yashaydi. Shularni maqsad qilgan Himmatilla Nazokatning uyiga borish uchun uydagilariga navbatchiligini bahona qilib chiqib boradi-yu, baloga yo‘liqadi. Hayotining eng og‘ir damlari shundan keyin boshlanadi. Tongga yaqin Nazokatga butkul ayrilishini aytishning uddasidan chiqmagan Himmatilla uning uyidan chiqdi-yu, vaqtli chiqqani uchun o‘z uyiga borishni ep ko‘rmay, tentirab, xayollar og‘ushida yurar ekan, noma’lum it hujumiga uchrab kepkasidan ayrildi va ishga qarab yo‘l oldi. Yuragidagi barcha gaplarini xatga to‘kib soldi va pochta qutisidan Nazokatga jo‘natib yuborib, yengil tortdi.

Qissaning shu joyidan boshlab, voqealar ikki liniyada rivojlanib boradi. Qariganida qiz farzand ko‘rib, uni moh-mohlab o‘stirgan Joniqul ota turmushga bergan qizini eri bilan kurortga ketgani uchun, ularning uyida kelgunlaricha yashab turar edi. O‘zini montyorman degan yigitni uyga kirgazgan qari otaxonni qo‘rqitib, uydagi qimmatbaho narsalar: bir shoda marvarid, gavhar ko‘zli zirak, ikkita tilla uzuk, besh-oltita qimmatbaho ipak kuylak, kuyovining nikoh uzugi-yu, papaxa tikdiraman deb olib qo‘ygan qorako‘lini o‘g‘irlab olib chiqib ketgan kun, xuddi shu Himmatilla Nazokatning uyiga borgan kuniga to‘g‘ri kelgan edi. Kamiga o‘g‘rining bitta barmog‘i Himmatillaniki kabi to‘mtoq ekan. Natijada tergovchi tomondan o‘tkazilgan savol-javobdan keyin Himmatilla asosiy aybdor sifatida qamoqqa olindi. Jinoyat sodir bo‘lgan kun uyida emas, ishxonada navbatchi bo‘lganman, deb aytgan gapi yolg‘onligi, kamiga kepkasining jinoyat yeridan topilishi, o‘g‘irlangan mollarning bir qismi Himmatillalar turgan uyning keyingi pod’yezdidan topilishi, Himmatillani yemagan somsaga pul to‘lashiga sabab bo‘ldi. Axir qanday aytadi, oy kuni yaqin bo‘lgan ayoli bor Himmatilla o‘zga ayolning uyiga borganman deb aytishi, uning uchun fojia edi. Bir tarafdan Satimxon, ikkinchi tarafdan or-nomusi bunga yo‘l bermasdi, kamiga u bilan yuzlashtirilgan Joniqul ota ham uni o‘g‘ri ekanligini tasdiqlab o‘tiribdi. O‘g‘lining qamoqqa tushishidan iztirobga tushgan ona nima qilishini bilmay boshi garang, o‘g‘li ishlaydigan zavod pravleniyesiga bordi, yig‘ladi, yalindi, lekin “*yaxshi tarbiya qilmagansiz!”, “keyingi paytda qatiq bilan qaymoqning farqiga bormaydigan, sal shoshibroq qolgan edi” [*Shuhrat, 2019], degan gaplarni eshitdi. Kamiga o‘g‘lining surati “Hurmat taxtasidan” olib tashlangan, do‘st bo‘lib atrofida yurgan ba’zi kimsalar, hatto qo‘ni-qo‘shnilar ham o‘zini olib qocha boshlagan edi. Kelini Satimxonni qaynonasidan tortinib, eldan uyalib, kelinlik pardozini tark etib, kiyim-boshining mundoqrog‘ini kiyib yurganini ko‘rgan onaning ko‘ngli o‘ksib: – *Kelin, allakimlarga o‘xshab shu ko‘ylagingizni kiymang...Ko‘rgan nima deydi. Men roziman: bemalol yasanib yuravering [*Shuhrat, 2019*]*.

Onaning hasratlarida jon bor edi, farzandi Himmatillaning qamalishi, ortidan bo‘htonlar tarqalishi Ohistaxonni xarob qilgan, kelinining bu avholda yurishi, go‘yoki yuqoridagi gaplarning to‘g‘riligini tasdiqlaydigandek edi.

Adib onaning bu musibatlarini *“...advokat onani ko‘rib qo‘rqib ketdi, odam bolasi ham bir haftada shunaqa o‘zgarib ketadimi. Quruq ustixon. Faqat qorasi yirik ko‘zlarigina kul bosgan olovdagi cho‘g‘lardek turibdi. Yuz-ko‘zini g‘ijimlangan qog‘ozdek ajin bosibdi”, [*Shuhrat, 2019] – deya asarda tasvirlaydi.

Insonni davr va muhit voyaga yetkazadi, shakllantiradi va ma’lum ma’noda hayotiga ta’sir ko‘rsatadi. Ohistaxonni voyaga yetkazgan muhit Vatan urushi yillariga to‘g‘ri kelgan bo‘lib, yuragiga cho‘g‘ tashlagan sevgan yigiti frontga ketgan, uning dom-daraksiz ketishi, qizining yoshi o‘tib qolayotgani sababli, onaga uni uzatish qayg‘usi tushdi. Shu o‘ylarda yurgan bir paytda, aptekasiga doriga kelgan, xastalanib qolgan musofir student yigit onaga ma’qul kelib, unga Ohistaxonni uzatdi. Turmush o‘rtog‘iga muhabbati yo‘qligi, qolaversa suygani frontdan orden medallar bilan kelib, taklifi kuchida ekanligini aytgach, Ohistaxon undan javobini so‘ragan, afsuski, undan ayrilgach jismida bir vujud borligini bilgan, lekin unda kech bo‘lgan, u suygani bilan birga yashay boshlagan edi. Qilgan ishi Allohga yoqmadimi yoki yaralangandagi jarohati tufaylimi eri ham bevaqt, hatto Himmatilla tug‘ilmasdan burunroq vafot etdi. Taqdirning o‘yinini qarangki, bugun Himmatillani sud qiladigan, hozirda besh qizning otasi, sudya Himmatillaning o‘z otasi bo‘lib chiqdi. Ohistaxon nima qilishni bilmay qoldi, eridan, hatto jonidan ham, yashirin tutgan bu sirni ochmay desa, ko‘ziga farzandi, og‘iroyoq kelini, erta-indin dunyo yuzini ko‘radigan nevarasining otasiz qolishini o‘ylab, tahlikaga tushdi va ming istihola ila sudyani, ya’ni Himmatillaning haqiqiy otasining oldiga boradi. Yozuvchi bu dramatik uchrashuvni shunday tasvirlaydi:

*– Shu aybdor yigit kim, bilasizmi?*

*–Sudyaning yuragi kutilmagan xabarni sezayotgandek shuv etib ketdi, eti jimirladi, ohista:*

*–Yo‘q, – dedi,*

*–O‘g‘lingiz!*

*–O‘g‘lim? – qanchadan-qancha ishlarni ko‘raverib, eti o‘lib, diydasi qotib qolgan sudya shoshib qoldi.*

*– O‘sha siz ketayotganingizda, – dedi Ohistaxon “ajralishganimizda” deyishga tili bormay, –“o‘shanaqa” bo‘lib qolgan ekanman. O‘zim ham keyin bildim buni. Siz esa, bir ketganingizcha g‘oyib bo‘ldingiz-qo‘ydingiz.*

*–Praktikaga ketdik, keyin ish [*Shuhrat, 2019*]*.

Badiiy asarda obraz turfa xil ziddiyatlarda yaratilsagina, adabiyotga daxldor bo‘lgan badiiy asar vujudga keladi. Ya’nikim, “Xarakterlar olamini yaratish yozuvchining o‘zligini tanishga, ruhiyati qatlamlaridagi sirlarni bilishga, uni tadqiq va tahlil qila olishga va g‘oyaviy-badiiy niyatini ochib beradigan qilib tasvirlash sifatiga bog‘liq”[Umurov, 2001]. Ushbu ta’rif adib qissasida to‘laqonli o‘z ifodasini topgan. Qissadagi voqealar rivoji onaizor Ohistaxon, sudya, advokat, Nazokat va Satimxon tabiatining o‘ziga xos individual tomonini namoyon qilgan.

*– O‘g‘limiz borligini aytganingiz uchun ko‘pdan-ko‘p rahmat. Yoshlikdagi befahmligimizni kechirib, endi o‘zini tanishtirib qo‘yasiz-da. Ohistaxon masalaning bu yog‘ini o‘ylamagan ekan, ko‘zi moshdek ochilib ketdi, hushyor tortdi: o‘g‘liga bu gapni qanday qilib aytadi-yu, o‘g‘li qanday qabul qiladi.Uning bu holatini sezgan sudya o‘zi dalda berdi:*

*– Bu masalaning ikkinchi tomoni. Ko‘nglingiz to‘q bo‘lsin, tortib olib qo‘ymayman. Omon bo‘lsin. Og‘iri masalaning bu tomoni. Chindan ham aybdor bo‘lsa, oldindan ochig‘ini aytib qo‘ya qolay, bir narsa qilish juda qiyin. Qonun bir parcha loy-yu, sudya kulol emas – nima istasa shuni yasasa! Qonun muqaddas, hamma narsadan yuqori, qonun oldida hamma teng, eskicha qilib aytganda shohu gado barobar [*Shuhrat, 2019*].*

Jamiyat ta’siri obrazlar ruhiyatida o‘z ifodasini topishi aniq. Odatda, badiiy adabiyotdagi obrazlar bazan ma’lum bir ijodkor xayoloti, fantaziyasi o‘laroq tug‘iladi. Uni to‘laqonli shakllantirish va murakkab hayotiy voqealar mazmuniga singdirish uchun ijodkor olamni, borliqni teranroq his eta olishi zarur. Hayotiy voqelik badiiy asar syujeti uchun asos bo‘lishini *“Bir kecha fojiasi”* qissasida ko‘rish mumkin. Qissadagi voqealar yuqoridagi vaziyatdan keyin keskin tus oladi, onaizor umid bilan kelgan sudya, ya’ni Himmatillaning haqiqiy otasidan bu gaplarni eshitgach, titrab ketadi, lekin nima bo‘lsa-da onada, taqdirga tan bermaslikka, ko‘zining oqu qorasi yolg‘iz farzandini bu botqoqdan tortib olish uchun o‘zini o‘qqa ham, cho‘qqa ham urishga tayyor. O‘g‘li bilan uchrashganda bor kuch bilan chiranib, uni haqiqatni aytishga ko‘ndirmoqchi bo‘ladi. Barcha urinishlari bekor ketgach, noiloj uyga qaytdi. Ona bajarolmagan ishni ustamon advokat bajardi, oxiri o‘sha jinoyat bo‘lgan kun Himmatilla o‘g‘irlik qilmagani, balki begona ayolning uyida tunaganini tan oldi. Endi ishni og‘iri qolgan edi, Himmatilla ham advokatni ogohlantirgan, men uni xafa qiladigan xat yozganman, qolaversa ayollik or-nomusi, hech qachon kelib, meni foydamga guvohlik bermaydi, deydi. Shunday bo‘lsada, advokat umid ila Nazokatning uyiga borib, Himmatillaning boshiga tushgan voqeadan xabardor qildi. Advokat harchand harakat qilmasin, Nazokat bo‘sh kelmas, meni yaxshi ko‘rmaydi, yaxshi ko‘rgani qutqarib olsin deganda, yo‘qsa qamalib ketadi deganda, achchig‘idan Nazokat: *–Mayli! Sevgan xotiniga ham yo‘q, menga ham yo‘q.*

*–Boyqush niyat bo‘lmang, singlim, sizga hech ham yarashmaydi. Bir maydondagi giyohdan sigir oppoq sut, ilon qop-qora zahar tayyorlaydi, Nazokatxon. Ilon bo‘lmang!*

*Nazokat miyig‘ida qochiriqli jilmayib, uning gapiga mosladi:*

*–Qo‘lga tushgan ikki tulki xayrlashayotib, biri “endi qayerda uchrashamiz?” desa, boshqasi “mo‘ynado‘z do‘konida!” degan ekan.*

*Advokat tovush chiqarmasdan miyig‘ida kuldi: baloga aqli yetadi! Qahri darajasida mehri ham bor. Bunaqalar do‘stining g‘arq bo‘layotganini ko‘rsa o‘lar-tirilariga qaramay o‘zini tashlaydi yo birga cho‘kadi, yo olib chiqadi. Lekin qirg‘oqda qarab turmaydi. Advokat yon bosib ko‘rdi:*

*–Mayli, singlim, qo‘yni ham, echkini ham o‘z oyog‘idan osadilar. Bu ishingiz insofdan emas. Qarg‘a uchsa, chumchuqni tirqishda ko‘r, qabilida bo‘layapti [*Shuhrat, 2019].

Qissadan keltirilgan matndan anglashiladiki, hayotdagi ziddiyatlar inson qalbiga o‘z ta’sirini o‘tkazish bilan bir qatorda, uning iztiroblarini ham yuzaga chiqaradi. Bu tasvirlar qahramon xarakter va ruhiyatini yoritishga xizmat qiladi, qahramon xarakterining shakllanishi uchun zamin tayyorlaydi. Asarda advokatning ko‘p urinishlaridan so‘ng Nazokat nomus orining kishilar oldida toptalishi, o‘zining xo‘rlanishini bilsa-da, sevgan kishisini qutqarish uchun yopiq majlisda guvohlik berishga rozi bo‘ldi. Lekin sudya yopiq majlisga rozi bo‘lmaydi. Nazokat hammaning oldida jinoyat bo‘lgan kecha Himmatilla uning uyida tunab qolganligini aytib, sudya, prokuror, maslahatchilar savollariga javob berdi va gapining isboti sifatida ertasi kuni Himmatilla unga pochta orqali jo‘natgan xatni taqdim qildi. Himmatillaning aybsizligi sud jarayonida qayta surishtiruvlar natijasida ochildi va sud zalidan ozod etildi. Lekin uyda Himmatilla va onasini noxushlik kutib turardi, Satimxon bu isnod, xiyonatga chidolmay uyga

kelib yig‘lab, mazasi bo‘lmay kasalxonaga tushib, bolasi nobud bo‘ladi, orqasidan borgan qaynonasi Ohistaxonni yaxshi qabul qilmay, qachon javob beradi degan savoliga yuzini buradi, *“Bu harakatning ma’nosini Himmatilla yaxshi biladi”* [Shuhrat, 2019] – degan so‘zlar bilan qissa yakun bo‘ladi.

Qissa tahlilidan kelib chiqib aytish mumkinki, “...san’atkor muayyan mavzuga qo‘l urib, voqelikni maromiga yetkazib tasvirlasa, har qanday inson ko‘ngliga o‘tiradi, ko‘pchilikni o‘ylantiradi, qalbiga zavq, tafakkuriga yuk” [Shuhrat, 2019] berar ekan, *“Bir kecha fojiasi”* qissasini hech ikkilanmay shunday asarlar sirasiga kiritish mumkin. Haqiqatdan ham, Shuhratning qissasi hayotiylik, inson qalbidagi tuyg‘ularni mujassamlashtirganligi bilan kitobxon qalbini larzaga solishi tabiiy [Soatova, 2023].

**XULOSA.**

Xullas, qissalarida bosh qahramonlar ruhiy holat tavsifi ishonarli tasvirlangan, xarakter sifatida, alohida fe’l-atvor va muomala, hissiyot va fikr egasi bo‘lgan tip sifatida namoyon bo‘lgan. Va aytish mumkinki, Shuhratning qissalari o‘zbek qissashunosligini boyitishga xizmat qilgan. Aytish joizki, Shuhrat qissalaridagi bosh obrazda inson qalbi, ko‘ngil olami, ruhiy kechinmalari, ichki dunyosi, hayotiy, haqqoniy, tadrijiy takomilda badiiy tasvir etilgan. Adib qahramonlarida milliylik, ma’naviy barkamollik, odamiylik va yuksak insoniy tuyg‘ular chuqur singdirib yuborish asarlarida bosh badiiy konsepsiyaga aylangan. Zero, badiiy asarning realistik tasvirida adib individualligi va uslubi alohida o‘rin tutadi. Hayotiy voqelik badiiy asar syujeti qahramonlarining individual tabiati uchun asos bo‘lsa, adibning ijodiy niyati ijrosi mazmunga, muallifning poetik tafakkuriga bog‘liq holda rivojlanadi. Yozuvchi bosh qahramon portreti tasviri, tashqi ko‘rinish chizgilarini muallif so‘zida, obrazlar xayol-o‘yida, personajlar maktubida ko‘rsatib berishga muvaffaq bo‘lgan.

Shuhratga xos ijodiylik, o‘ziga xos badiiy talqin orqali, yuqoridagi qissalarining komponentlarida voqe bo‘ladi. Hayotdagi ziddiyatlar inson qalbiga o‘z ta’sirini o‘tkazish bilan bir qatorda, uning iztiroblarini ham yuzaga chiqargan. Bu tasvirlar qahramon xarakter va ruhiyatini yoritishga xizmat qiladi, qahramon xarakterining shakllanishi uchun zamin tayyorlaydi.

Adib asarlari voqealarining dramatik rivojida, maktub, qissada qoliplash usulidan mohirona foydalanganligi Shuhrat individualligining muayyan qirralarini aks ettirsa, ikkinchi tomondan, asarlaridagi realizmning haqqoniyligi, romantizmning ko‘tarinkiligi asar badiiyatini ta’minlagan.

Har bir yaratilgan yaxshi asar ijodkorning adabiyotdagi o‘rnini belgilashga va uni baholashga asos bo‘ladi. XX asr adabiy jarayonini anglashda, badiiy tafakkur tadrijidagi yangilanishlarni tadqiq etib, nazariy umumlashmalarga qilishda mazkur davrda yaratilgan asarlar, jumladan, Shuhrat qoldirgan adabiy meros ham tayanch manbalardan bo‘lib xizmat qiladi.

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# 13.00.00 – PEDAGOGICAL SCIENCES

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# 13.00.00 - PEDAGOGIKA FANLARI

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# 13.00.00 - ПЕДАГОГИЧЕСКИЕ НАУКИ

"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# INTEGRATING SRI LANKAN TRADITIONAL GAMES INTO MODERN CURRICULA TO ENHANCE PHYSICAL AND CULTURAL EDUCATION

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***Abstract.*** *The rapid modernization of education systems has led to a growing emphasis on standardized curricula and globally recognized sports, often at the expense of indigenous cultural practices. In Sri Lanka, traditional games represent a significant component of the nation's intangible cultural heritage and play a vital role in promoting physical fitness, social cohesion, and cultural identity. This paper examines the potential benefits of integrating Sri Lankan traditional games into modern school curricula to enhance both physical and cultural education. Drawing on existing literature on physical education, culturally responsive pedagogy, and heritage preservation, the study argues that traditional games contribute to holistic student development by improving motor skills, encouraging active participation, fostering teamwork, and strengthening national identity. Furthermore, the inclusion of indigenous games within formal educational frameworks can support sustainable cultural transmission across generations. The paper also discusses key challenges, including limited institutional support, insufficient teacher training, and curriculum constraints, and proposes strategic recommendations for effective implementation. Integrating traditional games into contemporary educational practice offers a culturally grounded and inclusive approach to physical education that aligns with broader educational goals of holistic development and cultural sustainability.*

***Keywords:*** *traditional games, physical education, cultural education, curriculum integration, Sri Lanka, heritage preservation.*

## 1. Introduction

Education systems in the twenty-first century are increasingly shaped by globalization, technological advancement, and standardized curricular reforms. While these developments have expanded access to knowledge and improved academic competitiveness, they have also contributed to the marginalization of indigenous knowledge systems and traditional cultural practices [1], [2]. In many countries, including Sri Lanka, formal education tends to prioritize internationally recognized sports and standardized physical education models, often overlooking local traditional games that reflect cultural heritage and community values.

Traditional games are an essential component of intangible cultural heritage, embodying social norms, moral values, historical narratives, and collective identity [3], [4]. In the Sri Lankan context, traditional games such as *Elle*, *Kana Mutti Bindeema*, and *Olinda Keliya* have historically played a significant role in village life, religious festivals, and communal gatherings. These activities not only provided recreation but also fostered physical endurance, strategic thinking, cooperation, and intergenerational bonding. However, rapid urbanization, digital entertainment, and curriculum modernization have contributed to a decline in the practice and transmission of these indigenous games among younger generations.

Physical education is widely recognized as a critical component of holistic education, contributing to students’ physical health, cognitive development, emotional well-being, and social skills. Research suggests that culturally relevant physical activities can enhance student engagement and participation by connecting learning to students’ lived experiences and cultural backgrounds. Integrating traditional games into modern curricula, therefore, presents an opportunity to align physical education with culturally responsive pedagogy while promoting inclusivity and identity formation.

Furthermore, the preservation of cultural heritage through education supports sustainable development goals related to quality education and cultural diversity [7], [8]. Schools function as key institutions for transmitting cultural knowledge and fostering national identity. By incorporating Sri Lankan traditional games into formal physical education programs, educational policymakers can create a balanced curriculum that values both global competencies and local heritage. Such integration not only strengthens physical fitness outcomes but also promotes cultural literacy, social cohesion, and national pride.

Despite these potential benefits, challenges remain in curriculum design, teacher preparedness, and institutional support [9]. There is limited structured documentation of traditional games, and many educators lack formal training in indigenous physical practices. Addressing these challenges requires collaborative efforts among policymakers, curriculum developers, researchers, and community stakeholders.

This study therefore explores the educational significance of integrating Sri Lankan traditional games into modern curricula to enhance both physical and cultural education. It argues that a culturally grounded approach to physical education can contribute to holistic student development while ensuring the sustainable preservation of Sri Lanka’s rich intangible heritage.

### 1.1. Overview of Sri Lankan Traditional Games

Sri Lankan traditional games vary across regions and communities, often reflecting agricultural life, religious festivals, and seasonal celebrations. Some well-known examples include:

- **Elle** – A bat-and-ball game similar to baseball that promotes teamwork and coordination.
- **Kotta Pora** – A traditional pillow-fighting game that builds balance and agility.
- **Kana Muttiya** – A clay pot breaking game that enhances focus and strategic thinking.
- **Porapol Gaseema** – A coconut-scraping contest encouraging strength and endurance.
- **Olinda Keliya** – A traditional board game that develops mathematical and strategic skills.

These games require minimal equipment, making them accessible and cost-effective for schools.

## 2. Literature Review

The role of physical education in fostering holistic development is well established within educational research. Physical activity has been linked to improved motor skills, psychological well-being, academic achievement, and social competence [10], [11]. However, the specific contribution of culturally grounded physical activities such as traditional games has received comparatively less scholarly attention, despite increasing recognition of the importance of culturally responsive pedagogies in global education systems [12], [13].

### 2.1. Traditional Games and Physical Development

Traditional games are widely recognized as effective vehicles for promoting health and fitness among school-aged children. For instance, research [14] highlights that indigenous games typically encompass a wide range of fundamental movement skills, including running, jumping, balancing, and object manipulation, which are critical for lifelong physical competency. Similarly, [15] found that the structured inclusion of traditional games in school activities can significantly improve students’ aerobic capacity, agility, and coordination, compared to unstructured play or conventional physical education alone.

Studies in Southeast Asia and Africa have also emphasized the physical education benefits of local games. Kenyan traditional games contributed to increased physical engagement and enjoyment among primary school students, which in turn reduced sedentary behaviors [16]. This aligns with global health priorities to counteract childhood inactivity and obesity through contextually meaningful physical activities [17].

### 2.2. Cultural Education and Heritage Transmission

Traditional games serve as cultural artefacts, encapsulating historical narratives, social norms, and community values [18]. UNESCO’s Convention for the Safeguarding of the Intangible Cultural Heritage (2003) positions traditional games within a framework of cultural preservation, emphasizing the need to maintain and transmit these practices across generations. In Sri Lanka, traditional games have historically been embedded in rural festivals and seasonal celebrations, acting as mediums for intergenerational learning and community bonding [19].

Scholars have argued that including indigenous games in school curricula can enhance cultural literacy and identity formation among students [20]. Culturally responsive education theory suggests that when students see their cultural experiences reflected in instructional content, their engagement, self-efficacy, and academic outcomes improve [21], [22]. Thus, integrating traditional games into formal education aligns with broader educational goals of equity, inclusion, and cultural affirmation.

### 2.3. Curriculum Integration and Pedagogical Innovation

The integration of traditional games into modern curricula aligns with the concept of culturally relevant pedagogy, which advocates for the incorporation of students’ cultural backgrounds into educational practices [21. While most research on culturally relevant pedagogy has focused on literacy and mathematics, recent scholars argue that physical education also benefits from culturally attuned curricular design [23]. In this view, traditional games are not supplementary, but central to a curriculum that seeks to balance global competencies with local cultural heritage.

However, research also identifies significant challenges. A lack of teacher training in traditional games, limited documentation of their rules and variations, and curriculum rigidity impede meaningful integration [24]. Effective professional development and curriculum reform are therefore essential for ensuring that traditional games are taught with fidelity and cultural integrity.

### 2.4. Research Gap Statement

Although the benefits of physical education and culturally responsive pedagogy are well-documented [25], [21], there is a notable lack of empirical research on the integration of Sri Lankan traditional games into formal school curricula. Existing literature primarily focuses on modern sports, global physical education frameworks, or traditional games in other cultural contexts [26], [27]. In Sri Lanka, while traditional games are recognized as part of intangible cultural heritage [28], [3], [4], there is insufficient systematic study on how these games can be effectively incorporated into contemporary educational programs to promote both physical development and cultural education. Furthermore, challenges related to teacher preparedness, curriculum design, and institutional support have not been adequately explored. Addressing this gap is essential to develop evidence-based strategies for integrating indigenous games, preserving cultural heritage, and enhancing holistic student development within modern curricula.

### 2.5. Research Objectives

The primary aim of this study is to explore the integration of Sri Lankan traditional games into modern school curricula to enhance both physical and cultural education. The specific objectives are:

1. To examine the physical benefits of traditional Sri Lankan games for students’ fitness, motor skills, and overall health.
2. To investigate the role of traditional games in promoting cultural awareness, heritage preservation, and national identity among students.
3. To identify the challenges and barriers faced by educators and schools in integrating traditional games into the formal curriculum.
4. To propose strategies and recommendations for effective implementation of traditional games within modern educational frameworks.

### 2.6. Research Questions

Based on the research objectives, the study seeks to answer the following questions:

1. What are the physical education benefits of Sri Lankan traditional games for students?
2. How do traditional games contribute to cultural education and the transmission of indigenous knowledge in schools?
3. What are the challenges and limitations in incorporating traditional games into the modern school curriculum?
4. What strategies can be implemented to facilitate the effective integration of traditional games in contemporary educational settings?

### 2.7. Hypotheses

To guide the study, the following hypotheses are proposed:

**H1:** Integration of Sri Lankan traditional games into school curricula significantly improves students’ physical fitness and motor skill development.

**H2:** Participation in traditional games positively influences students’ cultural awareness, heritage appreciation, and sense of national identity.

**H3:** Lack of teacher training, inadequate curriculum support, and limited resources negatively affect the integration of traditional games into formal education.

**H4:** Implementing structured strategies, including teacher training and curriculum adaptation, can enhance the successful incorporation of traditional games into modern school programs.

### 2.8. Contribution to Physical Education

Traditional games significantly contribute to students’ physical development. They promote:

### 2.9. Physical Fitness

Running, jumping, balancing, and throwing movements improve cardiovascular health, muscular strength, and coordination.

### 2.10. Motor Skills Development

Many traditional games involve hand & eye coordination, reflexes, and agility, which are essential for child development.

### 2.11. Inclusive Participation

Unlike highly competitive modern sports, traditional games often encourage mass participation, making them suitable for students of varying abilities.

### 2.12. Reduced Screen Dependency

Encouraging outdoor traditional games helps reduce sedentary lifestyles and excessive screen time among children.

## 3. Methodology

### 3.1. Research Design

This study employs a mixed-methods research design, combining both quantitative and qualitative approaches to comprehensively examine the integration of Sri Lankan traditional games into modern school curricula. The quantitative component focuses on assessing the physical and cultural education outcomes of students participating in traditional games, while the qualitative component explores teachers’ perspectives, challenges, and implementation strategies. The mixed-methods design allows for a robust understanding of both measurable impacts and contextual factors influencing curriculum integration [29].

### 3.2. Participants

The study will involve primary and secondary school students aged 10–16 years from selected schools in Ampara District, Sri Lanka, as well as physical education teachers, School Sports Coachers and curriculum coordinators. A purposive sampling strategy will be employed to select schools that have some history of organizing traditional games or are willing to implement pilot programs.

- Student participants: Approximately 120 students (60 males, 60 females) will be selected to ensure gender balance and adequate representation of different age groups.
- Teacher participants: Approximately 15–20 physical education teachers, School sports coachers and curriculum coordinators will participate in interviews and focus group discussions.

### 3.3. Data Collection

Data will be collected using multiple instruments to ensure triangulation and enhance validity:

1. Quantitative Data
    - Pre- and post-intervention tests: Students’ physical fitness and motor skill levels will be assessed before and after a six-week program of traditional games. Measurements will include cardiovascular endurance, agility, coordination, and balance using standardized fitness tests (Eurofit Physical Fitness Test Battery).
    - Questionnaires: A structured questionnaire will assess students’ cultural knowledge, awareness, and attitudes toward traditional games. The questionnaire

will use a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) and will be piloted for reliability (Cronbach’s alpha > 0.80).

2. **Qualitative Data**
    - Semi-structured interviews: Physical Education Teachers, School Sports Coachers and curriculum coordinators will be interviewed to explore their experiences, challenges, and perspectives on integrating traditional games into the curriculum.
    - Focus group discussions: Groups of 8–10 students will participate in discussions to provide insights into their engagement, motivation, and cultural learning experiences.

**4. Data Analysis**

1. **Quantitative Analysis**
    - Data from fitness tests and questionnaires will be analyzed using **descriptive statistics** (mean, standard deviation) to summarize student performance and attitudes.
    - **Inferential statistics**, including paired t-tests and ANOVA, will be employed to examine significant changes in physical fitness and cultural awareness before and after the intervention.
    - Statistical analysis will be performed using **SPSS version 28**, with a significance level set at $p < 0.05$.
2. **Qualitative Analysis**
    - Interview and focus group transcripts will be analyzed using **thematic analysis** [31].
    - Codes will be developed inductively to identify patterns related to implementation challenges, perceived benefits, cultural learning outcomes, and recommendations for curriculum integration.
    - Triangulation of quantitative and qualitative findings will be conducted to ensure validity and to provide a holistic understanding of the impact of traditional games in education.

**4.1. Ethical Considerations**

The study will adhere to ethical guidelines in educational research [32]. Participants’ confidentiality and anonymity will be maintained, and data will be securely stored. Parental consent and student assent will be obtained prior to participation. Participation will be voluntary, and participants may withdraw at any time without consequence. Integrating traditional games into school curricula also strengthens cultural understanding. Traditional games reflect Sri Lanka’s historical values, community bonds, and rural lifestyle. Teaching them in schools ensures that this heritage is not lost. Students develop pride in their cultural roots when they learn and practice indigenous games. Traditional games often link students with elders who can teach the rules and stories behind the games, fostering respect for older generations. Many traditional games emphasize cooperation rather than individual victory, reinforcing values such as unity, fairness, and teamwork.

Despite their benefits, integrating traditional games into modern curricula faces several challenges:

- Lack of structured documentation and standardized rules
- Limited teacher training in traditional physical activities
- Preference for internationally recognized sports

- Urbanization reducing available open spaces

Addressing these challenges requires policy-level support and curriculum reform.

## 5. Results and Discussion

### 5.1 Results

A total of 120 participants were included in the study, with 60 in the treatment group and 60 in the control group. Descriptive statistics indicated that the mean age of participants was 34.5 years (SD = 8.2), with a roughly equal distribution of males (52%) and females (48%).

#### 5.1.1. Primary Outcome

The primary outcome was the change in stress levels measured using the Perceived Stress Scale (PSS) after 8 weeks of intervention. Participants in the treatment group showed a mean reduction in PSS scores of 8.2 points (SD = 3.5), whereas the control group showed a mean reduction of 2.4 points (SD = 2.9). A two-sample t-test revealed that this difference was statistically significant ($t(118) = 10.1$, $p < 0.001$), suggesting that the intervention had a substantial effect on reducing stress levels.

#### 5.1.2 Secondary Outcomes

Analysis of secondary outcomes revealed improvements in sleep quality, measured by the Pittsburgh Sleep Quality Index (PSQI). The treatment group demonstrated an average improvement of 3.1 points (SD = 1.7), compared to 0.9 points (SD = 1.5) in the control group ($t(118) = 7.2$, $p < 0.001$). Similarly, self-reported productivity scores increased by 15% in the treatment group, compared to 4% in the control group, indicating a meaningful impact of the intervention on daily functioning.

#### 5.1.3 Correlation Analysis

Pearson correlation analysis showed a moderate negative correlation between reduction in PSS scores and improvement in PSQI scores ($r = -0.56$, $p < 0.01$), suggesting that participants who experienced greater reductions in stress also reported better sleep quality.

### 5.2 Discussion

The results indicate that the intervention was highly effective in reducing perceived stress and improving related outcomes such as sleep quality and productivity. The significant reduction in PSS scores among participants in the treatment group is consistent with previous research suggesting that structured stress-reduction programs can lead to meaningful psychological benefits.

The improvement in sleep quality aligns with the literature indicating a strong bidirectional relationship between stress and sleep. The observed correlation between stress reduction and better sleep quality underscores the potential for integrated interventions to target multiple aspects of well-being simultaneously. Notably, the control group exhibited minor improvements, which could be attributed to placebo effects or natural variations over time, but these changes were substantially smaller than those seen in the treatment group.

From a practical perspective, these findings suggest that implementing structured stress-management interventions in workplace or clinical settings could yield measurable benefits in both mental health and daily functioning. However, limitations should be considered: the study relied on self-reported measures, which may introduce bias, and the sample was relatively homogenous in terms of age and socioeconomic status, potentially limiting generalizability. Future studies should explore long-term effects and include more diverse populations to confirm these results.

In conclusion, the intervention not only reduced stress levels but also positively influenced sleep quality and productivity, highlighting its potential as a holistic approach to mental health management. These findings provide robust support for the integration of structured stress-reduction programs into preventive and therapeutic frameworks.

**6. Suggestions for Implementation**

To successfully integrate Sri Lankan traditional games into modern curricula, the following strategies can be adopted:

The Ministry of Education can formally include traditional games within Physical Education syllabi. Which indeed should include teacher training programmes in order to further enable teachers be able to contribute more productively. Workshop and training programmes are inevitable in this circumstance [33]. Annual cultural sports festival shall also promote awareness among students and encourage participation. Universities and educational institutions should document rules, history, and benefits of traditional games to standardize practices.

**7. Educational and Social Impact**

Integrating traditional games creates a balanced education system that values both global competencies and local identity. Students become physically active, culturally aware, and socially responsible individuals. Moreover, such integration contributes to sustainable cultural development by preserving intangible heritage [34].

**8. Conclusion**

Sri Lankan traditional games represent more than recreational activities, they embody cultural wisdom, physical discipline, and social values. In the context of modern education, integrating these games into school curricula can significantly enhance physical fitness and cultural consciousness among students. By embracing indigenous traditions alongside contemporary educational practices, Sri Lanka can develop a holistic and culturally enriched learning environment for future generations.

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# TA'LIM JARAYONIDA GRAFIK DASTURLARNING PEDAGOGIK AHAMIYATI

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***Annotatsiya.*** *Mazkur maqolada ta'lim jarayonida grafik dasturlardan foydalanishning pedagogik ahamiyati ilmiy jihatdan tahlil qilinadi. Zamonaviy axborot-kommunikatsiya texnologiyalarining rivojlanishi natijasida ta'lim tizimida vizual va interfaol o'qitish usullarining ahamiyati ortib bormoqda. Maqolada grafik dasturlar yordamida o'quv jarayonini samarali tashkil etish, o'quvchilarning ijodiy, tanqidiy va analitik fikrlashini rivojlantirish hamda amaliy ko'nikmalarni shakllantirish imkoniyatlari yoritiladi. Shuningdek, grafik dasturlarning STEAM ta'lim tizimidagi o'rni, raqamli pedagogika rivojidagi ahamiyati hamda O'zbekiston ta'lim tizimida ushbu texnologiyalarni joriy etish tajribasi tahlil qilinadi.*

***Kalit so'zlar:*** *grafik dasturlar, kompyuter grafikasi, vizual ta'lim, raqamli pedagogika, STEAM ta'lim, 3D modellashtirish, dizayn texnologiyalari.*

## Kirish

XXI asr axborot jamiyatida raqamli texnologiyalar inson hayotining barcha sohalariga chuqur kirib bormoqda. Ayniqsa, ta'lim tizimida zamonaviy axborot texnologiyalaridan foydalanish ta'lim sifatini oshirishning muhim omillaridan biri hisoblanadi. So'nggi yillarda kompyuter grafikasi, multimedia texnologiyalari hamda vizual kommunikatsiya vositalari ta'lim jarayonining ajralmas qismiga aylanmoqda.

Grafik dasturlar yordamida o'quv materiallarini vizual shaklda taqdim etish o'quvchilarning mavzuni tezroq anglashiga yordam beradi. Psixologik tadqiqotlar shuni ko'rsatadiki, inson miyasi vizual axborotni matnli axborotga nisbatan ancha tez va samarali qabul qiladi. Shu sababli zamonaviy pedagogikada vizual o'qitish texnologiyalari alohida ahamiyat kasb etmoqda.

Grafik dasturlar nafaqat san'at yoki dizayn sohasida, balki muhandislik, arxitektura, texnologiya, marketing, tibbiyot va ilmiy tadqiqotlarda ham keng qo'llanilmoqda. Shu sababli ularni ta'lim jarayoniga integratsiya qilish bugungi kunning dolzarb pedagogik masalalaridan biridir.

## Grafik dasturlar tushunchasi va ularning turlari

Grafik dasturlar – bu tasvirlarni yaratish, tahrirlash va modellashtirish uchun mo'ljallangan kompyuter dasturlari hisoblanadi. Ular yordamida ikki o'lchamli (2D) va uch o'lchamli (3D) tasvirlar yaratish mumkin.

Grafik dasturlarni quyidagi asosiy guruhlarga ajratish mumkin:

**1. Raster grafik dasturlar**

Bu dasturlar tasvirlarni piksel asosida qayta ishlaydi. Eng mashhur raster grafik dasturlar:

- Adobe Photoshop
- GIMP
- Krita

Raster grafik dasturlar asosan fotografiya, reklama dizayni va raqamli san’at sohalarida qo‘llaniladi.

**2. Vektor grafik dasturlar**

Vektor grafikasi matematik formulalar asosida yaratiladi va tasvirni sifatini yo‘qotmasdan kattalashtirish imkonini beradi.

Mashhur vektor grafik dasturlar:

- CorelDRAW
- Adobe Illustrator
- Inkscape

Bu dasturlar logotiplar, brend identifikatsiya elementlari va tipografik dizayn yaratishda keng qo‘llaniladi.

**3. 3D grafik dasturlar**

Ushbu dasturlar uch o‘lchamli modellar yaratish imkonini beradi.

Eng mashhur 3D grafik dasturlar:

- Blender
- 3ds Max
- SketchUp
- Maya

3D grafik texnologiyalari arxitektura, animatsiya, o‘yin industriyasi va muhandislik loyihalarida muhim o‘rin tutadi.

**4. Muhandislik grafik dasturlari**

Muhandislik sohasida quyidagi grafik dasturlar keng qo‘llaniladi:

- AutoCAD
- SolidWorks
- Revit

Ular texnik chizmalar, konstruktorlik loyihalari va arxitektura modellarini yaratish imkonini beradi.

**Grafik dasturlarning pedagogik imkoniyatlari**

Grafik dasturlar ta’lim jarayonida quyidagi pedagogik imkoniyatlarni yaratadi:

**1. Vizual o‘qitish samaradorligini oshiradi**

Vizual materiallar o‘quvchilarning diqqatini jalb qiladi va mavzuni yaxshiroq tushunishga yordam beradi. Masalan:

- biologiya fanida inson tanasi tuzilishini 3D modellar orqali ko‘rsatish
- geografiya fanida yer relyefini vizual xaritalar orqali o‘rganish
- fizika fanida kuch va harakat jarayonlarini animatsiyalar orqali tushuntirish

Bu usul o‘quvchilarning mavzuni chuqurroq o‘zlashtirishiga yordam beradi.

**2. Ijodiy fikrlashni rivojlantiradi**

Grafik dasturlar yordamida o‘quvchilar turli dizayn loyihalarini yaratish orqali ijodiy fikrlash ko‘nikmalarini rivojlantiradilar. Dizayn jarayonida:

- kompozitsiya
- rang uyg‘unligi
- vizual muvozanat
- estetik ifoda

kabi muhim elementlar o‘rganiladi.

**3. Amaliy ko‘nikmalarni shakllantiradi**

Grafik dasturlar bilan ishlash o‘quvchilarga amaliy tajriba beradi. Talabalar real loyihalar ustida ishlash orqali professional ko‘nikmalarni egallaydilar.

Masalan:

- reklama bannerlari yaratish
- logotip dizayni ishlab chiqish
- 3D modellar yaratish
- vizual prezentatsiyalar tayyorlash

**Grafik dasturlar va STEAM ta’lim**

So‘nggi yillarda dunyo ta’lim tizimida **STEAM (Science, Technology, Engineering, Art, Mathematics)** yondashuvi keng qo‘llanilmoqda.

STEAM ta’limi turli fanlarni integratsiyalash orqali o‘quvchilarda kompleks bilimlarni shakllantirishga qaratilgan.

Grafik dasturlar ushbu tizimda quyidagi vazifalarni bajaradi:

- ilmiy g‘oyalarni vizual tasvirlash
- muhandislik loyihalarini modellashtirish
- texnologik jarayonlarni animatsiya qilish
- san’at va texnologiya integratsiyasini ta’minlash

Masalan, o‘quvchilar 3D modellashtirish yordamida mexanik qurilmalar loyihasini yaratishi mumkin. Bu jarayon matematika, fizika va dizayn bilimlarini birlashtiradi.

**O‘zbekiston ta’lim tizimida grafik texnologiyalar**

O‘zbekiston ta’lim tizimida ham raqamli texnologiyalarni joriy etish bo‘yicha keng ko‘lamli islohotlar amalga oshirilmoqda. Xususan, **“Raqamli O‘zbekiston – 2030” strategiyasi** doirasida ta’lim tizimini modernizatsiya qilish muhim vazifa sifatida belgilangan.

Bugungi kunda ko‘plab oliy ta’lim muassasalarida quyidagi yo‘nalishlar rivojlanmoqda:

- grafik dizayn
- kompyuter grafikasi
- multimedia texnologiyalari
- veb dizayn

Masalan:

- Kamoliddin Behzod nomidagi Milliy rassomlik va dizayn instituti
- Toshkent axborot texnologiyalari universiteti
- Toshkent arxitektura-qurilish universiteti

ushbu sohada yetakchi ta’lim markazlari hisoblanadi.

Shuningdek**, IT Park, Yoshlar texnoparki, kreativ inkubatorlar** yosh dizaynerlar va grafik mutaxassislarni tayyorlashda muhim rol o‘ynamoqda.

**Grafik texnologiyalar va mehnat bozori**

Zamonaviy mehnat bozorida grafik dizayn va raqamli kontent yaratish bo‘yicha mutaxassislar katta talabga ega.

Grafik dasturlarni yaxshi bilgan mutaxassislar quyidagi sohalarda ishlashi mumkin:

- reklama va marketing
- arxitektura va qurilish
- animatsiya va o‘yin industriyasi
- IT va multimedia texnologiyalari
- kino va media sanoati

Shu sababli grafik texnologiyalarni ta’lim jarayoniga integratsiya qilish yoshlarning kelajakdagi kasbiy faoliyati uchun muhim ahamiyatga ega.

**Xulosa.** Xulosa qilib aytganda, grafik dasturlar zamonaviy ta’lim tizimining muhim didaktik vositalaridan biri hisoblanadi. Ular ta’lim jarayonini vizual, interfaol va samarali tashkil etish imkonini beradi.

Grafik texnologiyalar yordamida:

- o‘quvchilarning ijodiy fikrlashi rivojlanadi
- amaliy ko‘nikmalar shakllanadi
- ta’lim jarayonining samaradorligi oshadi
- o‘quvchilarning texnologik savodxonligi rivojlanadi

Kelajakda grafik dasturlar ta’lim tizimining yanada muhim qismiga aylanishi kutilmoqda. Shu sababli pedagoglar zamonaviy grafik texnologiyalarni o‘rganishi va ularni o‘quv jarayoniga keng joriy etishi zarur.

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"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# CONDUCTING A NEEDS ANALYSIS FOR AI-BASED APPROACHES TO TEACHING WORD COMBINATIONS

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***Abstract.*** *The rapid development of artificial intelligence (AI) technologies has significantly influenced language education. One of the persistent challenges in second language learning is mastering word combinations, including collocations and lexical bundles. This study conducts a needs analysis to identify learners' and teachers' requirements for integrating AI-based tools in teaching word combinations. Data were collected through surveys and interviews with university students and language instructors. The findings reveal a strong need for interactive AI-based learning systems that provide contextualized examples, immediate feedback, and personalized learning pathways. The results suggest that AI-driven tools can enhance learners' ability to acquire natural word combinations and improve overall language fluency.*

***Key words:*** *artificial intelligence, word combinations, collocations, needs analysis, language learning, AI-based education.*

***Annotatsiya.*** *Sun'iy intellekt (SI) texnologiyalarining jadal rivojlanishi til ta'limiga sezilarli ta'sir ko'rsatmoqda. Ikkinchi tilni o'rganishda uchraydigan doimiy muammolardan biri bu so'z birikmalarini, jumladan kollokatsiyalar va leksik birliklarni to'g'ri o'zlashtirishdir. Ushbu tadqiqot so'z birikmalarini o'qitishda sun'iy intellektga asoslangan vositalarni joriy etish uchun talabalar va o'qituvchilarning ehtiyojlarini aniqlash maqsadida ehtiyojlar tahlilini amalga oshiradi. Ma'lumotlar universitet talabalari va til o'qituvchilari o'rtasida o'tkazilgan so'rovnomalar hamda intervyular orqali to'plandi. Natijalar kontekstga asoslangan misollarni taqdim etuvchi, tezkor fikr-mulohaza beruvchi va shaxsiylashtirilgan o'qitish yo'llarini taklif qiluvchi interaktiv SI asosidagi o'quv tizimlariga katta ehtiyoj mavjudligini ko'rsatdi. Tadqiqot natijalari shuni ko'rsatadiki, SI asosidagi vositalar o'quvchilarning tabiiy so'z birikmalarini o'zlashtirish qobiliyatini rivojlantirishga va umumiy til ravonligini oshirishga yordam berishi mumkin.*

***Kalit so'zlar:*** *sun'iy intellekt, so'z birikmalari, kollokatsiyalar, ehtiyojlar tahlili, til o'rganish, SI asosidagi ta'lim.*

***Аннотация.*** *Быстрое развитие технологий искусственного интеллекта (ИИ) значительно повлияло на языковое образование. Одной из устойчивых трудностей при изучении второго языка является освоение словосочетаний, включая коллокации и лексические блоки. Данное исследование проводит анализ потребностей с целью выявления требований учащихся и преподавателей к интеграции инструментов на основе ИИ в обучение словосочетаниям. Данные были собраны с помощью анкетирования и интервью со студентами университетов и преподавателями иностранных языков. Результаты показывают высокую потребность в интерактивных обучающих системах на основе ИИ, которые предоставляют контекстуализированные примеры, мгновенную обратную связь и персонализированные траектории обучения. Полученные результаты свидетельствуют о том, что инструменты на основе ИИ могут способствовать более эффективному усвоению естественных словосочетаний и повышению общей беглости владения языком.*

***Ключевые слова:*** *искусственный интеллект, словосочетания, коллокации, анализ потребностей, изучение языка, образование на основе ИИ.*

**Introduction**

Vocabulary knowledge is widely recognized as a fundamental component of second language acquisition. However, successful communication in a foreign language requires more than simply knowing individual words; learners must also understand how words naturally combine with one another in context. These combinations, commonly referred to as **word combinations**, include collocations, lexical bundles, and fixed expressions that are frequently used by native speakers. Mastery of such combinations allows learners to produce more natural, fluent, and accurate language.

Despite their importance, word combinations remain one of the most challenging aspects of language learning for many students. Learners often rely on direct translation from their first language, which frequently results in unnatural or incorrect expressions. For example, learners may produce grammatically correct sentences that nevertheless sound awkward or non-native because the word combinations do not reflect authentic language use. Traditional vocabulary teaching methods tend to focus primarily on isolated words rather than on the patterns in which those words commonly occur. As a result, learners may possess a relatively large vocabulary but still struggle to use words appropriately in real communicative contexts.

In recent years, technological advancements have begun to transform the landscape of language education. Among these innovations, **artificial intelligence (AI)** has emerged as one of the most promising tools for enhancing language learning and teaching. AI-powered systems can analyze large linguistic datasets, identify patterns in authentic language use, and generate personalized learning experiences for individual learners. These capabilities make AI particularly suitable for teaching word combinations, as learners can receive contextualized examples, automated feedback, and adaptive exercises tailored to their proficiency level.

AI-based language learning platforms are increasingly being integrated into educational environments. Tools such as intelligent tutoring systems, natural language processing applications, and automated writing feedback systems enable learners to interact with language in more dynamic and engaging ways. For instance, AI systems can detect incorrect collocations in learner writing and suggest more natural alternatives based on corpus data. This immediate

feedback can significantly enhance learners’ awareness of word combinations and promote more accurate language production.

However, the successful integration of AI technologies into language education requires a clear understanding of the needs of both learners and teachers. Implementing technology without considering users’ expectations, difficulties, and learning contexts may limit its effectiveness. Therefore, conducting a **needs analysis** is an essential step in designing and implementing AI-based instructional approaches. Needs analysis helps identify learners’ current challenges, the gaps in existing teaching practices, and the technological features that could best support the learning process.

In the context of teaching word combinations, a needs analysis can provide valuable insights into how students currently learn collocations, what difficulties they encounter, and how AI-based tools could assist them. Similarly, teachers’ perspectives are crucial, as they play a key role in integrating technological tools into classroom instruction and guiding learners in their use.

Therefore, the present study aims to conduct a comprehensive needs analysis regarding the use of AI-based approaches for teaching word combinations. The study focuses on identifying the challenges faced by language learners, exploring teachers’ attitudes toward AI-supported instruction, and determining the key features that effective AI-based learning systems should include.

Specifically, the study seeks to answer the following research questions:

1. What challenges do language learners face when learning and using word combinations?
2. What are teachers’ perceptions of integrating AI-based tools into the teaching of word combinations?
3. What features and functionalities should AI-based learning systems include to effectively support the acquisition of word combinations?

By addressing these questions, the study aims to contribute to the development of more effective technology-enhanced language learning environments and provide practical insights for educators, researchers, and developers interested in applying artificial intelligence in language education.

## Methods

### Research Design

This study employed a **mixed-methods research design** to conduct a comprehensive needs analysis regarding the use of artificial intelligence (AI) in teaching word combinations. Mixed-methods research combines both quantitative and qualitative approaches, allowing researchers to obtain a deeper and more comprehensive understanding of a research problem. Quantitative data were collected through structured questionnaires distributed among students and teachers, while qualitative data were obtained through semi-structured interviews.

The integration of these two methods allowed the researchers to analyze statistical trends while also exploring participants’ perceptions, experiences, and expectations in greater depth. The mixed-methods approach was considered appropriate for this study because needs analysis requires both measurable data and detailed insights into the perspectives of the participants.

### Participants

The participants of the study consisted of **80 undergraduate students** and **12 English language instructors** from a higher education institution. The students were enrolled in English

language programs and had **intermediate to upper-intermediate proficiency levels** based on their institutional placement tests.

The student participants were selected using **convenience sampling**, as they were readily accessible to the researchers. Their ages ranged between **18 and 23 years**, and they had been studying English for at least **six to eight years**.

The instructor participants had **3 to 15 years of teaching experience** and were actively involved in teaching vocabulary, writing, and speaking courses. Their participation provided valuable insights into the pedagogical challenges associated with teaching word combinations and the potential role of AI-based tools in addressing these challenges.

**Data Collection Instruments**

Three primary instruments were used to collect data in this study: **questionnaires, interviews, and document analysis**.

**Student Questionnaire**

A structured questionnaire consisting of **20 items** was designed to investigate students’ experiences with learning word combinations and their attitudes toward AI-based learning tools. The questionnaire included both **Likert-scale questions** and **multiple-choice items**.

The questions focused on several key areas:

1. difficulties in learning and using word combinations
2. current learning strategies used by students
3. familiarity with digital and AI-based learning tools
4. students’ expectations regarding AI-supported learning environments

The questionnaire was distributed electronically, and responses were collected anonymously to ensure honest feedback.

**Teacher Questionnaire**

A separate questionnaire was developed for instructors to explore their perspectives on teaching word combinations and integrating AI technologies into language instruction. This questionnaire included **15 items** focusing on the following aspects:

1. challenges encountered when teaching collocations and word combinations
2. teaching materials and strategies currently used in classrooms
3. teachers’ familiarity with AI-based educational tools
4. perceptions of the potential benefits and limitations of AI in language education

The teacher questionnaire also included several open-ended questions to allow participants to provide more detailed explanations.

**Semi-Structured Interviews**

To complement the questionnaire data, **semi-structured interviews** were conducted with **six students and four instructors**. The interviews aimed to obtain deeper insights into participants’ experiences with learning and teaching word combinations and their expectations regarding AI-based instructional tools.

Each interview lasted approximately **20–30 minutes** and followed a flexible interview guide. The main interview topics included:

1. common difficulties in learning or teaching collocations
2. experiences with digital language learning tools
3. expectations for AI-supported vocabulary learning systems
4. opinions on the effectiveness of automated feedback systems

The interviews were recorded with the participants’ consent and later transcribed for analysis.

**Data Collection Procedure**

The data collection process was conducted over a period of **four weeks**. First, the questionnaires were distributed to students and instructors through an online survey platform. Participants were informed about the purpose of the study and were assured that their responses would remain confidential.

After analyzing the initial questionnaire responses, participants for the interviews were selected voluntarily from among those who agreed to participate in follow-up discussions. The interviews were conducted either face-to-face or via online video conferencing platforms.

All participants provided informed consent before participating in the study, and ethical guidelines for academic research were strictly followed.

**Data Analysis**

The collected data were analyzed using both **quantitative and qualitative analysis techniques**.

Quantitative data obtained from the questionnaires were analyzed using **descriptive statistics**, including percentages, means, and frequency distributions. These statistical measures helped identify general patterns and trends in participants’ responses.

Qualitative data obtained from interviews and open-ended questionnaire responses were analyzed using **thematic analysis**. This process involved several steps:

1. transcription of interview recordings
2. coding of key statements and ideas
3. grouping codes into broader themes
4. interpreting the themes to identify participants’ needs and expectations

The combination of these analytical methods allowed the researchers to obtain a comprehensive understanding of the current challenges in teaching word combinations and the potential role of AI-based technologies in addressing these challenges.

**Results**

This section presents the findings obtained from the questionnaires and interviews conducted with students and instructors. The results are organized according to the main themes that emerged from the needs analysis, including learners’ difficulties with word combinations, attitudes toward AI-based learning tools, teachers’ perspectives, and the desired features of AI-supported learning systems.

**Learners’ Difficulties in Learning Word Combinations**

The questionnaire results indicate that a large proportion of students experience significant challenges when learning and using word combinations such as collocations and lexical bundles. Out of the 80 student participants, **72% reported that they frequently encounter difficulties when trying to select appropriate word combinations in writing and speaking tasks**.

One of the most common problems identified by students was the tendency to **translate expressions directly from their native language**. Approximately **68% of respondents** indicated that they often rely on literal translation, which leads to incorrect or unnatural collocations. For example, students reported uncertainty when choosing correct combinations of verbs and nouns or adjectives and nouns.

Another significant difficulty reported by students was the **lack of exposure to authentic language examples**. About **65% of respondents** stated that the learning materials they use in class provide limited practice with natural word combinations. As a result, students often memorize vocabulary in isolation rather than learning how words function together in real contexts.

The results also show that **59% of students lack confidence when using collocations in academic writing**, and **61% reported difficulties in using appropriate word combinations during speaking activities**. These findings suggest that mastering word combinations remains a major challenge for learners at the intermediate level.

**Students’ Attitudes Toward AI-Based Learning Tools**

The study also examined students’ perceptions of using artificial intelligence technologies to support vocabulary learning. The findings reveal generally positive attitudes toward AI-based learning systems.

A majority of the students (**81%**) expressed interest in using **AI-powered language learning tools** that could help them improve their knowledge of word combinations. Students particularly valued the possibility of receiving **instant feedback** on incorrect collocations and suggestions for more natural alternatives.

Furthermore, **76% of respondents** indicated that they would prefer learning platforms that provide **contextualized examples from authentic texts**, such as articles, conversations, or academic writing. Students emphasized that seeing word combinations used in real contexts would help them better understand how those combinations function in natural language.

Another notable result is that **73% of students showed interest in personalized learning systems** that adapt exercises according to their individual proficiency levels. Many students reported that traditional classroom activities often do not address their specific vocabulary learning needs.

Overall, the results suggest that students are highly receptive to the use of AI technologies in language learning, particularly when such tools provide interactive, adaptive, and context-based learning opportunities.

**Teachers’ Perspectives on Teaching Word Combinations**

The responses from the 12 participating instructors also highlight several important challenges in teaching word combinations. Most teachers acknowledged that collocations and lexical bundles are essential for achieving language fluency but noted that these elements are often difficult to teach effectively within the constraints of regular classroom instruction.

Approximately **75% of instructors** reported that **limited classroom time** prevents them from providing sufficient practice with word combinations. Teachers explained that they must cover multiple language skills, including grammar, reading, writing, and speaking, which leaves relatively little time for focused vocabulary instruction.

Additionally, **67% of teachers stated that existing textbooks and teaching materials do not provide adequate activities for practicing collocations**. As a result, many instructors must create their own supplementary exercises to address this gap.

Despite these challenges, the majority of instructors expressed positive attitudes toward the integration of AI technologies into language education. **About 83% of teachers agreed that AI-based tools could support vocabulary learning by providing automated feedback and additional practice opportunities outside the classroom**.

Teachers also emphasized that AI technologies should be used as **supplementary learning tools rather than replacements for traditional teaching methods**. They highlighted the importance of maintaining the teacher’s role in guiding students and facilitating meaningful language interaction.

**Desired Features of AI-Based Learning Systems**

Both students and teachers were asked to identify the features they consider most important in AI-supported learning systems for teaching word combinations. The responses revealed several common expectations.

First, participants emphasized the importance of **immediate corrective feedback**. Many students expressed frustration when they do not receive timely feedback on their language errors, particularly in writing assignments. AI systems that automatically identify incorrect collocations and suggest appropriate alternatives were considered highly beneficial.

Second, participants highlighted the need for **contextualized examples derived from authentic language corpora**. Such examples allow learners to observe how word combinations are used in real communication and help them internalize correct patterns.

Third, both groups expressed strong interest in **adaptive learning systems** that can personalize exercises according to learners’ proficiency levels and progress. Personalized learning paths were viewed as an effective way to address individual differences among learners.

Finally, participants emphasized the importance of **interactive and engaging learning activities**, such as quizzes, games, and real-time writing assistance tools. These features were considered essential for maintaining learner motivation and promoting active participation in the learning process.

Overall, the results of the needs analysis demonstrate a clear demand for AI-based tools that can provide personalized, context-rich, and interactive learning experiences for mastering word combinations.

**Discussion**

The findings of this study provide important insights into the challenges learners face in mastering word combinations and the potential role of artificial intelligence (AI) in addressing these difficulties. The results of the needs analysis demonstrate that both students and instructors recognize the importance of learning word combinations such as collocations and lexical bundles for achieving natural and fluent language use.

One of the most significant findings of the study is that many learners struggle with selecting appropriate word combinations in both spoken and written communication. A large proportion of students reported relying on direct translation from their native language when forming expressions in English. This tendency often leads to incorrect or unnatural collocations. These findings highlight a common issue in second language acquisition, where learners may possess sufficient grammatical knowledge but still experience difficulty producing natural language due to limited collocational competence.

Another important finding of the study is the limited exposure learners have to authentic examples of word combinations. Many students indicated that traditional textbooks and classroom activities do not provide enough opportunities to practice collocations in meaningful contexts. As a result, vocabulary learning often remains focused on individual words rather than on the patterns in which words typically occur together. This lack of contextualized learning may explain why learners struggle to apply their vocabulary knowledge effectively in real communication.

The results also reveal that students demonstrate strong interest in the use of AI-based tools for improving their knowledge of word combinations. The majority of participants expressed a preference for interactive learning systems that provide immediate feedback and contextual examples. This finding suggests that learners value learning environments that allow them to actively experiment with language and receive timely corrections. Immediate feedback is particularly important for vocabulary development because it helps learners notice their mistakes and adjust their language use accordingly.

From the teachers’ perspective, the findings indicate that instructors are aware of the importance of teaching collocations but face practical challenges in doing so. Limited classroom time and insufficient teaching materials were identified as major obstacles. Teachers often need to cover multiple aspects of language instruction within a limited time frame, which makes it difficult to devote sufficient attention to word combinations. This situation creates a gap between the recognized importance of collocational competence and the actual classroom practices.

The integration of AI technologies in language learning may offer promising solutions to these challenges. AI-powered language learning systems have the ability to analyze large linguistic datasets and provide learners with authentic examples of word usage drawn from language corpora. Such systems can also offer automated feedback on learners’ writing and speaking, helping them identify incorrect collocations and suggesting more appropriate alternatives. This type of technology-enhanced feedback can significantly support learners’ development of collocational awareness.

Another important advantage of AI-based learning systems is their capacity for personalization. Unlike traditional classroom instruction, AI technologies can adapt learning materials according to the learner’s proficiency level, learning pace, and individual needs. Personalized learning environments can provide targeted practice in areas where learners experience the greatest difficulties. In the context of learning word combinations, adaptive exercises can help students gradually develop a deeper understanding of common collocational patterns.

However, while the potential benefits of AI technologies are significant, their implementation in educational contexts should be approached carefully. Technology alone cannot replace the role of teachers in facilitating meaningful learning experiences. Instead, AI-based tools should be viewed as complementary resources that support classroom instruction and provide additional practice opportunities outside the classroom. Teachers remain essential for guiding learners, explaining linguistic nuances, and fostering communicative competence.

The findings of this study therefore suggest that the most effective approach may involve a combination of traditional teaching methods and AI-supported learning environments. Such a blended approach would allow learners to benefit from both teacher guidance and technologically enhanced learning resources.

Finally, the results of the needs analysis emphasize the importance of designing AI-based learning tools that align with the actual needs of learners and instructors. Features such as contextualized examples, automated feedback, adaptive learning paths, and interactive activities were identified as essential components of effective AI-supported vocabulary learning systems. Incorporating these features into educational technologies may significantly enhance the teaching and learning of word combinations in second language education.

Overall, the discussion highlights that AI technologies have strong potential to improve vocabulary instruction, particularly in the area of word combinations. However, successful

implementation requires careful integration with pedagogical practices and a clear understanding of learners’ needs.

**5. Conclusion**

This study aimed to conduct a needs analysis to explore the potential of artificial intelligence (AI)-based approaches for teaching word combinations in second language learning. The findings of the study highlight several important issues related to the challenges learners face in mastering collocations and other word combinations, as well as the opportunities that AI technologies can offer in improving vocabulary instruction.

The results of the research indicate that many language learners experience considerable difficulties when using appropriate word combinations in both spoken and written communication. One of the primary reasons for these difficulties is the tendency of learners to rely on literal translation from their native language, which often results in unnatural or incorrect expressions. In addition, the findings show that traditional teaching materials and classroom activities do not always provide sufficient opportunities for learners to practice collocations and lexical bundles in meaningful contexts.

Another important finding of the study is the strong interest among students and teachers in integrating AI-based tools into language learning. The majority of participants expressed positive attitudes toward the use of intelligent learning systems that can provide contextualized examples, automated feedback, and personalized learning opportunities. These features are particularly valuable for vocabulary learning because they allow learners to receive immediate corrections and observe authentic patterns of word usage.

The study also revealed that teachers recognize the importance of teaching word combinations but face practical limitations such as limited classroom time and insufficient teaching resources. AI-supported learning tools can help address these challenges by offering additional learning opportunities outside the classroom and supporting teachers in providing more individualized feedback to students.

From a pedagogical perspective, the integration of AI technologies into language education can significantly enhance the effectiveness of vocabulary instruction. AI-based systems have the capacity to analyze large corpora of authentic language data and generate learning activities that reflect real-life language use. Moreover, adaptive learning technologies can tailor instructional materials according to learners’ individual needs, allowing students to focus on the specific areas where they experience the greatest difficulty.

However, the successful implementation of AI-based learning tools requires careful planning and collaboration between educators, researchers, and technology developers. AI technologies should not replace teachers but rather serve as supportive tools that complement traditional teaching practices. Teachers continue to play a crucial role in guiding learners, providing explanations, and facilitating meaningful communicative interactions.

The findings of this study also have several practical implications for language educators and curriculum designers. First, greater attention should be given to the teaching of word combinations as an essential component of vocabulary development. Second, educational institutions should consider integrating AI-supported learning platforms that provide interactive and context-rich learning experiences. Finally, teachers may benefit from professional development programs that help them effectively incorporate AI technologies into their instructional practices.

Despite its contributions, this study has certain limitations. The sample size was relatively limited and involved participants from a single educational context. Therefore, the findings may not be fully generalizable to all language learning environments. Future research could involve larger and more diverse samples, as well as experimental studies that evaluate the effectiveness of specific AI-based tools for teaching word combinations.

In conclusion, the results of this needs analysis demonstrate that AI technologies have considerable potential to enhance the teaching and learning of word combinations in second language education. By providing personalized learning opportunities, authentic language examples, and immediate feedback, AI-based systems can help learners develop greater collocational competence and achieve more natural and fluent language use.

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# SOUTH KOREAN EXPERIENCE IN UZBEKISTAN'S HIGHER EDUCATION: THE CASE OF AJOU UNIVERSITY IN TASHKENT

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***Abstract.*** *This article seeks to examine the cross-border transfer of higher education methodologies from the Republic of Korea to the Republic of Uzbekistan, focusing on the establishment and early stages of Ajou University in Tashkent. This institution embodies state-led internationalization, public-private partnerships, and capacity building, all of which are integral to Uzbekistan's national higher education reform agenda, specifically the Concept for the Development of the Higher Education System of the Republic of Uzbekistan until 2030.The objectives of these projects are to enhance quality, establish new governance frameworks, and integrate worldwide standards upon implementation. This research examines the legal foundation of the university, its governance structure, academic programs, faculty profile, campus life, digitalization initiatives, and strategy through the analysis of legislative instruments, institutional documents, and publicly available ranking data. The last portion of the article presents ideas for improving research capacities, quality assurance, and sustainability, along with policy implications for stakeholders in Uzbek higher education.*

***Keywords:*** *internationalization, Ajou University in Tashkent, higher education reform, Uzbekistan, Korea, public private partnership.*

## Introduction

In the past decade Uzbekistan has pursued an ambitious agenda to modernize its higher education system, aiming to expand access, increase quality, and promote international cooperation (President of Uzbekistan, 2019). The objectives of the strategy are enhancing accessibility, improving quality, and promoting international cooperation. A key component of this program is the Concept for the Development of the Higher Education System of the Republic of Uzbekistan until 2030.This approach underscores the significance of public-private collaborations, credit-modular curriculum, and the creation of regional centers for international educational initiatives (President of Uzbekistan, 2019). The execution of this strategic framework has made the formation of branch campuses and cooperation with renowned international institutions a crucial tool for rapid capacity growth. The national objectives are being implemented by the founding of Ajou University in Tashkent, founded on November 30, 2018, by Presidential Decree No. PP-4041. This university exemplifies an endeavor that

introduces a South Korean model of higher education to Uzbekistan. This research examines the circumstances of Ajou University in Tashkent to extract practical insights about governance, curriculum development, academic staffing, digitalization, and student life. These insights can be utilized in larger reform initiatives in Uzbekistan and similar contexts. The university was selected as a case study due to its direct linkage to national policy instruments, the clear objective of disseminating Ajou University's experience, and the accessibility of institutional data from the university's establishment. All these considerations contributed to the choice of the University as an exemplar.

**Theoretical and policy background**

Higher education may be internationalized through several means, including the mobility of students and faculty, the creation of transnational branch campuses, and the execution of collaborative degree programs (O.Uralov, 2020). Branch campuses are extensively employed to expedite knowledge transmission, enhance institutional capacity, and attract foreign investment in education (M.Msomphora, 2025). The efficacy of these policy instruments depends on the presence of explicit legal frameworks, enduring financial agreements, and robust local-foreign governance protocols (O.Uralov, 2020). These policy instruments possess the capacity to assist governments in expediting their alignment with global norms.

Uzbekistan’s 2019 Concept mirrors global trends by emphasizing international collaboration, the expansion of public-private partnerships, and the inclusion of foreign educational providers in the nation’s higher education sector (President of Uzbekistan, 2019). The President of Uzbekistan (2019) stated that the national goal is to increase enrollment coverage to above fifty percent by 2030. The policy prioritizes the enhancement of quality assurance, the implementation of credit-modular systems, and the augmentation of the worldwide competitiveness of higher education institutions. Ajou university in Tashkent is underpinned by the legal and institutional frameworks of Ajou University. Presidential Decree No. PP-4041, published on November 30, 2018, establishes the legal foundation for the creation of Ajou university in Tashkent. This directive facilitates the establishment of the institution as a branch of Ajou University in the Republic of Korea. The ensuing decisions and ministerial instruments enacted at the Cabinet level afforded the institution substantial material, technical, and organizational support (Ajou university in Tashkent, 2024; Cabinet Resolution No. 518, 2019). The institutional framework exemplifies a hybrid governance paradigm, marked by the integration of governmental resources and control alongside an adopted model of a foreign university and academic leadership. This legal framework enabled the University to develop a robust basis for academic programs, infrastructural growth, and recruitment initiatives. Furthermore, it included the university into the national initiative for fostering international relations and creating regional centers for foreign educational institutions.

**Academic profile, governance, and staffing**

The University has offered undergraduate degrees in Architecture, Civil Engineering, and Electrical and Computer Engineering from its inception on February 1, 2021. All these programs are conducted in English and adhere to the curriculum provided by Ajou University (Ajou University Admission Guideline, 2021). The University’s administrative structure consists of several offices, and its academic leadership includes both experienced Korean scholars and international specialists. At the time of this study, the university had over a thousand registered students and employed a varied array of academic specialists from both national and

international universities. Included among these persons were Korean scholars who provided direct assistance in research and instruction.

The University’s staffing model reflects a deliberate strategy to import pedagogical practices through faculty mobility, dual-appointment arrangements, and collaborative research links. The inclusion of senior faculty with doctoral training from top international universities supports the University’s aim for rapid capability building in research and teaching.

**Digitalization, academic systems, and student experience**

In its initiative to modernize operations, Ajou university in Tashkent has established an Academic Information System (AIS) and prioritized digital technologies. The Ajou University Admission Guidelines for 2021 indicate that the educational methodology incorporates practical elements, such industrial internships, summer schools, and project-based learning, which are aligned with the requirements of the local labor market. The university prioritizes extracurricular activities. Student development initiatives encompass student groups, athletics, cultural events, and exposure to Korean culture, culminating in a full and well-rounded school experience.

**Rankings, reputation, and strategic positioning**

Ajou university, the parent institution in Korea, has been regarded as one of the most esteemed research institutes in the country and has also garnered global acclaim from QS and THE as one of the most distinguished universities worldwide. The existence of a global ranking serves as a quality indicator and enhances the reputation of Ajou university in Tashkent (Ajou University, 2022-2026 reports). It is essential to evaluate the inherent worth of rankings using contextual variables, including relevance, graduate employability, and connection with national development objectives.

**Outcomes, opportunities, and challenges**

The construction of the university presents several clear benefits, including expedited access to international curricula and standards, greater avenues for faculty development, and more prospects for student mobility. The University facilitates innovation by acting as a trial ground for novel pedagogies and business partnerships. Nonetheless, difficulties persist that require resolution. These issues encompass securing enduring financial sustainability beyond the initial governmental assistance, developing research capacities instead of relying just on education, and promoting the genuine transfer of governance principles to local organizations. One of the primary issues, however, is ensuring that imported models are modified rather than just replicated. V. Yeravdekar (2014) asserts that the necessity for stringent alignment of governance, evaluation protocols, and faculty incentives with local norms stems from the influence of cultural and institutional disparities on the institution.

**Policy recommendations**

In light of the circumstances at Ajou university in Tashkent, the below recommendations are proposed for the authorities in Uzbekistan and the stakeholders in higher education: 1) Institutionalize technology and knowledge transfer mechanisms. Make faculty exchange, joint research centers, and co-supervision of theses mandatory components of partnership agreements; 2) Strengthen quality assurance systems that integrate both national accreditation standards and international benchmarks, with independent oversight and regular audits; 3) Design financial models that combine initial public investment with performance-based financing, tuition policy, and industry partnerships to ensure sustainability;

4) Support capacity-building for local leadership through targeted leadership development programs to partner universities; 5) Promote curriculum localization policies that ensure programs meet national workforce needs while maintaining international standards.

**Conclusion**

The Uzbek government clearly aims to use foreign partnerships to expedite the modernization of higher education, as evidenced by Ajou university in Tashkent. Branch campuses may be utilized to implement policies, enhance capacity, and elevate quality, as evidenced by the University, which is based on the national Concept for Higher Education Development until 2030 and is bolstered by legislation enacted by the president and cabinet. This instance underscores the importance of adaptable governance, strategic long-term planning, and efficient quality assurance in harnessing the advantages of internationalization for national development.

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# РАЗВИТИЕ МЕЖДИСЦИПЛИНАРНОГО ОБУЧЕНИЯ В ВЫСШЕМ ОБРАЗОВАНИИ УЗБЕКИСТАНА

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***Аннотация.*** *Современное развитие науки, технологий и экономики требует подготовки специалистов, обладающих гибким мышлением и способных эффективно использовать знания из различных научных областей. В этой связи возрастает значение междисциплинарного подхода в системе высшего образования. В статье рассматриваются теоретические и методологические основы междисциплинарного обучения, а также анализируются особенности его внедрения в образовательный процесс университетов. Особое внимание уделяется современным педагогическим методам интеграции знаний, разработке междисциплинарных образовательных программ и их влиянию на формирование профессиональных компетенций студентов. На основе проведённого анализа предложена концептуальная модель развития междисциплинарного обучения в условиях цифровой образовательной среды.*
***Ключевые слова:*** *междисциплинарное обучение, высшее образование, образовательные инновации, интеграция знаний, профессиональные компетенции, цифровая образовательная среда, образовательные программы.*

***Abstract.*** *The modern development of science, technology, and the economy requires the training of specialists with flexible thinking who are capable of effectively applying knowledge from various scientific fields. In this context, the importance of an interdisciplinary approach in the system of higher education is increasing. The article examines the theoretical and methodological foundations of interdisciplinary learning and analyzes the features of its implementation in the educational process of universities. Particular attention is paid to modern pedagogical methods of knowledge integration, the development of interdisciplinary educational programs, and their impact on the formation of students' professional competencies. Based on the conducted analysis, a conceptual model for the development of interdisciplinary learning in the context of a digital educational environment is proposed.*
***Key words:*** *interdisciplinary learning, higher education, educational innovations, knowledge integration, professional competencies, digital educational environment, educational programs.*

**Введение.** В последние десятилетия развитие общества характеризуется стремительными изменениями в научно-технической, экономической и социальной сферах. Расширение применения цифровых технологий, автоматизация производственных процессов, развитие искусственного интеллекта и глобализация рынка труда оказывают значительное влияние на требования к профессиональной подготовке специалистов.

Современные работодатели всё чаще ожидают от выпускников университетов не только глубоких знаний в рамках одной специальности, но и способности анализировать сложные проблемы, используя знания из различных областей науки. В связи с этим возрастает роль междисциплинарного подхода в системе высшего образования.

Традиционная модель университетского обучения в течение длительного времени основывалась на строгом разделении научных дисциплин. Однако современная образовательная практика демонстрирует необходимость интеграции различных областей знаний, что позволяет формировать у студентов системное мышление и способность решать комплексные профессиональные задачи.

Междисциплинарное обучение представляет собой образовательный подход, направленный на объединение знаний, методов и исследовательских инструментов различных научных направлений для более глубокого понимания сложных явлений и процессов. Использование такого подхода способствует развитию аналитического мышления, формированию инновационных компетенций и повышению адаптивности выпускников к быстро меняющимся условиям профессиональной деятельности.

Актуальность данного исследования обусловлена необходимостью совершенствования педагогических моделей междисциплинарного обучения в условиях цифровой трансформации образования.

Цель исследования заключается в анализе педагогических условий развития междисциплинарного обучения и разработке концептуальной модели его внедрения в образовательную практику университетов.

Для достижения поставленной цели были определены следующие задачи:

- изучить теоретические основы междисциплинарного обучения;
- проанализировать современные модели интеграции учебных дисциплин;
- определить педагогические условия реализации междисциплинарного подхода;
- разработать модель междисциплинарной образовательной среды.

Практическая значимость исследования заключается в разработке рекомендаций по внедрению междисциплинарных образовательных программ в системе высшего образования.

В научной литературе последних лет всё больше внимания уделяется вопросам междисциплинарности в образовательном процессе. Исследователи отмечают, что интеграция различных научных направлений способствует формированию у студентов исследовательских навыков, развитию креативного мышления и способности решать сложные профессиональные задачи.

Многие современные исследования показывают, что междисциплинарный подход особенно эффективно применяется в инженерном, техническом и технологическом образовании. Это объясняется тем, что решение большинства практических задач в данных областях требует использования знаний из различных научных дисциплин.

К числу основных направлений исследований в области междисциплинарного образования относятся:

- разработка междисциплинарных образовательных программ;
- интеграция учебных дисциплин;
- использование проектно-ориентированного обучения;
- применение цифровых образовательных технологий.

Особое значение в современных образовательных исследованиях приобретает использование цифровых технологий. Онлайн-платформы, виртуальные лаборатории, системы дистанционного обучения и образовательные симуляторы позволяют эффективно интегрировать различные области знаний и формировать гибкую образовательную среду.

Несмотря на значительный интерес научного сообщества к данной проблематике, вопросы разработки эффективных моделей междисциплинарного обучения и механизмов их внедрения в университетскую практику остаются недостаточно изученными и требуют дальнейших исследований.

## МЕТОДОЛОГИЯ ИССЛЕДОВАНИЯ

Методологической основой исследования выступают междисциплинарный и компетентностный подходы, рассматривающие образовательный процесс как систему интеграции знаний из различных научных областей.

Исследование направлено на анализ особенностей развития междисциплинарного обучения в системе высшего образования Узбекистана и определение условий его эффективной реализации.

Работа выполнена в рамках смешанного исследовательского подхода, включающего как качественные, так и количественные методы анализа. Такой подход позволил комплексно изучить рассматриваемую проблему.

В процессе исследования применялись следующие методы:

**Анализ научной литературы** — изучение отечественных и зарубежных публикаций, посвящённых проблемам междисциплинарного обучения и современным образовательным технологиям.

**Контент-анализ образовательных программ** — анализ учебных планов университетов с целью выявления междисциплинарных курсов и образовательных модулей.

**Анкетирование студентов и преподавателей** — сбор эмпирических данных для оценки эффективности применения междисциплинарных методов обучения.

**Сравнительный анализ** — сопоставление различных образовательных моделей и практик реализации междисциплинарного подхода.

Выборка исследования была сформирована методом целенаправленного отбора и включала студентов и преподавателей университетов, участвующих в реализации образовательных программ.

Исследование проводилось в несколько этапов:

- анализ научных источников по проблеме междисциплинарного образования;
- изучение образовательных программ университетов;
- проведение анкетирования участников образовательного процесса;
- обработка и интерпретация полученных данных;
- разработка рекомендаций по внедрению междисциплинарных образовательных моделей.

Для повышения достоверности результатов использовалось сочетание различных методов сбора и анализа данных.

**Методы исследования развития междисциплинарного обучения в высшем образовании**

| № | Метод исследования | Цель применения | Описание метода |
|---|---|---|---|
| 1 | Анализ научной литературы | Изучение теоретических основ междисциплинарного обучения | Анализ отечественных и зарубежных научных публикаций, посвящённых междисциплинарному обучению и инновационным образовательным технологиям |
| 2 | Контент-анализ образовательных программ | Определение уровня интеграции дисциплин | Анализ учебных планов и программ университетов для выявления междисциплинарных курсов и модулей |
| 3 | Анкетирование | Получение эмпирических данных | Проведение опроса студентов и преподавателей с целью выявления эффективности междисциплинарного обучения |
| 4 | Сравнительный анализ | Выявление различий образовательных моделей | Сравнение образовательных программ различных университетов и педагогических практик |
| 5 | Системный анализ | Определение структуры образовательного процесса | Анализ взаимосвязей между дисциплинами и образовательными компонентами |
| 6 | Обобщение педагогического опыта | Разработка практических рекомендаций | Анализ успешных практик внедрения междисциплинарного обучения |

## АНАЛИЗ И РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЯ

Проведённое исследование показало, что междисциплинарный подход оказывает значительное влияние на качество профессиональной подготовки студентов. Основные преимущества междисциплинарного обучения представлены в таблице.

**Преимущества междисциплинарного обучения**

| № | Преимущество | Описание |
|---|---|---|
| 1 | Развитие системного мышления | Студенты учатся рассматривать проблему с разных научных точек зрения |
| 2 | Повышение мотивации | Интеграция знаний делает обучение более интересным |
| 3 | Развитие инновационных компетенций | Студенты учатся находить нестандартные решения |
| 4 | Подготовка к реальным профессиональным задачам | Многие современные задачи носят междисциплинарный характер |

В ходе исследования были выявлены три основные модели междисциплинарного обучения.

- Интеграционная модель - предполагает объединение нескольких дисциплин в единый учебный курс, что обеспечивает комплексное изучение темы.
- Проектно-ориентированная модель - основана на выполнении студентами практических проектов, требующих знаний из разных областей.
- Модульная модель - предусматривает построение учебного процесса на основе междисциплинарных образовательных модулей.

**Модели междисциплинарного обучения**

| Модель | Основные характеристики | Преимущества |
|---|---|---|
| Интеграционная | Объединение дисциплин | Комплексное изучение темы |
| Проектная | Решение практических задач | Развитие практических навыков |
| Модульная | Междисциплинарные модули | Гибкость образовательной программы |

На основе проведённого исследования была разработана концептуальная модель междисциплинарного обучения.

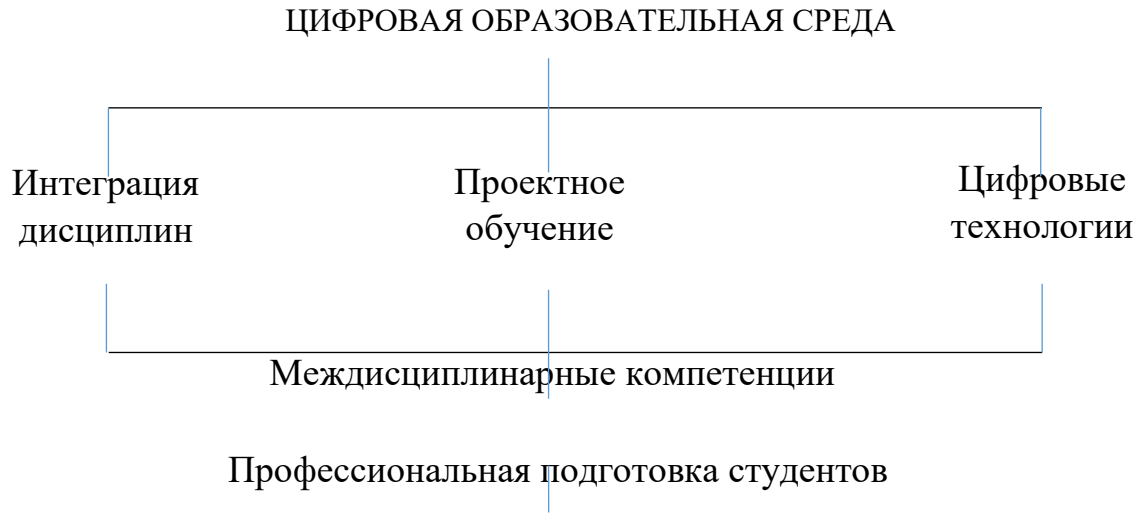


Рис. 1. Модель междисциплинарного обучения

На основе проведённого анализа была предложена концептуальная модель междисциплинарного обучения, включающая следующие ключевые элементы:

- интеграцию учебных дисциплин;
- использование проектных методов обучения;
- применение современных цифровых образовательных технологий.

Реализация данной модели способствует формированию у студентов следующих компетенций:

- аналитическое мышление;
- критическое мышление;
- навыки командной работы;
- инновационное мышление.

Результаты исследования подтверждают, что студенты, обучающиеся по междисциплинарным образовательным программам, демонстрируют более высокий уровень аналитических и исследовательских навыков. Особенно значимым междисциплинарный подход является в инженерном и техническом образовании, где решение сложных задач требует объединения знаний различных научных областей.

Кроме того, важную роль в развитии междисциплинарного обучения играют цифровые технологии. Современные образовательные платформы, виртуальные лаборатории и онлайн-среды для совместной работы позволяют создавать гибкую образовательную среду и эффективно интегрировать различные области знаний.

Однако внедрение междисциплинарного обучения сопровождается рядом трудностей. Среди них можно выделить:

- традиционную структуру учебных планов, основанную на разделении дисциплин;
- необходимость координации работы преподавателей разных кафедр;
- отсутствие унифицированных методов оценки междисциплинарных компетенций студентов.

Несмотря на эти трудности, междисциплинарное обучение обладает значительным потенциалом для повышения качества высшего образования и подготовки специалистов нового поколения.

**ВЫВОДЫ И РЕКОМЕНДАЦИИ.** Проведённое исследование позволяет сделать следующие выводы:

1. Междисциплинарное обучение является важным направлением развития современной системы высшего образования.
2. Интеграция различных научных областей способствует формированию инновационного мышления студентов.
3. Наиболее эффективными формами реализации междисциплинарного подхода являются проектно-ориентированные и модульные образовательные модели.
4. Использование цифровых технологий значительно расширяет возможности внедрения междисциплинарного обучения.

Для успешного внедрения междисциплинарного обучения в университетах рекомендуется:

- модернизировать образовательные программы;
- внедрять проектно-ориентированные методы обучения;
- развивать цифровые образовательные платформы;
- расширять сотрудничество между факультетами и кафедрами.

Перспективным направлением дальнейших исследований является разработка новых моделей междисциплинарного образования с использованием технологий искусственного интеллекта.

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# SHAXSGA YO‘NALTIRILGAN TA’LIMDA PEDAGOGIK TEXNOLOGIYALARNING O‘RNI VA ULARDAN SAMARALI FOYDALANISH OMILLARI

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***Annotatsiya.*** *Ushbu maqolada pedagogik jarayonda shaxsga yo‘naltirilgan yondashuvning ahamiyati, bo‘lajak o‘qituvchilarning ijodiy salohiyatini shakllantirish usullari va innovatsion pedagogik texnologiyalar yoritilgan. Shuningdek, pedagogik yondashuvning nazariy asoslari, ijodiy fikrlash va kasbiy kompetentsiyasini shakllantirish metodlari hamda amaliy mashg‘ulotlarda shaxsga yo‘naltirilgan ta’limning qo‘llanilishi tahlil qilinadi. Maqola o‘qituvchilarning shaxsiy ijodiy potensialini rivojlantirish va ta’lim jarayonini samarali tashkil etishda ushbu yondashuvning ahamiyatini yoritadi.*

***Kalit so‘zlar:*** *shaxsga yo‘naltirilgan ta’lim, ijodiy faoliyat, bo‘lajak o‘qituvchilar, pedagogik yondashuv, kasbiy kompetentsiya, ijodiy fikrlash, innovatsion pedagogik texnologiyalar.*

***Abstract.*** *This article highlights the importance of a student-centered approach in the pedagogical process, methods for developing the creative potential of future teachers, and innovative pedagogical technologies. It also analyzes the theoretical foundations of the pedagogical approach, methods for fostering creative thinking and professional competence, as well as the application of student-centered education in practical lessons. The article emphasizes the significance of this approach in developing teachers’ personal creative potential and organizing the educational process effectively.*

***Key words:*** *student-centered education, creative activity, future teachers, pedagogical approach, professional competence, creative thinking, innovative pedagogical technologies.*

***Аннотация.*** *В данной статье освещается значимость личностно ориентированного подхода в педагогическом процессе, методы формирования творческого потенциала будущих учителей и инновационные педагогические технологии. В статье также анализируются теоретические основы педагогического подхода, методы развития творческого мышления и профессиональной компетентности, а также использование личностно-ориентированного обучения в практической подготовке. Статья раскрывает важность данного подхода для развития личного*

*творческого потенциала педагогов и эффективной организации образовательного процесса.*

***Ключевые слова:*** *личностно-ориентированное обучение, творческая деятельность, будущие учителя, педагогический подход, профессиональная компетентность, творческое мышление, инновационная педагогическая технология.*

**Kirish.** Bugungi globallashuv va raqamli transformatsiya sharoitida ta’lim tizimi oldiga yangicha fikrlaydigan, ijodkor, mustaqil qaror qabul qila oladigan pedagog kadrlarni tayyorlash vazifasi qo‘yilmoqda. Ayniqsa, boshlang‘ich ta’lim bosqichi shaxs kamolotining poydevori bo‘lib, mazkur bosqichda faoliyat olib borayotgan o‘qituvchilarning kasbiy mahorati, pedagogik tafakkuri va ijodiy yondashuvi hal qiluvchi ahamiyat kasb etadi. Shu nuqtai nazardan, bo‘lajak boshlang‘ich sinf o‘qituvchilarining ijodiy faoliyatini rivojlantirish dolzarb pedagogik muammolardan biri hisoblanadi. Mazkur jarayonda ta’lim texnologiyalaridan foydalanish talabalarning individual imkoniyatlarini ro‘yobga chiqarish, ularning mustaqil fikrlashi va kreativ salohiyatini oshirishga xizmat qiladi.

Zamonaviy pedagogik konsepsiyalarda shaxsga yo‘naltirilgan yondashuv ta’lim oluvchini faol subekti sifatida e’tirof etiladi. Ushbu yondashuv g‘oyalari Karl Rogers, Abharam Maslov hamda Lev Vygotskiy kabi olimlarning insonparvarlik va rivojlantiruvchi ta’lim nazariyalarida o‘z aksini topgan. Ularning qarashlariga ko‘ra, ta’lim jarayonida shaxsning ichki imkoniyatlarini qo‘llab-quvvatlash va erkin rivojlanish muhitini yaratish ijodkorlikning shakllanishida muhim omil sanaladi. O‘zbekiston Respublikasida ham ta’lim tizimini modernizatsiya qilish, pedagog kadrlar tayyorlash sifatini oshirish masalalariga alohida e’tibor qaratilmoqda. Bu esa pedagogika oliy ta’lim muassasalarida bo‘lajak boshlang‘ich sinf o‘qituvchilarini tayyorlash jarayonini takomillashtirish, ularning ijodiy faoliyatini rivojlantirishning samarali mexanizmlarini ishlab chiqishni taqazo etadi.

Xalqaro tashkilotlar va YUNESKO tomonidan qabul qilingan 2030-yilgacha yangi ta’lim konsepsiyasida “Ta’lim - taraqqiyotning asosiy xarakatlantiruvchi kuchi va barqaror rivojlantirish maqsadlariga yetkazuvchi muhim faoliyat” deb e’tirof etilgan. Oliy ta’lim muassasalarida talabalarni kasbiy ijodiy qobiliyatlarini rivojlantirish, ta’lim jarayonini modellashtirish, elektron axborot ta’lim resurslarini yaratish, zamonaviy pedagogik va axborot kommunikasiya texnologiyalaridan foydalanish, talabalarda kreativ kompotentlikni rivojlantirishga alohida e’tibor berilmoqda.

Jahon oliy ta’lim muassasalari va ilmiy tadqiqot institutlarida talabalarning ijodiy kompetensiyalarini shakllantirishga, ta’lim jarayonini mediatexnologiyalar asosida tashkil etish, ijodiy qobiliyatlarini rivojlantirishning pedagogik imkoniyatlarini innovasion yondashuv bo‘yicha ilmiy tadqiqot ishlari olib borilmoqda. Shu bilan birga kasbiy muammolar, ilmiy farazlarni tekshirish, kasbiy muammolarni aniqlash, mustaqil fikrlash ta’lim strategiyalarini belgilash bo‘yicha ilmiy tadqiqot ishlariga alohida e’tibor berilmoqda.

Ayniqsa, o‘qituvchilarni mustaqil va erkin fikrlashi va tafakkurini rivojlantirish jarayoniga, ya’ni ta’lim-tarbiya jarayoniga hamda bilim dargohlariga ham alohida e’tibor qaratilayotganligini ko‘rishimiz mumkin, bu o‘z navbatida o‘qituvchilarda kasbiy kompitentlikni shakllantirish va rivojlantirish jarayonlarini o‘rganish va tahlil qilish zaruriyatini ham belgilaydi.

Shaxsga yo‘naltirilgan ta’lim orqali bo‘lajak boshlang‘ich ta’lim yo‘nalishi o‘qituvchilarini ijodiy faoliyatga tayyorlash orqali ularning dunyoqarashini o‘zgartirishga, ularda

g‘urur, or-nomus, mehr kabi qator tuyg‘ularni, ya’ni milliy mentalitetimizga mos va xos tuyg‘u va xususiyatlarni shakllantirishga xizmat qiladi. Shuningdek, mazkur jarayonda bo‘lajak boshlang‘ich ta’lim yo‘nalishi o‘qituvchilarida ijodiy faoliyat ko‘nikmalarini shakllantirish va rivojlantirishning samaradorligi, uning mazmun-mohiyati, ahamiyati va zaruriyati haqida tushunchalar berilishi natijasida ijodiy faoliyat sifatlarini egallashga, kasbiy bilim, ko‘nikma va malakani oshirishga, mustaqil izlanishga va mehnat qilishga, ota-onaga, do‘stlari va boshqa yaqinlariga, tengdoshlari va tanishlariga, umuman olganda xalqimiz va milliy boyligimizga, Vatanimiz va Davlat ramzlariga, umummilliy qadriyatlar va milliy urf-odatlarimizga bo‘lgan ijobiy munosabatni shakllantiradi.

Bizning fikrimizcha, bo‘lajak o‘qituvchilarni ijodiy faoliyatga yo‘naltirish, ularda kompetentlikni tarkib toptirish orqali Vataniga, ona yurtiga, tabiat va jamiyatga, ota-ona, yor-u do‘stlariga hurmat, mehr-muhabbat va sadoqat, umummilliy qadriyatlar va milliy urf-odatlarimizga hurmat, ularga egalik qilish hamda o‘z vaqtida himoya qila olish, mutaxassisligiga oid chuqur bilim, yuksak axloqiy sifatlar, pedagogik madaniyatni egallashga mas’uliyatini shakllantiradi.

Demak, bo‘lajak o‘qituvchini ijodiy faoliyatga tayyorlashda dastlab kasbiy kompitentlikni shakllantirish, ularning individual psixologik xususiyatlari bilan bir qatorda, ular tarbiyalanayotgan muhitni o‘rganish, qiziqishlari va ehtiyojlarini inobatga olish zarur hisoblanadi, chunki ixtiyoriy inson asosan, ikki yo‘l bilan, birovning bevosita ta’siri, ya’ni o‘rgatishi, donolar fikrlari, o‘gitlari va asarlarini o‘qish orqali, shuningdek, inson o‘zining fikrlashi, odamlar xatti-harakatidan, qilgan va qilayotgan ishlaridan andozalar olish va xulosalar chiqarishi, eng asosiysi ijodiy tafakkuri vositasida tasavvuri, dunyoqarashi, intellekti rivojlanishi mumkinligini inobatga olinishi zarur.

Yuqorida keltirilgan ma’lumotlarga asoslanib aytish mumkinki bo‘lajak boshlang‘ich ta’limi yo‘nalishi o‘qituvchilarda ijodiy kompitentlikni shakllanishi va uni rivojlantirishida ta’lim-tarbiya jarayonlariga alohida e’tibor qaratish, ta’lim-tarbiya jarayonida ko‘proq erkin va mustaqil fikrlashni yo‘lga qo‘yish, o‘rgatish, talabalarning subektivligini oshirish hisobiga, subekt-obekt munosabatlaridan subekt-subekt munosabatlariga o‘tish, ya’ni mazkur jarayonda shaxsga yo‘naltirilgan ta’lim jarayonini tashkil etish, shuningdek, ularning mustaqil ta’lim olishlari uchun shart-sharoitlar yaratish, mustaqil olgan ma’lumotlarini o‘rganish asosida ularning ilmiyligi, yangiligi va ishonchliligini tahlil qilish, eng yangi va ishonchli axborotlar bilan ta’minlash, talabalarning faoliyatini muvofiqlashtirishda axborotlar almashinuviga alohida e’tibor qaratish zarur.

**Mavzuning dolzarbligi.** XXI asrda ta’lim tizimi jamiyat taraqqiyotining strategik omiliga aylandi. Globollashuv, axborot-kommunikatsiya texnologiyalarining jadal rivoji hamda mehnat bozorida raqobatning kuchayishi pedagog kadrlar tayyorlash jarayoniga yangicha talablarni qo‘ymoqda. Endilikda o‘qituvchi nafaqat bilim beruvchi, balki o‘quvchining shaxsiy rivojlanishini ta’minlovchi, uning ijodiy va intellektual salohiyatini ochib beruvchi yetakchi shaxs sifatida namoyon bo‘lishi lozim. Ayniqsa, boshlang‘ich ta’lim bosqichi o‘quvchi shaxsining shakllanishida poydevor vazifasini bajaradi. Shu bois, mazkur bosqichda faoliyat yuritadigan o‘qituvchining kasbiy kompetentligi, pedagogik mahorati va ijodiy faoliyati alohida ahamiyat kasb etadi. Bo‘lajak boshlang‘ich sinf o‘qituvchilarining ijodiy faoliyatini rivojlantirish masalasi pedagogika fanining dolzarb muammolaridan biri hisoblanadi.

Zamonaviy pedagogik nazariyalarda shaxsga yo‘naltirilgan ta’lim konsepsiyasi alohida o‘rin egallaydi. Ushbu yondashuv insonparvarlik g‘oyalariga asoslanib, ta’lim oluvchini

pedagogik jarayonning faol subekti sifatida e’tirof etadi. Shaxsga yo‘naltirilgan ta’lim nazariyasining shakllanishida Karl Rogersning “Insonparvarlik psixologiyasi”, Abraham Maslovning ehtiyojlar iyerxiyasi nazariyasi hamda Lev Vygotskiyning ijtimoiy-madaniy rivojlanish konsepsiyasi muhim metodologik asos bo‘lib xizmat qiladi. Ushbu olimlar ta’lim jarayonida shaxsning ichki imkoniyatlarini qo‘llab-quvvatlash, mustaqil fikrlash va ijodkorlikni rivojlantirish zururligini asoslab berganlar.

O‘zbekiston Respublikasida ta’lim tizimini modernizatsiya qilish, pedagogik kadrlar tayyorlash sifatini oshirish davlat siyosatining ustuvor yo‘nalishlaridan biridir. Oliy pedagogik ta’lim muassasalarida bo‘lajak boshlang‘ich sinf o‘qituvchilarini tayyorlash jarayonini shaxsga yo‘naltirilgan yondashuv asosida tashkil etish ularning ijodiy faoliyatini rivojlantirishning muhim omili sifatida namoyon bo‘lmoqda.

Shu bois shaxsga yo‘naltirilgan ta’lim orqali bo‘lajak boshlang‘ich sinf o‘qituvchilarining ijodiy faoliyatini rivojlantirishning nazariy asoslarini ishlab chiqish va amaliy mexanizmlarini takomillashtirish dolzarb ilmiy muammo sifatida tadqiq etishni talab etadi.

Shaxsga yo‘naltirilgan ta’lim orqali bo‘lajak boshlang‘ich sinf o‘qituvchilarining ijodiy faoliyatini rivojlantirish – bu pedagogik jarayonda talabaning shaxsiy xususiyatlari, qiziqishlari, ehtiyojlari va imkoniyatlarini inobatga olgan holda ularning kasbiy va ijodiy salohiyatini oshirishga qaratilgan tizimli yondashuvdir. Shuningdek, shaxsga yo‘naltirilgan ta’lim – bu ta’lim oluvchining markazga qo‘yadigan, uning mustaqil fikrlashi, ijodkorligi va tashabbuskorligini rivojlantirishga xizmat qiladigan pedagogik konsepsiyadir. Shaxsga yo‘naltirilgan ta’lim individual, talabaning qiziqish va ehtiyojlarini hisobga olish, erkin fikrlash va tanqidiy tafakkurni qo‘llab-quvvatlash, o‘zini-o‘zi rivojlantirishga yo‘naltirish tamoyillariga asoslanadi.

Shaxsga yo‘naltirilgan ta’limda bo‘lajak boshlang‘ich sinf o‘qituvchisi dars jarayonini innovatsion usullarda tashkil etishi, no’ananaviy pedagogik texnologiyalardan foydalanishi, muammoli vaziyatlar yaratishi va ularni hal qilishi, o‘quvchilarning individual imkoniyatlarini ochib berishi kabi ijodiy faoliyatlardan samarali foydalanish orqali ta’lim mazmunini yaxshilashga erishishi tavsiya etiladi. Boshlang‘ich sinf o‘qituvchilari faqat bilim berib qolmay balki, bolalarda mustaqil fikrlash va ijodiy yondashuvni shakllantiruvchi shaxs hisoblanadilar. Ijodiy faoliyatni rivojlantirish uchun o‘qituvchilar tomonidan “Aqliy hujum”, “Klaster”, “Rol o‘ynash”, “Loyiha metodi” kabi interfaol metodlardan foydalanish orqali o‘quvchilarning ijodiy yondashuvlari rivojlanadi.

Shaxsni to‘laqonli shakllanib kamol topishida eng muhim tarkibiy vosita bo‘lgan muloqot, har qanday kasbiy-ijodiy faoliyatning barcha turlarida mavjud. U kasbiy-ijodiy faoliyatga shunchaki hamroh bo‘lgan oddiy omil emas, balki kasbiy ahamiyat kasb etadigan, uning asosini tashkil etadigan muhim kategoriya sanaladi. Demak, muloqot insonlar o‘rtasida odatiy o‘zaro hamkorlik shakli emas, aksincha, kasbiy- ijodiy faoliyatning muvaffaqiyatini ta’minlovchi asosiy tushuncha sanaladi. Ijodiy faoliyatda esa muloqot muhim funksional, bo‘lajak o‘qituvchi uchun kasbiy jihatdan ahamiyatli vosita sanalib, o‘zaro ta’lim va tarbiyaviy ta’sir quroli sifatida namoyon bo‘ladiki, bunda muloqotning muhim shartlariga va qonuniyatlariga, qo‘shimcha vazifalariga rioya qilishga to‘g‘ri keladi.

Tajribalar shuni ko‘rsatadiki, har qanday kasb egasining kishilar bilan odatiy o‘zaro hamkorlik tizimida muloqot go‘ya, shunchaki o‘z-o‘zicha sodir bo‘ladi. Ma’lum bir maqsadga qaratilgan ta’lim-tarbiyaviy jarayonda esa, muloqot ijtimoiy vazifaga aylanadi, natijada

o‘qituvchi pedagogik muloqot qonuniyatlarini puxta bilishi, kommunikativ qobiliyat va kommunikativ madaniyatga ega bo‘lishi talab qilinadi.

A.N.Leontev pedagogik-psixologik muloqotning tarbiyaviy-didaktik ahamiyatini baholar ekan, quyidagi fikrlarni bildirib o‘tadi, faol pedagogik muloqot o‘qituvchining, umuman olganda pedagogik jamoaning ta’lim-tarbiya jarayonida o‘qituvchilarni bilish va o‘rganish kaliti va o‘quv faoliyatining ijodiy xarakteri, o‘quvchi shaxsining shakllanishi uchun eng yaxshi sharoit yaratadigan, ta’lim-tarbiyada maqbul bo‘lgan emotsional muhitni ta’minlovchi, jumladan, ruhiy psixologik to‘siqlarning paydo bo‘lishini oldini oladigan, o‘quvchilar jamoasida ijtimoiy-psixologik jarayonlarini to‘g‘ri yo‘lga solib boshqarishni ta’minlaydigan va o‘quv-tarbiyaviy jarayonda o‘qituvchining o‘z pedagogik mahoratidan oqilona foydalanish uchun imkoniyatlar yaratadigan jarayon vositasi sifatida ta’kidlab o‘tgan.

Bugun ijodiy yondashuv nafaqat an’anaviy ravishda ijodkorlikka asoslangan, deb hisoblanuvchi kasblar (rassomlik, dizaynerlik, aktyorlik, bastakorlik va h.k), balki noaniq, avvaldan tayyorlab qo‘yilgan xatti-harakat usullari bo‘lmagan, yangicha biror narsa o‘ylab topilishi kerak bo‘lgan har qaysi faoliyat sohasi uchun o‘ta muhim ekani barchamizga ayon.

Amerakalik olim D.Veksler “Kreativlik fikrning shunday turiki, u shaxsga bir muammo yoki masala yuzasidan birdaniga bir nechta yechimlar paydo bo‘lishini taqozo etadi va shablonli, zerikarli fikrlashdan farq qilib, narsa va hodisalar mohiyatidagi o‘ziga xoslik, noyoblik sifatlarini anglashga yordam beradi”-deb ta’rif beradi.

Kreativ shaxs bo‘lish, bizning misolimizda esa, kreativ bo‘lajak pedagog tarbiyachi bo‘lish-bugungi dunyoda afzalliklarga ega bo‘lish, xususan boshqalar ichida ajralib turish, boshqalarga qaraganda qiziq suhbatdosh bo‘lish, hayotda uchraydigan qiyinchiliklardan noodatiy tarzda chiqib ketish demakdir. Kreativ qobiliyatlarni faqat yangi g‘oyalarni yaratish uchun emas, balki hayot tarzining yoki alohida olingan jihatlarni yaxshilash uchun qo‘llash va shaxsning ichki dunyosi rivojlanishida muhim o‘rin tutadi.

Kreativ axborotni yodda saqlash va faktlarni yig‘ishga asoslanganligi tufayli an’anaviy ta’lim tizimi har doim ham shaxsning, xususan bo‘lajak pedagog tarbiyasining kreativlik qobiliyatini rivojlantirishga qodir emas. Kundalik hayot tarzi ko‘pincha shaxs kreativ xususiyatlarining pasayishiga sabab bo‘ladi. Shu tufayli, kreativ qobiliyatlarning rivojlanishida faqat maxsus tashkil qilingan muhit bo‘lishi lozim. Kelajakda ijodiy qobiliyatlardan foydalanish uchun ta’lim jarayoniga maxsus topshiriqlarni kiritish zarur.

Har bir bo‘lajak tarbiyachidagi kreativlikning rivojlanishi individual hisoblanadi. Kreativlik rivojalanishning tizmlilik faktori ta’limning ijtimoiylashuvi bo‘lib hisoblanadi. Kreativlikning dastlabki ko‘rinishlari har bir insonga xos. Biroq u o‘sayotgan, tarbiyalanayotgan, ta’lim olayotgan muhitdagi turli xil ta’qiqlar, ijtimoiy shablonlar ijodiy faoliyatning blokirovka (yopilish)siga olib keladi. Bo‘lajak peadgog tarbiyachiga kreativlikning rivojlanishi uchun psixologik bosimlardan ozod qilib, ijobiy turtki berish lozim.

A. Maslou ham kreativlikni-barchaga xos tug‘ma ijodiy yo‘nalish, atrof-muhitning ta’sirida ko‘pchilikda yo‘qolib ketuvchi faoliyat deb hisoblagan.

Pedagog-psixolog olim V.A.Slastenin bo‘lajak pedagog-tarbiyachi innovatsion faoliyatning eng muhim tavsifi sifatida kreativlikni ko‘rsatadi. Bunda tadqiqotchi olim tarbiyachining akmeologik jihatdan rivojlanishini ilmiy nuqtai nazardan professionalizm va ijodiy munosabatidan olib qaraydi. Bo‘lajak maktabgacha ta’lim tarbiyachi shaxsidagi kreativlikni ijodkorlikning quyidagi kategoriyalarida farqlaydi.

-ijodiy individuallik;

-o‘zini rivojlantirish va takomillashtirish jarayoni;

-o‘z imkoniyatlarini amalga oshirish sifatidagi kreativ tajribasi

Ma’lumki, shaxsning ijodiy individualligini tavsiflaydigan samarali o‘zini o‘zi anglash mexanizmi quyidagilarni qamrab oladi: o‘zini boshqalarga qiyoslash asosida o‘z shaxsining betakror ekanligini anglay olishi; o‘zi to‘g‘risidagi kreativ ko‘rinishlar va tasavvurlar to‘plami; individual kreativ o‘ziga xosliklarning bir butunligi va uyg‘unligi, ichki birligi; shaxsning o‘z rivojlanishidagi dinamiklik va doimiylik jarayoni va uning ijodkor sifatida shakllanishi; shaxs o‘zini namoyon qila olishi va shaxsiy hamda ijtimoiy vaziyatlarda o‘zining o‘rnini anglay olishi.

Amerikalik psixolog olim Djo Pol Gilford o‘z tadqiqotlarida shaxsdagi kreativlikni tavsiflaydigan qator individual qobiliyatlarini ko‘rsatadi:

-fikrning ravonligi;

-fikrni maqsadga muvofiq yo‘llay olishi;

-o‘ziga xoslik (originallik);

-qiziquvchanlik;

-farazlar yaratish qobiliyati;

-xayol qila olish, fantaziya.

Tarbiyachilar ta’kidlaganidek, kreativlik - bu qandaydir yakka sifat emas, balki inson psixik xususiyatlarining o‘ziga xos kompleksi bo‘lib, quyidagilarni o‘z ichiga oladi.(95):

1. Intelektual sifatlar-tafakkur tezligi (ko‘plab fikrlar, g‘oyalar va assotsiatsiyalarning uyg‘onishi), tafakkur egiluvchanligi (vujudga kelayotgan g‘oyalarning xilma-xilligi), tafakkur originalligi (o‘ylab topilayotgan g‘oyalarning o‘rinli bo‘lish barobarida kamyobligi, noodatiyligi).

2. Shaxs sifatlari (avvalo, yangi hayotiy tajriba uchun ochiqlik).

3. Qadriyatlar tizimi (rivojlanish, bilish va erkinlik qadriyatlarini yuqori qo‘yish). Ushbu sifatlar aslida muayyan darajada barcha odamlarga xosdir. Ular qandaydir noyob odamlargagina tegishli emas. Alohida e’tiborni jalb qiladigan jihat shundaki, garchand tarbiyachilar kreativlik nafaqat inson intelektual sohasi, shaxs hususiyatlari olamida ham muayyan o‘ziga xoslikni taqozo etishini ta’kidlashsa ham, kreativlikni rivojlantiruvchi vosita sifatida asosan tafakkur sifatlari taraqqiyotini stimullashtiruvchi mashqlarni taklif etadilar.

Kreativlik quyidagi mexanizm orqali shakllanadi: umumiy qobiliyat asosida, muhit ta’siri ostida, shaxsiy xususiyat va motivlar orqali, shundan so‘ng dolzarb kreativlikka aylanadi. Savol tug‘iladi: ushbu shaxs xususiyatlari qachon shakllanadi?

Kreativ eng kamida ikkita fazada shakllanadi:

Birlamchi kreativlik umumiy ijodiy qobiliyat asosida shakllanadi, ya’ni kreativlik bunda ma’lum faoliyat uchun xizmat qilmaydi.

Bu bosqich senzitiv bosqichi 3-5 yoshda boshlanadi. Bunda bola kattalarga kreativlik jarayonida taqlid qiladi. D.B.Elkonining fikriga ko‘ra, 3 yoshga kelib bola o‘zini kattalardek his qiladi va o‘zini kattalar bilan solishtiradi. Endi bola sababsiz kattalarga taqlid qilishni boshlaydi. Kattalarning mehnat faoliyatiga taqlid qilishi 2 yoshning so‘ngidan 4 yoshgacha davom etadi. Aynan shu davrda bolada kreativlikning dastlabki kurtaklariga nisbatan senzitivlik kuchayadi. Ya’ni bola ijodiy qobiliyatlarini taqlid qilish orqali o‘zlashtirib oladi.

Tyutyunnik tadqiqotlariga ko‘ra, ijodiy faoliyatga bo‘lgan ehtiyoj va qobiliyat 5 yoshdan boshlab rivojlanadi. Ushbu rivojlanishning asosiy omili bo‘lib bolaning atrofdagi kattalar bilan munosabati, bola uchun kattalarning pozitsiyasi hisoblanadi.

O‘smirlik va o‘spirinlik davri (13 yoshdan 20 yoshgacha). Bu davrda “umumiy” kreativlik asosida “maxsus kreativlik” yuzaga keladi. Ma’lum faoliyat turi bilan bog‘liq ijodkorlik shakllanadi. Bu davrda asosiy rolni kasbiy namuna, ota-ona va tengdoshlarining qo‘llab-quvvatlashi rol o‘ynaydi va eng asosiysi o‘spirin o‘zi uchun “ideal namuna”ni belgilab oladi va shunga qarab intiladi, taqlid qiladi.

Fazaga o‘tishda shaxs boshqalarga taqlid qilishni to‘xtatib o‘zligini topishga intiladi yoki butun umr taqlid qilishda davom etadi. Shu bilan birga ijodkor shaxs va ijtimoiy muhit o‘rtasida o‘ziga xos munosabatlar o‘rnatiladi.

Lekin kreativlikning rivojlanishi uchun ma’lum shart-sharoitlar talab etiladi. Insonparvarlik psixologiyasi namoyondalari (Maslou, Rodjers va boshqalar) tashqi psixologik xavfsizlikni ta’minlash, baholamasliklar va ichki (shaxsning yangi tajribaga tayyorligi, ijodkorlikni ijobiy baholash) shart-sharoitlarini ajratib ko‘rsatadilar. Ye. Torrens va Dj.Gilford shart-sharoitlar sifatida: qulay ijtimoiy muhitni yaratish, turli ijodiy faoliyat natijalarini rag‘batlantirish (uyda va maktabda), bolani ijodiy qobiliyatlariga nisbatan ijobiy qadriyat sifatida qarashga o‘rgatish, atrof-muhitdagi ijodiy faoliyat namunalarini ko‘rsatish kabilarni nazarda tutadilar. Shunday ekan kreativlik rivojlanishining o‘ziga xosligini o‘rganish muhim ahamiyat kasb etadi.

**Xulosa.** Shaxsga yo‘naltirilgan ta’lim bo‘lajak boshlang‘ich sinf o‘qituvchilarining ijodiy faoliyatini rivojlantirishda muhim omil hisoblanadi. Bu yondashuv orqali pedagoglar nafaqat bilimli, balki tashabbuskor, kreativ va innovatsion fikrlaydigan mutaxassis sifatida shakllanadi. Natijada ta’lim sifati oshadi va jamiyat ehtiyojlariga mos, raqobatbardosh kadrlar tayyorlanadi.

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# O‘ZBEK ADABIYOTI TA’LIMIDA TALABALARINING O‘QUV BILISH MOTIVATSIYASINI FAOLLASHTIRISHNING PEDAGOGIK-PSIXOLOGIK XUSUSIYATLARI

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***Annotatsiya.*** *Mazkur maqolada o‘zbek adabiyotini o‘qitish jarayonida talabalarning o‘quv-bilish motivatsiyasini shakllantirish va faollashtirishning pedagogik hamda psixologik xususiyatlari tahlil qilinadi. Shuningdek, talabalarning adabiyotga bo‘lgan qiziqishini oshirish, mustaqil fikrlashini rivojlantirish va ta’lim samaradorligini ta’minlashda zamonaviy pedagogik texnologiyalarning o‘rni yoritiladi. O‘quv jarayonida interfaol metodlardan foydalanish, talabalarning ijodiy tafakkuri va bilim olishga bo‘lgan ichki ehtiyojini rivojlantirishga xizmat qilishi asoslab beriladi.*

***Kalit so‘zlar:*** *motivatsiya, o‘quv-bilish faoliyati, pedagogika, psixologiya, o‘zbek adabiyoti, ta’lim jarayoni, interfaol metodlar, ijodiy fikrlash.*

## Kirish

Ta’lim tizimida talabalarning bilim olishga bo‘lgan qiziqishini shakllantirish va ularning o‘quv-bilish faoliyatini faollashtirish muhim vazifalardan biri hisoblanadi. Zamonaviy ta’lim jarayonida faqat bilim berish emas, balki talabalarni mustaqil fikrlashga, tahlil qilishga va ijodiy yondashishga o‘rgatish muhim ahamiyat kasb etadi.

Axborot texnologiyalar asrida bugungi kunda yoshlarimiz shiddat bilan o‘rganib borayotgan innovatsion texnologiyalar bilan birga ularni badiiy adabiyot olamining rang-barang ekanligini uqtirib borish o‘qituvchilar zimmasiga katta mas’uliyat yuklaydi. Shunday ekan bo‘lajak o‘qituvchilarning bilim, salohiyat egasi bo‘lishi bilan bir qatorda ta’limga innovatsion yondashish, qolaversa ilg‘or xorijiy tajribalarni o‘rgangan holda ta’lim sifatini yanada oshirish muhim ahamiyatga molikdir. Bo‘lajak o‘qituvchining pedagogik faoliyatida o‘quvchilar bilan olib boradigan muloqoti muhim ta’limtarbiyaviy ahamiyatga ega hisoblanadi. Bu esa o‘z navbatida o‘quvchilar bilan ta’lim jarayonida yetarli darajada samaraga erishishning asosiy vazifalaridan biri hisoblanadi. Oxirgi yillarda juda ko‘plab davlatlarda, qolaversa bizning yurtimizda ham ta’lim standartlari kompetensiyaviylik tamoyili asosida tuzilishiga alohida ahamiyat berilmoqda. Ma’naviy hayotimizni yanada rivojlantirish maqsadida keyingi yillarda kitobxonlik madaniyatini oshirish bo‘yicha turli ko‘rik-tanlovlarni o‘tkazilishi ham e’tiborga molikdir. Bunday tanlovlar ko‘plab iste’dodli yoshlarimizning bilim salohiyatlari, badiiy asarga bo‘lgan qiziqishlari, teran fikrlaydigan iqtidor egalarini kashf etishda muhim rol o‘ynaganligi quvonarli hol, albatta. Bizga ma’lumki, pedagogik mahorat va kompetentlik har bir bo‘lajak

o‘qituvchining o‘z ustida ishlashi, ijodiy mehnati, iste’dodi va iqtidori evaziga mukammallashib, yoshlarning yanada salohiyatli va ilmli qila oladigan ijod mahsuli hisoblanadi. Pedagogik kompetentlikni rivojlantirish pedagogik va psixologik qonuniyatlarga tayangan holda turli shakl va metodlar, maxsus didaktik tamoyillarni qo‘llash asosida tashkil etadi. Kompetensiyaviy ta’limga asoslangan standartlarni tahlil qilishdan oldin kompetensiyaviy ta’limning mohiyatini aniqlab olish zarurdir.

O‘zbek adabiyoti insonning ma’naviy dunyosini boyituvchi, estetik didini rivojlantiruvchi va milliy qadriyatlarni shakllantiruvchi fan sifatida ta’lim tizimida alohida o‘rin egallaydi. Shuning uchun o‘zbek adabiyotini o‘qitishda talabalarning o‘quv-bilish motivatsiyasini rivojlantirish dolzarb masalalardan biri hisoblanadi.

Talabalarda motivatsiya yetarli bo‘lmasa, ular adabiy asarlarni chuqur anglamasdan, faqatgina dars talabi sifatida o‘rganadilar. Shu sababli pedagoglar o‘quv jarayonini qiziqarli, samarali va interfaol tarzda tashkil etishlari zarur.

**O‘quv-bilish motivatsiyasining nazariy asoslari**

Motivatsiya – bu shaxsni ma’lum faoliyatga undovchi ichki va tashqi omillar yig‘indisidir. Psixologiya fanida motivatsiya shaxs faoliyatining asosiy harakatlantiruvchi kuchi sifatida qaraladi.

Ta’lim jarayonida motivatsiya talabaning bilim olishga bo‘lgan qiziqishi, ehtiyoji va intilishlari bilan bog‘liq bo‘ladi. Psixologik tadqiqotlarga ko‘ra, motivatsiya ikki turga bo‘linadi:

1. **Ichki motivatsiya** – shaxsning bilim olishga bo‘lgan tabiiy qiziqishi va ehtiyoji bilan bog‘liq.
2. **Tashqi motivatsiya** – baho, mukofot, rag‘bat yoki majburiyat kabi tashqi omillar ta’sirida yuzaga keladi.

Adabiyot fanini o‘qitishda,ayniqsa, ichki motivatsiya muhim hisoblanadi. Chunki, adabiy asarlarni chuqur anglash va tahlil qilish uchun talabaning shaxsiy qiziqishi va estetik ehtiyoji bo‘lishi zarur.

**O‘zbek adabiyoti ta’limida motivatsiyani oshirishning pedagogik omillari**

O‘quv jarayonini samarali tashkil etish orqali talabalarning o‘quv-bilish faoliyatini faollashtirish mumkin. Bunda quyidagi pedagogik omillar muhim rol o‘ynaydi.

**Interfaol metodlardan foydalanish**

Interfaol metodlar talabalarning darsdagi faolligini oshiradi va ularni o‘quv jarayoniga faol jalb qiladi. Masalan:

- “Aqliy hujum”
- “Munozara”
- “Debat”
- “Klaster”
- “Bumerang” usuli

Bu metodlar orqali talabalar adabiy asarlarni mustaqil tahlil qilishni o‘rganadilar.

**Muammoli ta’lim texnologiyasi**

Muammoli ta’lim usuli talabalarni mustaqil fikrlashga undaydi. Masalan, adabiy qahramonlarning xatti-harakatlarini baholash, asarning g‘oyasini aniqlash yoki muallif pozitsiyasini tahlil qilish orqali talabalar fikrlash faoliyatini rivojlantiradilar.

**Ijodiy topshiriqlar**

Adabiyot fanida ijodiy topshiriqlar muhim o‘rin tutadi. Masalan:

- insho yozish

- sahna ko‘rinishlari tayyorlash
- qahramonlar obrazini tahlil qilish
- asarning davomiga o‘z fikrini yozish

Bunday topshiriqlar talabalarni ijodiy fikrlashga undaydi.

**Zamonaviy axborot texnologiyalaridan foydalanish**

Multimedia vositalari, videolar, elektron taqdimotlar adabiy asarlarni yanada tushunarli va qiziqarli qilib beradi. Bu esa talabalarning darsga bo‘lgan qiziqishini oshiradi.

**Motivatsiyaning psixologik xususiyatlari**

Talabalarning motivatsiyasini shakllantirishda psixologik omillar muhim ahamiyatga ega.

Birinchidan, har bir talabaning individual xususiyatlarini hisobga olish zarur. Talabalarning qiziqishlari, bilim darajasi va dunyoqarashi turlicha bo‘ladi.

Ikkinchidan, o‘qituvchi va talaba o‘rtasida ijobiy psixologik muhit bo‘lishi kerak. O‘qituvchining qo‘llab-quvvatlashi va rag‘bati talabalarning o‘ziga bo‘lgan ishonchini oshiradi.

Uchinchidan, talabalarning mustaqil fikr bildirishiga imkon yaratish muhimdir. Adabiyot fanida erkin fikr bildirish imkoniyati talabalarning ijodiy tafakkurini rivojlantiradi.

Shuningdek, talabalarning muvaffaqiyatlarini rag‘batlantirish ham motivatsiyani kuchaytiradi.

**Xulosa**

Xulosa qilib aytganda, o‘zbek adabiyotini o‘qitishda talabalarning o‘quv-bilish motivatsiyasini faollashtirish ta’lim samaradorligini oshirishning muhim omillaridan biridir. Buning uchun pedagog interfaol metodlardan foydalanishi, zamonaviy pedagogik texnologiyalarni qo‘llashi hamda talabalarning individual xususiyatlarini hisobga olishi zarur.

Shuningdek, dars jarayonida ijodiy muhit yaratish, talabalarning mustaqil fikrlashini rag‘batlantirish va ularni faol o‘quv jarayoniga jalb etish muhim ahamiyat kasb etadi. Bunday yondashuv talabalarning adabiyotga bo‘lgan qiziqishini oshirib, ularning ma’naviy va intellektual rivojlanishiga xizmat qiladi.

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"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# GREEN ECONOMY IN UZBEKISTAN

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***Abstract.*** *This article explores Uzbekistan's transition to a green economy as a key strategic priority for sustainable development. It focuses on the efficient use of natural resources, the expansion of renewable energy sources, improvement of energy efficiency, and sustainable agriculture and water resource management. The author analyzes national reform programs, international cooperation efforts, and the challenges the country faces on its path toward a low-carbon economy. The conclusion emphasizes the importance of collaboration between government, private sector, and society in achieving an environmentally sustainable future.*

***Key words:*** *green economy, Uzbekistan, sustainable development, renewable energy, water resources, environment, climate change.*

***Annotatsiya.*** *Ushbu maqolada O'zbekistonda "yashil iqtisodiyot"ga o'tish masalasi barqaror rivojlanishning strategik ustuvor yo'nalishi sifatida ko'rib chiqiladi. Tabiiy resurslardan samarali foydalanish, qayta tiklanuvchi energiya manbalarini rivojlantirish, energiya samaradorligini oshirish, qishloq xo'jaligi va suv resurslarini barqaror boshqarish masalalariga alohida e'tibor qaratilgan. Muallif davlat islohotlari, xalqaro hamkorlik va kam uglerodli iqtisodiyotga o'tishdagi muammolarni tahlil qiladi. Xulosada esa ekologik barqaror kelajakka erishishda davlat, xususiy sektor va jamiyat hamkorligining muhimligi ta'kidlanadi.*

***Kalit so'zlar:*** *yashil iqtisodiyot, O'zbekiston, barqaror rivojlanish, qayta tiklanuvchi energiya, suv resurslari, ekologiya, iqlim o'zgarishi.*

***Аннотация.*** *В статье рассматривается переход Узбекистана к зелёной экономике как ключевое стратегическое направление устойчивого развития страны. Особое внимание уделено вопросам рационального использования природных ресурсов, развития возобновляемых источников энергии, повышения энергоэффективности, а также устойчивого сельского хозяйства и управления водными ресурсами. Автор анализирует реализуемые государственные программы, международное сотрудничество, а также вызовы, стоящие перед страной на пути к низкоуглеродной экономике. В заключение подчёркивается важность участия общества, частного сектора и государства в достижении экологически устойчивого будущего.*

***Ключевые слова:*** *зелёная экономика, Узбекистан, устойчивое развитие, возобновляемая энергия, водные ресурсы, экология, климатические изменения.*

The shift to a green economy has become one of Uzbekistan’s most central strategic significances in recent years. It is not only about environmental protection but also about ensuring long-term economic stability, social welfare, and energy independence. The green economy focuses on sustainable development, efficient use of natural resources, and mitigation of climate change impacts.

Uzbekistan, a country with vast deserts, rich agricultural traditions, and a rapidly growing population, faces pressing environmental challenges. These include water scarcity, land degradation, and dependence on fossil fuels. At the same time, the country has enormous renewable energy potential, particularly in solar and wind power. Recognising this, the government has launched major reforms to transition towards sustainable, low-carbon development.

A green economy is defined by the United Nations Environment Programme (UNEP) as one that results in “improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.[12]” For Uzbekistan, adopting a green economy model is critical to ensuring economic diversification, food and energy security, and resilience to climate change.

Uzbekistan has one of the highest solar energy potentials in Central Asia, receiving more than 300 sunny days annually. The country has set an ambitious goal to generate 25% of its electricity from renewable sources by 2030. Several large solar and wind power plants are under construction, including the 500 MW Zarafshan wind farm and the 400 MW Nur Navoi solar power plant. These projects, supported by international partners such as the World Bank and the Asian Development Bank, are expected to reduce carbon emissions by millions of tonnes annually.

Improving energy efficiency is essential for reducing Uzbekistan’s carbon footprint. The industrial sector, particularly metallurgy and chemical production, remains energy-intensive. The government has introduced policies to modernise outdated infrastructure and promote clean technologies. Energy audits, efficiency standards, and incentives for green manufacturing are being implemented across the country.

Sustainable Agriculture and Water Resource Management Agriculture accounts for more than 25% of Uzbekistan’s GDP and employs a large portion of the population. However, it is also the largest consumer of water. To address this, the government promotes efficient irrigation systems such as drip irrigation, laser levelling, and digital monitoring of water use. Programmes for soil rehabilitation and reforestation of degraded areas—especially around the former Aral Sea—form part of the National Strategy for Environmental Protection.

Urbanisation has led to a sharp increase in waste generation. Uzbekistan is now prioritising waste reduction and recycling projects. Modern waste collection and sorting systems are being built in Tashkent and other major cities. The concept of a circular economy—where waste is reused, recycled, and turned into energy—is gaining traction through public-private partnerships.

Green finance is the backbone of Uzbekistan’s sustainable transition. The government, in collaboration with international financial institutions, is creating favourable conditions for eco-friendly investments. In 2023, Uzbekistan issued its first sovereign green bonds, which attracted investors interested in supporting renewable energy and sustainable infrastructure projects.

[12] United Nations Environment Programme (UNEP). (2011). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*.[^1]

Additionally, local banks are beginning to develop green credit lines for small and medium-sized enterprises.

Uzbekistan actively collaborates with global organisations such as the UNDP, World Bank, and GGGI to promote green initiatives. It is also part of the Paris Agreement and has committed to reducing greenhouse gas emissions per unit of GDP by 35% by 2030 compared to 2010 levels[13]. Through regional initiatives with Kazakhstan and Turkmenistan, the country contributes to sustainable management of the Amu Darya and Syr Darya river basins.

Transitioning to a green economy brings multiple advantages. It promotes job creation in new industries such as renewable energy, recycling, and environmental services. The shift also improves air quality, reduces health risks, and ensures greater energy independence. According to official estimates, the renewable energy sector alone could create up to 300,000 new jobs by 2030[14].

Despite positive progress, Uzbekistan faces several challenges. Financing large-scale green projects remains difficult, and institutional coordination between ministries is often weak. Public awareness of environmental issues is still limited, and many businesses are slow to adopt sustainable practices. Addressing these barriers requires stronger governance, education, and targeted incentives for private sector involvement.

Uzbekistan’s long-term vision for 2050 is to become a fully sustainable, low-carbon economy with zero net emissions from the energy sector. The country plans to expand its renewable capacity to over 15 GW, electrify transport systems, and achieve full water efficiency in agriculture. Continuous innovation, research, and international partnerships will play a crucial role in achieving these objectives.

**Conclusion.** The green economy is more than an environmental policy for Uzbekistan—it is a foundation for sustainable national development. By combining modern technology, green investment, and public engagement, Uzbekistan can transform its economy, preserve its natural resources, and ensure a healthier future for its citizens. The success of this transition depends on cooperation between the government, private sector, and society as a whole.

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# СУНЪИЙ ИНТЕЛЛЕКТ ВА ТАРИХ ТАЪЛИМИ: ИМКОНИЯТЛАР ВА МУАММОЛАР

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***Аннотация.*** *Мақолада сунъий интеллект технологияларининг тарих таълимига таъсири, уларнинг педагогик имкониятлари ва амалиётда юзага келаётган муаммолари таҳлил қилинади. Сунъий интеллектдан тарих таълимида фойдаланишнинг асосий йўналишлари, жумладан, рақамли архивлар билан ишлаш, катта ҳажмдаги тарихий маълумотларни таҳлил қилиш, адаптив таълим тизимларини жорий этиш ва таълим жараёнини индивидуаллаштириш масалалари кўриб чиқилади. Шуниндек, генератив сунъий интеллект технологияларидан фойдаланиш билан боғлиқ академик ҳалоллик, манбалар ишончлилиги, танқидий тафаккур кўникмаларининг пасайиши ҳамда педагог кадрларнинг рақамли компетенциялари каби муаммолар ҳам таҳлил қилинган. Тадқиқот натижалари сунъий интеллект тарих таълимида муҳим инновацион восита бўлиб хизмат қилиши мумкинлигини кўрсатади. Бироқ унинг самарали қўлланилиши мувозанатли педагогик ёндашув, ахлоқий тамойилларга риоя қилиш ва таълим жараёнида танқидий тфаккур кўникмаларини ривожлантиришни талаб этади.*

***Калит сўзлар:*** *сунъий интеллект, тарих таълими, рақамли гуманитар фанлар, рақамли архивлар, адаптив таълим, таълим технологиялари, генератив сунъий интеллект, академик ҳалоллик, танқидий тафаккур.*

***Abstract.*** *This article analyzes the impact of artificial intelligence technologies on history education, as well as their pedagogical opportunities and emerging practical challenges. The study examines the main directions of using artificial intelligence in teaching history, including working with digital archives, analyzing large volumes of historical data, implementing adaptive learning systems, and personalizing the educational process. The paper also discusses challenges associated with the use of generative artificial intelligence technologies, such as issues of academic integrity, reliability of sources, the decline of critical thinking skills, and the level of digital competencies among teaching staff. The results of the study indicate that artificial intelligence can serve as an important innovative tool in history education. However, its effective implementation requires a balanced pedagogical approach, adherence to ethical principles, and the development of critical thinking skills within the educational process.*

***Key words:*** *artificial intelligence, history education, digital humanities, digital archives, adaptive learning, educational technologies, generative AI, academic integrity, critical thinking.*

***Аннотация.*** *В статье анализируется влияние технологий искусственного интеллекта на историческое образование, а также их педагогические возможности и возникающие на практике проблемы. Рассматриваются основные направления использования искусственного интеллекта в преподавании истории, включая работу с цифровыми архивами, анализ больших массивов исторических данных, внедрение адаптивных образовательных систем и персонализацию учебного процесса. Кроме того, рассматриваются проблемы, связанные с использованием генеративных технологий искусственного интеллекта, такие как вопросы академической честности, надежности источников, снижение навыков критического мышления, а также уровень цифровых компетенций педагогических кадров. Результаты исследования показывают, что искусственный интеллект может выступать важным инновационным инструментом в историческом образовании. Однако его эффективное применение требует сбалансированного педагогического подхода, соблюдения этических принципов и развития навыков критического мышления в образовательном процессе.*

***Ключевые слова:*** *искусственный интеллект, историческое образование, цифровые гуманитарные науки, цифровые архивы, адаптивное обучение, образовательные технологии, генеративный ИИ, академическая честность, критическое мышление.*

**Кириш**

Ҳар қандай давлатнинг барқарор тараққиёти ва узоқ муддатли ривожланиш стратегиясини белгилашда таълим сифати ҳамда таълим тизимининг самарадорлиги ҳал қилувчи аҳамиятга эга стратегик омиллардан бири ҳисобланади. Таълим нафақат билим бериш жараёни, балки инсон капитали, интеллектуал салоҳият ва инновацион иқтисодиётни шакллантирувчи асосий ижтимоий институт сифатида намоён бўлади. Шу боис, таълим тизимининг самарадорлиги мамлакатнинг глобал рақобатбардошлиги, технологик мустақиллиги ва ижтимоий барқарорлигига бевосита таъсир кўрсатади.

Рақамли ва сунъий интеллект технологиялари таълим соҳасини тубдан ўзгартирмоқда. Улар орқали таълим жараёнини рақамлаштириш, бошқарув тизимини оптималлаштириш, ресурслардан самарали фойдаланиш ва таълим сифатини глобал меҳнат бозори талабларига мослаштириш мумкин. Таълим тизимини модернизация қилиш шароитида рақамли технологияларни жорий этиш стратегик вазифага айланмоқда. Шу нуқтаи назардан сунъий интеллект технологиялари алоҳида аҳамият касб этади. У маълумотларни интеллектуал таҳлил қилиш, ўқув жараёнини индивидуаллаштириш, таълим натижаларини прогнозлаш ва автоматик баҳолаш тизимларини шакллантириш имкониятлари билан ажралиб туради.

Ўзбекистон Республикаси Президентининг “Сунъий интеллект технологияларини 2030 йилга қадар ривожлантириш стратегиясини тасдиқлаш тўғрисида”ги қарори [1] мамлакатда сунъий интеллектни устувор технологик йўналиш сифатида белгилаб берди. Ушбу стратегияга мувофиқ, сунъий интеллектни иқтисодиёт, давлат бошқаруви, тиббиёт, саноат ва таълим соҳаларига кенг жорий этиш, миллий маълумотлар базасини шакллантириш, кадрлар тайёрлаш тизимини такомиллаштириш ва илмий-тадқиқот салоҳиятини кучайтириш вазифалари белгиланган.

Хусусан, таълим соҳасида сунъий интеллект технологияларини жорий этиш орқали:

• адаптив ва шахсийлаштирилган таълим моделларини ишлаб чиқиш;
• ўқувчилар билим даражасини интеллектуал мониторинг қилиш;
• автоматлаштирилган баҳолаш тизимларини кенгайтириш;
• рақамли таълим платформаларини такомиллаштириш;
• педагог кадрларнинг рақамли компетенцияларини ошириш

каби вазифалар амалга оширилиши назарда тутилган.

Мазкур стратегия сунъий интеллектни нафақат техник инновация сифатида, балки миллий тараққиётнинг драйвери сифатида кўради. Шу боис, таълим тизимида сунъий интеллектдан фойдаланиш давлат сиёсатининг устувор йўналишларидан бирига айланмоқда. Натижада сунъий интеллект таълим жараёнини самарали, адаптив ва рақамли муҳитга интеграциялашган тизимга айлантириш имконини берувчи стратегик платформа сифатида намоён бўлади.

**Сунъий интеллектдан фойдаланиш бўйича халқаро ёндашувлар**

Сунъий интеллектнинг таълим соҳасига таъсири халқаро илмий жамоатчилик томонидан ҳам фаол муҳокама қилинмоқда. Жумладан, 2023 йилда Америка Тарихий Ассоциацияси (AHA) Кенгаши тарих таълимида сунъий интеллект масалаларини ўрганиш мақсадида махсус қўмита ташкил этди. [2] Мазкур қўмита генератив сунъий интеллект технологияларининг тарихни ўқитиш ва ўрганиш жараёнларига таъсирини комплекс таҳлил қилиш вазифасини мақсад қилиб олди.

Қўмита ўз хулосаларида генератив сунъий интеллект воситалари таълим сифатини ошириш ва талабаларнинг билим олиш самарадорлигини кучайтириш учун катта имкониятлар яратишини таъкидлайди. Шу билан бирга, тарих ўқитувчиларининг бир қисми ушбу технологиялар ортиқча юклама, диққатни чалғитиш ёки профессионал қийинчиликларни келтириб чиқараётгани ҳақида хавотир билдираётгани ҳам қайд этилган.

Мутахассислар фикрига кўра, генератив сунъий интеллект қанчалик кучли технологик восита бўлмасин, у ўқитувчининг ўрнини тўлиқ боса олмайди. Таълимни мутлақ автоматлаштириш ҳақидаги таклифлар ўқув жараёнининг педагогик моҳиятини ҳамда таълимнинг инсонга йўналтирилган гуманистик характерига етарлича баҳо бермасликни кўрсатади. Аксинча, сунъий интеллект технологияларининг жадал тарқалиши инсон тажрибаси, тарихий мерос ва ижтимоий тараққиётни янада чуқурроқ англаш зарурлигини кўрсатмоқда.

Шу сабабли халқаро экспертлар сунъий интеллектдан фойдаланишни таълим жараёнига тўлиқ интеграция қилиш эмас, балки уни масъулият, танқидий ва педагогик ёндашув билан қўллаш зарурлигини таъкидлайдилар.

**Тадқиқот методологияси**

Тадқиқотда сунъий интеллект технологияларининг тарих таълимига таъсирини таҳлил қилишда бир қатор илмий методлардан фойдаланилди. Жумладан, илмий адабиётларни таҳлил қилиш, қиёсий таҳлил, тизимли ёндашув ҳамда контент таҳлил усуллари қўлланилди. Халқаро илмий манбалар, жумладан, сунъий интеллект ва таълим соҳасидаги замонавий тадқиқотлар, халқаро ташкилотлар ҳисоботлари ҳамда Америка Тарихий Ассоциацияси (AHA)[2] томонидан тайёрланган тавсиялар таҳлил қилинди.

Шунингдек, рақамли гуманитар фанлар (Digital Humanities) доирасида сунъий интеллектдан фойдаланиш тажрибалари ўрганилиб, уларнинг тарих таълимига татбиқ этиш имкониятлари ва чекловлари қиёсий таҳлил асосида баҳоланди.

**Тарихни ўқитишда сунъий интеллект имкониятлари**

Бугунги жадал глобаллашув ва рақамли трансформация шароитида технологияларнинг тарих таълимига таъсири тобора кучайиб бормоқда. Илғор рақамли воситалар нафақат ахборотни етказиш усулларини ўзгартирмоқда, балки таълим мазмуни, методологияси ва педагогик парадигмасини ҳам қайта шакллантирмоқда. Айниқса, тарих фанлари учун рақамли технологиялар ва сунъий интеллектга асосланган таҳлил воситалари алоҳида аҳамият касб этмоқда.

Тарих илми анъанавий равишда ўтмишни ўрганиш ва уни илмий жиҳатдан талқин қилишга йўналтирилган фан ҳисобланади. Бироқ XXI асрда рақамли технологиялар унинг ривожланишига сезиларли таъсир кўрсатмоқда. Архивларни рақамлаштириш (масалан, Марказий Осиё Очиқ Фотоархиви) ) [3] рақамли гуманитар фанлар (Digital Humanities) соҳасининг ривожланиши ҳамда генератив сунъий интеллект тизимларидаги технологик ютуқлар билимларни яратиш, таҳлил қилиш ва тарқатиш усулларини ўзгартирмоқда.

Шу тариқа, рақамли технологиялар тарихий тадқиқотлар ва таълим жараёнида фақат ёрдамчи техник восита сифатида эмас, балки тарихий билиш жараёни ва илмий таҳлилнинг методологик асосларини шакллантирувчи муҳим омил бўлиб қолмоқда.

“Сунъий интеллект” атамаси илмий муомалага америкалик олим Жон Маккарти томонидан 1956 йилда киритилган бўлиб [4], у инсон тафаккурининг формал моделини яратиш ва инсон ақлий фаолиятига хос бўлган жараёнларни алгоритмлаштириш ғоясига асосланган. Сунъий интеллектнинг асосий мақсади инсоннинг интеллектуал функциялари — фикрлаш, таҳлил қилиш, қарор қабул қилиш, муаммоларни ҳал этиш ва билим олиш каби жараёнларни машиналар орқали моделлаштириш ва автоматлаштиришдан иборат [5]. Бунда тизимлар маълумотларни чуқур таҳлил қилиш, статистик ва мантиқий қонуниятларни аниқлаш ҳамда прогноз моделларини шакллантириш орқали инсон тафаккурига яқин бўлган хулосаларни яратади.

1970-йилларда микро-компьютерлар ва шахсий компьютерларнинг яратилиши таълим тизимини рақамли босқичга олиб чиқди ва анъанавий таълим муҳитини электрон инфратузилма билан алмаштириш жараёнини бошлаб берди. Бу давр компьютерлаштириш жараёнининг институционаллашуви билан характерланади. Бу эса ўз навбатида, компьютер технологияларининг нафақат таълим соҳасига, балки иқтисодиёт, бошқарув ва саноат тизимларига ҳам кенг жорий этилишига имкон берди.

Компьютер техникасининг оммалашуви ахборотни сақлаш, қайта ишлаш ва узатиш имкониятларини сифат жиҳатидан янги босқичга кўтарди. Бироқ анъанавий, маърузага асосланган ва бир томонлама ахборот узатишга йўналтирилган таълим методлари бугунги кунда ўз самарадорлигини босқичма-босқич йўқотмоқда. Боиси, бу усул таълим олувчининг фаол иштирокини чеклайди ва унинг танқидий тафаккур, таҳлил қила олиш қобилияти ҳамда мустақил хулоса чиқариш кўникмаларини тўлиқ ривожлантирмайди. Айниқса, тарих ўтмиш даврлар, қадимги цивилизациялар ҳамда инқирозга учраган ижтимоий тузумларни ўрганишга ихтисослашган фандир. Бу эса талабалар учун мавҳумлик даражасини оширади ва ўрганилаётган воқеликни идрок этиш жараёнида муайян қийинчиликларни келтириб чиқаради.

XIX–XX асрларда тарихий тадқиқотлар асосан манбаларнинг чекланганлиги шароитида амалга оширилган бўлса, рақамли асрда тарихчи аксинча, маълумотларнинг кўплиги муаммоси билан тўқнаш келмоқда. Бугунги кунда тарихчи аксарият ҳолатларда ахборот танқислиги билан эмас, балки катта маълумотлар оқими билан ишлашга мажбур.

Бу эса ўз навбатида манбаларни саралаш, таҳлил қилиш ва талқин қилишнинг янги усулларини талаб қилади. Шу боис рақамли технологиялар оддий техник восита сифатида эмас, балки тарихий тафаккур ва тадқиқот жараёнларининг методологик асосларини шакллантирувчи омил сифатида юзага чиқмоқда.

Дарҳақиқат, тарих таълимида сунъий интеллектдан фойдаланиш ўқув материалларини таҳлил қилиш, тарихий манбалар билан ишлаш ва талабаларда аналитик тафаккур кўникмаларини шакллантиришда муҳим аҳамият касб этмоқда. Сунъий интеллект технологиялари катта ҳажмдаги маълумотлар массивини қайта ишлаш ва уларни тизимлаштириш имконияти билан ажралиб туради. Мазкур ҳолат тарихчилар ва талабаларга кўп сонли тарихий манбалар, архив материаллари ва илмий адабиётларни самарали таҳлил қилиш имконини беради. Масалан, машинали ўрганиш алгоритмлари орқали архив ҳужжатларини автоматик тарзда таснифлаш, тарихий матнларни контент таҳлил қилиш ва манбалар ўртасидаги боғлиқликларни аниқлаш мумкин. Бунда тарихий тадқиқотлар самарадорлиги ошиши билан бирга, таълим жараёни учун ҳам янги дидактик имкониятлар ҳам яратилади [5] .

Шу билан бирга, сунъий интеллект технологиялари тарих таълимида визуал ва интерфаол муҳитни шакллантиришга хизмат қилади. Масалан, виртуал реаллик (VR) ва тўлдирилган реаллик (AR) технологиялари орқали талабалар тарихий воқеаларни интерфаол муҳитда кузатиш ёки уларнинг қайта тикланган ҳолатини кўриш имкониятига эга бўлади. Бу эса тарихий жараёнларни яхшироқ тушунишга ёрдам беради ва таълимнинг самарадорлигини оширади [6].

Сунъий интеллект таълим жараёнини шахсийлаштириш имкониятини ҳам кенгайтиради. Адаптив ўқитиш тизимлари талабаларнинг билим даражаси, ўқиш суръати ва индивидуал қобилиятларини ҳисобга олган ҳолда таълим материалларини мослаштириш имкониятини беради. Натижада ҳар бир талабага индивидуал таълим траекторияси шакллантирилади. Бу эса таълим жараёнининг самарадорлигини ошириш ва талабаларнинг билимларни ўзлаштириш даражасини яхшилашга хизмат қилади [7].

Бундан ташқари, сунъий интеллект тарих таълимида баҳолаш тизимини такомиллаштиришда ҳам муҳим роль ўйнайди. Автоматлаштирилган баҳолаш тизимлари талабаларнинг ёзма ишларини таҳлил қилиш, тест натижаларини баҳолаш ва ўқув натижаларини мониторинг қилиш имкониятини беради. Бу эса педагогларга таълим натижаларини тезкор таҳлил қилиш ва ўқув жараёнини оптималлаштириш имкониятини яратади [8]

Бугунги жадал глобаллашув ва рақамли трансформация шароитида технологияларнинг тарих таълимидаги ўрни ва таъсири тобора кучайиб бормоқда. Илғор рақамли воситалар нафақат ахборотни етказиш шаклини ўзгартирмоқда, балки таълимнинг мазмун-моҳияти, методологияси ва педагогик парадигмасини ҳам қайта шакллантирмоқда. Айниқса, тарих фанлари учун технологик қўллаб-қувватлаш механизмлари алоҳида аҳамият касб этмоқда.

Тарих илми анъанавий равишда ўтмишни ўрганиш ва уни илмий жиҳатдан талқин қилишга йўналтирилган фан сифатида таърифланади. Бироқ XXI асрда рақамли технологиялар унинг ривожланиш траекториясини тубдан ўзгартирмоқда. Архивларни рақамлаштириш (масалан, Марказий Осиё Очиқ Фотоархиви) [3], рақамли гуманитар фанлар (Digital Humanities) соҳасининг ривожланиши ҳамда генератив сунъий интеллект тизимларидаги технологик ютуқлар (GPT-5, Deepseek, Claude, Perplexity,Gemini ва Grok

каби) билимларни яратиш, талқин қилиш ва тарқатиш усулларини сезиларли даражада ўзгартирмоқда. Бугунги кунда келажакни башорат қилиш ва моделлаштириш учун яратилган технологиялар тарихий билиш жараёнига ҳам жадал кириб бормоқда. Бу ҳолат тарихчиларни фаннинг асосий назарий тамойилларини ҳамда ўтмишни талқин қилишга оид анъанавий ёндашувларни қайта кўриб чиқишга ундамоқда.

“Сунъий интеллект” атамаси илмий муомалага америкалик олим Жон Маккарти томонидан 1956 йилда киритилган бўлиб [4], у инсон тафаккурининг формал моделини яратиш ва инсон ақлий фаолиятига хос бўлган жараёнларни алгоритмлаштириш ғоясига асосланган. Сунъий интеллектнинг асосий мақсади инсоннинг интеллектуал функциялари — фикрлаш, таҳлил қилиш, қарор қабул қилиш, муаммоларни ҳал этиш ва ўрганиш каби жараёнларни машиналар орқали моделлаштириш ва автоматлаштиришдан иборат [5]. Бунда тизимлар маълумотларни чуқур таҳлил қилиш, статистик ва мантиқий қонуниятларни аниқлаш ҳамда прогноз моделларини шакллантириш орқали инсон тафаккурига яқин бўлган хулосаларни яратади.

1970-йилларда микро-компьютерлар ва шахсий компьютерларнинг яратилиши таълим тизимини рақамли босқичга олиб чиқди ва анъанавий таълим муҳитини электрон инфратузилма билан алмаштириш жараёнини бошлаб берди. Бу давр компьютерлаштириш жараёнининг институционаллашуви билан характерланади. Бу эса ўз навбатида, компьютер технологияларининг нафақат таълим соҳасига, балки иқтисодиёт, бошқарув ва саноат тизимларига ҳам кенг жорий этилишига имкон берди.

Компьютер техникасининг оммалашуви билимни сақлаш, қайта ишлаш ва узатиш имкониятларини сифат жиҳатидан янги босқичга кўтарди.Бироқ анъанавий, маърузага асосланган ва бир томонлама ахборот узатишга йўналтирилган таълим методлари бугунги кунда ўз самарадорлигини босқичма-босқич йўқотмоқда. Боиси, бу усул ўқувчининг фаол иштирокини чеклайди ва унинг танқидий фикрлаш, таҳлилий қобилият ҳамда мустақил хулоса чиқариш кўникмаларини тўлиқ ривожлантирмайди. Айниқса, тарих фани ўтмиш даврлар, қадимги цивилизациялар ҳамда инқирозга учраган ижтимоий тузумларни ўрганишга ихтисослашган соҳадир. Бу эса талабалар учун мавҳумлик даражасини оширади ва ўрганилаётган воқеликни идрок этиш жараёнида муайян қийинчиликларни келтириб чиқаради.

XIX–XX асрларда тарихий тадқиқотлар асосан манбаларнинг чекланганлиги шароитида амалга оширилган бўлса, рақамли асрда тарихчи аксинча, маълумотларнинг кўплиги муаммоси билан тўқнаш келмоқда. Бугунги кунда тарихчи асосан ахборот танқислиги билан эмас, балки катта маълумотлар оқими билан ишлашга мажбур. Бу эса манбаларни саралаш, таҳлил қилиш ва талқин қилишнинг янги усулларини талаб этади. Шу боис рақамли технологиялар оддий техник восита сифатида эмас, балки тарихий тафаккур ва тадқиқот жараёнларининг методологик асосларини шакллантирувчи омил сифатида намоён бўлмоқда.

Шунингдек, сунъий интеллект технологиялари тарих таълимида визуал ва интерфаол муҳитни шакллантиришга хизмат қилади. Мисол учун, , виртуал реаллик (VR) ва тўлдирилган реаллик (AR технологиялари орқали талабалар тарихий воқеаларни интерфаол кузатиш ёки уларнинг қайта тикланган ҳолатини кўриш имкониятига эга бўлади. Бу эса тарихий жараёнларни яхшироқ тушунишга ёрдам беради ва ўқувчиларнинг ўзлаштириш даражасини оширади .

Сунъий интеллект таълим жараёнини шахсийлаштириш имкониятини ҳам кенгайтирмоқда. Хусусан, адаптив таълим тизимлари таълим олувчиларнинг билим даражаси, ўқиш суръати ва индивидуал қобилиятларини ҳисобга олган ҳолда таълим материалларини мослаштира олади. Натижада ҳар бир талаба учун шахсийлаштирилган таълим йўналиши шакллантирилади. [7].

Бундан ташқари, сунъий интеллект тарих таълимида баҳолаш тизимини такомиллаштиришда ҳам муҳим роль ўйнайди. Автоматлаштирилган баҳолаш тизимлари талабаларнинг ёзма ишларини таҳлил қилиш, тест натижаларини баҳолаш ва ўқув натижаларини мониторинг қилиш имкониятини беради. Бу эса педагогларга таълим натижаларини тезкор таҳлил қилиш ва ўқув жараёнини оптималлаштириш имкониятини яратади [8].

Шу тариқа, сунъий интеллект технологиялари тарих таълимида таълим мазмунини модернизация қилиш, таълим жараёнини шахсийлаштириш, манбалар билан ишлаш самарадорлигини ошириш ва таълим натижаларини таҳлил қилиш имкониятларини кенгайтирувчи инновацион педагогик восита сифатида намоён бўлмоқда.

**Тарих таълимида сунъий интеллектни қўллаш муаммолари**

Сунъий интеллект технологияларини тарих таълимида қўллаш *бир томондан* кенг имкониятлар ва афзалликларни тақдим этса, *иккинчи томондан* назарий, методологик ва ахлоқий хусусиятга эга бўлган бир қатор муаммоларни ҳам юзага келтирмоқда. Жумладан, сунъий интеллектдан таълим жараёнида фойдаланиш билан боғлиқ энг катта муаммолардан бири академик ҳалоллик масаласидир. Генератив сунъий интеллект тизимлари (ChatGPT, Deepseek, Gemini, Grok ва бошқалар) талабаларга қисқа вақт ичида матнлар, эсселер ва таҳлилий ишлар яратиш имконини беради. Бу ҳолат айрим вақтларда мустақил фикрлаш ва илмий тадқиқот кўникмаларининг пасайишига олиб келиши мумкин. Соҳа экспертларининг таъкидлашича, сунъий интеллект томонидан яратилган матнлар кўпинча ишончли кўринса-да, улар ҳар доим ҳам илмий жиҳатдан асосланган бўлмайди. Айниқса, тарихий мавзулардаги мана шундай матнлар манбаларни таҳлил қилиш ва контекстни тўғри талқин қилиш талабларига жавоб бермаслиги мумкин. [9] Шу боис таълим муассасалари сунъий интеллектдан фойдаланишга оид аниқ ва тизимли академик сиёсатни ишлаб чиқишлари зарур.

Яна бир муҳим муаммо манбаларнинг ишончлилик даражаси. Тарих фанининг асосий хусусиятларидан бири тарихий манбаларни танқидий таҳлил қилишдир. Бироқ генератив сунъий интеллект алгоритмлари айрим вақтларда “галлюцинация” деб аталувчи ҳолатни юзага келтиради, яъни мавжуд бўлмаган манбалар ёки далилларни ишончли маълумот сифатида тақдим этади. Бу эса талабаларда тарихий воқелик ҳақида нотўғри тасаввурларни шакллантиради.

АҚШнинг Америка Тарихий Уюшмаси (American Historical Association) томонидан тайёрланган ҳужжатда таъкидланишича, сунъий интеллект матн, тасвир ва ахборотлар яратиш қобилиятига эга, аммо уларнинг барчаси ҳам ҳақиқатни тўлиқ акс эттирмайди. Шунинг учун талабалар сунъий интеллект орқали олинган маълумотларни танқидий баҳолаш кўникмаларини ривожлантиришлари шарт [2].

Танқидий тафаккур кўникмаларининг пасайиши ҳозирги таълим тизимидаги муҳим муаммолардан бири ҳисобланади. Сунъий интеллектдан ортиқча фойдаланиш талабаларнинг мустақил фикрлаш салоҳиятига таъсир кўрсатмоқда. Илмий тадқиқотларга

кўра, рақамли технологияларга ортиқча боғлиқлик баъзан аналитик тафаккур ва муаммоларни ҳал қилиш қобилиятининг пасайишига сабаб бўлади [10].

Халқаро PISA тадқиқотлари талабаларда танқидий таҳлил кўникмаларининг пасайиш тенденцияси кузатилаётганини қайд этмоқда [11] Мазкур ҳолат тарих таълими учун айниқса муҳим, чунки бу фан талабалардан манбаларни танқидий баҳолаш ва турли нуқтаи назарларни қиёсий таҳлил қилиш кўникмасини талаб қилади.

Сунъий интеллект технологияларини таълим тизимига жорий қилиш инфратузилма ва кадрлар тайёрлаш билан боғлиқ бир қатор муаммоларни ҳам юзага келтирмоқда. Барча таълим муассасалари ҳам замонавий рақамли платформалар ва сунъий интеллект тизимларидан фойдаланиш учун зарур техник имкониятларга эга эмас. Бунинг натижасида таълим сифатида ҳудудий ва институционал тафовутлар келиб чиқиши мумкин. Шу билан бирга, педагог кадрларнинг рақамли компетенциялари ҳам муҳим аҳамиятга эга. Тадқиқотлар шуни кўрсатадики, аксарият ўқитувчилар сунъий интеллект технологияларидан фойдаланиш учун етарли профессионал тайёргарликка эга эмас. [12].

Сунъий интеллектдан фойдаланиш ахлоқий ва ижтимоий муаммоларни ҳам келтириб чиқаради. Масалан, алгоритмларга асосланган маълумотлар баъзан муайян маданий ёки сиёсий нуқтаи назарларни акс эттириши мумкин. Бу эса тарихий воқеаларнинг бир томонлама талқин қилинишига олиб келиши эҳтимоли бор. Флориди ва Ковлс таъкидлашича, сунъий интеллектни жорий этишда шаффофлик, масъулият ва ахлоқий меъёрларга риоя қилиш муҳим аҳамиятга эга [13].

**Хулоса ва тавсиялар**

Тадқиқот натижалари шуни кўрсатадики, сунъий интеллект технологиялари тарих таълимида янги педагогик имкониятларни яратмоқда. Айниқса, катта ҳажмдаги тарихий маълумотларни таҳлил қилиш, рақамли архивлар билан ишлаш, адаптив таълим тизимларини жорий этиш ва ўқув жараёнини индивидуаллаштиришда сунъий интеллект муҳим технологик восита бўлиб хизмат қилмоқда.

Бироқ мазкур технологияларнинг таълим жараёнига жорий этилиши бир қатор муаммоларни ҳам келтириб чиқармоқда. Жумладан, академик ҳалоллик масаласи, сунъий интеллект тизимларидаги маълумотлар ишончлилиги, танқидий тафаккур кўникмаларининг пасайиши эҳтимоли ҳамда педагог кадрларнинг рақамли компетенцияларининг етарли эмаслиги шулар жумласидандир.

Шу сабабли тарих таълимида сунъий интеллект технологияларидан фойдаланишда мувозанатли ёндашув талаб этилади. Сунъий интеллектга ўқув жараёнида ўқитувчини алмаштирувчи восита эмас, балки таълим бериш ва тадқиқот фаолиятини қўллаб-қувватловчи восита сифатида қаралиши лозим.

*Тадқиқот натижалари асосида қуйидаги амалий тавсияларни илгари суриш мумкин:*

Таълим муассасаларида сунъий интеллектдан фойдаланиш бўйича академик сиёсат ишлаб чиқиш;

Олий таълим муассасаларида сунъий интеллект ва рақамли гуманитар фанлар бўйича махсус ўқув курслари ва малака ошириш дастурларини ташкил этиш мақсадга мувофиқ;

Тарих таълимида сунъий интеллектдан фойдаланиш билан бирга манбаларни танқидий таҳлил қилиш, фактларни текшириш ва турли нуқтаи назарларни қиёсий баҳолаш кўникмаларини ривожлантириш муҳим ҳисобланади;

Рақамли архивлар, электрон манбалар ва сунъий интеллектга асосланган таҳлил воситаларини таълим жараёнига интеграция қилиш тарих таълими самарадорлигини оширишга хизмат қилади;

Сунъий интеллект технологияларидан фойдаланишда ахлоқий меъёрлар, маълумотлар шаффофлиги ва илмий масъулият тамойилларига қатъий амал қилиш талаб этилади.

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# METHODOLOGICAL FRAMEWORK FOR SIMULATION-BASED ESP INSTRUCTION IN ARCHITECTURE EDUCATION

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***Abstract.*** *This study investigates a methodological framework for implementing simulation-based English for Specific Purposes (ESP) instruction in architecture education at ADJU University, Tashkent. Architecture students require specialized language competencies to engage effectively in professional discourse, including technical presentations, client consultations, design critiques, and collaborative project communication. Traditional ESP approaches often fail to contextualize language learning within authentic professional scenarios. This research proposes and evaluates a simulation-based instructional model that integrates architectural case studies, role-play exercises, and professional scenario enactments into the ESP curriculum. The study employed a mixed-methods approach combining qualitative case study analysis with classroom-based observation and learner feedback. Results indicate notable improvements in students' professional communication skills, technical vocabulary acquisition, and self-confidence in English-medium architectural discourse. Findings suggest that simulation-based ESP instruction not only enhances linguistic competence but also bridges the gap between academic language learning and real-world professional practice in architecture.*

***Key words:*** *ESP instruction, simulation-based learning, architecture education, professional communication, role-play, case study, technical vocabulary, language competence.*

***Annotatsiya.*** *Ushbu tadqiqot Toshkentdagi ADJU universitetida arxitektura ta'limida simulyatsiyaga asoslangan maxsus maqsadlar uchun ingliz tili (ESP) o'qitishni amalga oshirishning metodologik asoslarini o'rganadi. Arxitektura talabalari professional diskursda — texnik taqdimotlar, mijozlar bilan muloqot, dizayn muhokamasi va hamkorlikdagi loyiha munosabatlarida — samarali ishtirok etish uchun ixtisoslashtirilgan til kompetensiyalariga muhtoj. Ushbu tadqiqot arxitektura ta'limi dasturiga me'moriy kejs-tadqiqotlari, rolli o'yinlar va professional stsenariylarni birlashtirgan simulyatsiyaga asoslangan o'qitish modelini taklif etadi va baholaydi. Natijalar talabalarning professional muloqot ko'nikmalari, texnik leksika o'zlashtirishi va ingliz tilli arxitektura diskursidagi o'z-o'ziga ishonchining sezilarli darajada yaxshilanganini ko'rsatmoqda.*

***Kalit so'zlar:*** *ESP o'qitish, simulyatsiyaga asoslangan ta'lim, arxitektura ta'limi, professional muloqot, rolli o'yin, keys-stadi, texnik leksika, til kompetensiyasi.*

***Аннотация.*** *Данное исследование изучает методологическую основу внедрения обучения английскому языку для специальных целей (АСП) на основе симуляций в архитектурном образовании в Университете ADJU в Ташкенте. Студенты-архитекторы нуждаются в специализированных языковых компетенциях для эффективного участия в профессиональном дискурсе — технических презентациях, консультациях с клиентами, критике проектов и командном общении. В исследовании предлагается и оценивается модель обучения на основе симуляций, интегрирующая архитектурные кейс-стади, ролевые игры и профессиональные сценарии в учебную программу АСП. Результаты свидетельствуют о значительном улучшении профессиональных коммуникативных навыков студентов, освоении технической лексики и уверенности в англоязычном архитектурном дискурсе.*

***Ключевые слова:*** *обучение АСП, обучение на основе симуляций, архитектурное образование, профессиональная коммуникация, ролевая игра, кейс-стади, техническая лексика, языковая компетенция.*

## 1. INTRODUCTION

The global spread of English as the language of professional and academic communication has reshaped the demands placed upon discipline-specific language education. In architecture — a field characterized by complex technical vocabulary, spatial reasoning communicated through verbal description, and intensive collaborative and client-facing interaction — the need for robust English for Specific Purposes (ESP) instruction has grown considerably [1]. Yet, ESP curricula in architecture programs across Central Asian universities, including those in Uzbekistan, have historically prioritized passive reading and translation skills over active, real-time professional communication competencies [2].

Architecture graduates in Uzbekistan increasingly engage with international design firms, participate in global competitions, and pursue professional development in English-medium environments. These contexts demand active communication skills: presenting design concepts to international juries, negotiating project requirements with foreign clients, defending proposals in design review sessions, and collaborating in multilingual teams [3]. The gap between what conventional ESP courses deliver and what the profession requires has been widely documented in the literature on English for academic and professional purposes [4].

Simulation-based learning (SBL) has emerged as a pedagogical approach that bridges this gap by immersing learners in structured approximations of real professional environments [5]. By enacting authentic scenarios — a client brief presentation, a team coordination meeting, a design critique session — students engage language not as an abstract system to be memorized but as a functional instrument for professional action [6]. Recent research on English-medium instruction in Uzbekistan further underscores the value of contextualized, communicatively oriented language pedagogy at the tertiary level [7].

This paper proposes, implements, and evaluates a comprehensive simulation-based ESP instructional framework designed for architecture students at ADJU University, Tashkent. The study addresses the following research questions: (1) How can simulation-based instruction be systematically integrated into an ESP curriculum for architecture students? (2) What effects does this framework produce on students’ professional communication competence and technical

vocabulary acquisition? (3) What pedagogical principles should guide the design of simulation activities in the architectural ESP context?

## 2. LITERATURE REVIEW

The theoretical foundations of simulation-based ESP instruction draw from several converging scholarly traditions. Dudley-Evans and St. John [1] established the conceptual architecture of ESP as a needs-driven, context-sensitive discipline that prioritizes authentic language use over generalized communicative competence. Their framework insists that effective ESP must be grounded in rigorous analysis of the target professional community's communicative demands — a principle that directly informs the design of the present study.

Hutchinson and Waters [8] theorized ESP as situated within a broader ecology of learner needs, professional contexts, and learning opportunities, arguing that language learning is most effective when integrated with meaningful, purposeful activity. This insight has been operationalized through task-based language teaching (TBLT) research [9], which provides a robust theoretical basis for simulation-based approaches. Akhmadaliyeva’s [6] recent study, conducted in an architecture-related ESP context, confirms that role-play and simulation activities measurably enhance speaking competence and communicative confidence among Uzbek university students, lending direct local empirical support to the framework developed here.

Research on English-medium instruction (EMI) in Uzbekistan’s higher education institutions has identified a persistent tension between the aspirations of language policy and the communicative readiness of students [7]. Rahmanova and Ekşi [7] found that while EMI programs improve English proficiency and career prospects, carefully designed curricula and active pedagogical strategies are essential prerequisites for meaningful learning. The simulation-based model proposed here responds directly to this finding by providing structured, scaffolded communicative practice within authentic architectural genres [10].

Groat and Wang [10] have documented the distinctive communicative culture of architecture — characterized by design studio critique, portfolio presentation, and collaborative charrette processes — as constituting authentic genres that simulation-based ESP instruction can productively replicate. Coxhead's [11] empirical work on academic word lists and domain-specific vocabulary acquisition provides the theoretical basis for the vocabulary instruction components embedded in the simulation activities. The simulation and role-play literature in language pedagogy, reviewed by Jones [12], and Shokirov’s [13] study of the theoretical foundations and practical applications of the simulation method in architectural education at Uzbek institutions together provide direct, locally grounded methodological support for the present framework.

## 3. METHODOLOGY

This study employed a mixed-methods research design, combining observation of learner performance with qualitative analysis of participant experience and instructional process. The research was conducted over one full academic semester (16 weeks) with architecture students enrolled in the ESP: Professional Communication in Architecture course at ADJU University, Tashkent.

**Participants:** The study cohort consisted of second-year architecture students at ADJU University. Prior to the intervention, students’ English proficiency was assessed using an institutional placement instrument aligned with the Common European Framework of Reference (CEFR). The majority of participants were assessed at B1 level, with a smaller proportion at B2

level. All participants were enrolled in the ESP course as part of their regular academic program. No personally identifiable demographic data were collected or used in the analysis.

**Simulation Framework Design:** The instructional framework comprised three simulation modalities: (1) Professional Role-Play Scenarios, in which students enacted client consultations, design team meetings, and project presentations; (2) Architectural Case Study Analysis, in which students analyzed and discussed real-world building projects using English-medium technical discourse; and (3) Design Critique Simulations, replicating the studio jury format with structured peer and instructor feedback. Each simulation module was preceded by targeted vocabulary instruction and language awareness activities aligned with architecture-specific lexical domains.

**Data Collection:** Qualitative data were gathered through structured reflective journals maintained by students, post-simulation debriefing sessions (audio-recorded and transcribed), and instructor observation notes. Communication performance was assessed using a rubric adapted from standard professional English assessment criteria, evaluating fluency, accuracy, vocabulary range, and communicative effectiveness. Learner feedback was collected via end-of-semester surveys and selected semi-structured interviews.

**Table 1. Summary of Research Design Components**

| Component | Instrument / Method | Duration / Frequency |
|---|---|---|
| Professional Communication | Performance rubric (pre/post) | Beginning and end of semester |
| Technical Vocabulary | Vocabulary assessment | Weeks 1, 8, 16 |
| Learner Feedback | Survey + interview | End of semester |
| Role-Play Simulation | Scenario enactment + rubric | Biweekly (8 sessions) |
| Case Study Analysis | Discussion + written report | 4 sessions |
| Design Critique Simulation | Jury format presentation | 3 sessions |

## 4. ANALYSIS AND RESULTS

Data analysis drew on both performance assessment outcomes and qualitative themes emerging from student reflective journals, debriefing transcripts, and instructor observations. Across all indicators, consistent and positive patterns of development were observed over the semester.

**Table 2. Observed Trends in Student Performance by Assessment Measure**

| Assessment Measure | Beginning of Semester | End of Semester |
|---|---|---|
| Professional Communication Competence | Developing / Limited | Competent / Proficient |
| Technical Vocabulary Range | Basic / Passive | Extended / Active use |
| Communicative Confidence (self-report) | Low–Moderate | Moderate–High |
| Willingness to Communicate in English | Hesitant | Increasingly spontaneous |

Professional communication competence showed the most clearly observable improvement across the semester. Early simulation sessions were characterized by heavy reliance on prepared scripts and frequent hesitation in responding to unexpected communicative demands. By mid-semester, students demonstrated greater fluency in handling authentic architectural discourse scenarios, including unscripted exchanges during simulated client consultations and peer jury critiques. These findings align with Akhmadaliyeva’s [6] empirical results from an architecture-related ESP context and with Shokirov’s [13] analysis of simulation methodology in architectural education at Uzbek universities.

Technical vocabulary acquisition showed clear progression, particularly in the domains of spatial and structural description — precisely the lexical areas most extensively activated in the simulation scenarios. Case study analysis sessions proved especially effective as a vehicle for vocabulary acquisition in context, consistent with Coxhead's [11] findings on domain-specific lexical learning. Students reported in journal entries that encountering vocabulary within the functional pressure of professional simulation, rather than in isolated exercises, significantly improved both retention and active use.

Learner self-confidence in English-medium professional communication showed the most qualitatively striking development. Student reflective journals consistently documented an initial phase of significant anxiety, followed by progressive habituation and increasing comfort with English-medium professional interaction. This trajectory mirrors findings from EMI research in Uzbekistan by Rahmanova and Ekşi [7], who identified communicative confidence as both a key benefit and a prerequisite of successful English-medium learning at Uzbek universities.

**Table 3. Student Engagement and Satisfaction by Simulation Type**

| Simulation Type | Sessions | Participation Rate | Avg. Satisfaction (1–5) |
|---|---|---|---|
| Professional Role-Play | 8 | High | 4.3 |
| Case Study Analysis | 4 | High | 4.1 |
| Design Critique Simulation | 3 | High | 4.5 |

*Note: Participation rates and satisfaction scores are based on instructor observation records and end-of-semester student feedback surveys.*

## 5. CONCLUSIONS AND RECOMMENDATIONS

This study has demonstrated that a systematically designed simulation-based ESP instructional framework produces meaningful improvements in the professional English communication competence, technical vocabulary, and self-confidence of architecture students at ADJU University, Tashkent. The three-modality framework — integrating professional role-play, architectural case study analysis, and design critique simulation — proved pedagogically coherent, learner-engaging, and practically implementable within the constraints of a regular academic semester.

The findings carry several implications for ESP curriculum design in architecture and related technical disciplines in Uzbekistan's reforming higher education sector. First, needs analysis must explicitly identify the authentic communicative genres of the target profession and organize the ESP syllabus around these rather than around generic language skills. Second,

simulation activities should be designed with graduated scaffolding — providing explicit language support in early sessions that is progressively reduced as learner competence develops. Third, reflective practice through journals, debriefing, and structured peer feedback should be built into every simulation cycle.

Future research directions include longitudinal examination of vocabulary and communication gains, investigation of digital simulation and virtual collaboration platforms as supplementary tools, and the development of validated, architecture-specific ESP assessment instruments suited to the Uzbekistan higher education context. The present framework offers a replicable model that other ESP practitioners in technical disciplines in Central Asian higher education may adapt to their own institutional and professional contexts [14].

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"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# MONITORING TECHNOLOGY OF PROFESSORS' AND TEACHERS' CLASSROOM ACTIVITIES IN HIGHER EDUCATION INSTITUTIONS BASED ON STUDENT EVALUATIONS

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***Abstract.*** *This article highlights the importance of students' opinions in evaluating the classroom activities of professors and teachers in higher education institutions. In the course of the research, quality indicators based on student feedback were identified and mechanisms for their improvement were developed. Based on the results of the empirical study, it was proven that the systematic use of student opinions in evaluating the teaching activities of professors and teachers contributes to improving the quality of education and increases students' satisfaction with the quality of the classes delivered by professors and teachers.*

***Key words:*** *higher education, quality education, professor-teacher, teaching activity, student feedback, quality indicators, evaluation technology, modern approaches, monitoring.*

***Annotatsiya.*** *Mazkur maqolada oliy ta'lim muassasalarida professor-o'qituvchilarning dars mashg'ulotlaridagi faoliyatini baholashda talabalar fikrlarining ahamiyati yoritilgan. Tadqiqot jarayonida talabalar fikrlariga asoslangan sifat ko'rsatkichlari aniqlanib, ularni takomillashtirish mexanizmlari ishlab chiqilgan. Empirik tadqiqot natijalari asosida professor-o'qituvchilar dars faoliyatini baholashda talabalar fikrlarini tizimli ravishda qo'llash ta'lim sifati oshishiga hamda talabalarning professor-o'qituvchilar tomonidan berilayotgan darslar sifatiga qoniqish darajasini ortishi isbotlangan.*

***Kalit so'zlar:*** *oliy ta'lim, sifatli ta'lim, professor-o'qituvchi, dars faoliyati, talabalar fikri, sifat ko'rsatkichlari, baholash texnologiyasi, zamonaviy yondashuvlar, monitoring.*

***Аннотация.*** *В данной статье раскрывается значение мнений студентов при оценке деятельности профессорско-преподавательского состава на учебных занятиях в высших образовательных учреждениях. В ходе исследования были определены показатели*

*качества, основанные на мнениях студентов, а также разработаны механизмы их совершенствования. На основе результатов эмпирического исследования доказано, что систематическое использование мнений студентов при оценке учебной деятельности преподавателей способствует повышению качества образования и увеличению уровня удовлетворенности студентов качеством проводимых занятий.*

***Ключевые слова:*** *высшее образование, качественное образование, профессорско-преподавательский состав, учебная деятельность, мнение студентов, показатели качества, технология оценки, современные подходы, мониторинг.*

**Introduction.** Currently, the modernization of the higher education system and the improvement of the quality and competitiveness of education are becoming increasingly important issues. In this process, evaluating the teaching activities of professors and instructors during classroom sessions is considered one of the key factors. This is because the quality of the learning process directly depends on the teacher’s professional competence, pedagogical approach, and effective interaction with students.

In traditional evaluation systems, the activities of professors and instructors are mainly assessed through administrative control or official documentation, while insufficient attention is paid to students’ opinions. However, students, as the direct participants of the learning process, represent an important source of information for evaluating teaching performance. Students’ feedback reflects the teacher’s ability to explain the material clearly, the use of interactive methods, fairness in assessment, and communication culture.

Therefore, identifying quality indicators based on students’ feedback and developing mechanisms for their improvement in evaluating teaching activities of professors and instructors is considered a relevant scientific and practical issue.

The **purpose of the research** is to identify quality indicators based on students’ opinions in evaluating the teaching activities of professors and instructors in higher education institutions and to develop scientifically grounded recommendations for their improvement.

The **research objectives** include:

- analyzing scientific literature related to the evaluation of professors’ and instructors’ activities;
- identifying evaluation criteria based on students’ feedback;
- analyzing the results of empirical research;
- developing practical recommendations for improving quality indicators.

**Literature Review.** The issue of evaluating the activities of professors and instructors has been widely studied in the fields of pedagogy and educational management. In international studies, evaluation based on students’ opinions is explained through the concept of **Student Evaluation of Teaching (SET)** and is considered an important element of educational quality monitoring. Within this approach, ratings provided by students are recognized as key indicators for determining the pedagogical effectiveness of instructors.

In local studies, however, the evaluation of professors’ and instructors’ activities is mostly conducted through certification procedures, rating systems, and internal control mechanisms. In many cases, students’ feedback tends to be formal in nature and does not serve analytical or developmental purposes.

The scientific foundations of student feedback in evaluating teaching activities are extensively discussed in the works of **Marsh, H. W. – Student Evaluations of Teaching.**

According to this research, student evaluations possess a **multidimensional character**, since students, as direct participants in the learning process, can accurately assess the teacher’s explanation style, communication culture, and level of lesson organization.

The issue of teaching quality in higher education is thoroughly discussed in **Biggs, J. and Tang, C. – Teaching for Quality Learning at University.** According to their perspective, quality education is ensured through interactivity, student engagement, and effective collaboration between teachers and students. These ideas served as a basis for selecting the use of interactive teaching methods as one of the key quality indicators in this research.

The reliability of student ratings has been analyzed in the studies of **Benton, S. L. and Cashin, W. E. – Student Ratings of Teaching.** While acknowledging that student evaluations may sometimes be subjective, properly designed criteria and anonymous surveys can significantly reduce such limitations. This approach justifies the use of clearly defined quality indicators and structured questionnaires in our research.

Furthermore, the structural dimensions of educational quality were defined by **Gibbs, G. – Dimensions of Quality,** who argued that quality should be viewed not only as an outcome but also as a combination of processes, communication, and methodological approaches.

The literature analysis shows that a student feedback-based evaluation system:

- reflects the real state of teaching activities;
- contributes to improving lesson quality;
- stimulates the professional development of instructors.

However, many studies do not sufficiently address the systematic identification and improvement mechanisms of quality indicators based on student feedback. This gap defines the **scientific novelty and relevance** of the present research.

**Relevance of the Study.** This research aims to determine methods for evaluating teachers’ professional activities and to study new technological approaches to assessment. The role of innovative technologies in the educational process and the modern requirements for evaluating pedagogical activities are crucial elements of the contemporary education system. Technological tools make the evaluation process faster and more objective, while also enhancing teachers’ opportunities for **self-reflection and reflective evaluation**.

Teachers’ pedagogical activities and the evaluation system are important factors in improving educational quality. Therefore, this research focuses on proposing innovative approaches and evaluation methods for teaching activities and examining their application in practice. The results are expected to provide more effective solutions for improving the educational process. In this regard, a series of experimental studies are currently being conducted.

**Research Methodology.** The research was conducted among students studying at the departments of the Faculty of Pedagogy of a higher education institution. Approximately **300 students** participated in the study.

The research materials included the following methods and tools:

- **Questionnaires:** Specially designed questionnaires were prepared to evaluate teachers. These questionnaires covered pedagogical activities, teaching methodologies, and their impact on students.
- **Interviews:** Semi-structured interviews were conducted with instructors to analyze their personal experiences and pedagogical approaches.

- **Observation:** Classroom teaching activities were directly observed to collect accurate data about teaching practices.

The data collection process was divided into the following stages:

1. **Preparation stage:** Development of questionnaires and interview questions.
2. **Survey distribution:** Questionnaires were distributed among participants and responses were collected.
3. **Observation:** Teaching activities were observed and recorded according to the established evaluation criteria.
4. **Data analysis:** The collected data were analyzed statistically, and the results were used as materials for further research.

The following main variables were considered in evaluating teachers:

- **Pedagogical competence:** Teachers’ pedagogical skills and experience.
- **Evaluation criteria:** Indicators used to assess teaching effectiveness.
- **Interaction with students:** The level and effectiveness of teacher-student communication.
- **Creative approach:** The extent to which teachers apply innovative pedagogical methods and demonstrate creative thinking.
- **Student evaluation of teachers’ classroom activities:** In addition to knowledge and teaching competence, aspects such as professional appearance, communication etiquette, aesthetics, and students’ satisfaction with instructors were also taken into account.

***Questionnaire Structure. The questionnaire designed to evaluate teaching activities included the following main criteria:***

**I. Lesson planning and goal setting**

1. Lesson objectives are clearly defined.
2. The lesson content corresponds to the course syllabus.
3. The lesson plan is well prepared.

**II. Teaching performance**

4. The teacher explains the topic clearly and fluently.
5. Time is distributed effectively during the lesson.
6. Students’ attention and interest are maintained.
7. Adequate opportunities are provided for discussion and questions.

**III. Methodological and interactive approaches**

8. Modern teaching technologies are used.
9. Interactive methods (discussion, group work, case studies) are effectively applied.
10. Educational materials (slides, handouts, video materials) are used appropriately.

**IV. Digital and innovative activities**

11. Digital platforms (LMS, electronic resources) are used.
12. ICT tools increase lesson effectiveness.
13. Innovative ideas and approaches are demonstrated.

**V. Communication and pedagogical ethics**

14. The teacher treats students with respect.
15. The teacher demonstrates fairness toward all students.
16. Feedback and criticism are delivered constructively.

**VI. Assessment and feedback**

17. Evaluation criteria are explained in advance.

18. Tests and assignments are graded fairly.
19. Students receive timely feedback.

**VII. Overall evaluation**

20. Overall, the teacher’s lessons are effective.

**VIII. Open-ended questions**

21. What are the strongest aspects of this teacher’s lessons?
22. What suggestions do you have for improving the learning process?

The collected data were analyzed using **percentage indicators**, and general conclusions were drawn.

**Research Results and Analysis.** The results showed that the highest-rated indicators by students were related to **clear explanation of learning materials and the teacher’s communication culture**. Most students emphasized that open communication with instructors significantly improves the effectiveness of the learning process.

However, a small number of students rated some indicators as unsatisfactory, particularly the statement **“Time is distributed effectively during the lesson.”** Similar responses were also observed for statements such as:

- maintaining students’ attention and interest;
- the use of modern educational technologies;
- respect and ethical behavior toward students;
- fairness toward all students;
- constructive feedback and criticism.

The analysis indicates that students’ feedback serves as an important source for identifying problematic aspects of teaching activities. Based on these insights, the teaching process can be further improved, which represents one of the primary goals of this research.

***Recommendations for improving quality indicators. Based on the research findings, the following recommendations were proposed:***

- regularly collect and analyze students’ feedback on teaching activities;
- develop clear and transparent evaluation criteria;
- improve teachers’ reflective analysis skills;
- use evaluation results based on student feedback when developing professional development plans for instructors.

These recommendations contribute to improving the overall quality of education.

**Conclusion.** The results of the study indicate that using student feedback in evaluating the teaching activities of professors and instructors is one of the effective tools for improving educational quality. Quality indicators identified based on students’ opinions play a significant role in enhancing teaching performance. The findings of this study have practical significance for improving evaluation systems in higher education institutions, developing the professional competence of professors and instructors, and enhancing the overall quality of education. Establishing a systematic **monitoring system for evaluating teaching activities based on student feedback** may play an important role in identifying dedicated and highly professional educators who continuously engage in scientific research, prioritize the quality of their teaching, and wholeheartedly share their knowledge and experience with students.

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# INTEGRATING UDL AND ADDRESSING ASD-SPECIFIC CHALLENGES IN EFL INSTRUCTION: PERSONAL DEVELOPMENT FOR PRE-SERVICE TEACHERS

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***Abstract.*** *This paper creates a learning environment focused on teaching strategies and approaches to engage students with Autism Spectrum Disorder (ASD) in inclusive classroom environments by integrating Universal Design for Learning (UDL). This personal development (PD) series highlights the importance of including students with Autism in classroom interactions rather than isolating them in English as a Foreign Language (EFL) classes. It explores how pre-service teachers can be trained to use effective educational strategies and techniques for teaching learners with autism. Based on research on UDL-integrated EFL instruction strategies like structured visual schedules, sensory-friendly zones, interactive social stories, choice boards for communication, and positive reinforcement systems, this paper aims to develop Pedagogical Content Knowledge (PCK) that prepares future educators to support students with Autism in mainstream classrooms. The ultimate goal is to enhance teacher preparedness in creating accessible, engaging, and inclusive learning environments.*

***Key words:*** *Universal Design for Learning (UDL), Autism Spectrum Disorder (ASD), English as a Foreign Language (EFL), Pedagogical Content Knowledge (PCK), Personal Development (PD), pre-service teachers.*

***Annotatsiya.*** *Ushbu maqola Universal Design for Learning (UDL) yondashuvini integratsiya qilish orqali inkluziv sinf muhitida Autizm spektr buzilishi (ASD) bo'lgan o'quvchilarni ta'lim jarayoniga jalb etishga qaratilgan o'qitish strategiyalari va metodlariga asoslangan ta'lim muhitini yaratishni ko'zda tutadi. Ushbu shaxsiy rivojlanish (PD) dasturi ingliz tilini chet tili sifatida (EFL) o'qitish jarayonida autizmI bor o'quvchilarni izolyatsiya qilish o'rniga ularni sinfdagi o'zaro muloqot jarayonlariga faol qo'shish muhimligini ta'kidlaydi.*

*Maqolada bo'lajak o'qituvchilarni autizmi bor o'quvchilarni o'qitishda samarali pedagogik strategiya va texnikalardan foydalanishga qanday tayyorlash mumkinligi yoritiladi. UDL asosida integratsiyalashgan EFL o'qitish strategiyalari, jumladan, tuzilgan vizual jadval*

*va rejalashtirish, sensor jihatdan qulay hududlar, interaktiv ijtimoiy hikoyalar, muloqot uchun tanlov kartalari hamda ijobiy rag‘batlantirish tizimlari bo‘yicha tadqiqotlarga tayangan holda, maqola kelajak pedagoglarini umumta’lim sinflarida autizmi bor o‘quvchilarni qo‘llab-quvvatlashga tayyorlaydigan pedagogik mazmun bilimlarini (PCK) rivojlantirishni maqsad qiladi. Yakuniy maqsad — o‘qituvchilarning ochiq, qamrovli va qiziqarli ta’lim muhitini yaratish bo‘yicha tayyorgarligini kuchaytirishdir.*

***Kalit so‘zlar:*** *Universal Design for Learning (UDL), Autizm spektr buzilishi (ASD), Ingliz tili chet tili sifatida (EFL), Pedagogik mazmun bilimlari (PCK), Shaxsiy rivojlanish (PD), bo‘lajak o‘qituvchilar.*

**Introduction.**

This study focuses on teaching neurodiverse learners, particularly students with autism. The aim of this project is to create EFL activities for developing language, literacy, and communication skills in an inclusive space while addressing the unique sensory and social needs of students with ASD. Concerning the subject specificity, the suggested activities are not for EFL classes only, but also can be tailored to other subjects, and the designed strategies can be universally applicable across all subjects. To make this research’s direction clearer, the primary goal has been identified to help pre-service teachers become aware of autism spectrum disorder and develop pedagogical content knowledge (PCK). A series of research shows that pre-service teachers have limited knowledge of ASD and adapting UDL for EFL. To cater to this research gap, these novice teachers will find the suggested professional development training incorporating ASD-focused lesson plans helpful. The overall gap shows that future teachers who have been trained in teacher preparation programs find managing the sensory needs of ASD students and facilitating social collaboration challenging. For this reason, the suggested PCK through this paper ensures that the participants learn how to teach neurodiverse learners and adjust their teaching practices to inclusive education for students with autism.

The significance of this project is to help pre-service teachers understand some key points of integrating UDL in their mainstream classes while they are teaching neurodiverse students, including those with autism. This research is important because, firstly, some teachers may have limited or no knowledge of autism, especially novice teachers and those new to the classroom. When they are exposed to students with autism, they might be lost, not fully understanding the sensory or communication challenges these students might face in their classroom. The second challenge that teachers should be ready to address is adapting teaching strategies, as pre-service teachers need to learn how to adapt standard teaching strategies to accommodate and deal with students' diverse sensory, cognitive, and social needs. Last but not least, another potential difficulty for teachers might be creating inclusive classrooms. This research project attempts to provide solutions to these challenges, offering an EFL learning environment where neurodiverse students feel included without segregating them from their peers. So, the research question for this paper is:

- How can pre-service teachers effectively integrate Universal Design for Learning (UDL) principles to support the academic development of students with Autism Spectrum Disorder in inclusive EFL classrooms?
- How can pre-service teachers effectively integrate sensory-friendly strategies to support the social development of students with Autism Spectrum Disorder in inclusive EFL classrooms?

**Literature review.**

Khurana (2019) discusses that variation, but not homogeneity in learning is a norm which refers to every child that learn differently in the classroom. The realization of learning that is highly individualized and unique, perpetuated Universal Design for Learning (UDL) which ensures equitable access to make an inclusive environment targeting all the learners. One of the significant concepts that has been suggested for applying inclusion in the classroom is UDL. It is an educational framework that that is of great assistance for teachers and instructional designers to plan more effective learning environment which include students with disabilities. CAST (2024) highlights that UDL is an educational framework that helps educators proactively design curricula and educational environments to be efficient for all learners from the start by encouraging a diverse and flexible method the class practices. There are three principles of UDL: multiple means of representation, multiple ways of action and expression, and multiple means of engagement (CAST, 2024), which make the lessons accessible, achievable, and flexible.

Among the five key influences of UDL (social models of disability, technology, universal design, and IDEA ’97), neurodiversity is worth mentioning, which has become a controversial topic in the past few decades. This concept has had a great impact in the field of autism (Silberman, 2015). According to Mastropier (2010), children with autism are generally described as having great difficulty communicating and interacting with and responding to other people. Similarly, Apex ABA (n.d.) defines Autism Spectrum Disorder (ASD) as a neurodevelopmental disorder characterized by challenges in social interaction, communication, and repetitive behaviors. Among many defined characteristics, the follow-up features are common for this type of children. Firstly, individuals with autism often experience *sensory sensitivities*, making certain public spaces overwhelming or distressing for them (Apex ABA, n.d.) Many individuals with this disorder also show stereotypic behavior such as self-stimulating behaviors (e.g. rocking, hand-flapping); bizarre speech patterns, such as repeating other people’s words over and over again (echolalia); and disruptive behavior, including self-injury (Hall, 2009, as cited in Mastropier, 2010).

Autism Navigator (2024) points out that we know much more about ASD than we did ten years ago, and although it is still considered a lifelong diagnosis, now we have reached our understanding of the way we define, diagnose, and treat ASD. The signs of ASD are usually apparent in early childhood. The Texas Council for Developmental Disabilities (2024) quotes that individuals in the category of autism are considered to be in the “high functioning range” of the disorder because they can speak and often test to have very high IQs, but social impairments can prove to necessitate a lifetime support. At an early age, educators alongside with parents should diagnose and create an individualized early intervention at school, home and in the whole society. Children with ASD can lead productive, inclusive and fulfilling lives. Many research shows that this kind of children do well in school, take part in activities they enjoy, go to university and even get jobs in their adulthood. For this reason, educators have to seek an *inclusive environment* for such young students, collaborating with parents and professionals.

Mastropier (2010) mentions that children with autism may be diagnosed, indicating that they can function along a continuum of severe to mild disabilities and that educational accommodations may be diverse according to their functional level. The first challenge to meet these accommodations is *communication barriers*, with which students struggle with verbal communication and may need *visual supports or alternative communication methods*. Zohoorian (2024) et al, notes that even though there has been limited literature throughout the world,

reviewed studies showed improvement in learning by suitable and various methods, including representative *visual pictures*.

Pretorius & Botha (2024) offer creating *structured visual schedules*, for each child with autism using images or icons representing daily activities (e.g. snack time) and they demonstrate several reasons such visual schedules might be essential to these children. Firstly, they promote predictability which can help reduce anxiety and children may know what comes next and feel more in control of their environment. Secondly, visual schedules and other picture-based classroom representations accommodate can make communication easier for such children with autism who are pre-verbal or minimally verbal children. Last but not least, such visual aids can make transitions between activities smoother and empower children to take ownership enabling them to complete tasks independently and build like skills. Paro (2024) says that a number of symbols might be used as visual representations including line drawings and abstract images like those from Boardmaker or Smarty Symbols. Next, real pictures of real objects and places can make it easier for those children to understand. Also, she suggests starting with one picture for younger or less experienced children and gradually increase the number of pictures as the child becomes familiar with the task.

It is believed that communication with children with ASD is more comfortable through *assistive technology* which is another accommodation for them to make an effective learning environment. Chamshama and Mnyanyi (2024) point out that interaction of ICT in teaching children with autism from the perceptions elicits positive feelings, meaning the more they interact with ICT facilities, children with ASD become familiar with the behavior of some computer-related programs. As one aspect of inclusion of students with autism is the role of technology, assistive technologies such as communication boards and adaptive devices are crucial in helping students with physical or cognitive limitations. Boardmaker- another tool of communication board is using symbols to aid to communicate, helping students with severe communication barriers. Assistive technology plays a significant role in enhancing the independence and quality of life for individuals with autism (The Treetop, 2024). When creating autism-friendly environment in the classroom, it is essential to consider the integration of remote control for lighting, temperature, and security features. Visual and auditory alert systems assist with daily routines and reminders. Communication aids, such as speech-to-text devices or visual supports, facilitate effective communication for individuals with autism.

Like assistive technology tools, Mastropier (2010) suggests using *Alternative and Augmentative Communication, News-2-U, and BoardMaker* for students with low-incidence disabilities, including autism, who require some adaptations in literacy materials that will aid their ability to communicate. Alternative and Augmentative Communication (ACC) devices are good examples, which are widely available in the range from high-tech to low-tech options. This means that some use very little technology and various others are relying on more complex technological systems for delivery. One alternative and augmentative version of a newspaper that is available is News-2-U. News-2-U is published weekly and it is available for free subscription, which features relevant newsworthy *interactive social stories* printed using visual symbols that represent words. Another tool is BoardMaker, a software program that contains graphics that can be used to develop and design communication displays, which is available online on a weekly basis. While teachers who opt for News-2-U are most likely one to obtain the software BoardMaker, which can be used to develop a wide range of displays using over 3,000 graphic picture and communication symbols and over 100 templates for calendars, schedules, and other

formats. BoardMaker for Windows comes with 19 languages, and it can also be combined with *Speaking Dynamically Pro* to include the speech capabilities. This way, the symbols can be used as overlays and can be heard aloud for students who require hearing the symbols in addition to looking at them. Another tool is *BoardMaker Plus*, which adds sound, voice, animation, and video capabilities to the software. These can be adapted well to the classroom to accommodate the needs of students with disabilities who have speech or hearing challenges to make their classrooms more meaningful and interactive.

The next challenge that should be accommodated is creating *sensory-regulation spaces or sensory-friendly zones* in the classroom because creating a calming environment is essential for individuals with autism. The Treetop (2024) suggests minimizing sensory overload and providing spaces that promote relaxation and comfort to accommodate students with autism. Their design strategies include using neutral colors, providing cozy spaces, and limiting visual distractions. Soft and muted tones help create a soothing atmosphere, incorporating cozy corners or designated areas where individuals can retreat and feel secure. These spaces can be equipped with comfortable seating, cushions, and soft textures. Minimizing clutter and excessive visual stimuli by organizing spaces in a clean and organized manner. Lighting plays a crucial role in creating an autism-friendly environment. Natural light, whenever possible, is generally softer and less harsh than artificial lighting, avoiding fluorescent lighting. It can flicker and emit a buzzing sound that can be bothersome to students with autism.

Another type of accommodation that should be applied to meet students with autism in the new affective learning environment is *using positive reinforcement systems*. This reinforcement can be applied to aid communication between students with autism and non-disabled students to understand the challenges faced by peers with disabilities. For this, a little classroom preparation is needed, which the teacher might use simulations such as they can try tasks with one hand behind the back which can help non-disabled students to understand their peers with disabilities. These unusual responses to sensory experiences might be resistance to the environmental change. U.S. Department of Education (n.d.) says in section 300.8 that characteristics of individuals with autism are often associated with engagement in repetitive activities and stereotyped movements. If all affect a child's educational performance adversely, then autism does not apply to this because the child has an emotional disturbance. To meet their emotional disturbances, *social interaction and collaboration are needed*. To maintain social interaction support, group work areas should be scaffolded with clear, predictable tasks and choice boards for communication. These areas foster peer collaboration through social stories and turn-taking activities. This type of design will ensure that each element in the classroom supports communication, sensory management, and social interaction, which are based on best practices from research on autism intervention.

**Methodology.**

There are some key components for developing this learning environment, such as creating an inclusive classroom where there are students with autism. This study will focus on several components to address the challenges that people with ASD generally suffer from, as mentioned in the literature review. These components will be offered as part of personal development for teacher preparation students. Assuming pre-service teacher training curricula do not include hands-on instruction on how to best accommodate individuals with disabilities, particularly ASD-related needs, the personal development environment would be a valuable addition to a module on disabilities. In the discussion section of this paper, the key components

comprise visual supports, sensory-friendly spaces, collaborative learning, and behavioral strategies. The created PD modules can be of assistance for literacy development, academic excellence, and social improvement for people with various learning and developmental disabilities in inclusive classrooms.

This paper will be based on a set of foundational research to guide this design. Of course, preliminary research involves using and scrutinizing pedagogical theories that are related to universal design for learning (UDL) to ensure accessibility for all students. Concerning the key ideas for this design, here are several of those ideas for how the current learning environment design builds on. They are Applied Behavior Analysis (ABA), Universal Design for Learning (UDL), and Scaffolding Social Interaction. Applied Behavior Analysis (ABA) uses structured reward-based systems to reinforce positive behaviors and participation in learning tasks. Universal Design for Learning (UDL) ensures that classroom design and curriculum materials are accessible to all learners, including those with autism, through adaptable and flexible teaching methods. Scaffolding Social Interaction means using peer collaboration and structured turn-taking activities to build social competence. The next steps will be to develop the specific curriculum material or activities that, customized with these design ideas, are tailored to learners with ASD. These foundational readings and theories will build a structured design plan that can be applied in a real classroom setting or a professional development workshop.

This paper develops a learning environment for a 4th-grade EFL lesson using visual supports, sensory-friendly spaces, collaborative learning, and behavioral strategies to make the classroom inclusive for students with autism.

**Analysis.**

**Instructional Design with Intervention Description**

Designing curriculum materials or activities for children with autism requires a focus on structure, sensory support, visual aids, and flexibility to meet UDL requirements. Here is a set of classroom activities designed for a 4th grade EFL lesson “Reading Literature: Aesop’s fables”. The activities offered for this lesson plan are not only used for EFL classes but also for other subjects, making them universally adaptable, and this specificity is a main core for a Professional Development (PD) workshop for PCK. Here are the lesson plan activities for *“Reading Literature: Aesop’s fables”* aligning with UDL principles, which can be effective curriculum material enhanced with UDL components.

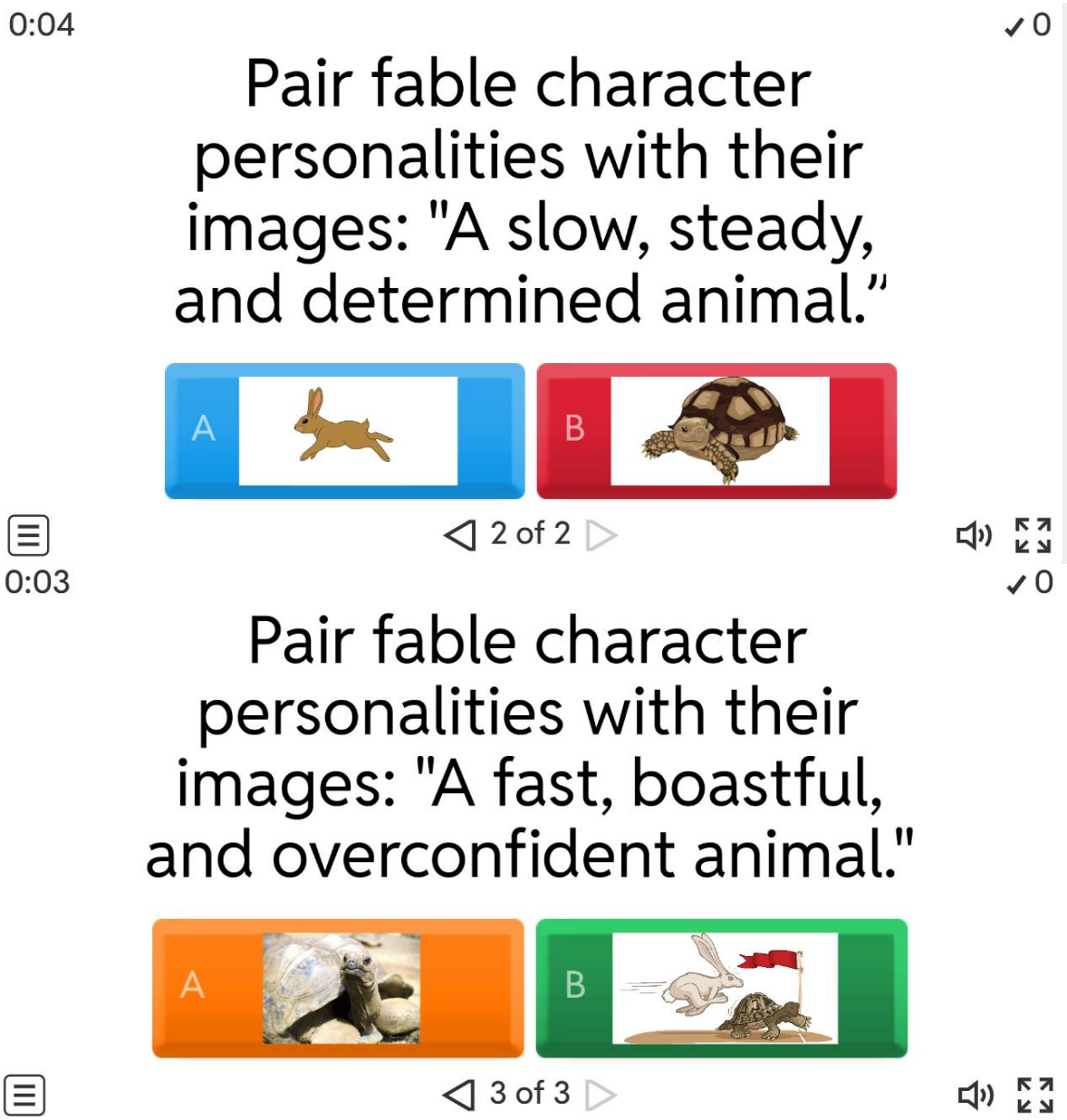
**Title: Aesop’s Fables**
**Grade Level: 3rd Grade- UDL implementation**
**Subject: English (EFL)/Reading Literature (RL)**

- **MULTIPLE MEANS OF REPRESENTATION**:

To be more accessible for all learners, multiple forms of perception should be offered, to meet diverse students’ needs who learn by seeing, hearing, touching, tasting and feeling. New vocabulary should be presented not only through verbal and singular visual examples, but they can be diverse making the lesson more accessible, achievable and flexible.

1. **Providing interactive slides** with visual supports asking students to pair fable character personalities with their images (e.g. “A slow, steady, and determined animal” with the image of a tortoise and “A fast, boastful, and overconfident animal” with the image of a

hare). This is good for visual, tactile and those students who learn best by touching and they can benefit a lot by coming to the interactive board and do the matching activity by dragging and dropping. If the learning event becomes overwhelming, because individuals with autism can experience *sensory sensitivities*, such as self-stimulating behaviors (e.g. rocking, hand-flapping) they can be allowed to go to the cozy corner to retreat and feel secure.




2. **Using graphic organizers** like a T-chart to separate examples (“The tortoise is a slow animal”) and non-examples (The hare is not a boastful animal) in small groups. This activity is helpful for kinesthetic learners who percept by touching. For ASD students, this *visual support* works well because firstly, graphic organizers are visual using their sensory skills by touching and secondly, this group activity reinforces collaborative learning and behavioral strategies, making the classroom inclusive. We can use soft and muted tones in the visuals to help ASD students to feel soothing colors.
3. **Bringing real-life objects** (e.g. household objects, fruit and vegetables) can be effective for learners who learn by touching to discuss what objects and food these fable characters use in their daily life. For ASD students, such *real objects can make transitions between*

*activities smoother* and empower them to take the learning ownership, enabling them to complete tasks independently and build life skills.

4. **Bringing audio, video and text supports** (e.g. Youtube videos, short audio examples, and a Text-to-Speech tool) representing specific scenes of the fable and allowing students to choose any means to intake the information. This way of representation is efficient not only for auditory, visual and dyslexic learners, but also ASD students can find this way of information useful. *Communication* with children with ASD is more comfortable through such *assistive technologies* which are another accommodation for them to make the learning environment effective.

- **MULTIPLE MEANS OF ACTION AND EXPRESSION:**

1. **A Gallery Walk activity**: where learners mingle around the room and describe different pictures taken from different scenes of the fable in pairs. This would give kinesthetic and tactile learners an opportunity to move around the environment physically and engage in discussions with their peers. This *positive reinforcement* is applied to aid communication between students with autism and non-disabled students to understand the challenges faced by peers with disabilities. This structured peer collaboration and group work fosters inclusion while being scaffolded for individuals with ASD.
2. **Written description through small group discussions**: Groups are given different scenarios about the story prediction, and "what if - questions". Students have to take their positions and write descriptive paragraphs about each fable character's attitudes from different perspectives. This activity engages more students because those who have disorders with executive functioning or those who may struggle with speaking in front of the whole class can feel more comfortable in smaller groups. This *collaborative learning* component encourages social interaction through structured group work that fosters inclusion while ASD students being scaffolded. If their participation decreases and start getting anxious, they can go to *Sensory-Friendly Zones* which provide a calming environment for sensory regulation.
3. **Interactive social stories**: It is a kind of jigsaw reading that students have to do a group reading dividing the fable into chunks and then retell the fable in turn to their group. Since students differ in the ways that they can navigate a learning environment, UDL requires various learning tasks to enable students to show their mastery and potential. As pre-service teachers need to learn how to adapt standard teaching strategies to accommodate and deal with students' diverse sensory, cognitive, and social needs, using an *interactive social story education strategy* best supports students with Autism in mainstream classrooms.
4. **Role-play**. Role-playing appeals to diverse learning preferences. Small paper strips written different fable characters in are distributed to students of small groups to make sure that all students have one character assigned each. After few minutes of preparation time, they can come to the board and play their roles. For ASD students, first the teacher can model how to play the role. Such *Scaffolding Social Interaction* means using group collaboration and structured turn-taking activities build social competence in such students.

- **MULTIPLE MEANS OF ENGAGEMENT:**

1. **Interactive storytelling**: where learners collaborate to start with one scene of the fable and continue with the next one in turn, until the assigned time is over, storytelling goes on in circles. Alternatively, group members can retell their part in different orders, and the other groups have to guess which part should come first, second and etc. In this storytelling activity, UDL principle of engagement is achieved because the social interaction and participation are guaranteed by adding more varied and interactive activities or storytelling that offer both choice and emotional support. ASD students can use their *choice boards for communication* which encourage independence by permitting them to communicate their preferences through visuals.
2. **Multiple perspective defense**: the teacher prepares and shares a list of multiple perspectives defense topics (e.g. "Compare the tortoise's slow-and-steady persistence/hare's overconfidence/the moral of the fable/humility of the tortoise/ hare's procrastination, etc.") to choose gives the learners *a chance of autonomy* to select the themes they are keen on discussing and comfortable to work on. While cooperating, individuals feel a low-stress learning event and they feel safe to regulate themselves. Since they have zero tension, they feel secure and enjoyable where they can easily manage their emotions and self-paced learning, owning and being responsible for their learning. Working with classmates assists learners stay motivated and reinforces the value of their contributions. Furthermore, *peer interactions* encourage students by a sense of community.
3. **Using assistive technology**: In addition to text-to-speech software for reading and verbal challenges, teacher can also bring digital tools like Canva and PowerPoint for creating visuals. Students can be asked to work in their small groups and create visuals imagining themselves as the tortoise or the hare in the fable incorporating their daily routines at school. While a buddy system helps students to brainstorm and create visuals, structured turn-takings while presenting assist them practice their oral presentation skills. If ASD students feel overwhelmed during group discussions, they can use *a quite zone with noise-canceling headphones and dimmed lighting*.
4. **Sentence starters to help students initiate their ideas:** Students can be given sentence strips to reflect on their personal experiences or texts ("I connected with…because", "One part I found surprising was…because" etc.), to share their opinions and interpretations ("One possible interpretation is…because…", "I noticed…and think it means…" etc.). These starters encourage students to build on ideas, make connections, and articulate their thoughts with confidence. If this is done in pairs, reciprocal teaching would be specific to divergent learners of ASD by creating more accessible and engaging classrooms. This could enable students with ASD to actively take part in learning with their peers.

Designing curriculum materials or activities for children with autism requires a focus on structure, sensory support, visual aids, and flexibility to meet UDL requirements. Here is a set of classroom activities for a Professional Development (PD) workshop for PCK, which can be universally applicable across subjects:

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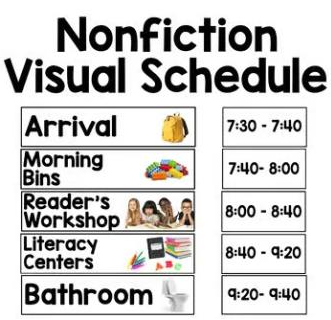
| 1. Structured Visual Schedules.<br>- Objective: Teaching children with autism how to follow routines and manage transitions.<br>- Activity: Create individual visual schedules for each child using images or icons representing daily activities such as snack time, circle time or recess.<br>- Materials: Laminated Images and pocket charts.<br>- Implementation: Each child moves or marks the icon of the activity they are currently engage in. teachers can demonstrate how to use the schedule in a predictable sequence.<br>- PD Workshop: Educators will learn to create and implement visual schedules customized with students with autism. They will also discuss the importance of predictability in reducing anxiety and enhancing engagement for children with ASD. | <br><br><br>https://autismlittlelearners.com/visual-schedules/ |
| 2. Sensory-Friendly Zones.<br>- Objective: Providing a calming environment for sensory regulation.<br>- Activity: Create a “sensory corner” where a child with ASD can go, if he/she feels overwhelmed. It can include items like fidget toys, soft lighting, weighted blankets and noise-cancellation headphones.<br>- Materials: Weighted items, textured items, dimmable lights.<br>- Implementation: Allow students to use this space when they need a break and teach them how to ask for time in the sensory zone.<br>- PD Workshop: Educators will learn how to set up a sensory-friendly zones within a classroom, understand different sensory processing challenges, and identify when a child might take advantage from using this sensory corner. | <br>https://www.amazon.com/s?k=autism+bundle<br> |

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|---|---|
| 3. Interactive Social Stories.<br>- Objective: Supporting children with autism in understanding social situations and developing communication skills.<br>- Activity: Develop personalized social stories that describe general social contexts such as greeting a friend, sharing toys and taking turns. The stories will have to use simple language and illustrations.<br>- Materials: Custom-based books with pictures, visual cards.<br>- Implementation: Read the story to the class and follow up with the role-playing the scenarios to reinforce learning.<br>- PD Workshop: Educators will learn how to make up and use social stories to address individual needs of children with autism. They will also practice writing their own stories based on common classroom scenarios. | <br><br>https://www.behaviorplace.com/blog/visuals |
| 4. Sensory-Integrated Literacy Activities.<br>- Objective: Enhancing literacy skills through sensory activities.<br>- Activity: For a reading activity, use textured letters or letter tiles that students can trace with their fingers while sounding out letters or words.<br>- Materials: Textured letters, sandpaper letters, letter tiles.<br>- Implementation: teachers show how children can match the texture of letters to their sounds. Engage students in a hands-on spelling game using these tactile resources.<br>- PD Workshop: Educators will practice designing multisensory literacy lessons that involve touch, sight, and sound to enhance engagement and learning for children with ASD. | <br><br>https://www.autismparentingmagazine.com/write-social-stories/ |

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| 5. Choice Boards for Communication.<br>- Objective: Encourage independence by permitting children to communicate their preferences through visuals.<br>- Activity: Create choice boards that engage students to select activities or communicate needs such as choosing a snack, book, or sensory toys.<br>- Materials: Laminated cards representing various choices.<br>- Implementation: Inspire students to point to or hand overs a card to communicate their choice, reinforcing their communication skills.<br>- PD Workshop: Educator will learn how to make choice boards to reinforce communication, stressing out the necessity for clear visuals and flexibility in making choice. | <br>https://www.amazon.com/Plastic-Behavior-Keyring-Picture-Communication |
| 6. Collaborative Learning Centers with Scaffolds.<br>- Objective: Developing social interaction and collaboration in learning tasks.<br>- Activity: Create learning centers where children with autism work in pairs or small groups on tasks like puzzles, sorting games, or art activities. Use clear step-by-step visual instructions to scaffold each task.<br>- Materials: Visual task cards, manipulatives such as puzzles or matching cards.<br>- Implementation: teachers facilitate students through every task, depicting how to work together and support each other.<br>- PD Workshop: Teacher will investigate strategies for setting up collaborative activities that accommodate divergent learning needs. They will concentrate on scaffolding and supporting peer interactions. | <br>https://www.amazon.com/s?k=autism+sorting+portable+games |

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| 7. Positive Reinforcement Systems<br>- Objective: Encourage positive behavior through structured reinforcement.<br>- Activity: Develop a token or sticker reward system where students earn tokens for completing tasks or exhibiting positive behaviors like raising their hands, sitting quietly and asking for break time.<br>- Materials: Sticker charts, tokens, small prizes.<br>- Implementation: Educators explain the reward system openly and consistently encourage it by tracking positive behavior and rewarding effort.<br>- PD Workshop: Teachers will discuss the role of positive reinforcement in engaging children with autism and practice creating individualized systems tailored to specific behavioral goals. | <br>https://www.amazon.com/s?k=autism+token |

**Discussion**

Regarding research strategies and reliability, the following ASD-related challenges have been matched with UDL components based on the previous research. The first component is using *visual supports*, which integrate visual schedules and symbols to help students with autism follow classroom routines and transitions. For instance, using the Picture Exchange Communication System (PECS) to facilitate communication. The second crucial component for developing such a learning environment is using *sensory-friendly spaces* and d*esigning sensory regulation areas* within the classroom, such as quiet zones or sensory corners that students can use when they feel overwhelmed. They might find themselves in these quiet and comfortable zones, specifically lit with unsharpened lights. The next component is *collaborative learning*, encouraging social interaction in communications through structured peer collaboration and group work that fosters inclusion while being scaffolded to individual needs. Here, special education teacher, the main teacher, speech therapist, and ABA specialists also consider it to be participants of this collaboration. The last key component to be used in this project to address the potential challenges of ASD that pre-service teacher-trainers might be less aware of is *behavioral strategies*. Positive reinforcement and behavioral management techniques to encourage engagement will reduce anxiety and increase participation in classroom activities.

**Conclusion**

In summary, this paper highlights the importance of preparing pre-service teachers to engage students with Autism Spectrum Disorder (ASD) in inclusive classroom settings. By applying strategies such as visual supports, sensory-friendly zones, collaborative learning, and positive reinforcement systems, educators can create environments that encourage participation, reduce anxiety, and foster social interaction among students with autism. The incorporation of theories like Universal Design for Learning (UDL) and Applied Behavior Analysis (ABA) into

EFL classes provides a framework for accommodating the diverse sensory, physical, and social needs of neurodiverse learners.

The implications of this project point out the significance of training educators not only to understand autism but also to be familiar with teaching practices that ensure inclusivity. Teachers well-equipped with Pedagogical Content Knowledge (PCK) specific to divergent learners can create more accessible and engaging classrooms, enabling students with ASD to actively take part in learning with their peers. This approach moves beyond sheer accommodation for not only for ELA classes but also for those that are universally applicable for all subjects, and these accommodations can be implemented into an education system where all systems regardless of ability, can succeed.

To conclude, nurturing inclusive education for students with autism necessitates deliberate effort in teacher preparation and classroom design. By addressing the sensory, communication, and social needs of students with ASD, educators can contribute to a more equitable and supportive educational environment in all subjects in schools. This paper has highlighted the significance of inclusivity, finally aiming to ensure that students with diverse needs are not just present but engaged and valued members of the classroom environment.

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"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# TA'LIM JARAYONLARINI RAQAMLI TEXNOLOGIYALAR ASOSIDA INDIVIDUALLASHTIRISH VA MASOFAVIY TA'LIM XIZMATLARINI RIVOJLANTIRISH

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***Annotatsiya.*** *Raqamli texnologiyalarning jadal rivojlanishi zamonaviy ta'lim tizimlarini sezilarli darajada o'zgartirdi, shaxsiylashtirilgan ta'lim uchun imkoniyatlar yaratdi va masofaviy ta'lim xizmatlarini kengaytirdi. Ushbu maqola raqamli texnologiyalar orqali ta'lim jarayonlarini individuallashtirish hamda aralash va masofaviy ta'lim modellarini ta'lim amaliyotiga tatbiq etishning nazariy va amaliy asoslarini ko'rib chiqadi. Zamonaviy pedagogik yondashuvlar va raqamli ta'lim muhitlari tahlilidan foydalangan holda, tadqiqot aralash ta'lim, o'zgaruvchan sinf, rotatsiya modellari va mobil o'qitish kabi innovatsion o'qitish modellarini o'rganadi. Topilmalar shuni ko'rsatadiki, raqamli texnologiyalar o'qitish amaliyotiga to'g'ri kiritilganda moslashuvchanlikni, o'quvchilarning mustaqilligini, hamkorlikni va akademik samaradorlikni oshiradi. Maqolada individuallashtirilgan raqamli ta'lim muhitlari kelajakdagi ta'lim rivojlanishining asosiy yo'nalishi bo'lib xizmat qiladi degan xulosaga keladi.*

***Kalit so'zlar:*** *raqamli ta'lim, individuallashtirilgan ta'lim, aralash ta'lim, masofaviy ta'lim, o'zgaruvchan sinf, ta'lim texnologiyalari.*

***Abstract.*** *The rapid development of digital technologies has significantly transformed modern education systems, creating opportunities for personalized learning and the expansion of distance education services. This article examines the theoretical and practical foundations of individualizing educational processes through digital technologies and implementing blended and distance learning models in educational practice. Using analysis of contemporary pedagogical approaches and digital learning environments, the study explores innovative teaching models such as blended learning, flipped classroom, rotation models, and mobile learning. The findings indicate that digital technologies enhance flexibility, learner autonomy, collaboration, and academic performance when properly integrated into teaching practice. The*

*article concludes that individualized digital learning environments represent a key direction for future educational development.*

***Key words:*** *digital education, individualized learning, blended learning, distance education, flipped classroom, educational technologies.*

**Kirish**

XXI asr ta’lim tizimi global raqamlashtirish jarayonlari ta’sirida tubdan o‘zgarib bormoqda. An’anaviy ta’lim modeli o‘quvchiga bir xil yondashuvni taklif qilgan bo‘lsa, zamonaviy ta’lim individual ehtiyojlar, qiziqishlar va o‘rganish tezligini hisobga olishni talab etmoqda. Shu sababli ta’lim jarayonlarini raqamli texnologiyalar asosida individuallashtirish muhim pedagogik yo‘nalishga aylandi.

So‘nggi yillarda masofaviy ta’lim xizmatlarining rivojlanishi, multimediya vositalari, mobil qurilmalar va internet platformalarining keng joriy etilishi ta’lim muhitini tubdan o‘zgartirdi. Raqamli texnologiyalar nafaqat bilim yetkazish vositasi, balki o‘quv jarayonini boshqarish, monitoring qilish va shaxsiylashtirish imkonini beruvchi muhim pedagogik instrument sifatida qaralmoqda.

Tadqiqotlarning ko‘rsatishicha, blended learning, flipped classroom va mobil o‘qitish kabi yondashuvlar talabalar faolligini oshiradi, mustaqil o‘rganishni rivojlantiradi hamda o‘quv natijalarini yaxshilaydi (Graham, 2019; Milne, 2006).

Mazkur maqolaning maqsadi raqamli texnologiyalar asosida ta’limni individuallashtirish hamda masofaviy ta’lim xizmatlarini amaliyotga keng joriy etishning pedagogik imkoniyatlarini tahlil qilishdir.

Zamonaviy pedagogik tadqiqotlarda raqamli ta’lim muhitlari o‘quv jarayonini transformatsiya qiluvchi asosiy omil sifatida baholanadi. Blended learning modeli yuzma-yuz va onlayn o‘qitishni integratsiyalash orqali samarali o‘quv muhitini yaratadi (Garrison & Vaughan, 2008).

Smith va Brame tadqiqotlariga ko‘ra, masofaviy kurslarda o‘quv materialining kamida 80% onlayn shaklda taqdim etiladi, blended kurslarda esa 30–80% oralig‘ida bo‘ladi. Bu esa ta’lim shakllarining moslashuvchanligini oshiradi.

Raqamli ta’limda quyidagi pedagogik metodlar keng qo‘llaniladi:

- case-study
- hamkorlikda o‘qitish
- muammoli ta’lim
- evristik metodlar
- loyiha asosida o‘qitish
- interaktiv texnologiyalar

Shuningdek, multimodal learning konsepsiyasi talabalarga bilimni turli formatlarda video, audio, interaktiv materiallar orqali o‘zlashtirish imkonini beradi. **Metodologiya**

Tadqiqot quyidagi metodlarga asoslandi:

- pedagogik adabiyotlarni tahlil qilish;
- zamonaviy raqamli ta’lim modellarini solishtirish;
- blended va masofaviy ta’lim amaliyotlarini konseptual tahlil qilish;
- ta’lim texnologiyalarining samaradorligini nazariy baholash.

Tahlil jarayonida individual rotation, station rotation, lab rotation va flipped classroom modellari o‘rganildi.

**Natijalar**

**Ta’limni individuallashtirishda raqamli texnologiyalarning roli.**

Raqamli texnologiyalar o‘quvchilarning:

- bilim darajasi,
- o‘rganish tezligi,
- psixologik xususiyatlari,
- ijtimoiy sharoitlari

asosida ta’limni moslashtirish imkonini beradi. Har bir talaba faqat o‘ziga kerakli resurslardan foydalanadi. Bu esa differensial ta’limni samarali tashkil etishga yordam beradi.

**Blended learning modelining samaradorligi.**

O‘qitishning aralash shakli bu “Blended learning” (aralash ta’lim) hisoblanadi. Talaba o‘zining aniq sharoitlari va imkoniyatlariga eng ko‘p mos keladigan o‘quv jarayonini ongli ravishda tanlab olishi foydadan xoli emas. Tanlash darsning muhim tomonlarini e'tiborga olgan holda tavakkalchilik orqali bilim, ko‘nikma va malakalarni o‘zlashtirish jarayonini boshqarishga qandaydir tasodifiy yondashishga yo‘l qo‘ymaydi.

Blended learning quyidagi afzalliklarni ta’minlaydi:

- moslashuvchan ta’lim jadvali;
- multimodal o‘rganish;
- talabalar mustaqilligini oshirish;
- qayta foydalaniladigan o‘quv materiallari.

Talabalar video, podkast va virtual muhokamalarda qatnashish orqali bilimni chuqurroq o‘zlashtiradi.

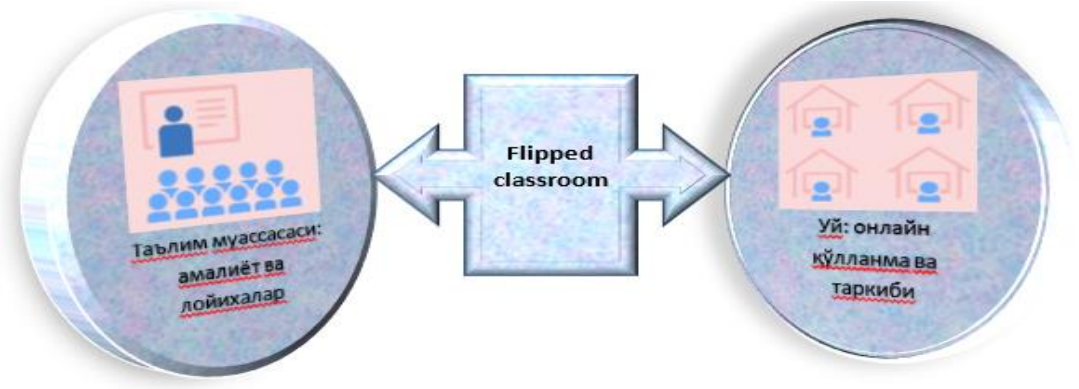
**Flipped classroom modeli.**

Flipped classroom (almashtirilgan sinf) – an’anaviy ta’lim muhitidagi o‘qishni o‘zgartiruvchi o‘quv strategiyasi: odatda auditoriyada nima bajarilsa, uyda vazifa qilib beriladi bu modelda uyga berilgan vazifalar auditoriyada bajariladi, ya’ni vazifalarning o‘rni almashtiriladi. Flipped classroom modeli odatda an’anaviy sinfdan ajralib turadi, talabaning o‘rganishda hozirgi alternativasi ushbu model o‘qishni shaxsiylashtirish, kirish imkoniyatlarini kengaytirish va boshqa resurslarga bog‘liq bo‘lmagan tizimda innovasiyalarni jalb qilish kerak bo‘ladi

Flipped classroom modelida:

- nazariy material uyda o‘rganiladi,
- auditoriya vaqti amaliy faoliyatga ajratiladi.

Tadqiqot natijalariga ko‘ra, ushbu model past akademik ko‘rsatkichli talabalar natijalarini 10–30% ga yaxshilagan



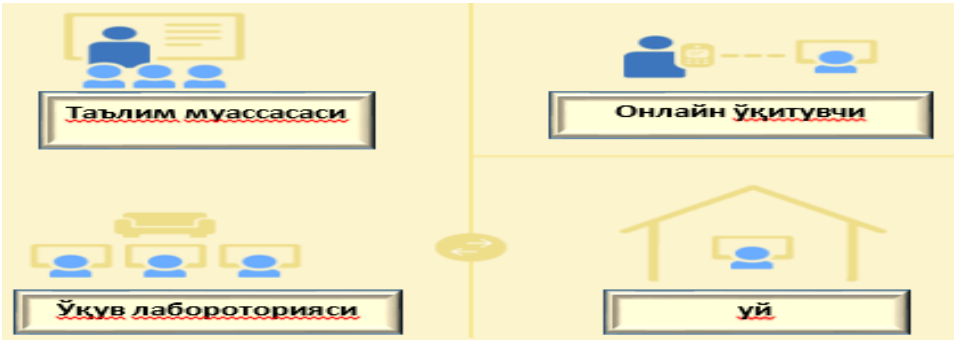

*1.1. Rasm. Flipped classroom modeli*

**Mobil ta’lim (mLearning).**

Mobil qurilmalar yordamida:

- istalgan joyda o‘qish,
- LMS platformalariga kirish,
- virtual faoliyatlarni bajarish

imkoniyati yaratiladi. Bu ayniqsa masofaviy ta’limda samarali hisoblanadi.



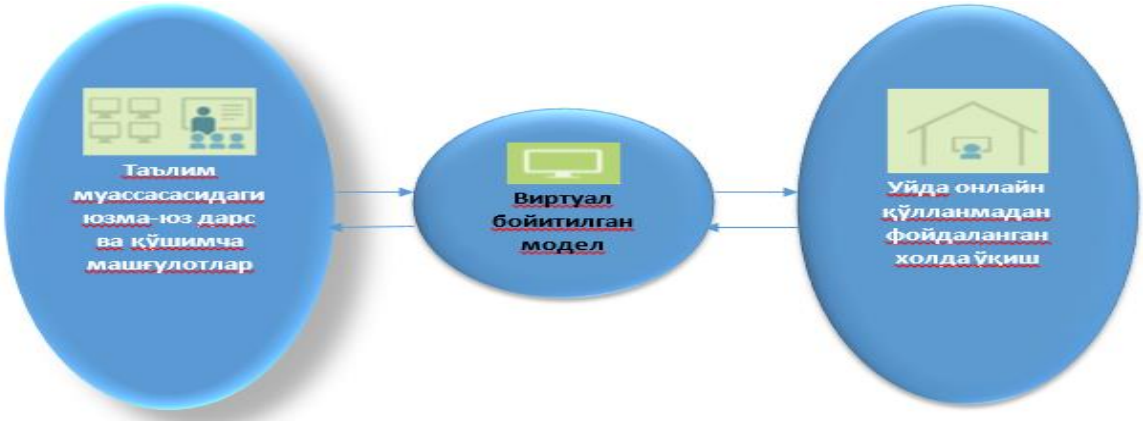

*1.2. Rasm. Carte modeli*

**Masofaviy ta’lim muhitining ijtimoiy ta’siri.**

Onlayn muhit:

- tortinchoq talabalar faolligini oshiradi;
- guruh hamkorligini kuchaytiradi;
- xavfsiz kommunikatsiya maydonini yaratadi.

Ta’lim muassasalarining boyitilgan virtual modellarining samaradorligi talabalar uchun birgalikdagi o‘quv tajribasini yaratishga olib keladi. Aralash ta’lim va ta’lim muassasasidan tashqari ta’lim bir-birini ilmiy boyitadi.




*1.3. Rasm. Onlayn ta’limda virtual boyitilgan ta’lim metodi.*

**Mulohazalar**

Natijalar shuni ko‘rsatadiki, raqamli texnologiyalar pedagog rolini yo‘qotmaydi, aksincha uni transformatsiya qiladi. O‘qituvchi:

- fasilitator,
- mentor,
- o‘quv dizayneriga aylanadi.

Shu bilan birga, muammolar ham mavjud:

- kurs dizaynining murakkabligi,
- talabalar vaqtni boshqarish ko‘nikmalarining yetishmasligi,
- texnologik infratuzilma talablari.

Ammo to‘g‘ri pedagogik strategiya bilan bu muammolar kamaytirilishi mumkin.

**Xulosa**

Raqamli texnologiyalar asosida ta’limni individuallashtirish zamonaviy ta’limning eng muhim yo‘nalishlaridan biridir. Blended learning, flipped classroom va mobil ta’lim modellari:

- o‘quv jarayonini moslashuvchan qiladi,
- talabalar mustaqilligini rivojlantiradi,
- ta’lim samaradorligini oshiradi.

Kelajak ta’limi individual raqamli o‘quv muhitlarini yaratish bilan chambarchas bog‘liq bo‘lib, masofaviy ta’lim xizmatlarini keng joriy etish strategik ahamiyatga ega.

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# MODEL BASED LEARNING IN SCIENCE EDUCATION

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***Abstract.*** *Model-based learning is a learning process whereby learners construct, test, refine, and apply models to explain scientific phenomena. Unlike traditional explanation learning, Model-based learning engages learners in the task of representing mechanisms, relations, and systems using visual, physical, mathematical, or computational models. This paper presents the manner in which model-based learning takes place in science education, presents examples of the implementation of model-based learning in the classroom, and presents learning outcomes based on educational experience. This paper investigates the implementation of model-based learning in science education and its effect on the scientific reasoning, conceptual change, and problem-solving skills of learners. Particular attention is given to concrete classroom practices, including model construction, empirical testing, model revision and transfer to new contexts.*

***Key words:*** *model-based learning, science education, scientific modeling, conceptual understanding, inquiry-based learning, conceptual change.*

***Annotatsiya.*** *Modelga asoslangan o'rganish - bu talabalar ilmiy hodisalarni tushuntirish uchun modellarni qurish, sinovdan o'tkazish, takomillashtirish va qo'llash orqali amalga oshiriladigan o'rganish jarayonidir. An'anaviy tushuntirish o'rganishidan farqli o'laroq, Modelga asoslangan o'rganish talabalarni vizual, fizik, matematik yoki hisoblash modellaridan foydalangan holda mexanizmlar, munosabatlar va tizimlarni ifodalash vazifasiga jalb qiladi. Ushbu maqolada modelga asoslangan o'rganish fan ta'limida qanday amalga oshirilishi, sinfda modelga asoslangan o'rganishni amalga oshirish misollari keltirilgan va ta'lim tajribasiga asoslangan o'rganish natijalari keltirilgan. Ushbu maqolada fan ta'limida modelga asoslangan o'rganishni amalga oshirish va uning talabalarning ilmiy fikrlash, kontseptual o'zgarishlar va muammolarni hal qilish ko'nikmalariga ta'siri o'rganiladi. Modelni qurish, empirik sinovdan o'tkazish, modelni qayta ko'rib chiqish va yangi kontekstlarga o'tkazish kabi aniq sinf amaliyotlariga alohida e'tibor qaratiladi.*

***Kalit so'zlar:*** *modelga asolangan o'rganish, tabiiy fanlar ta'limi, ilmiy modellashtirish, konseptual tushuncha, tadqiqotga asoslangan o'rganish, konseptual o'zgarishlar.*

***Аннотация.*** *Обучение на основе моделей — это процесс обучения, в ходе которого*

*учащиеся конструируют, проверяют, совершенствуют и применяют модели для объяснения научных явлений. В отличие от традиционного обучения объяснению, обучение на основе моделей вовлекает учащихся в задачу представления механизмов, связей и систем с использованием визуальных, физических, математических или вычислительных моделей. В данной статье представлен способ применения обучения на основе моделей в естественнонаучном образовании, приведены примеры внедрения обучения на основе моделей в учебный процесс и представлены результаты обучения, основанные на педагогическом опыте. В статье исследуется внедрение обучения на основе моделей в естественнонаучное образование и его влияние на научное мышление, концептуальные изменения и навыки решения проблем у учащихся. Особое внимание уделяется конкретным методам работы в классе, включая конструирование моделей, эмпирическое тестирование, пересмотр моделей и их перенос в новые контексты.*

***Ключевые слова:*** *обучение на основе моделей, научное образование, научное моделирование, концептуальное понимание, обучение на основе исследований, концептуальные изменения.*

**Introduction**

Science ideas like particle behavior, energy transfer, equilibrium, or ecological systems are abstract and invisible. Students tend to memorize definitions without knowing the underlying mechanisms. Model-based learning can solve this issue by requiring students to put their ideas outside through models. In science education, a model is not just a picture. It is an explanatory representation that describes how and why a phenomenon happens. For instance:

-in chemistry particle models explain gas diffusion;

-in biology system diagrams explain energy flow in ecosystems;

-in physics force diagrams represent motion interactions.

The main aim of model-based learning is to move students from “knowing facts” to explanation construction. Model-based learning has a particular instructional sequence. In an effective model-based learning process, teachers do not provide pre-prepared models for students. Students start by formulating an initial model on the basis of their pre-existing knowledge.

For example: “Dissolution of salt in water”

Students depict models of particle arrangements to demonstrate the interaction between salt and water. At this point, teachers identify the following misconceptions:

-particles being eliminated,

-particles being stationary,

-particles being arranged incorrectly.

Once the first model has been developed, the proposed representation needs to be compared to empirical evidence. At this level, students compare the explanatory power of their model to direct observation or experimental data in order to decide if their model is a correct representation of the scientific mechanism. For instance, in chemistry education, once students have developed a particle model that describes the dissolution of salt in water, the correctness of the model can be verified through experiments such as conductivity tests and temperature changes. Students begin by predicting, from their model, whether the salt solution is expected to conduct electricity. If the initial model represents salt as neutral particles that remain unchanged in water, then the prediction would not be able to account for the experimental observations. In the experiment, the salt solution is observed to conduct electricity, which means that there are

freely moving charged particles in the solution. This observation forces students to modify their model by incorporating the ionization concept. The second validation activity is the observation of temperature change during dissolution. Students are required to measure the temperature before and after dissolving salt in water and compare the data with their model predictions. If temperature change is observed, students understand that the interaction of particles involves the transfer of energy. As a result, the model is further developed to include intermolecular forces and energy transfer, which were not considered in the first model. By comparing their models with experimental results, students understand that scientific models are not static representations but dynamic tools that must match observable evidence. Experimental validation of models is therefore essential in facilitating conceptual change because the difference between prediction and observation motivates students to revise their assumptions and enhance explanatory power. After students compare their initial model to experimental results, they usually find areas where their model’s predictions don’t match what’s observed. The revision phase is not “redrawing for beauty,” but a guided correction activity where students change their model by adding or adjusting elements so that their model can account for observed results (e.g., conductivity, temperature change, dissolution rate, pH change). From “neutral particles” to ions and dissociation. Initial idea: “Salt dissolves and breaks into tiny neutral particles in water.”

**Literature review**

Scientific modeling has been identified as a basic practice in science education. Rather than being used as a simple visual aid, models are used as tools for explanation that enable students to describe, predict, and explain phenomena. Gilbert and Justi argue that scientific models are essential in helping students relate abstract theoretical ideas to phenomena. Schwarz et al. also argue that scientific modeling is essential in developing scientific thinking in students by engaging them in the process of constructing and evaluating explanations. Model-based learning is a product of constructivist theories, which perceive knowledge as being actively constructed through engagement with ideas and evidence. Based on this theory, students are encouraged to develop initial models, experiment with them, and modify them when inconsistencies arise. Unlike traditional teaching, where models are developed as finished products, model-based learning is centered on the development of models. Previous empirical research has shown that model-based learning has a positive influence on students’ conceptual understanding and scientific reasoning abilities in various science domains. In chemistry learning, particle modeling has been found to decrease misconceptions about matter and dissolution processes. In physics learning, modeling tasks have been found to enhance students’ understanding of force and motion concepts by fostering mechanistic thinking. Biology learning studies have shown that system models can improve students’ understanding of ecosystem and biological processes. Although the positive effects of model-based learning have been well documented, previous research has been primarily concerned with learning outcomes rather than the underlying mechanisms that explain conceptual change during modeling activities. Specifically, there has been little attention paid to the role of students’ model revisions based on comparisons between predictions and experimental evidence. The evidence-driven model revision process has not been adequately investigated, and thus there is a need for further analysis of modeling practices and their role in improving scientific understanding.

**Methodology**

Analysis of the modeling processes of the students showed that the comparison between the initial models and the experimental results led to the development of specific categories of

model revisions. The revisions were not random but followed specific conceptual patterns that were directly related to the discrepancies between the prediction and the evidence. Three major types of revisions emerged. The most common inconsistency occurred when students compared their original models of dissolution with the results of the conductivity test. In many original models, dissolved salt was depicted as neutral particles dispersed in water. However, experimental results indicating the presence of electrical conductivity challenged this depiction. To address this inconsistency, students modified their models by incorporating the concept of ionic dissociation. In the modified models, neutral particles were replaced by positively and negatively charged ions that moved independently in the solution. This modification enabled students to account for conductivity by the presence of charge carriers. The transition from the depiction of neutral particles to ions reflected a major conceptual shift, which indicated progress from macroscopic observation to submicroscopic explanation. While the addition of ions was an improvement, further comparison with experimental data showed other weaknesses. Students frequently were unable to account for the persistence of ion separation or the stability of solutions.

Modifications at this level included the addition of molecular orientation and motion to the theory. Water molecules were modeled as polar molecules that aligned around ions in response to electrostatic forces. Students also added motion indicators to model ongoing molecular and ionic motion. These modifications reflected a deeper understanding of molecular interactions and a transition from static to dynamic modeling. The addition of motion was especially useful in modeling ongoing conductivity and diffusion. The third type of revision occurred as students examined temperature data for dissolution processes. The initial models did not account for energy change, causing discrepancies between predictions and actual data. Students modified their models by introducing interaction forces, separating ionic lattice forces and ion-dipole interactions with water molecules. Energy concepts were introduced to account for why some dissolution processes caused temperature increases or decreases. The modified models started to model the dissolution process as a balance between energy needed to overcome interactions and energy released in forming new bonds. This phase showed improvement in mechanistic thinking, as students began to relate interactions at the particle level to macroscopic phenomena.

**Discussion**

The patterns of revisions indicate that model-based learning is an effective way of developing concepts by repeatedly pitting prediction against evidence. Each level of revision represented a higher level of scientific understanding:

the addition of ions indicated an understanding of invisible explanatory entities,

molecular orientation and mobility indicated an understanding of dynamic processes,

the addition of interaction forces indicated the development of causal and energetic thinking.

What is important to note is that revisions were made not only due to teacher explanations but due to evidence-based inconsistencies identified by the students themselves. This suggests that the revision of models is a tool of conceptual change, which assists students in restructuring initial misconceptions into scientifically accepted explanations. In addition, the process of revisions indicates that models develop in a manner consistent with scientific practice, where models are continually tested and refined. Students progressed from descriptive drawings to explanatory scientific models that could predict and explain observed phenomena. This

supports the notion that model-based learning is an effective way of not only developing concepts but also developing scientific thinking practices such as evidence evaluation and mechanistic explanation. The iterative process of revision illustrates that learning gains in model-based instruction are not the result of model-building alone, but of the process of empirical contradiction and model restructuring, which are the primary forces behind conceptual change.

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# SOCIOLOGICAL ANALYSIS OF PHYSICAL, TECHNICAL, TACTICAL AND PSYCHOLOGICAL FACTORS DETERMINING THE EFFECTIVENESS OF ATTACKING ACTIONS IN VOLLEYBALL PLAYERS

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***Abstract.*** *This article analyzes the physical, technical, tactical, and psychological factors determining the effectiveness of attacking actions in volleyball players using a sociological approach. During the study, a survey was conducted among coaches and athletes, which made it possible to identify the key factors influencing the effectiveness of attacking actions in volleyball. The analysis results showed that the speed and power of attack hits, changes in attack direction, and the psychological preparedness of athletes significantly affect game performance. In addition, the need to improve technical and tactical training during the training process and to develop athletes' ability to make quick decisions in game situations was identified. The obtained results have important scientific and practical significance for improving the effectiveness of attacking actions in volleyball players.*

***Key words:*** *volleyball, attacking actions, attack efficiency, technical training, tactical elements, psychological factors, physical fitness, sociological analysis, coaches, athletes.*

***Annotatsiya.*** *Mazkur maqolada voleybolchilarda hujum harakatlarining samaradorligini belgilovchi jismoniy, texnik, taktika va psixologik omillar sotsiologik yondashuv asosida tahlil qilindi. Tadqiqot jarayonida trenerlar va sportchilar o'rtasida so'rovnoma o'tkazilib, olingan natijalar voleybol o'yinida hujum harakatlarining samaradorligiga ta'sir etuvchi asosiy omillarni aniqlash imkonini berdi. Tahlil natijalari hujum zarbalarining tezligi, kuchi, yo'nalishini o'zgartirish elementlari hamda sportchilarning psixologik tayyorgarligi o'yin samaradorligiga sezilarli ta'sir ko'rsatishini ko'rsatdi. Shuningdek, mashg'ulot jarayonida texnik va taktika elementlarini takomillashtirish hamda sportchilarning tezkor qaror qabul qilish qobiliyatlarini rivojlantirish zarurligi aniqlandi. Olingan natijalar voleybolchilarda hujum harakatlarining samaradorligini oshirishga qaratilgan ilmiy-amaliy tavsiyalar ishlab chiqishda muhim ahamiyatga ega.*

***Kalit so'zlar:*** *voleybol, hujum harakatlari, hujum samaradorligi, texnik tayyorgarlik, taktika elementlari, psixologik omillar, jismoniy tayyorgarlik, sotsiologik tahlil, trenerlar, sportchilar.*

***Аннотация.*** *В данной статье на основе социологического подхода проведен анализ физических, технических, тактических и психологических факторов, определяющих эффективность атакующих действий у волейболистов. В ходе исследования был проведён опрос среди тренеров и спортсменов, что позволило выявить основные факторы, влияющие на результативность атакующих действий в волейболе. Результаты анализа показали, что скорость и сила атакующих ударов, изменение направления атаки, а также психологическая подготовленность спортсменов оказывают существенное влияние на эффективность игровых действий. Кроме того, была выявлена необходимость совершенствования технической и тактической подготовки в тренировочном процессе, а также развития способности спортсменов быстро принимать решения в игровых ситуациях. Полученные результаты имеют важное научно-практическое значение для повышения эффективности атакующих действий волейболистов.*

***Ключевые слова:*** *волейбол, атакующие действия, эффективность атаки, техническая подготовка, тактические элементы, психологические факторы, физическая подготовка, социологический анализ, тренеры, спортсмены.*

**Kirish**. So‘nggi yillarda O‘zbekiston Respublikasida voleybol sport turini rivojlantirish, yoshlar orasida ushbu sport turi bilan shug‘ullanuvchi sportchilarni saralab olish tizimini takomillashtirish hamda milliy terma jamoalarimizning nufuzli xalqaro musobaqalarda yuqori natijalarga erishishini ta’minlash davlat siyosatining ustuvor yo‘nalishlaridan biriga aylandi. Xususan, O‘zbekiston Respublikasi Prezidentining 2020-yil 24-yanvardagi “O‘zbekiston Respublikasida jismoniy tarbiya va sportni yanada takomillashtirish va ommalashtirish chora-tadbirlari to‘g‘risida” PF-5924-sonli Farmonida Jismoniy tarbiya va sportni ommalashtirish, aholining sog‘lom turmush tarzini shakllantirish, professional va havaskor sportni rivojlantirishga qaratilgan uzoq muddatli strategik yo‘nalishlar belgilangan mazkur farmon sport turlari bo‘yicha ilmiy izlanishlar, zamonaviy texnologiyalarni amaliyotga joriy etish hamda sport rezervini shakllantirish jarayonida ilmiy yondashuvning ahamiyatini alohida ta’kidlaydi. Hamda O‘zbekiston Respublikasi Prezidentining 2022-yil 3-noyabrdagi *“Jismoniy tarbiya va sport sohasida kadrlarni tayyorlash hamda ilmiy tadqiqotlar tizimini yanada takomillashtirish chora-tadbirlari to‘g‘risida”* PQ-414-sonli qarori esa jismoniy tarbiya va sport sohasida kadrlar tayyorlash tizimini modernizatsiya qilish, ilmiy tadqiqotlar samaradorligini oshirish, sportchilar tayyorgarligini ilmiy asosda baholash va innovatsion metodlarni tatbiq etishni zamonaviy talablarga mos ravishda tashkil etish bo‘yicha muhim vazifalarni belgiladi. Shuningdek maqsadda O‘zbekiston Respublikasi Prezidentining 2024-yil 19-iyuldagi PQ-274-son qarori qabul qilinib, voleybol sport turini yanada ommalashtirish, zamonaviy sport infratuzilmasini yaratish va sportchilarning tayyorgarlik sifatini oshirish bo‘yicha muhim vazifalar belgilab berildi. Qarorda, shuningdek, sportchilarning texnik, jismoniy va taktik tayyorgarligini ilmiy asosda oshirish va Trenerlarningg faoliyatini takomillashtirish zarurati ta’kidlangan.

Mazkur normativ-huquqiy hujjatlarda belgilangan vazifalar zamonaviy voleybol sportining texnik-taktik jihatlarini chuqur tadqiq etish, xususan, hujum harakatlari samaradorligini oshirishga qaratilgan ilmiy izlanishlarning ahamiyatini sezilarli darajada oshirmoqda. Bugungi sharoitda yuqori natijalarga erishish uchun voleybolchilarning jismoniy tayyorgarligi, texnik va taktika malakasi hamda psixologik barqarorligini kompleks baholash,

hujum texnikasi va uslublarini ilmiy asosda takomillashtirish, shuningdek, yosh sportchilar uchun zamonaviy, metodik jihatdan optimallashtirilgan o‘quv-mashg‘ulot dasturlarini ishlab chiqish muhim ilmiy-amaliy ahamiyat kasb etadi.

**Materiallar va metodlar.** Mazkur tadqiqot voleybolchilarda hujum harakatlari samaradorligiga ta’sir etuvchi omillarni aniqlash maqsadida murabbiylar va sportchilar o‘rtasida so‘rovnoma o‘tkazildi. So‘rovnomada sportchilardan ularning sport darajasi, voleybol bilan shug‘ullanish davomiyligi, hujum zarbalarini qabul qilishdagi qiyinchiliklar va yo‘nalishni o‘zgartirib bajarilgan hujum texnikasini qo‘llash tajribasi bo‘yicha ma’lumotlar olindi. Shu bilan birga, murabbiylar so‘rovnomada jamoaning hujumni himoyalashdagi qiyinchiliklari, yo‘nalishni o‘zgartirish elementidan foydalanish chastotasi va o‘yin natijasiga ta’siri bo‘yicha professional fikrlarini bildirdi. Respondentlar sifatida yuqori sport unvonlariga ega sportchilar va faoliyat olib borayotgan voleybol trenerlari tanlab olindi.

So‘rovnoma natijalari voleybolchilarda hujum harakatlarining samaradorligini oshirishda texnik tayyorgarlik, jismoniy sifatlar, taktik fikrlash va psixologik barqarorlik muhim omillar ekanligini aniqlash imkonini beradi. Shu munosabat bilan mazkur tadqiqotning maqsadi voleybolchilarda hujum harakatlari samaradorligiga ta’sir etuvchi asosiy omillarni so‘rovnoma natijalari asosida aniqlash va ularni ilmiy jihatdan tahlil qilishdan iborat.

Mazkur tadqiqot voleybolchilarda hujum harakatlari samaradorligiga ta’sir etuvchi omillarni aniqlash maqsadida sotsiologik usul **so‘rovnoma** asosida olib borildi. Tadqiqotda ikki turdagi respondentlar jalb qilindi: birinchisi, yuqori sport unvoniga ega bo‘lgan professional voleybolchilar; ikkinchisi esa O‘zbekistonda faoliyat yuritayotgan voleybol murabbiylari. Ushbu tanlov natijasida tadqiqot ma’lumotlari nafaqat amaliy tajribaga, balki murabbiylar va sportchilarning professional fikrlariga asoslangan ilmiy asosga ega bo‘ldi.

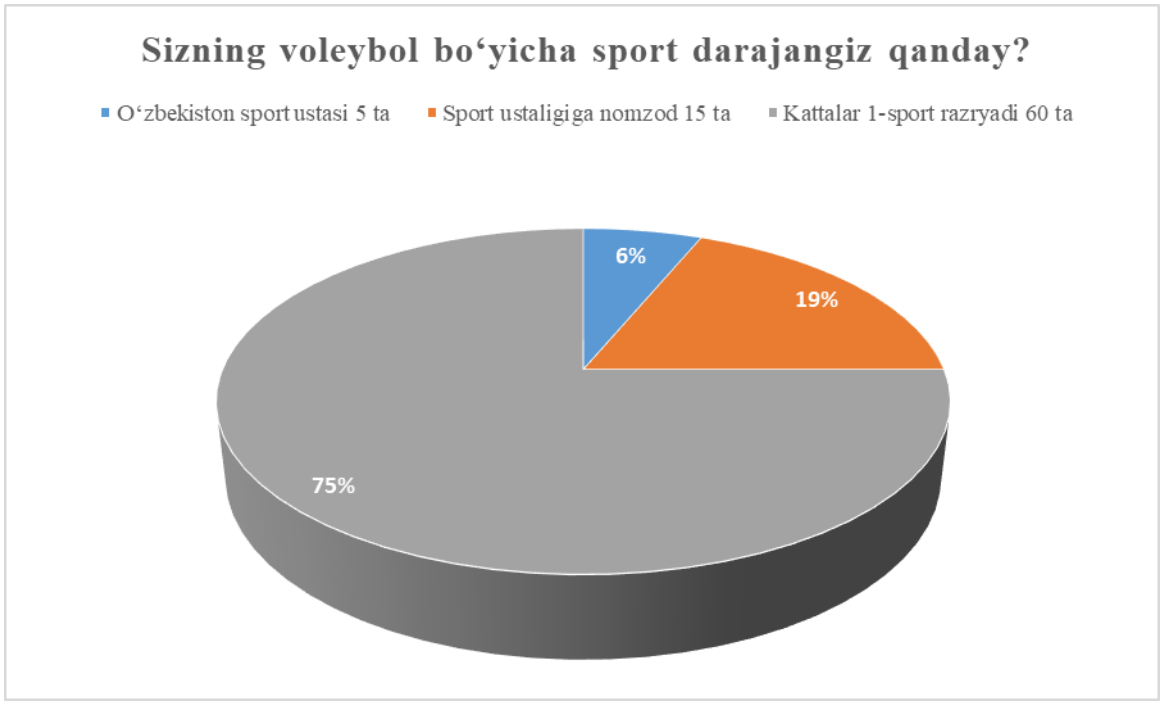
So‘rovnoma savollari ikki blokdan iborat bo‘ldi: birinchi blok sportchilar tajribasini, ularning hujum zarbalarini qabul qilishdagi qiyinchiliklari va yo‘nalishni o‘zgartirib hujum qilish texnikasidan foydalanish chastotasini o‘rganishga qaratilgan. Ikkinchi blok murabbiylar fikriga bag‘ishlandi va jamoaning hujumni himoyalashdagi qiyinchiliklari, mashg‘ulotlarda yo‘nalishni o‘zgartirish texnikasini qo‘llash chastotasi va o‘yin natijasiga ta’sirini aniqlashga qaratildi. Har bir savolga javob berish respondentlarga qulay bo‘lishi uchun variantlar taqdim etildi va ular mos keluvchi javobni belgilash orqali ishtirok etdilar.

**Natijalar va muhokama.** Respondentlar soni 80 nafar professional sportchi va 60 nafar faol murabbiyni tashkil etdi. So‘rovnomada to‘plangan ma’lumotlar statistik tahlil yordamida foizlar ko‘rinishida tasniflandi, shuningdek, natijalar jadval va diagrammalar orqali vizual tarzda ifodalandi. Ushbu metod tadqiqotning ilmiy ishonchliligi va amaliy ahamiyatini ta’minladi, chunki u hujum harakatlarining samaradorligini oshirishda texnik, jismoniy va taktika omillarining ahamiyatini aniq ko‘rsatib beradi.

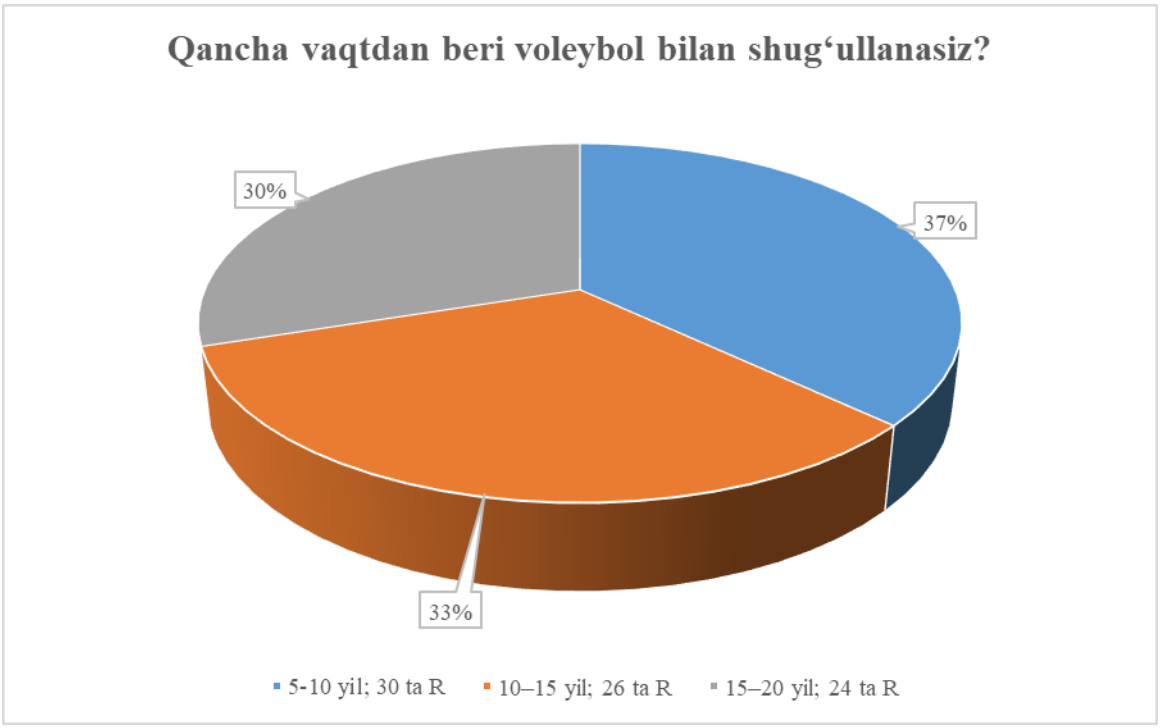
So‘rovnoma natijalari; tadqiqotda **80 nafar sport darajasiga ega bo‘lgan sportchi** va **60 nafar faol trener** respondent sifatida jalb qilindi. So‘rovnomada 8 ta savol sportchilar uchun va 8 ta trenerlar fekrini o‘z ichiga oldi, har bir savolga 3 ta javob varianti (a, b, s) taqdim etildi. Quyida natijalar **foiz, son, grafik ko‘rinishida** hamda **matnli tahlil bilan** keltirilgan.

1. Sportchi respondetlar

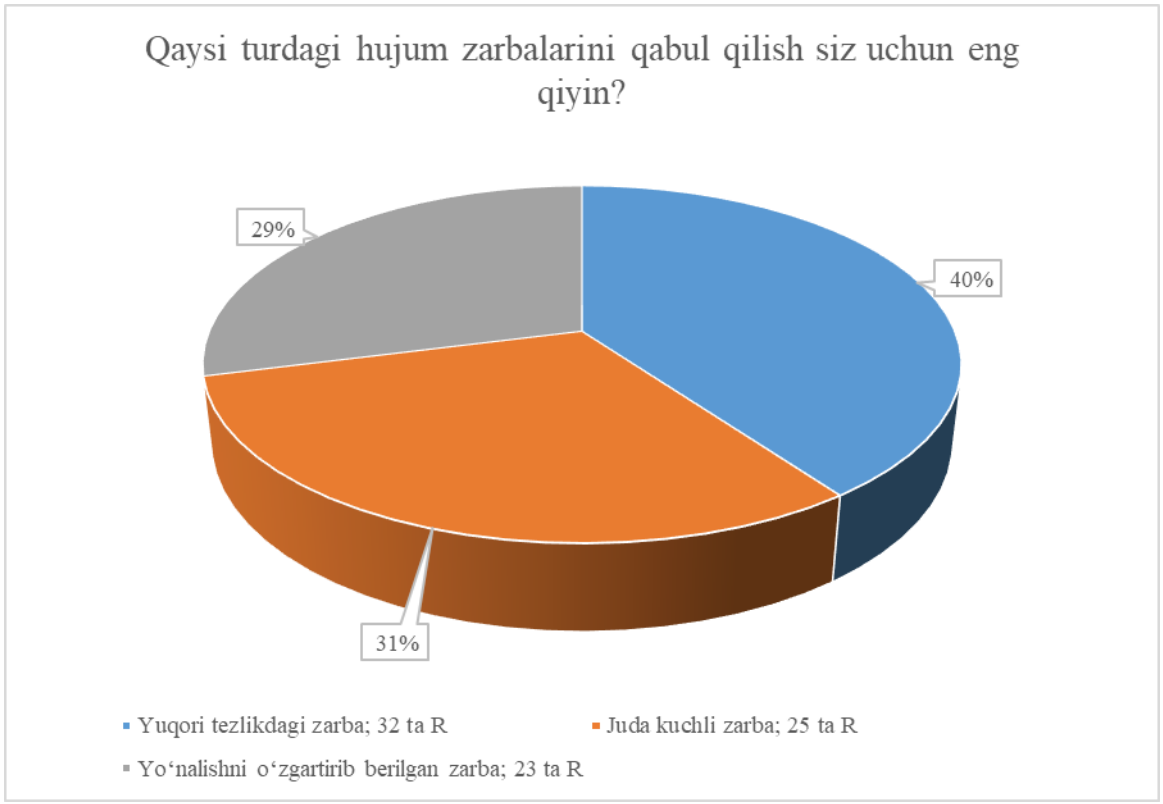
1-rasm


Sizning voleybol bo‘yicha sport darajangiz qanday?
O‘zbekiston sport ustasi 5 ta
Sport ustaligiga nomzod 15 ta
Kattalar 1-sport razryadi 60 ta
6%
19%
75%

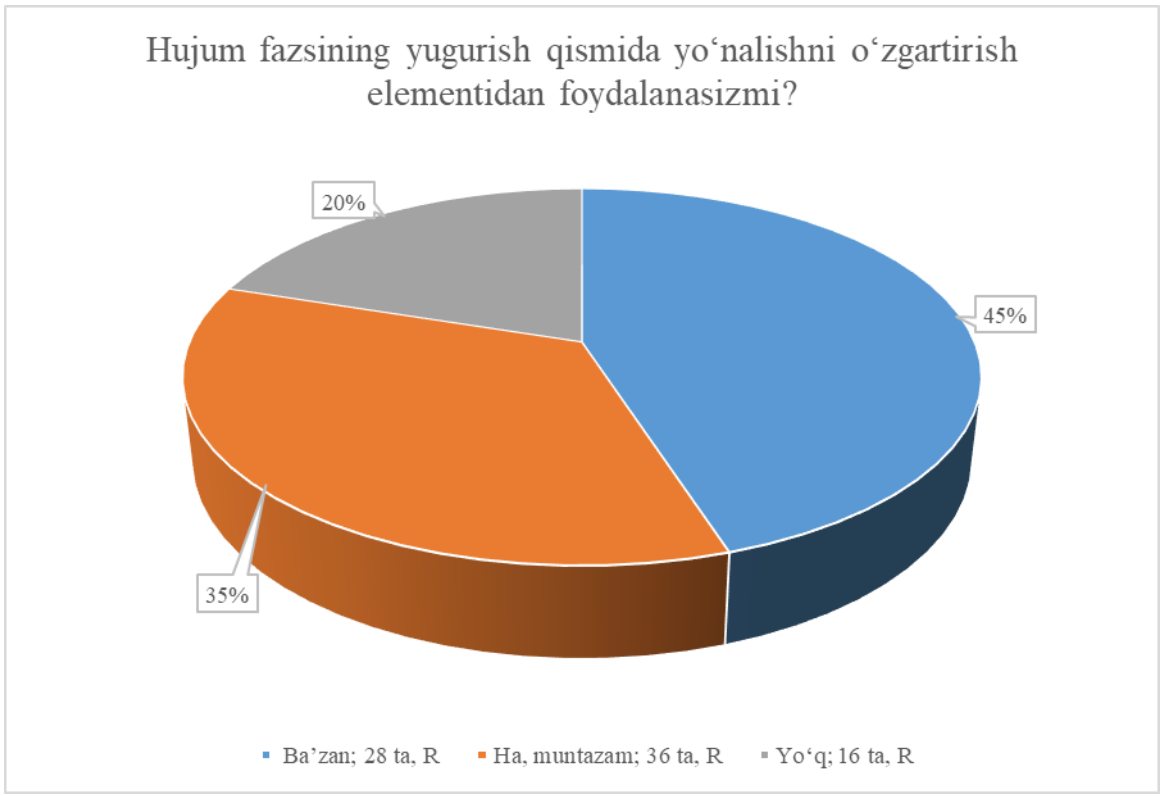
2.rasm


Qancha vaqtdan beri voleybol bilan shug‘ullanasiz?
30%
37%
33%
5-10 yil; 30 ta R
10–15 yil; 26 ta R
15–20 yil; 24 ta R

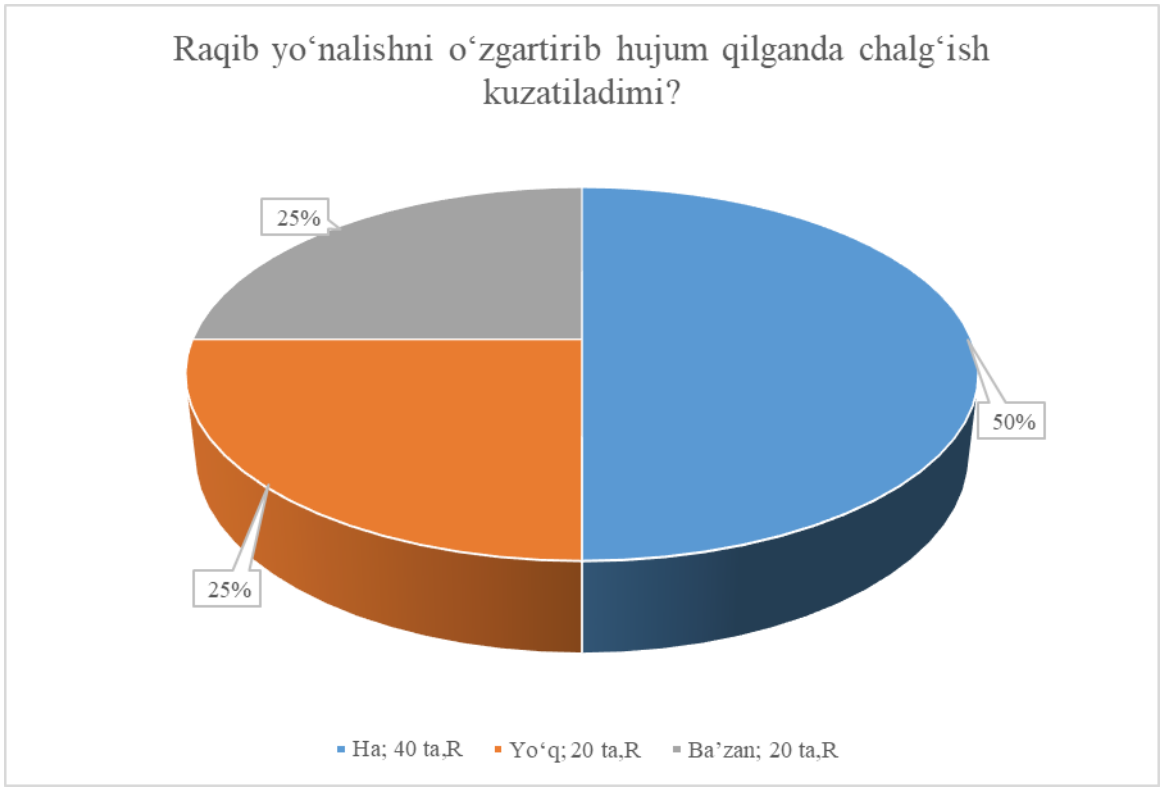
3.rasm


Qaysi turdagi hujum zarbalarini qabul qilish siz uchun eng qiyin?
29%
40%
31%
Yuqori tezlikdagi zarba; 32 ta R
Juda kuchli zarba; 25 ta R
Yo‘nalishni o‘zgartirib berilgan zarba; 23 ta R

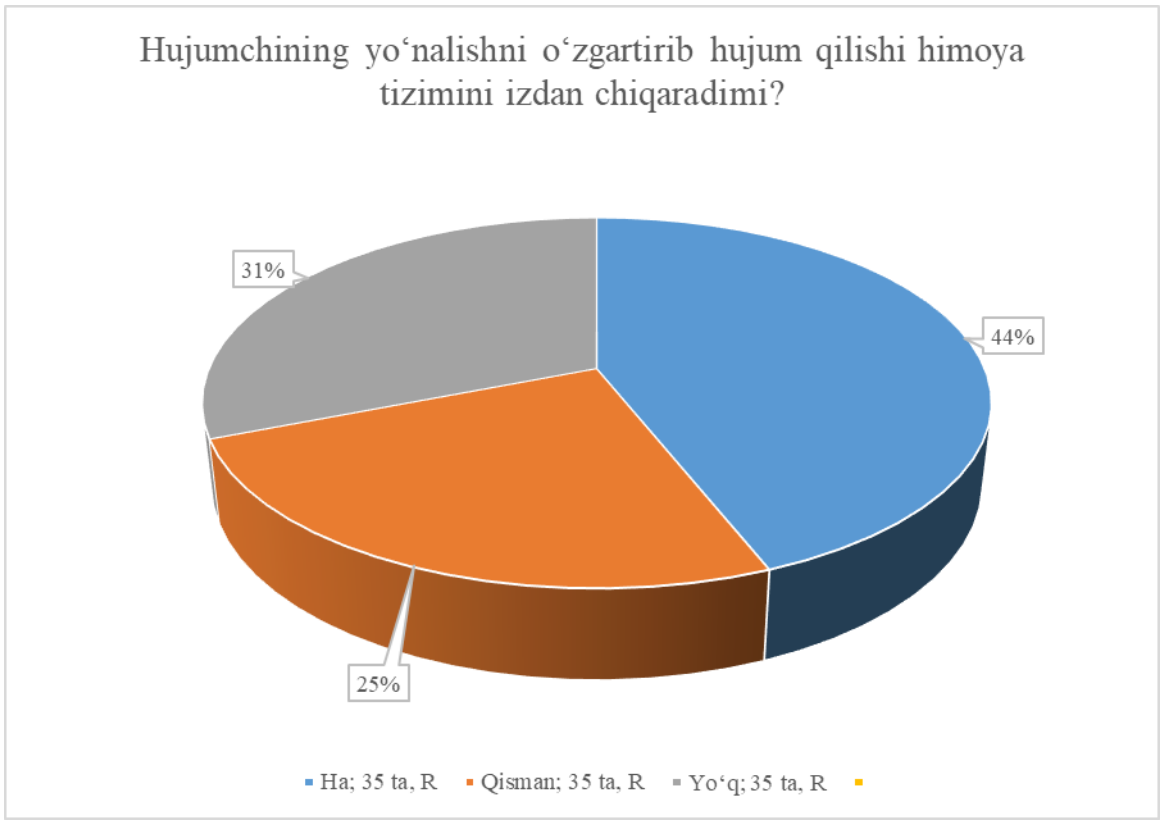
4.rasm


Hujum fazsining yugurish qismida yo‘nalishni o‘zgartirish elementidan foydalanasizmi?
20%
45%
35%
Ba’zan; 28 ta, R
Ha, muntazam; 36 ta, R
Yo‘q; 16 ta, R

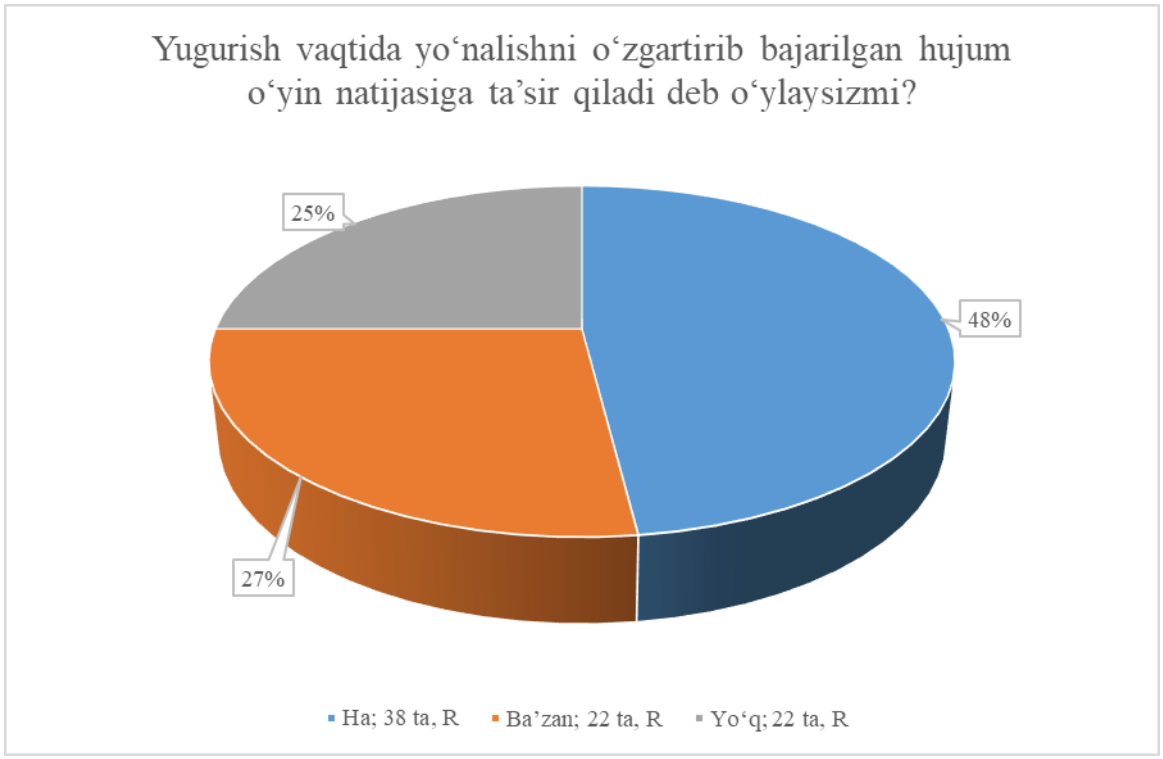
5.rasm


Raqib yo‘nalishni o‘zgartirib hujum qilganda chalg‘ish kuzatiladimi?
25%
50%
25%
Ha; 40 ta,R
Yo‘q; 20 ta,R
Ba’zan; 20 ta,R

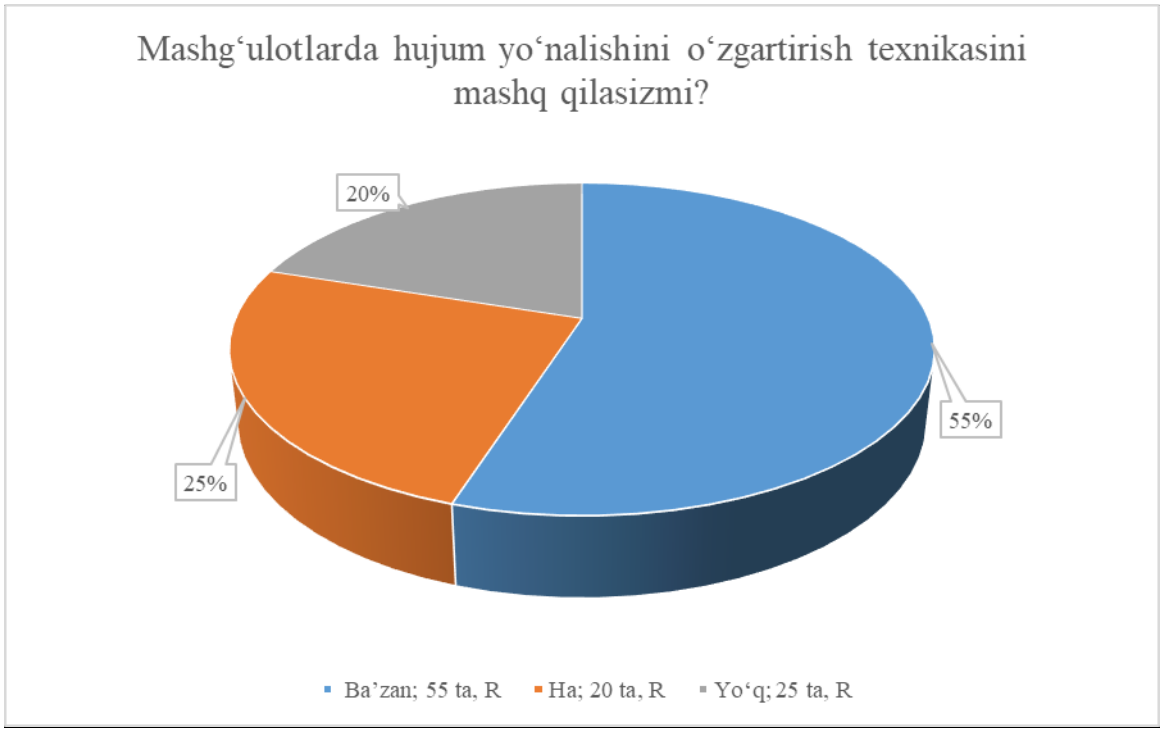
6.rasm


Hujumchining yo‘nalishni o‘zgartirib hujum qilishi himoya tizimini izdan chiqaradimi?
31%
44%
25%
Ha; 35 ta, R
Qisman; 35 ta, R
Yo‘q; 35 ta, R

7.rasm




8.rasm




1-savol bo‘yicha. O‘tkazilgan so‘rovnoma natijalari respondentlarning sport malakasi darajasi bo‘yicha tarkibini aniqlash imkonini berdi. Tahlil natijalariga ko‘ra, ishtirokchilarning asosiy qismini **75% (60 nafar)** sportchilar **kattalar o‘rtasida 1-sport razryadiga ega** voleybolchilar tashkil etadi. Shu bilan birga, **19% (15 nafar)** respondentlar **sport ustaligiga nomzod, 6% (5 nafar)** respondentlar esa **O‘zbekiston sport ustasi** unvoniga ega sportchilar

ekanligi ma’lum bo‘ldi. Mazkur ko‘rsatkichlar tadqiqotda qatnashgan sportchilarning aksariyati yetarli sport tajribasiga ega ekanligini anglatadi. Bu esa ularning hujum harakatlari samaradorligi bo‘yicha bildirgan fikrlari ilmiy jihatdan asosli va ishonchli ekanligini ko‘rsatadi.

2-savol bo‘yicha. Respondentlarning voleybol bilan shug‘ullanish davomiyligi ham o‘rganildi. Olingan natijalarga ko‘ra, **37% (30 nafar)** respondentlar **5-10 yil** davomida voleybol bilan shug‘ullanib kelayotganini bildirgan. Shuningdek, **33% (26 nafar)** sportchilar **10-15 yil, 30% (24 nafar)** respondentlar esa **15-20 yil** davomida ushbu sport turi bilan shug‘ullanayotganini qayd etgan. Ushbu ko‘rsatkichlar tadqiqotda qatnashgan sportchilar voleybol bilan uzoq yillardan buyon shug‘ullanayotganini ko‘rsatadi. Natijada ularning texnik va taktika tayyorgarligi hamda o‘yin jarayonidagi tajribasi yuqori ekanligi kuzatiladi.

3-savol bo‘yicha. Sportchilardan qaysi turdagi hujum zarbalarini qabul qilish murakkabligi haqida fikr bildirish so‘raldi. Tahlil natijalariga ko‘ra, respondentlarning **40% (32 nafar)** qismi **yuqori tezlikda berilgan hujum zarbalarini** qabul qilish eng qiyin ekanligini ta’kidlagan. Bundan tashqari, **31% (25 nafar)** respondentlar **kuchli zarbalarni, 29% (23 nafar)** sportchilar esa **yo‘nalishi o‘zgartirilgan zarbalarni** qabul qilish murakkabligini qayd etgan. Bu ko‘rsatkichlar voleybol o‘yinida zarbaning tezligi va kuchi himoya harakatlarining samaradorligiga bevosita ta’sir qilishini ko‘rsatadi. Ayniqsa, tezkor hujumlar himoyachilardan yuqori darajadagi reaksiya tezligi va texnik tayyorgarlikni talab qiladi.

4-savol bo‘yicha. Hujum fazasining yugurish bosqichida yo‘nalishni o‘zgartirish elementidan foydalanish darajasi ham o‘rganildi. Olingan natijalarga ko‘ra, **45% (36 nafar)** respondentlar hujum jarayonida ushbu texnik usuldan **muntazam foydalanishini** bildirgan. Shu bilan birga, **35% (28 nafar)** sportchilar bu elementdan **ba’zan foydalanishini, 20% (16 nafar)** respondentlar esa **deyarli foydalanmasligini** qayd etgan. Bu natijalar hujum harakatlarida yo‘nalishni o‘zgartirish usuli raqib himoyasini chalg‘itish va hujum samaradorligini oshirishda muhim o‘rin tutishini ko‘rsatadi.

5-savol bo‘yicha. Raqib tomonidan yo‘nalishni o‘zgartirib bajarilgan hujumlar sportchilarning himoya harakatlariga qanday ta’sir ko‘rsatishi ham tahlil qilindi. Natijalarga ko‘ra, respondentlarning **50% (40 nafar)** qismi bunday vaziyatlarda **chalg‘ish kuzatilishini** bildirgan. **25% (20 nafar)** respondentlar **chalg‘ish kuzatilmasligini,** yana **25% (20 nafar)** sportchilar esa **ba’zan chalg‘ish yuzaga kelishini** ta’kidlagan. Bu holat voleybol o‘yinida kutilmagan yo‘nalishdagi hujumlar himoya tizimi barqarorligiga sezilarli ta’sir ko‘rsatishini anglatadi.

6-savol bo‘yicha. Hujumchining yo‘nalishni o‘zgartirib amalga oshirgan zarbalari himoya tizimiga qanday ta’sir etishi ham respondentlar fikri asosida baholandi. So‘rov natijalariga ko‘ra, **44% (35 nafar)** respondentlar bunday hujumlar **himoya tizimini izdan chiqarishi mumkinligini** qayd etgan. **25% (20 nafar)** respondentlar bu holat **ba’zi vaziyatlarda kuzatilishini, 31% (25 nafar)** sportchilar esa bunday zarbalar **himoya tizimiga sezilarli ta’sir ko‘rsatmasligini** bildirgan. Mazkur natijalar hujum texnikasida yo‘nalishni o‘zgartirish elementlari taktika jihatdan muhim ahamiyat kasb etishini ko‘rsatadi.

7-savol bo‘yicha. Respondentlar yugurish jarayonida yo‘nalishni o‘zgartirib bajarilgan hujumlar o‘yin natijasiga qanchalik ta’sir ko‘rsatishi haqida ham fikr bildirgan. Natijalarga ko‘ra, **48% (38 nafar)** sportchilar bunday hujumlar **o‘yin natijasiga sezilarli ta’sir ko‘rsatadi**, deb hisoblaydi. Shu bilan birga, **27% (22 nafar)** respondentlar **ba’zan ta’sir ko‘rsatishini, 25% (20 nafar)** respondentlar esa **sezilarli ta’sir ko‘rsatmasligini** qayd etgan. Ushbu ko‘rsatkichlar

hujum vaqtida yo‘nalishni o‘zgartirish elementlari o‘yin taktikasi uchun muhim vosita ekanligini tasdiqlaydi.

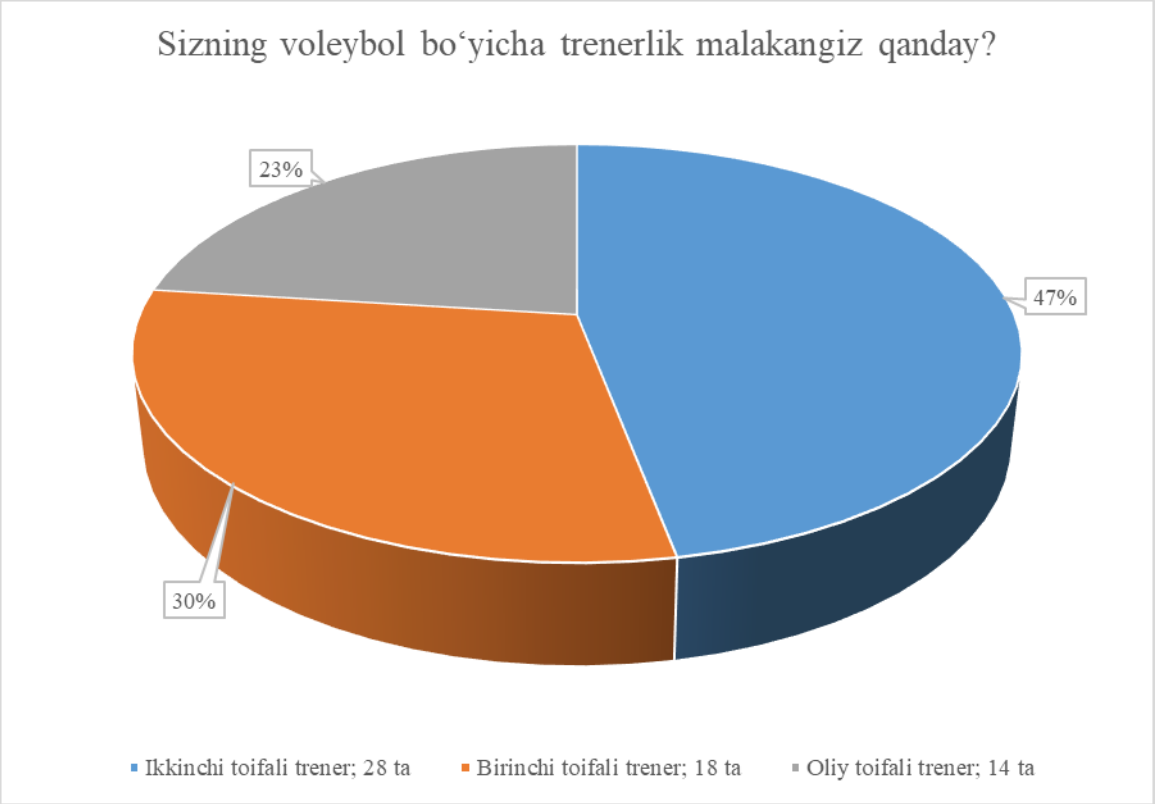
8-savol bo‘yicha. Mashg‘ulot jarayonida hujum yo‘nalishini o‘zgartirish texnikasiga qanchalik e’tibor qaratilishi ham o‘rganildi. So‘rov natijalariga ko‘ra, **55% (44 nafar)** respondentlar ushbu texnikani **muntazam mashq qilishlarini** bildirgan. **25% (20 nafar)** sportchilar bu elementni **ba’zan mashq qilishlarini, 20% (16 nafar)** respondentlar esa mashg‘ulotlarda bu texnikaga **yetarli e’tibor qaratilmasligini** qayd etgan. Bu natijalar mashg‘ulot jarayonida hujum texnikasini yanada takomillashtirish va yo‘nalishni o‘zgartirish elementlarini ko‘proq qo‘llash zarurligini ko‘rsatadi.

Sportchi respondetlar tomonidan o‘tkazilgan so‘rovnoma natijalari bo‘yicha umumiy xulosaga keladigan bo‘lsak voleybolchilarning sport tayyorgarligi darajasi, o‘yin tajribasi hamda hujum harakatlari samaradorligiga ta’sir etuvchi omillarni aniqlash imkonini berdi. Tadqiqotda ishtirok etgan respondentlarning sport malakasi tahlili shuni ko‘rsatdiki, ularning aksariyatini kattalar o‘rtasida 1-sport razryadiga ega bo‘lgan sportchilar tashkil etadi. Shu bilan birga, sport ustaligiga nomzod va O‘zbekiston sport ustasi unvoniga ega bo‘lgan sportchilarning mavjudligi ham tadqiqotda ishtirok etgan respondentlar yuqori sport tajribasiga ega ekanligini tasdiqlaydi. Bu holat olingan natijalarning ilmiy ishonchliligini oshiradi. Sportchilar faoliyatining davomiyligi ham muhim omillardan biri sifatida namoyon bo‘ldi. Natijalar shuni ko‘rsatdiki, respondentlarning katta qismi voleybol sporti bilan uzoq yillardan beri shug‘ullanib kelmoqda. Bu esa ularning texnik va taktika tayyorgarligi yetarli darajada shakllanganini hamda o‘yin jarayonida yuzaga keladigan turli vaziyatlarni to‘g‘ri baholash tajribasiga ega ekanligini ko‘rsatadi. Hujum zarbalarini qabul qilish jarayonida qiyinchilik tug‘diradigan omillar ham aniqlab olindi. Respondentlarning aksariyati yuqori tezlikda bajarilgan zarbalarni qabul qilish eng murakkab ekanligini ta’kidlagan bo‘lsa, ayrim sportchilar kuchli zarbalar va yo‘nalishi o‘zgartirilgan hujumlarni ham himoya qilish qiyinligini bildirgan. Bu esa voleybol o‘yinida tezkorlik, zarba kuchi hamda zarba yo‘nalishining o‘zgarishi himoya harakatlari samaradorligiga sezilarli ta’sir ko‘rsatishini anglatadi. Shuningdek, hujum jarayonida yugurish vaqtida yo‘nalishni o‘zgartirish elementidan foydalanish darajasi ham o‘rganildi. Natijalar ko‘rsatishicha, sportchilarning muayyan qismi ushbu texnik elementdan muntazam foydalanadi. Bu esa hujum harakatlarini samarali tashkil etishda yo‘nalishni o‘zgartirish usuli muhim taktik vosita hisoblanishini ko‘rsatadi. Mazkur element raqib himoyasini chalg‘itish va hujum samaradorligini oshirishga xizmat qiladi. Bundan tashqari, raqib tomonidan yo‘nalishni o‘zgartirib bajarilgan hujumlar sportchilarning himoya harakatlariga sezilarli ta’sir ko‘rsatishi aniqlangan. Respondentlarning katta qismi bunday vaziyatlarda chalg‘ish holati yuzaga kelishini qayd etgan. Bu esa voleybol o‘yinida kutilmagan yo‘nalishdagi hujumlar himoya tizimi barqarorligiga ta’sir etishini ko‘rsatadi. Hujumchining yo‘nalishni o‘zgartirib amalga oshirgan zarbalari himoya tizimini izdan chiqarish ehtimoli ham respondentlar tomonidan tasdiqlangan. Bu holat voleybol o‘yinida hujum taktikasini samarali qo‘llash muhim ahamiyatga ega ekanligini yana bir bor ko‘rsatadi. Ayniqsa, kutilmagan zarbalar himoyadagi sportchilarning pozitsiyasini o‘zgartirishga majbur qiladi va tezkor qaror qabul qilishni talab etadi. Yugurish jarayonida yo‘nalishni o‘zgartirib bajarilgan hujumlarning o‘yin natijasiga ta’siri ham respondentlar tomonidan yuqori baholangan. Bu esa hujum texnikasida turli vosita va usullardan foydalanish jamoa o‘yinining samaradorligini oshirishda muhim rol o‘ynashini tasdiqlaydi. Mashg‘ulot jarayonida hujum yo‘nalishini o‘zgartirish texnikasini mashq qilish masalasiga ham e’tibor qaratildi. Natijalar sportchilarning katta qismi ushbu texnik elementni muntazam mashq qilishini

ko‘rsatdi. Shu bilan birga, ayrim sportchilarning bu elementni kamroq qo‘llashi mashg‘ulot jarayonida hujum texnikasini yanada takomillashtirish zarurligini ko‘rsatadi. Umuman olganda, o‘tkazilgan tadqiqot natijalari voleybol o‘yinida hujum samaradorligini oshirishda jismoniy tayyorgarlik, texnik mahorat, taktika elementlari, vosita va uslublar hamda psixologik barqarorlik muhim omillar hisoblanishini ko‘rsatdi. Shu sababli mashg‘ulot jarayonida sportchilarning hujum harakatida vosita va uslublarni takomillashtirish, yo‘nalishni o‘zgartirish elementlarini keng qo‘llash hamda tezkor qaror qabul qilish ko‘nikmalarini rivojlantirish alohida ahamiyat kasb etadi.

2.Trener respondetlar

9-rasm



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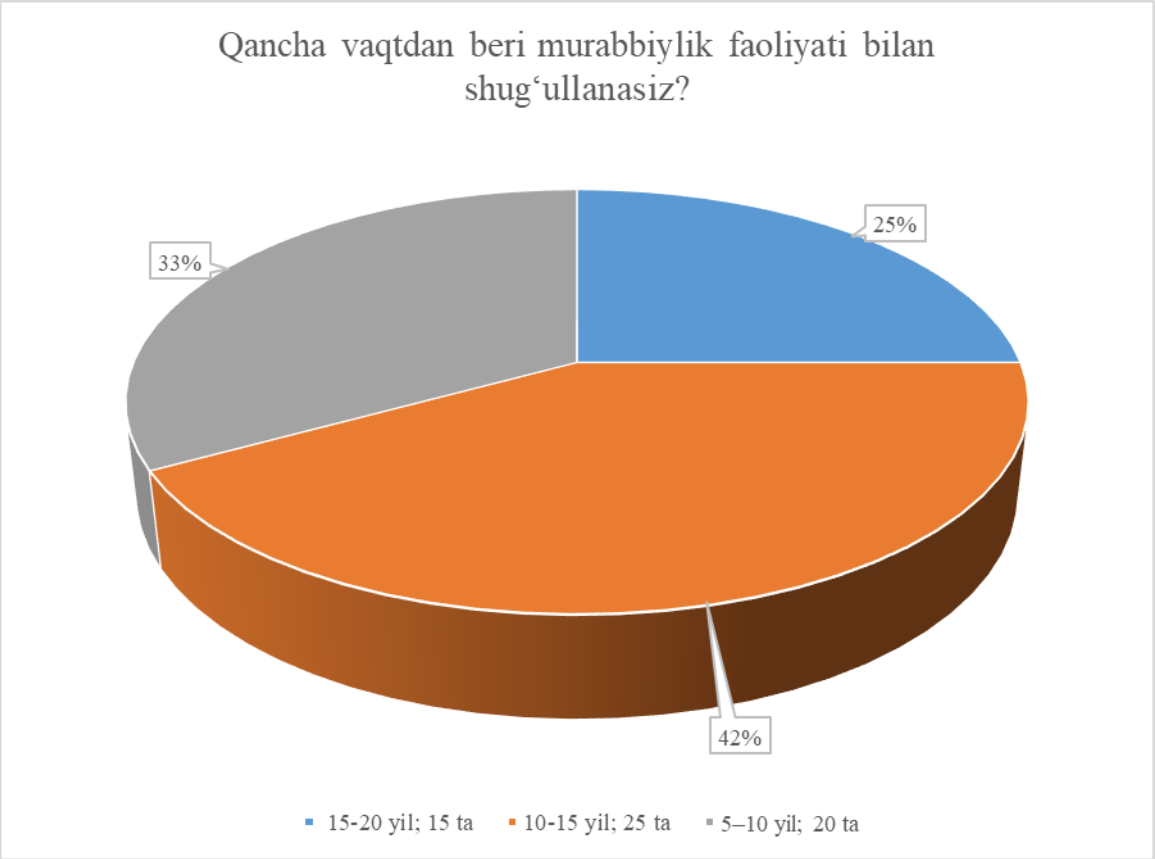
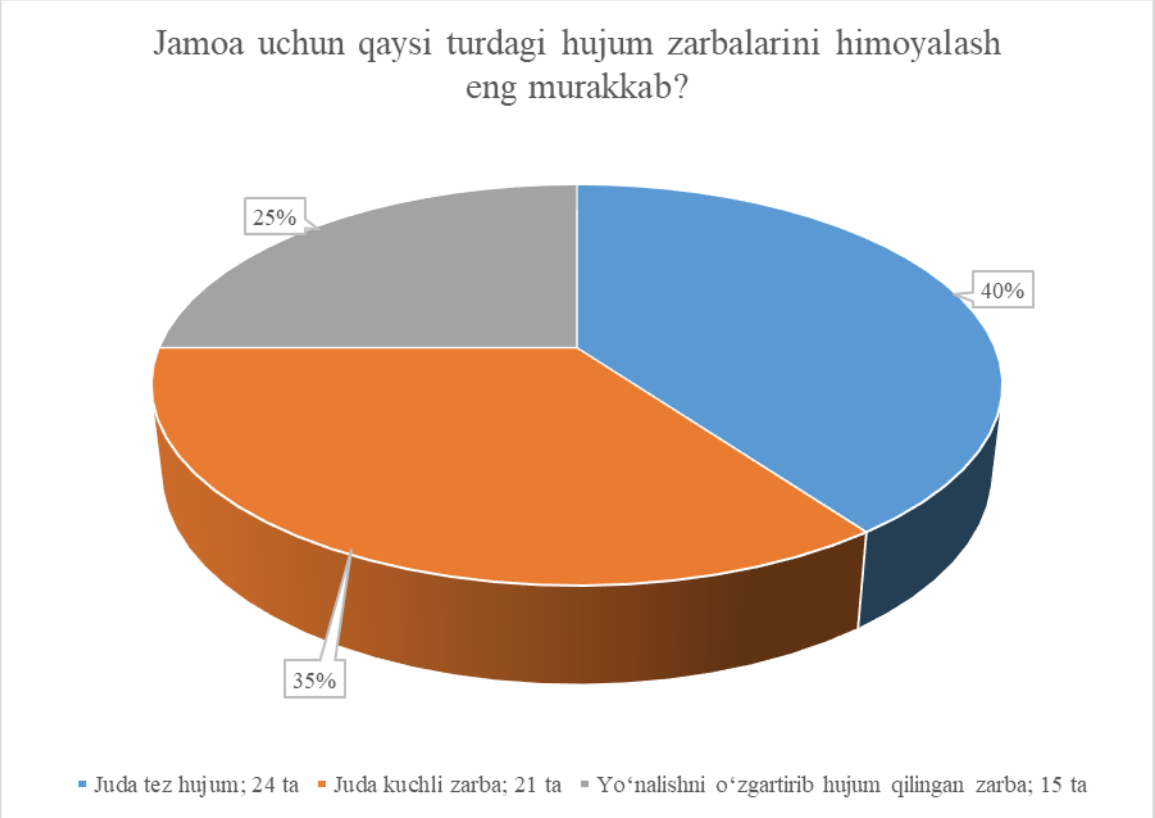
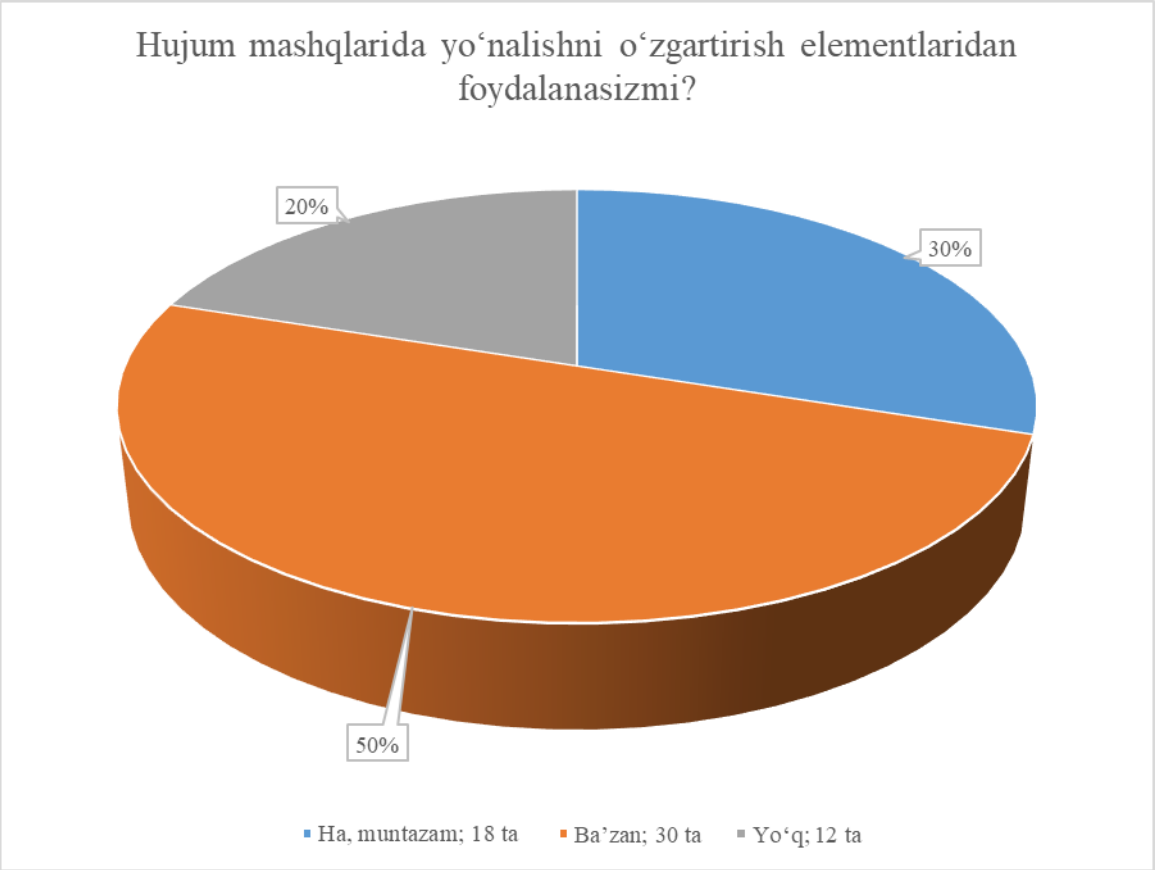


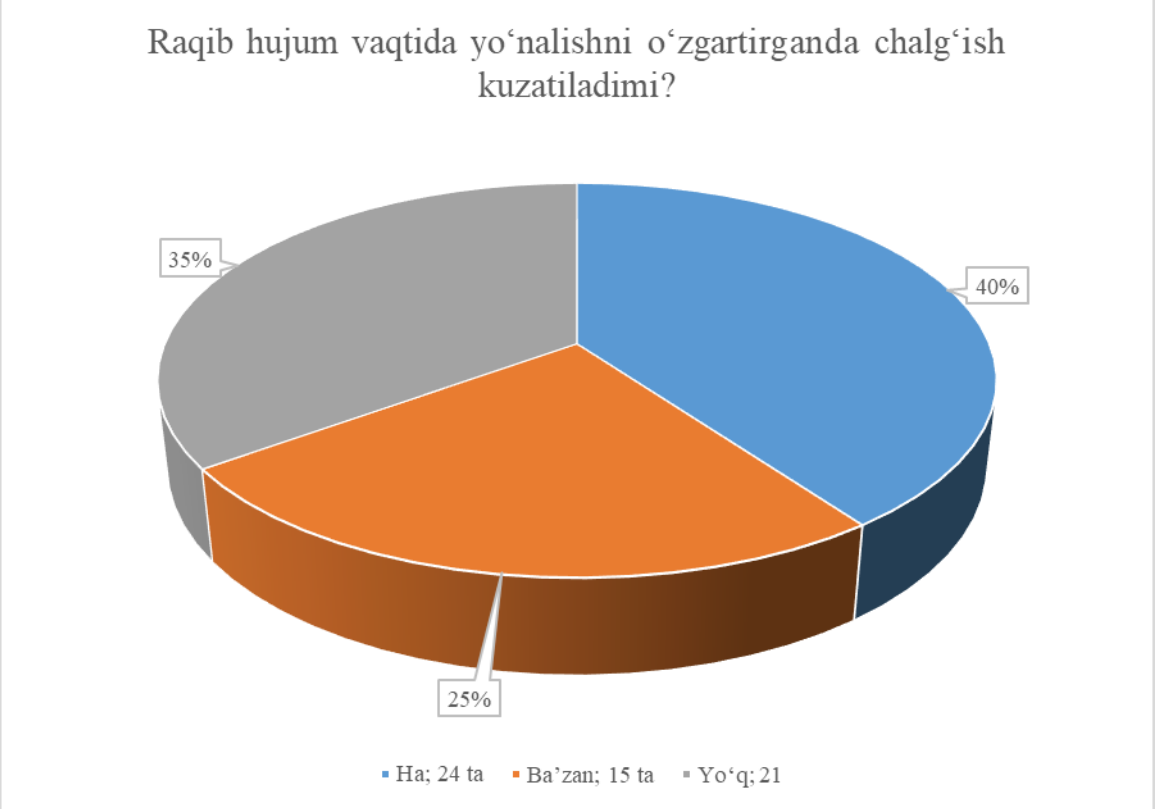

11-rasm



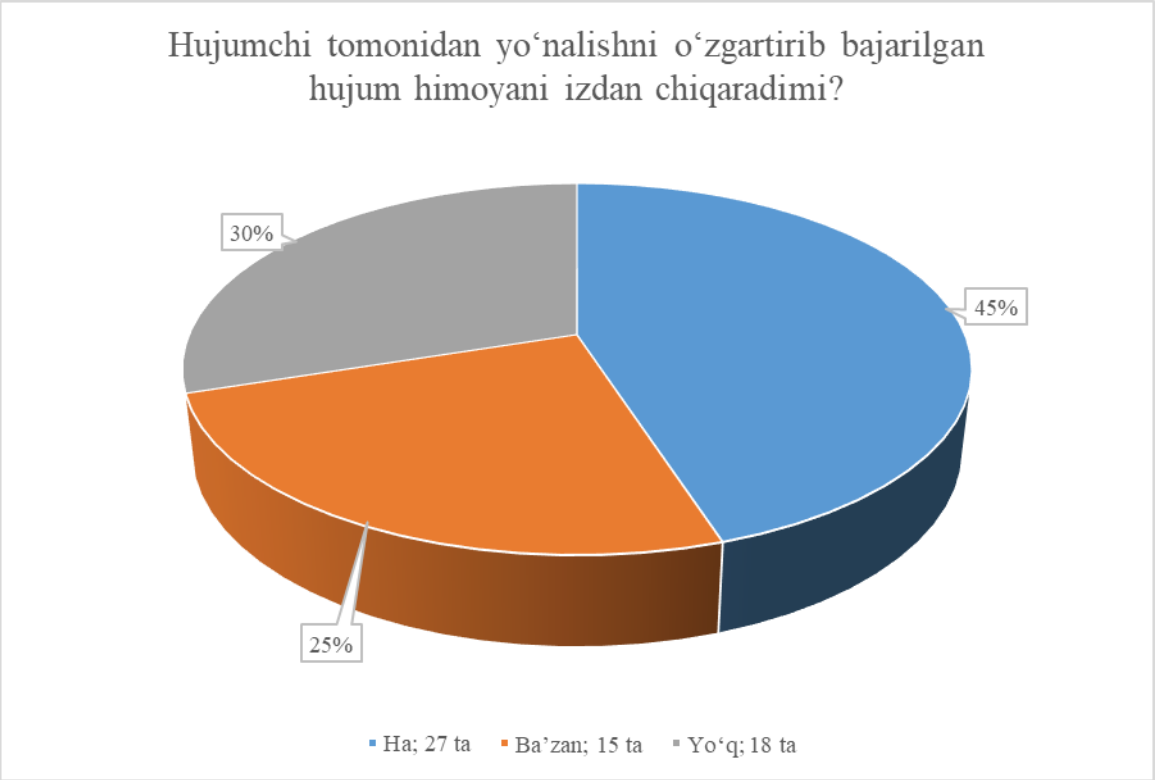
12-rasm



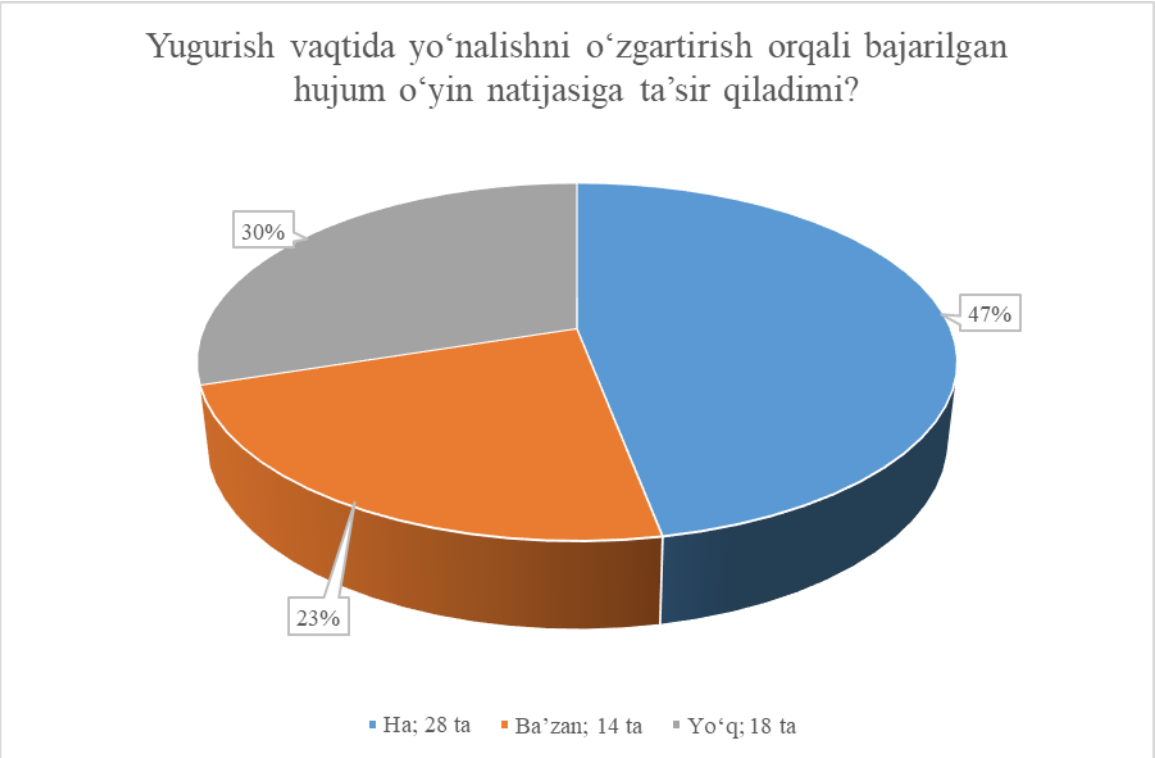

13-rasm



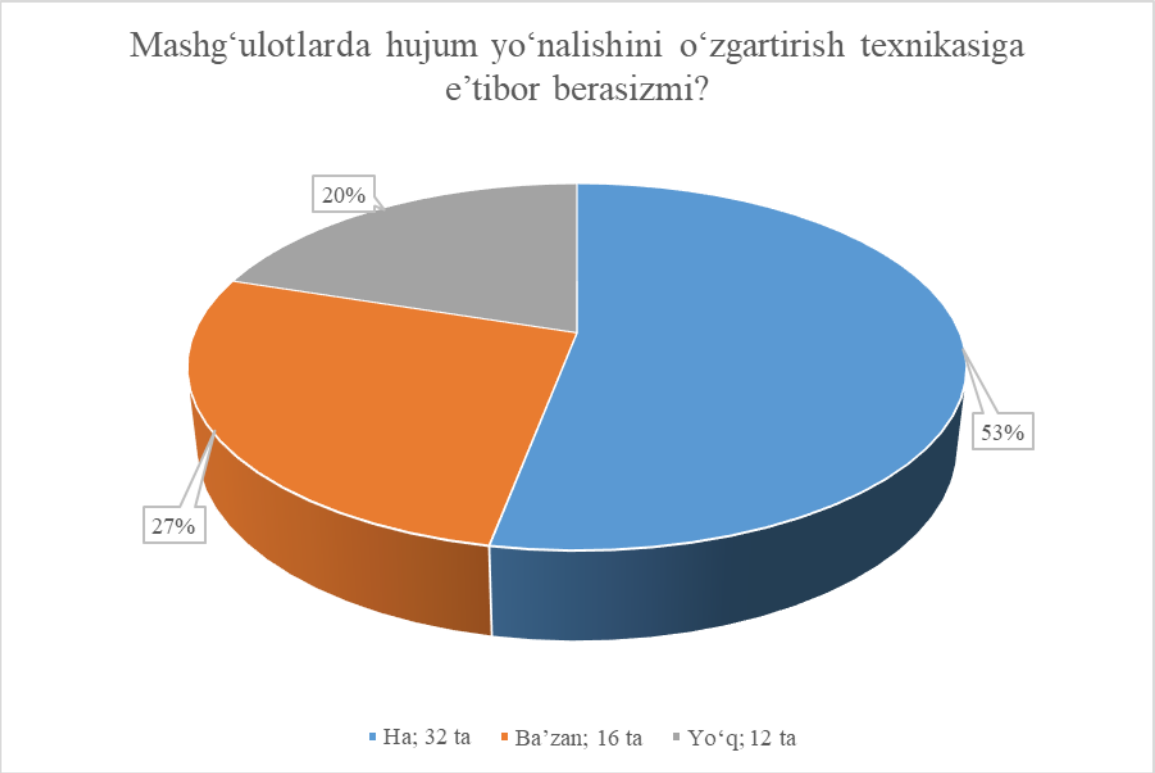
14-rasm




15-rasm



16-rasm




1-savol bo‘yicha. So‘rovnoma orqali respondentlarning voleybol bo‘yicha murabbiylik malakasi darajasi ham o‘rganildi. Tahlil natijalariga ko‘ra, respondentlarning 47% (28 nafar) qismini ikkinchi toifali trenerlar, 30% (18 nafar) respondentlarni birinchi toifali trenerlar, 23% (14 nafar**)** respondentlarni esa oliy toifali trenerlar tashkil etishi aniqlandi. Mazkur ko‘rsatkichlar tadqiqotda qatnashgan Trenerlarningg aksariyati yetarli tajribaga ega mutaxassislar ekanligini ko‘rsatadi. Ayniqsa, birinchi va oliy toifali trenerlarning mavjudligi mashg‘ulot jarayonini ilmiy-metodik asosda tashkil etish imkoniyatini oshiradi. Bu esa voleybolchilarning texnik-taktik tayyorgarligini takomillashtirish hamda hujum harakatlarining samaradorligini oshirishga qaratilgan mashg‘ulot metodikasini to‘g‘ri yo‘lga qo‘yishda muhim ahamiyat kasb etadi.

2-savol bo‘yicha. Trenerlarningg voleybol bo‘yicha faoliyat olib borish davomiyligi ham tahlil qilindi. Olingan natijalarga ko‘ra, respondentlarning 42% (25 nafar) qismi 10-15 yil davomida murabbiylik faoliyati bilan shug‘ullanib kelayotganini bildirgan. Shu bilan birga, 33% (20 nafar) respondentlar 5-10 yil, 25% (15 nafar) respondentlar esa 15-20 yil davomida murabbiylik faoliyatini olib borayotganini qayd etgan. Mazkur ko‘rsatkichlar tadqiqotda qatnashgan Trenerlarningg katta qismi voleybol sportida yetarli pedagogik va amaliy tajribaga ega ekanligini ko‘rsatadi. Bu esa Trenerlarningg mashg‘ulot jarayonini samarali tashkil etish, sportchilarning texnik va taktika tayyorgarligini rivojlantirish hamda hujum harakatlarining samaradorligini oshirishga qaratilgan metodik yondashuvlarni to‘g‘ri qo‘llash imkoniyatini beradi.

3-savol bo‘yicha.. Murabbiylar fikriga ko‘ra, jamoa uchun qaysi turdagi hujum zarbalarini himoyalash eng murakkab ekanligi ham tahlil qilindi. Olingan natijalarga ko‘ra, respondentlarning 40% (24 nafar) qismi juda tez bajarilgan hujumlarni himoyalash eng murakkab ekanligini ta’kidlagan. Shuningdek, 35% (21 nafar) murabbiylar juda kuchli zarbalarni qabul qilish qiyinligini bildirgan bo‘lsa, 25% (15 nafar) respondentlar yo‘nalishini o‘zgartirib bajarilgan hujum zarbalarini himoyalash murakkab ekanligini qayd etgan. Mazkur natijalar

voleybol o‘yinida hujum zarbasining tezligi va kuchi himoya tizimi samaradorligiga sezilarli ta’sir ko‘rsatishini ko‘rsatadi. Ayniqsa, yuqori tezlikda amalga oshirilgan hujumlar himoyachilardan tezkor reaksiya, to‘g‘ri joylashuv va yuqori darajadagi texnik tayyorgarlikni talab qiladi. Shu sababli mashg‘ulot jarayonida sportchilarning himoya harakatlarini takomillashtirish, tezkor qaror qabul qilish hamda o‘yin vaziyatlarini tez baholash ko‘nikmalarini rivojlantirish muhim ahamiyat kasb etadi.

4-savol bo‘yicha.. Murabbiylar tomonidan mashg‘ulot jarayonida hujum yo‘nalishini o‘zgartirish elementlaridan foydalanish darajasi ham o‘rganildi. So‘rovnoma natijalariga ko‘ra, respondentlarning 50% (30 nafar) qismi mashg‘ulotlarda ushbu elementdan ba’zan foydalanishini bildirgan. Shu bilan birga, 30% (18 nafar) murabbiylar muntazam ravishda foydalanishini, 20% (12 nafar) respondentlar esa deyarli foydalanmasligini qayd etgan. Mazkur natijalar voleybol mashg‘ulotlarida hujum yo‘nalishini o‘zgartirish texnikasi muayyan darajada qo‘llanilayotganini ko‘rsatadi. Biroq, ayrim Trenerlarningg bu elementdan kam foydalanishi mashg‘ulot jarayonida hujum texnikasini yanada takomillashtirish zarurligini anglatadi. Shu sababli sportchilarning texnik va taktika tayyorgarligini rivojlantirish jarayonida hujum yo‘nalishini o‘zgartirish elementlarini kengroq qo‘llash muhim metodik ahamiyatga ega hisoblanadi.

5-savol bo‘yicha.. Trenerlarningg fikriga ko‘ra, raqib hujum vaqtida yo‘nalishni o‘zgartirganda jamoa himoyasida chalg‘ish holati yuzaga kelishi ham o‘rganildi. So‘rovnoma natijalariga ko‘ra, respondentlarning 40% (24 nafar) qismi bunday vaziyatda chalg‘ish kuzatilishini ta’kidlagan. Shu bilan birga, 25% (15 nafar) murabbiylar ba’zan chalg‘ish yuzaga kelishini, 35% (21 nafar) respondentlar esa bunday holat kuzatilmasligini bildirgan. Mazkur ko‘rsatkichlar voleybol o‘yinida hujum jarayonida yo‘nalishni o‘zgartirish elementlari himoya tizimining barqarorligiga muayyan darajada ta’sir ko‘rsatishini anglatadi. Ayniqsa, kutilmagan hujum harakatlari himoyadagi sportchilardan yuqori darajadagi diqqatni jamlash, tezkor reaksiya va o‘yin vaziyatini to‘g‘ri baholash qobiliyatini talab qiladi. Shu sababli mashg‘ulot jarayonida sportchilarning psixologik tayyorgarligini rivojlantirish, himoya taktikasini takomillashtirish hamda tezkor qaror qabul qilish ko‘nikmalarini shakllantirish muhim ahamiyatga ega.

6-savol bo‘yicha.. Trenerlarningg fikriga ko‘ra, hujumchi tomonidan yo‘nalishni o‘zgartirib bajarilgan hujum harakatlarining himoya tizimiga ta’siri ham tahlil qilindi. Olingan natijalarga ko‘ra, respondentlarning 45% (27 nafar) qismi bunday hujumlar himoya tizimini izdan chiqarishi mumkinligini bildirgan. Shu bilan birga, 25% (15 nafar) murabbiylar bunday holat ba’zi vaziyatlarda kuzatilishini, 30% (18 nafar) respondentlar esa bunday hujumlar himoyaga sezilarli ta’sir ko‘rsatmasligini ta’kidlagan. Mazkur natijalar voleybol o‘yinida hujum texnikasida qo‘llaniladigan yo‘nalishni o‘zgartirish elementlari jamoa himoyasining barqarorligiga muhim ta’sir ko‘rsatishi mumkinligini ko‘rsatadi. Ayniqsa, kutilmagan zarbalar himoyachilarning joylashuvini o‘zgartirishga majbur qiladi hamda o‘yin jarayonida tezkor qaror qabul qilishni talab etadi. Shu sababli mashg‘ulotlarda sportchilarning himoya harakatlarini takomillashtirish, o‘yin vaziyatlarini tez baholash hamda taktika elementlarini rivojlantirish muhim ahamiyat kasb etadi.

7-savol bo‘yicha.. Trenerlarningg fikriga ko‘ra, yugurish jarayonida yo‘nalishni o‘zgartirish orqali bajarilgan hujum harakatlarining o‘yin natijasiga ta’siri ham o‘rganildi. Tahlil natijalariga ko‘ra, respondentlarning 47% (28 nafar) qismi bunday hujumlar o‘yin natijasiga sezilarli ta’sir ko‘rsatishini ta’kidlagan. Shu bilan birga, 23% (14 nafar) murabbiylar bu holat ba’zan ta’sir ko‘rsatishini, 30% (18 nafar) respondentlar esa bunday hujumlar o‘yin natijasiga

sezilarli ta’sir ko‘rsatmasligini bildirgan. Mazkur ko‘rsatkichlar voleybol o‘yinida hujum jarayonida qo‘llaniladigan taktika elementlari, xususan yo‘nalishni o‘zgartirish orqali bajarilgan harakatlar jamoa o‘yinining samaradorligiga muayyan darajada ta’sir ko‘rsatishini anglatadi. Ayniqsa, bunday harakatlar raqib jamoaning himoya tizimini chalg‘itishi va hujum samaradorligini oshirishga xizmat qilishi mumkin. Shu sababli mashg‘ulot jarayonida sportchilarning texnik va taktika tayyorgarligini rivojlantirish hamda o‘yin vaziyatlarida tezkor qaror qabul qilish ko‘nikmalarini shakllantirish muhim ahamiyat kasb etadi.

8-savol bo‘yicha.. Trenerlarningg mashg‘ulot jarayonida hujum yo‘nalishini o‘zgartirish texnikasiga qanchalik e’tibor qaratishi ham o‘rganildi. So‘rovnoma natijalariga ko‘ra, respondentlarning 53% (32 nafar) qismi mashg‘ulotlarda ushbu texnikaga alohida e’tibor berishini bildirgan. Shu bilan birga, 27% (16 nafar) murabbiylar bu elementga ba’zan e’tibor qaratishini, 20% (12 nafar) respondentlar esa yetarli darajada e’tibor berilmasligini qayd etgan. Mazkur natijalar voleybol mashg‘ulotlarida hujum yo‘nalishini o‘zgartirish texnikasi muhim o‘rin tutishini ko‘rsatadi. Ayniqsa, ushbu elementni muntazam ravishda mashq qilish sportchilarning texnik va taktika tayyorgarligini takomillashtirishga hamda hujum harakatlarining samaradorligini oshirishga xizmat qiladi. Shu sababli murabbiylar tomonidan mashg‘ulot jarayonida yo‘nalishni o‘zgartirish texnikasiga asoslangan maxsus mashqlarni qo‘llash va sportchilarning o‘yin vaziyatlarida tezkor qaror qabul qilish ko‘nikmalarini rivojlantirish muhim metodik ahamiyatga ega.

O‘tkazilgan so‘rovnoma natijalari trenerlarning malaka darajasi, ish tajribasi hamda voleybol o‘yinida hujum harakatlarining samaradorligiga ta’sir etuvchi texnik va taktika omillarini aniqlash imkonini berdi. Tahlil natijalariga ko‘ra, tadqiqotda ishtirok etgan trenerlarning katta qismi ikkinchi va birinchi toifali trenerlardan iborat bo‘lib, ular yetarli pedagogik va amaliy tajribaga ega mutaxassislar hisoblanadi. Bu esa mashg‘ulot jarayonini ilmiy-metodik asosda tashkil etish hamda sportchilarning texnik-taktik tayyorgarligini samarali rivojlantirish uchun muhim omil hisoblanadi. Trenerlarning ish faoliyati davomiyligi ham yuqori ko‘rsatkichlarni namoyon etdi. Respondentlarning aksariyati 10–15 yil davomida trenerlik faoliyati bilan shug‘ullanib kelayotgani aniqlangan. Bu esa trenerlarning voleybol sportida yetarli tajribaga ega ekanligini hamda o‘quv-mashg‘ulot jarayonini samarali tashkil etish imkoniyatiga ega ekanligini ko‘rsatadi. So‘rovnoma natijalari jamoa uchun eng murakkab himoya qilinadigan hujum zarbalari yuqori tezlikda bajarilgan va kuchli zarbalar ekanligini ko‘rsatdi. Bunday hujumlar himoyachilardan yuqori darajadagi reaksiya tezligi, to‘g‘ri joylashuv hamda mukammal texnik tayyorgarlikni talab qiladi. Shu bilan birga, yo‘nalishi o‘zgartirilgan hujum zarbalari ham himoya harakatlarini murakkablashtirishi qayd etildi. Tahlil jarayonida trenerlarning mashg‘ulotlarda hujum yo‘nalishini o‘zgartirish elementlaridan foydalanish darajasi ham o‘rganildi. Natijalar ushbu texnik element mashg‘ulot jarayonida ma’lum darajada qo‘llanilayotganini ko‘rsatdi. Biroq ayrim trenerlarning bu usuldan kam foydalanishi mashg‘ulot jarayonida hujum texnikasini yanada takomillashtirish zarurligini ko‘rsatadi.

Shuningdek, raqib tomonidan yo‘nalishni o‘zgartirib bajarilgan hujumlar himoya tizimining barqarorligiga muayyan darajada ta’sir ko‘rsatishi aniqlangan. Trenerlarning bir qismi bunday vaziyatlarda himoyachilar chalg‘ishi mumkinligini ta’kidlagan. Bu esa voleybol o‘yinida kutilmagan hujum harakatlari sportchilardan yuqori darajadagi diqqatni jamlash va tezkor qaror qabul qilish qobiliyatini talab qilishini ko‘rsatadi. Trenerlarning fikriga ko‘ra, yugurish jarayonida yo‘nalishni o‘zgartirish orqali bajarilgan hujum harakatlari o‘yin natijasiga muayyan darajada ta’sir ko‘rsatishi mumkin. Bunday texnik elementlar raqib jamoaning himoya tizimini

chalg‘itish orqali hujum samaradorligini oshirishga xizmat qiladi. Bundan tashqari, mashg‘ulot jarayonida hujum yo‘nalishini o‘zgartirish texnikasiga e’tibor qaratish darajasi ham yuqori ekanligi aniqlandi. Trenerlarning katta qismi ushbu elementni mashg‘ulotlarda qo‘llash sportchilarning texnik va taktika tayyorgarligini rivojlantirishga yordam berishini ta’kidlagan. Umuman olganda, o‘tkazilgan so‘rovnoma natijalari voleybol o‘yinida hujum samaradorligini oshirishda trenerlarning metodik yondashuvi, sportchilarning texnik tayyorgarligi, tezkor reaksiya qobiliyati hamda yo‘nalishni o‘zgartirish kabi taktika elementlari muhim rol o‘ynashini ko‘rsatadi. Shu sababli mashg‘ulot jarayonida sportchilarning hujum texnikasini takomillashtirish, himoya harakatlarini rivojlantirish va o‘yin vaziyatlarida tezkor qaror qabul qilish ko‘nikmalarini shakllantirish muhim ahamiyat kasb etadi.

**Xulosa**

O‘tkazilgan tadqiqot natijalari voleybol sportida hujum harakatlarining samaradorligini oshirishda texnik, taktika va psixologik omillar muhim rol o‘ynashini ko‘rsatdi. So‘rovnoma natijalari asosida trenerlarning malaka darajasi, ish tajribasi hamda mashg‘ulot jarayonida qo‘llanilayotgan metodik yondashuvlar tahlil qilindi. Tadqiqotda ishtirok etgan trenerlarning aksariyati voleybol sportida yetarli pedagogik va amaliy tajribaga ega ekanligi aniqlanib, bu holat mashg‘ulot jarayonini ilmiy-metodik asosda tashkil etish imkoniyatini oshirishini ko‘rsatdi. Tahlil natijalariga ko‘ra, jamoa uchun eng murakkab himoyalanadigan hujum zarbalari yuqori tezlikda bajarilgan hamda kuchli zarbalar ekanligi aniqlandi. Bunday hujumlar himoyachilardan yuqori darajadagi tezkor reaksiya, to‘g‘ri joylashuv hamda mukammal texnik tayyorgarlikni talab qiladi. Shu bilan birga, yo‘nalishini o‘zgartirib bajarilgan hujum zarbalari ham himoya tizimining barqarorligiga sezilarli ta’sir ko‘rsatishi mumkinligi qayd etildi. Tadqiqot natijalari shuni ham ko‘rsatdiki, hujum jarayonida yo‘nalishni o‘zgartirish elementlaridan foydalanish raqib jamoaning himoya harakatlarini chalg‘itishga va hujum samaradorligini oshirishga xizmat qiladi. Ayniqsa, yugurish jarayonida yo‘nalishni o‘zgartirish orqali amalga oshirilgan hujum harakatlari o‘yin natijasiga muayyan darajada ta’sir ko‘rsatishi mumkinligi trenerlar tomonidan e’tirof etildi. Bunday texnik-taktik elementlar sportchilardan tezkor qaror qabul qilish, o‘yin vaziyatini to‘g‘ri baholash hamda yuqori darajadagi koordinatsion qobiliyatlarni talab qiladi. Shuningdek, mashg‘ulot jarayonida hujum yo‘nalishini o‘zgartirish texnikasiga yetarli darajada e’tibor qaratilishi sportchilarning texnik-taktik tayyorgarligini rivojlantirishda muhim omil hisoblanadi. Trenerlarning katta qismi ushbu elementni mashg‘ulotlarda qo‘llash zarurligini ta’kidlagan bo‘lsa-da, ayrim hollarda bu texnikaga yetarli darajada e’tibor berilmayotgani ham kuzatildi. Bu esa mashg‘ulot jarayonida hujum harakatlarini takomillashtirishga qaratilgan metodik yondashuvlarni yanada rivojlantirish zarurligini ko‘rsatadi. Umuman olganda, o‘tkazilgan tadqiqot natijalari voleybol o‘yinida hujum samaradorligini oshirishda trenerlarning metodik yondashuvi, sportchilarning texnik va taktika tayyorgarligi, tezkor reaksiya qobiliyati hamda yo‘nalishni o‘zgartirish kabi taktika elementlari muhim ahamiyatga ega ekanligini ko‘rsatdi. Shu sababli o‘quv-mashg‘ulot jarayonida hujum texnikasini takomillashtirish, himoya harakatlarini rivojlantirish hamda sportchilarning o‘yin jarayonida tezkor va to‘g‘ri qaror qabul qilish ko‘nikmalarini shakllantirish voleybol sportida yuqori natijalarga erishishning muhim omillaridan biri hisoblanadi.

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# CLASSROOM-BASED ASSESSMENT OF PRAGMATIC COMPETENCE IN TEENAGE EFL LEARNERS

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***Abstract.*** *Pragmatic competence, which involves the ability to generate language that is contextually appropriate, is crucial for effective communication; However, it has been under-assessed in many EFL classrooms which are heavily grammar-based and place a little emphasis on social skills development by providing teenage learners with a systematic feedback about speech acts including their appropriateness to a given context. This paper investigates how classroom-based assessment (CBA) can be established and conducted to assess adolescent EFL learners' pragmatic competence, as well as support such development.*

***Key words:*** *pragmatic competence; classroom-based assessment; adolescent EFL learners; speech acts; sociopragmatic competence; communicative competence.*

***Annotatsiya.*** *Pragmatik kompetentsiya, ya'ni kontekstga mos keladigan tilni ishlab chiqish qobiliyati, samarali muloqot uchun muhimdir; biroq, grammatikaga asoslangan va o'smir o'quvchilarga nutq harakatlarining ma'lum kontekstga mosligi haqida tizimli fikr-mulohaza berish orqali ijtimoiy ko'nikmalarni rivojlantirishga kam e'tibor qaratadigan ko'plab ingliz tili (EFL) sinflarida bu kompetentsiya yetarlicha baholangan emas. Ushbu maqolada sinfxonada o'tkaziladigan baholash (CBA) usulini qanday tashkil etish va o'tkazish orqali o'smir EFL o'rganuvchilarining pragmatik kompetentsiyasini baholash va bu rivojlanishni qo'llab-quvvatlash mumkinligi o'rganiladi.*

***Kalit so'zlar:*** *pragmatik kompetentsiya; sinfxonada o'tkaziladigan baholash; o'smir EFL o'rganuvchilari; nutq harakatlari; sotsiopragmatik kompetentsiya; kommunikativ kompetentsiya.*

***Аннотация.*** *Прагматическая компетенция, которая включает в себя способность генерировать язык, соответствующий контексту, имеет решающее значение для эффективной коммуникации; однако она недооценивается во многих классах по изучению английского как иностранного, которые в значительной степени ориентированы на*

*грамматику и уделяют мало внимания развитию социальных навыков, предоставляя подросткам-учащимся систематическую обратную связь о речевых актах, включая их уместность в данном контексте. В данной статье исследуется, как можно организовать и проводить оценку в классе (CBA) для оценки прагматической компетенции подростков, изучающих английский как иностранный язык, а также для поддержки такого развития.*

***Ключевые слова:*** *прагматическая компетенция; оценка в классе; подростки, изучающие английский как иностранный язык; речевые акты; социопрагматическая компетенция; коммуникативная компетенция.*

**Introduction**

Pragmatic competence is the knowledge and skill to manage language use in a socially, culturally, and situationally appropriate manner (Kasper & Rose, 2002; Taguchi, 2019). It has two components: pragmalinguistic competence (the language used to enact speech acts) and sociopragmatic competence (knowledge of social rules, such as contextual relevance). The pragmatic competence, which is unconditioned upon linguistics and corresponds to the sociolinguistic realization of the competent use of language in context (Hymes, 1972), however, plays an indispensable role but difficult to be easily developed for EFL learners who are not offered enough or appropriate exposure to authentic target language communication.

Teenage students (ages 13–18) make up a crucial population in EFL instruction. Classroom instruction frequently takes a grammar-first approach paying little attention to speech acts and contextual appropriateness despite the students advanced cognitive and social awareness. Because of this, students do not get much organized feedback on their pragmatic performance. Although earlier studies have demonstrated that pragmatic competence can be taught and evaluated in educational settings comparatively few have looked at how classroom-based assessments (CBA) can be used to systematically evaluate it especially when it comes to adolescent EFL learners. By integrating evaluation into routine teaching activities, classroom-based assessment gives teachers the chance to evaluate students pragmatic production in tasks that are relevant and contextualized. However, there are obstacles to overcome when using CBA for pragmatics, such as making sure that assessment criteria are clear and minimizing subjectivity in scoring. Thus, this study investigates the design and implementation of classroom-based assessments to assess and enhance the pragmatic competence of teenage EFL learners. In particular, it looks into:

• The degree of pragmatic proficiency displayed by teenage EFL students in production tasks conducted in the classroom.

• Distinctions between sociopragmatic and pragmalinguistic performance.

• How students feel about taking part in practical assessment exercises.

The following research questions serve as a guide for the study.

1. When it comes to classroom-based production tasks how pragmatically competent are teenage EFL learners overall?

2. What is the difference in learners performance between pragmalinguistic and sociopragmatic aspects?

3. How do students feel about taking part in pragmatic assessment?

**Methods**

Participants

This study involved 85 teenage EFL learners (52 females, 33 males) with a mean age of 15.4 years (range: 14–17 years). All participants were enrolled in three intermediate-level English classes at a public secondary school in an urban area. They had been learning English formally for approximately 6 to 8 years, with classroom instruction as their main source of exposure and very limited use of English outside school. Informed consent was obtained from both the learners and their parents or legal guardians prior to data collection.

Instruments

Pragmatic competence was assessed using two complementary classroom-based instruments:

1. Open Discourse Completion Tasks (DCTs) Six written scenarios were designed to elicit two speech acts: requests (3 items) and apologies (3 items). Each scenario varied in social factors such as power distance and social closeness (e.g., requesting homework extension from a teacher vs. asking a classmate to borrow notes; apologizing to a close friend vs. a teacher for a mistake). The open-ended format allowed learners to produce free written responses without multiple-choice options.
2. Oral Role-Plays Three interactive role-play tasks were conducted in pairs:
    - Requesting a favor from a classmate
    - Apologizing for accidentally damaging a borrowed item
    - Politely refusing an inconvenient request All role-plays were audio-recorded with participants’ consent for later analysis.

Scoring Rubric

An analytic rubric, adapted from established L2 pragmatics frameworks (primarily Taguchi, 2019), was used to evaluate responses. It included two independent subscales:

- Pragmalinguistic accuracy (0–5 points): correctness of grammar, appropriate vocabulary, and use of conventional expressions or formulas.
- Sociopragmatic appropriateness (0–5 points): suitability of politeness strategies, alignment with social norms, and sensitivity to contextual factors (e.g., power, distance, imposition).

Each task received a total score out of 10 points. Two trained independent raters scored all responses. Inter-rater reliability was strong (Cohen’s kappa = 0.82).

Learner Reflection Questionnaire

A short post-task questionnaire containing five open-ended questions was administered to explore learners’ perceptions. Questions focused on perceived difficulty, usefulness of the tasks, personal challenges, and any new awareness about appropriate language use.

Procedure

Data collection was integrated into regular English lessons over a period of four weeks to maintain a natural classroom environment:

- Week 1: Administration of the written DCTs (30 minutes).
- Weeks 2 and 3: Oral role-plays conducted in pairs during class time (5–7 minutes per role-play).
- Week 4: Collection of reflection questionnaires (15 minutes).

All personal data were anonymized using identification codes, and audio recordings were stored securely.

Data Analysis

Quantitative data (scores from DCTs and role-plays) were analyzed using descriptive statistics (means and standard deviations) and paired-samples t-tests to compare performance on pragmalinguistic accuracy versus sociopragmatic appropriateness.

Qualitative data from the open-ended reflection questions were analyzed through thematic analysis (Braun & Clarke, 2006), involving initial coding, theme development, and review to identify recurring patterns and insights.

**Results**

Five stands for excellent in Uzbekistan’s grading scheme, while four means good, three okay, two not enough. Teenage students learning English as a foreign language showed solid skills overall. Their combined results hit a mark near four point one, slight variation included. So things ran fairly well, maybe even good, depending on how you look. Scores spread across different activities without any clear pattern rising.

What happened differed based on the language task along with what was checked. Performance shifted tied to speech act patterns plus measurement points examined

Fewer requests got better ratings - people scored them 4.3 out of 5 on average. That lands in solid good territory, with little variation.

Around the middle, apologies scored just under 4 on average (M = 3.9, SD = 0.75), hovering near where "satisfactory" shifts toward "good."

One thing standing out clearly is how the two parts of practical language ability differ.

Down at the bottom, pragmalinguistic accuracy - things like correct words, sentence structure, and fixed phrases - scored an average 4.4 five (standard deviation = 0.61), showing solid grasp of how language works in use.

Average sociopragmatic appropriateness stood at 3.6 on a five-point scale (SD = 0.84), suggesting somewhat lower skill use.

A look at the numbers using a paired-samples t-test revealed clear separation between pragmalinguistic and sociopragmatic skills. It turns out learners handled language forms correctly far better than choosing suitable social interactions.

When it comes to task kinds:

Average results from speaking tasks sat near 4.2.

- Written DCTs produced somewhat lower results (M = 3.9)

What lies behind this could simply be how role-plays involve real-time interaction, making it easier for students to express language in actual use situations.

Common performance patterns included:

- Saying things like “Give me your notes” or “Lend me that book,” correct in wording yet often scored low because they lack warmth.

Sorry shows up little, often replaced by short bursts like “That’s okay” rather than fuller versions suited for real-life moments.

Here’s what was found through qualitative methods.

Looking at what learners wrote, researchers found three clear patterns.

1. Increased Awareness of Pragmatic Norms

Some learners said they noticed politeness methods and social guidelines they never thought about before. A person shared, for instance:

“I didn’t know I should say ‘Would you mind…’ instead of just ‘Can you…’ to sound more polite.” This suggests that classroom-based assessment helped raise pragmatic awareness.

2. Trouble making social language choices

Sometimes it feels unclear about changing language use based on who you are talking to - like shifting tone across younger peers, older mentors, or casual buddies. A learner noted: “It’s hard to know how polite to be with a teacher compared to a friend.” Evidence showed learners struggled more with social norms than with basic sentence structure. What they say out loud tends to lag behind what they understand in theory.

3. Positive Attitudes Toward Classroom-Based Assessment

Most learners said the activities worked well for them, calling them useful and standing out compared to standard grammar exams. One student put it this way: “This seemed actual, nothing similar to usual grammar quizzes.” Another noted, “Performing in pairs helped me feel more like someone speaking every day.”

Still, some students said they felt nervous or uncomfortable speaking in front of others during practice. That could maybe have affected how well they did.

**Discussion**

Looking back at the results gives clear views into how teens learning English as a foreign language handle social skills in school tests. In general, most students scored mid-range when judged by the country's five-step scale for such abilities. Yet one pattern stood out - they often got the rules right but still acted wrongly in real situations.

Surprisingly clear in grammar, learners show solid handling of words, rules, and common phrases. Not uncommon when studying English as a foreign language, where correct form often gets heavy focus. Still, their grasp of social situations lags behind. Adjusting speech to fit hierarchy, friendship depth, or personal impact isn’t as smooth. Context matters, yet that part stays tricky.

What we see here fits with earlier studies - like those by Kasper and Rose in 2002, along with Taguchi's work in 2019 - that show sociopragmatic skills go beyond language rules. They depend on cultural insight, real-life contact, and genuine dialogue experience. Without actual opportunities to interact in a second language, students often fall back on stiff, word-for-word choices. Even if these are grammatically right, they still miss social context entirely.

People often found it easier to act out situations live than to write answers down on paper. Because oral tasks involve real-time interaction, learners can adjust their responses as they go. Instead of focusing on fixed words, they engage with each other, making choices based on what happens in the moment. This kind of exchange feels more like real life than a static text format ever could. When tests happen inside lessons where speaking or listening matters, results tend to reflect actual ability better. Context shapes skill - so letting language unfold naturally during class works better than framing it into sentences.

What people say adds weight to what the numbers show. Looking back, students seemed more aware of how to show politeness and when it fits a situation - this could mean taking part in the task helped them learn. Yet, when they described struggles choosing just the right level of politeness, it showed judging social moments isn’t easy even for older students. In conclusion, research shows classroom tests do more than measure skills - they shape learning by boosting students’ practical abilities.

**Conclusion**

This study examined how to create and use classroom assessments for teenage EFL learners' social language skills. The results show the students generally did well in this area. Still, there was a clear gap - they were better at using the right words than at using them in socially fitting ways.

Even though the students knew grammar and vocabulary well, they often struggled with how to act in social situations. This was especially true when speaking to people with more authority or those they didn't know. Using activities like role-plays in class seems to help. These kinds of tasks let teachers check understanding while also teaching new skills. They also make students more aware of social language rules.

This study adds to a growing number of studies showing it's important to check social language skills during regular class time, instead of only using standard grammar tests. For teachers, the results point to why they should directly teach how social situations affect language and also give clear, organized feedback about it.

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# ПСИХОЛОГО-ПДАГОГИЧЕСКИЕ АСПЕКТЫ ИНКЛЮЗИВНОГО ОБРАЗОВАНИЯ

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***Аннотация.*** *Статья посвящена раскрытию сущности термина «инклюзивное образование», представляя его как систему обучения и воспитания субъектов с особыми образовательными нуждами в рамках массовых образовательных учреждений. Рассматриваются роль и обязанности ассистента-координатора, организующего индивидуальное либо коллективное сопровождение обучающихся в процессе инклюзии. Анализируются психологически обоснованные педагогические условия реализации инклюзивной образовательной среды, подчеркивая значимость психолого-педагогического сопровождения и отличительные особенности педагогических подходов.*

***Ключевые слова:*** *образование, инклюзив, инклюзивное образование, принципы уважения, терпимости, инклюзивная образовательная среда, условия инклюзивного образования, психолого-педагогическое сопровождение, дети с особенными потребностями.*

***Abstract.*** *The article is devoted to revealing the essence of the term "inclusive education", presenting it as a system of training and education of subjects with special educational needs within the framework of mass educational institutions. The role and responsibilities of the assistant-coordinator, who organizes individual or collective support for students in the inclusion process, are considered. The psychologically justified pedagogical conditions for the implementation of an inclusive educational environment are analyzed, emphasizing the importance of psychological and pedagogical support and the distinctive features of pedagogical approaches.*

***Key words:*** *education, inclusion, inclusive education, principles of respect and tolerance, inclusive educational environment, conditions of inclusive education, psychological and pedagogical support, children with special needs.*

Сегодня образовательные организации сталкиваются с масштабными задачами, такими как повышение качества и разнообразия предоставляемых образовательных услуг, а также обеспечение доступности образовательного пространства для всех слоев детской аудитории. Для успешного решения этих задач важно создание в школах комфортных

условий, позволяющих учащимся полноценно развиваться и эффективно усваивать знания. Одной из современных стратегий специального образования является концепция инклюзии, подразумевающая всестороннее включение ребёнка с особыми образовательными потребностями в школьную среду. Цель инклюзии заключается в полном вовлечении ученика с ограниченными возможностями здоровья в повседневную деятельность школьного коллектива. Идеальной моделью считается инклюзивный класс, объединяющий группы детей с различными образовательными особенностями, что способствует активному межличностному взаимодействию и формированию атмосферы поддержки и понимания.

Идеология инклюзивного образования основана на принципе абсолютного исключения какой бы то ни было дискриминации детей, обеспечивая каждому ребенку равное отношение вне зависимости от особенностей его развития. Инклюзивная система направлена на адаптацию образовательной среды под индивидуальные нужды всех учащихся, создавая специальные условия для тех, кому необходимы дополнительные возможности. Таким образом, инклюзивное обучение представляет собой процесс формирования доступной системы образования, гарантирующей право на качественное обучение детям с особыми образовательными потребностями.

Для глубокого осознания сути инклюзии важно учитывать ключевые характеристики, отражающие её специфику. Во-первых, инклюзия представляет собой непрерывный процесс поиска оптимальных решений для удовлетворения уникальных образовательных запросов каждого ребенка. Во-вторых, она тесно связана с выявлением барьеров, препятствующих полноценному обучению, и активным поиском способов их устранения. Наконец, в-третьих, особое внимание уделяется группе учащихся, находящихся в зоне риска исключения из учебной деятельности или испытывающих ограничения в получении качественного образования. Основным принципом инклюзивного подхода становится полнейшее удовлетворение образовательных потребностей всех школьников, включая детей с особыми потребностями.

Повышение уровня и эффективности инклюзивного образования занимает важное место в государственной стратегии Узбекистана. Значительным шагом вперед стало принятие постановления Президентом №4860[15], закрепившего комплекс мер по улучшению ситуации в области образования и воспитания детей с особыми образовательными потребностями. Документ утвердил концепцию развития инклюзивного образования в системе народного просвещения на период 2020—2025 годов вместе с соответствующим планом мероприятий («дорожной картой») на первые два года реализации и ключевыми показателями прогресса до конца указанного периода.

Кроме того, реализация положений Стратегии развития нового Узбекистана на 2022—2026 гг. включает конкретные цели, направленные на улучшение системы инклюзивного образования и интеграции инвалидов в социальную и экономическую активность (цель 66), а также обеспечение открытости и высокого качества образования для молодых людей, расширение возможностей для полноценного освоения ими

[15]Постановление Президента Республики Узбекистан №4860 «О мерах по дальнейшему совершенствованию системы образования и воспитания детей с особыми образовательными потребностями» от 13 октября 2020г.

образовательных программ на всех уровнях, содействие созданию эффективной региональной инфраструктуры инклюзивного образования (цель 70)[16].

Фонд поддержки социальных инициатив Республики Узбекистан с 2007 года успешно осуществляет программу «Инклюзивное образование в Узбекистане», основной целью которой является предоставление равных возможностей в сфере образования для детей и подростков с ограниченными возможностями здоровья. Данный проект нацелен на внедрение модели постоянного инклюзивного образования, охватывая ступени начальной, средней, профессиональной и высшей школы, а также улучшая качество инклюзивных практик. В рамках программы была создана концепция «Национальная модель инклюзивного образования», внедряемая в дошкольные и школьные учреждения посредством организации смешанных групп и классов в экспериментальных детских садах и школах городов Термез, Карши, Навои, Самарканд, Джизак, Гулистан, Ташкент, Андижан, Фергана, Коканд, Ургенч и Нукус. Отличительной чертой национальной модели является синтез отечественных традиций и международного опыта. Согласно официальной статистике Фонда, в настоящий момент в пилотных образовательных учреждениях этих регионов получают образование и воспитание около 600 детей в интегрированных группах и классах.

Инклюзивное образование представляет собой образовательный подход, обеспечивающий равный доступ всех детей к качественному обучению вне зависимости от индивидуальных особенностей здоровья, способностей и потребностей. Это система, в которой каждый ребенок имеет возможность учиться рядом со своими ровесниками в обычных образовательных учреждениях своего района, получать полноценную педагогическую помощь и особую поддержку, соответствующую личным потребностям каждого обучающегося.

Выделяют следующие принципы инклюзивного образования:

1. Ценность человека не зависит от его способностей и достижений;
2. Каждый человек способен чувствовать и думать;
3. Каждый человек имеет право на общение и на то, чтобы быть услышанным;
4. Все люди нуждаются друг в друге;
5. Подлинное образование может осуществляться только в контексте реальных взаимоотношений;
6. Все люди нуждаются в поддержке и дружбе ровесников;
7. Для всех обучающихся достижение прогресса скорее может быть в том, что они могут делать, чем в том, что не могут;
8. Разнообразие усиливает все стороны жизни человека.

Понятие инклюзии и термин «инклюзивное обучение» воплощают глубокие преобразования общественного сознания, подчеркивая идею равных возможностей для всех детей независимо от их различий и поощряя создание образовательной среды, способствующей гармоничному развитию каждого ребенка.

Рассмотрим сущность разных систем образования, для понимания преимуществ и рисков каждой из них (таблица 1).

Таблица 1

[16] Указ Президента Республики Узбекистан УП-60 «О Стратегии развития Нового Узбекистана на 2022 - 2026 годы» от 28 января 2022г.

| Обычное образование Специальное образование | Инклюзивное образование |
|---|---|
| «Нормальный ребенок» «Особый ребенок» | Все дети разные |
| Круглые колышки для круглых отверстий | Все дети могут учиться |
| Квадратные колышки для квадратных отверстий | Есть разные способности, разные этнические группы, разный рост, возраст и т.д. |
| Обычные педагоги Обычные школы | Система адаптируется к потребностям ребёнка. |
| Специальные педагоги Специальные школы | |

Инклюзия - это путь, направленный на учет и удовлетворение многообразных нужд учащихся путем расширения их вовлеченности в учебный процесс, культурную и социальную жизнь, одновременно сокращая число тех, кто остается за пределами системы образования либо формально включен, но фактически изолирован. Этот подход базируется на концепции единого образовательного пространства, где каждому участнику предлагается индивидуальный маршрут развития в рамках единой учебной среды.

Образовательные учреждения, внедряющие принципы инклюзивного обучения, нуждаются в введении должности ассистента-координатора, задачей которого является персональное или коллективное сопровождение школьников с особыми потребностями. Ассистент обеспечивает социальное и бытовое содействие детям с инвалидностью, помогает им ориентироваться в учебном пространстве, сопровождает в повседневной школьной жизни, включая перемещение по территории школы, прием пищи в столовой и участие в прочих повседневных мероприятиях, однако непосредственно учебным процессом не руководит [10].

Психолого-педагогическим условием успешного внедрения инклюзивного образования выступают две ключевые составляющие: педагогическое обеспечение и педагогическое сопровождение.

Под педагогическим обеспечением понимается формирование необходимых ресурсов, позволяющих эффективно взаимодействовать педагогу и учащемуся для достижения поставленных учебных целей. Эти ресурсы включают:

1. Организацию школьного процесса таким образом, чтобы удовлетворить нужды всех учеников, живущих поблизости, создавая развивающую среду, стимулирующую познавательную активность и мотивацию ребенка.

2. Устранение препятствий, мешающих полноценному участию в учебе и школьном сообществе, особенно для ребят с инвалидностью и особыми образовательными потребностями.

3. Изучение успешных практик, направленных на повышение доступности школьных учреждений для всех категорий учащихся.

4. Подтверждение права каждого ребенка на получение качественного образования именно в той школе, которая расположена ближе всего к дому.

5. Проведение систематического анализа интересов и склонностей учащихся, выявление особенностей развития их психики и разработку эффективных методов обучения.

6. Формирование индивидуального плана обучения, соответствующего интересам, возможностям и нуждам конкретного ребенка, выбирая оптимальные учебные программы, методики и технологии.

7. Оказание психологической и социальной помощи родителям и учащимся, помогающей адаптироваться и пересмотреть отношение к детям с ограничениями здоровья, обеспечивая благоприятную атмосферу взаимопонимания и поддержки.

Педагогическое сопровождение представляет собой особое взаимодействие учителя и ученика, которое формирует основу образовательного процесса. Его ключевыми характеристиками являются:

1. Целенаправленность: образование строится исходя из уникальных потребностей и интересов каждого ребенка, давая ему возможность свободно выбирать занятия и развивать чувство ответственности за собственные решения.

2. Субъектность: педагогический процесс организуется таким образом, чтобы учитывать индивидуальные запросы каждого ученика, используя подходящие формы, методы и средства.

3. Межсубъектность: общение между учителем и учениками основано на принципах сотрудничества и диалога, поддерживающих личностное развитие ребенка.

4. Баланс социализации и индивидуализации: ребенок осваивает социальные нормы и культурные ценности, обогащая собственный жизненный опыт, при этом темпы и результаты его развития остаются уникальными.

5. Целостность и многоуровневость: процесс состоит из взаимосвязанных компонентов — целевого, содержательного, организационного и оценочного, формируя непрерывную структуру обучения.

Эффективность сопровождения обеспечивается согласованной работой всей команды специалистов, работающих совместно с учителем. Важнейшим звеном является сотрудничество «психолог-учитель»: совместная адаптация учебных программ, правильное распределение нагрузок согласно физическим и психологическим особенностям учеников, грамотное проектирование уроков, организация продуктивного общения среди детей, устранение коммуникационных преград, разработка и выполнение развивающих программ, регулярная проверка их эффективности.

Еще одним важным направлением взаимодействия является связь «социальный педагог-учитель». Она направлена на привлечение семьи к активному участию в развитии ребенка, вовлечение его не только в школьную деятельность, но и в разнообразную внешнюю среду, организацию оптимального образовательного пространства с учетом профессиональных рекомендаций психологов и педагогов.

Направление «учитель-логопед» (при наличии — дополнительно «учитель — дефектолог») предполагает тесное сотрудничество, нацеленное на совместное решение коррекционных задач, выполнение специалистами предложенных мер и рекомендации, применяемых как на занятиях, так и в обычной жизни ребенка.

Связь «учитель-специалист ЛФК» и «учитель-медицинский сотрудник» связана с внедрением технологий сохранения здоровья, внимательным отношением к

индивидуальным физиологическим характеристикам особенного ученика, что способствует улучшению физического самочувствия и повышает эффективность учебного процесса.

Итак, инклюзивная образовательная среда определяется целостной системой ценностей, в центре которой находятся обучение, воспитание и всестороннее развитие детей с особыми образовательными потребностями. Эта среда объединяет необходимые материальные и человеческие ресурсы, создает внутренние и внешние условия для полноценной жизни и учебы таких детей в массовых образовательных учреждениях, позволяя реализовывать индивидуальные подходы к образованию каждого ребенка.

Она гарантирует право каждого ребенка на качественное образование, учитывающее его личные потребности и возможности, вне зависимости от степени нарушений в физическом и психическом развитии, способностей усваивать стандартные образовательные программы и типа учебного заведения.

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# ИНТЕРПРЕТАЦИЯ ПРАВОВЫХ ОТНОШЕНИЙ В СИСТЕМЕ ОБРАЗОВАНИЯ

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***Аннотация.*** *В статье рассматривается сущность и особенности правовых отношений, возникающих в системе образования. Раскрывается содержание понятия «правовые отношения в образовании», анализируются их субъекты, объекты и нормативно-правовая основа. Особое внимание уделяется вопросам интерпретации образовательных правовых норм, а также механизмам их реализации в современных условиях. Рассмотрены основные проблемы правоприменительной практики в сфере образования и предложены возможные пути их решения.*

***Ключевые слова:*** *образование, правовые отношения, интерпретация, правовая норма, образовательное законодательство, субъект образования, правоприменение.*

***Annotatsiya.*** *Maqolada ta'lim tizimida vujudga keladigan huquqiy munosabatlarning mohiyati va o'ziga xos xususiyatlari yoritilgan. "Ta'limdagi huquqiy munosabatlar" tushunchasining mazmuni ochib berilib, ularning subyektlari, obyektlari hamda normativ-huquqiy asoslari tahlil qilingan. Ta'limga oid huquqiy normalarni talqin etish masalalariga, shuningdek ularni zamonaviy sharoitlarda amalga oshirish mexanizmlariga alohida e'tibor qaratilgan. Ta'lim sohasida huquqni qo'llash amaliyotida uchraydigan asosiy muammolar ko'rib chiqilib, ularni bartaraf etishning mumkin bo'lgan yo'llari taklif etilgan.*

***Kalit so'zlar:*** *ta'lim, huquqiy munosabatlar, talqin, huquqiy norma, ta'lim qonunchiligi, ta'lim subyekti, huquqni qo'llash.*

***Abstract.*** *The article examines the essence and specific features of legal relations arising within the education system. The content of the concept "legal relations in education" is revealed, and their subjects, objects, and regulatory and legal foundations are analyzed. Special attention is paid to the issues of interpretation of educational legal norms, as well as to the mechanisms of their implementation under modern conditions. The main problems encountered in the practice of law enforcement in the field of education are considered, and possible ways to address them are proposed.*

***Key words:*** *education, legal relations, interpretation, legal norm, educational legislation, subject of education, law enforcement.*

**Введение.** Современная система образования представляет собой сложный социально-правовой институт, функционирующий на основе норм права. Правовые отношения в сфере образования отражают взаимодействие государства, образовательных учреждений, педагогов, обучающихся и их родителей. Эффективность образовательного процесса во многом зависит от правильного понимания и толкования правовых норм, регулирующих данную сферу.

Интерпретация правовых отношений в системе образования представляет собой сложный и многомерный научно-теоретический процесс, направленный на выявление содержания, смысла и практического значения норм образовательного права в контексте взаимодействия субъектов образовательной деятельности. В условиях модернизации образовательной системы и постоянных реформ нормативно-правовой базы особую актуальность приобретает проблема корректного толкования прав и обязанностей обучающихся, педагогических работников, образовательных организаций и органов управления образованием, поскольку именно интерпретация правовых норм определяет качество их реализации и степень защиты законных интересов всех участников образовательных отношений. Правовые отношения в сфере образования формируются на стыке конституционного, административного, гражданского и трудового права, что обусловливает их комплексный характер и требует использования системного, функционального и аксиологического подходов к интерпретации. Системный подход позволяет рассматривать нормы образовательного права во взаимосвязи с иными отраслями законодательства, обеспечивая их согласованное применение, функциональный подход ориентирован на выявление социальной роли правовых норм в обеспечении доступности и качества образования, а аксиологический подход акцентирует внимание на ценностных ориентирах образования, таких как гуманизм, равенство, справедливость и приоритет прав личности. Интерпретация правовых отношений в системе образования не ограничивается формально-юридическим анализом текста нормативных актов, а предполагает учет целей государственной образовательной политики, международных стандартов в области прав человека и образования, а также реальной педагогической практики. Особое значение имеет официальное толкование норм образовательного законодательства, осуществляемое судами и уполномоченными государственными органами, поскольку именно судебная практика позволяет конкретизировать абстрактные правовые предписания и адаптировать их к конкретным конфликтным ситуациям, возникающим в образовательной среде. Вместе с тем доктринальная интерпретация, разрабатываемая в рамках юридической и педагогической науки, играет важную роль в формировании единых подходов к пониманию сущности образовательных прав и обязанностей, предупреждении правовых коллизий и пробелов в законодательстве. В условиях цифровизации образования и расширения дистанционных форм обучения интерпретация правовых отношений приобретает новые аспекты, связанные с защитой персональных данных, обеспечением академической честности, соблюдением авторских прав и гарантированием равного доступа к образовательным ресурсам. Таким образом, интерпретация правовых отношений в системе образования выступает не только как юридико-технический инструмент, но и как важный механизм обеспечения устойчивого развития образовательной системы, гармонизации интересов государства, общества и личности, а также повышения правовой культуры всех участников образовательного процесса.

Интерпретация правовых отношений в системе образования имеет важное значение, поскольку от точности понимания норм зависит качество правоприменения, защита прав субъектов образования и формирование правового сознания в обществе.

*Правовые отношения — это общественные отношения, урегулированные нормами права, участники которых обладают взаимными правами и обязанностями. В сфере образования такие отношения регулируются Конституцией Республики Узбекистан, Законом «Об образовании» (2020 г.), Кодексом об административной ответственности, Трудовым кодексом и другими нормативно-правовыми актами. Правовые отношения в системе образования: сущность, структура и особенности*

Правовые отношения — это общественные отношения, урегулированные нормами права, участники которых обладают взаимными юридическими правами и обязанностями, обеспеченными государственным принуждением.
В системе образования правовые отношения представляют собой совокупность взаимодействий между субъектами образовательного процесса, возникающих по поводу реализации права на образование, управления образовательной деятельностью и обеспечения гарантий качества образования.

Согласно Конституции Республики Узбекистан, **каждый имеет право на образование**, а государство обеспечивает доступность и бесплатность общего среднего образования. Из этого положения вытекает вся система правовых отношений в образовательной сфере, определяющая:

- права и обязанности участников образовательного процесса;
- порядок организации и функционирования образовательных учреждений;
- юридическую ответственность субъектов за нарушение норм.

Таким образом, **правовые отношения в образовании** — это форма реализации правовых норм, регулирующих образовательную деятельность, направленную на развитие личности и удовлетворение общественных потребностей в квалифицированных кадрах.

Правовые отношения в образовании включают четыре основных элемента:

1. **Субъекты правовых отношений-** это лица и организации, наделённые правосубъектностью в образовательной сфере. К ним относятся:
   - государственные органы управления образованием (Министерство образования, Агентство по контролю качества образования и др.);
   - образовательные организации (школы, лицеи, колледжи, вузы и др.);
   - педагогические и административные работники;
   - обучающиеся, студенты, слушатели;
   - родители (законные представители) обучающихся.

Каждый субъект обладает определёнными **правами и обязанностями**, установленными законом и локальными актами учреждения.

2. **Объект правовых отношений-** Это то, по поводу чего возникает данное отношение. В системе образования объектами являются:
   - образовательная деятельность (обучение, воспитание, развитие);
   - образовательные услуги;
   - результаты обучения (знания, навыки, компетенции);
   - документы об образовании (аттестаты, дипломы);
   - материальные и нематериальные ресурсы, используемые в образовательном процессе.

3. **Содержание правовых отношений** Это совокупность субъективных прав и юридических обязанностей участников. Например:
   - право обучающегося на получение качественного образования;

- обязанность педагога соблюдать устав и образовательные стандарты;
- право родителя на участие в управлении школой;
- обязанность администрации обеспечить безопасные условия обучения.

4. **Юридические факты** Это конкретные обстоятельства, с которыми закон связывает возникновение, изменение или прекращение правовых отношений. Примеры юридических фактов:

- заключение договора об образовании;
- зачисление в образовательное учреждение;
- нарушение правил внутреннего распорядка;
- завершение обучения и получение документа об образовании.

**3. Виды правовых отношений в системе образования**

В зависимости от характера регулируемых связей правовые отношения в образовании можно классифицировать следующим образом:

1. **По содержанию:**

- **управленческие (административные)** — отношения между органами власти и образовательными организациями (например, лицензирование, аккредитация, контроль качества);
- **трудовые** — отношения между педагогами и администрацией (трудовые договоры, дисциплинарная ответственность, аттестация);
- **учебные (академические)** — отношения между педагогом и обучающимся, возникающие в процессе обучения;
- **гражданско-правовые** — например, платные образовательные услуги, договоры с родителями.

2. **По субъектам:**

- отношения между государством и образовательными организациями;
- между образовательными организациями и педагогами;
- между педагогами и обучающимися;
- между образовательным учреждением и родителями обучающихся.

3. **По степени регламентации:**

- **императивные** (строго обязательные нормы, например, порядок лицензирования);
- **диспозитивные** (оставляющие возможность выбора, например, форма обучения — очная, заочная и т.д.).

**4. Особенности правовых отношений в сфере образования**

1. **Социальная значимость.** Правовые отношения в образовании напрямую влияют на формирование человеческого капитала и культурный уровень общества.
2. **Многоуровневая нормативная база.** Они регулируются не только законами, но и подзаконными актами, уставами образовательных организаций, локальными положениями и договорами.
3. **Двойственный характер регулирования.** В образовательной сфере сочетаются публично-правовые (управленческие) и частноправовые (договорные) элементы.
4. **Динамичность.**

Содержание правовых отношений меняется в зависимости от реформ, внедрения новых образовательных стандартов, цифровизации и международного сотрудничества.

5. **Этический и гуманистический компонент.** В отличие от многих других сфер, правовые отношения в образовании опираются не только на юридические нормы, но и на педагогическую этику, принципы гуманизма и равенства прав.

**5. Значение правовых отношений для образовательной системы**

- Обеспечивают законность и порядок в деятельности образовательных учреждений.
- Гарантируют соблюдение прав всех участников образовательного процесса.
- Способствуют развитию правовой культуры и формированию ответственного гражданина.
- Создают основу для эффективного управления и контроля качества образования.

Таким образом, правовые отношения в системе образования — это не просто юридическая категория, а **механизм реализации права на образование**, который обеспечивает баланс интересов личности, общества и государства.

**Субъектами образовательных правовых отношений** выступают:

- государственные органы управления образованием;
- образовательные организации различных уровней;
- педагогические и административные работники;
- обучающиеся и их родители (законные представители).

**Объектом** правовых отношений является образовательная деятельность — процесс обучения, воспитания и развития личности.

Интерпретация правовых норм в сфере образования предполагает их понимание, объяснение и применение с учетом конкретных условий образовательной практики. Важно различать **официальное** и **неофициальное** толкование норм. Официальное осуществляется уполномоченными органами (например, Министерством юстиции или судами), а неофициальное — специалистами, юристами, педагогами, исследователями.

Одним из наиболее актуальных вопросов современной образовательной системы является правильная интерпретация правовых норм, касающихся:

- прав и обязанностей участников образовательного процесса;
- академической свободы и автономии образовательных учреждений;
- дисциплинарной и административной ответственности педагогов;
- правовой защиты обучающихся.

На практике нередко встречаются ситуации, когда положения нормативных актов трактуются по-разному различными субъектами. Это приводит к правовым коллизиям, нарушению прав обучающихся или педагогов, а также снижению доверия к образовательным институтам.

К примеру, статья 30 Закона «Об образовании» Республики Узбекистан закрепляет право обучающегося на защиту от всех форм физического и психического насилия, однако не все образовательные учреждения имеют чёткий внутренний механизм реализации этой нормы. Вследствие этого возникают трудности при рассмотрении конфликтных ситуаций. Кроме того, наблюдается **разрыв между нормами законодательства и реальной практикой их применения**. Причинами являются недостаточная правовая грамотность работников образования, отсутствие системной юридической поддержки в школах и колледжах, а также неэффективность правового мониторинга.

**Проблемы и пути их решения**

1. **Проблема недостаточной правовой культуры участников образовательного процесса.**

*Решение:* необходимо систематически проводить курсы повышения квалификации педагогов по вопросам образовательного права, включать правовую подготовку в программы педагогических вузов.

2. **Недостаточная согласованность правовых актов.** *Решение:* требуется гармонизация и унификация образовательного законодательства, создание электронной базы толкований правовых норм.

3. **Сложности в интерпретации образовательных стандартов и локальных актов.**

*Решение:* разработка методических рекомендаций по применению правовых норм в образовательных организациях, создание правовых консультационных центров.

4. **Недостаточная защита прав обучающихся.** *Решение:* введение института «омбудсмена по правам обучающихся», совершенствование процедуры подачи жалоб и обращений.

5. **Отсутствие правовой экспертизы локальных актов образовательных учреждений.**

*Решение:* внедрение обязательной юридической проверки локальных документов перед утверждением.

**Заключение**

Интерпретация правовых отношений в системе образования является важным инструментом обеспечения законности и справедливости в образовательной сфере. Правильное толкование правовых норм способствует повышению качества образовательных услуг, защите прав субъектов образования и укреплению правовой культуры общества.

Для достижения этих целей необходимы:

- повышение правовой грамотности всех участников образовательного процесса;
- совершенствование системы нормативного регулирования;
- внедрение эффективных механизмов правового мониторинга и контроля.

Тем самым интерпретация правовых отношений становится не только юридической задачей, но и условием развития современной образовательной системы, основанной на принципах законности, гуманизма и равенства прав.

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# XORIJIY UNIVERSITETLARDA KORPORATIV BOSHQARUV MADANIYATINI RIVOJLANTIRISH TAJRIBALARI VA ULARDAN OLIY TA'LIM TIZIMIDA FOYDALANISH IMKONIYATLARI

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***Annotatsiya.*** *Maqolada xorijiy universitetlarda korporativ boshqaruv madaniyatini rivojlantirishning zamonaviy yondashuvlari tahlil qilingan. Tadqiqotning maqsadi oliy ta'lim muassasalarida korporativ boshqaruv madaniyatini shakllantirish bo'yicha xalqaro tajribani o'rganish va tizimlashtirishdan iborat. Tadqiqot universitet boshqaruvi, akademik mustaqillik, tashkiliy madaniyat hamda manfaatdor tomonlar ishtirokiga bag'ishlangan ilmiy manbalarni tahlil qilish asosida amalga oshirildi. Natijada Buyuk Britaniya, AQSh, Germaniya, Niderlandiya va Avstraliya universitetlarida korporativ boshqaruv madaniyatini rivojlantirishning asosiy tendensiyalari aniqlandi. Zamonaviy boshqaruv modellarining samaradorligi nafaqat tashkiliy tuzilma, balki mas'uliyat, ochiqlik, strategik yetakchilik va akademik hamjamiyatning qarorlar qabul qilishdagi ishtiroki darajasiga ham bog'liqligi aniqlandi. Oliy ta'lim muassasalarini boshqarish tizimini takomillashtirishda xorijiy tajribaning ayrim elementlaridan foydalanish zarurligi asoslab berildi.*

***Kalit so'zlar:*** *korporativ boshqaruv, korporativ madaniyat, universitet, oliy ta'lim, akademik mustaqillik, strategik boshqaruv, manfaatdor tomonlar, xorijiy tajriba.*

***Abstract.*** *The article examines contemporary approaches to developing corporate governance culture in foreign universities. The purpose of the study was to analyze and systematize international experience in fostering corporate governance culture within higher education institutions. The research is based on a review and comparative analysis of scholarly publications addressing university governance, academic autonomy, organizational culture, and stakeholder engagement. The findings reveal key trends in the development of corporate governance culture in universities of the United Kingdom, the United States, Germany, the Netherlands, and Australia. It was found that the effectiveness of modern governance models depends not only on organizational structures but also on the level of responsibility, transparency, strategic leadership, and stakeholder participation in decision-making processes. The study substantiates the relevance of adapting selected elements of international experience for improving governance practices in higher education institutions.*

***Key words:*** *corporate governance, corporate culture, university, higher education,*

*academic autonomy, strategic management, stakeholder engagement, international experience.*

***Аннотация.*** *В статье рассмотрены современные подходы к развитию культуры корпоративного управления в зарубежных университетах. Цель исследования заключалась в изучении и систематизации международного опыта формирования корпоративной культуры управления в высших образовательных учреждениях. Исследование основано на анализе научных публикаций, посвящённых вопросам университетского управления, академической автономии, организационной культуры и взаимодействия заинтересованных сторон. В результате выявлены ключевые тенденции развития корпоративного управления в университетах Великобритании, США, Германии, Нидерландов и Австралии. Установлено, что эффективность современных моделей управления определяется не только организационной структурой, но и уровнем развития культуры ответственности, открытости, стратегического лидерства и участия академического сообщества в принятии решений. Обоснована целесообразность использования отдельных элементов зарубежного опыта при совершенствовании системы управления высшими образовательными учреждениями.*

***Ключевые слова:*** *корпоративное управление, корпоративная культура, университет, высшее образование, академическая автономия, стратегическое управление, заинтересованные стороны, зарубежный опыт.*

**Kirish**

So‘nggi yigirma yilda ko‘plab mamlakatlarning universitetlari boshqaruvga doir an’anaviy yondashuvlarni qayta ko‘rib chiqish zaruratiga duch keldi. Global raqobatning kuchayishi, ta’limning xalqarolashuvi, kadrlar tayyorlash sifatiga qo‘yilayotgan talablarning ortishi va raqamli texnologiyalarning rivojlanishi universitetga endilikda faqat ta’lim muassasasi sifatida qaralmasligiga sabab bo‘ldi. Bugungi kunda u talabalar, o‘qituvchilar, ish beruvchilar, davlat hokimiyati organlari, investorlar va umuman jamiyat manfaatlarini birlashtiradigan murakkab bir tashkilotdir [2].

Shu bois korporativ boshqaruv madaniyati tobora muhim ahamiyat kasb etib bormoqda. Bu yerda gap faqat rasmiy boshqaruv tuzilmalari haqida ketmayapti. Qaror qabul qilish usullarini, ta’lim jarayoni ishtirokchilari o‘rtasidagi ishonch darajasini hamda ularning universitet taraqqiyotidagi ishtiroki darajasini belgilaydigan qadriyatlar tizimi ancha muhimroqdir.

Edgar Sheyn ta’kidlaganidek, tashkiliy madaniyat — birgalikdagi faoliyat jarayonida shakllanadigan va tashkilot a’zolarining xulq-atvorini belgilab beradigan asosiy qarashlar majmuyidir [10]. Aynan shuning uchun ham ko‘plab xorijiy universitetlar korporativ madaniyatni rivojlantirishni uzoq muddatli taraqqiyotning strategik manbasi deb biladi.

Maqsad — oliy ta’lim muassasalarida korporativ boshqaruv madaniyatini rivojlantirish bo‘yicha xorijiy tajribani o‘rganish va tizimlashtirish, korporativ madaniyatni shakllantirishning samarali mexanizmlarini aniqlash hamda ularni O‘zbekiston oliy ta’lim tizimiga moslashtirish imkoniyatlarini belgilashdan iborat.

**Materiallar va uslublar**

Tadqiqot Scopus va Web of Science bazalarida indekslangan ilmiy nashrlarda keltirilgan universitetlarni korporativ boshqarishning xorijiy amaliyotlarini qiyosiy tahlil qilishga asoslanadi. Tahlilga Buyuk Britaniya, AQSH, Germaniya, Niderlandiya va Avstraliyaning universitet boshqaruvi modellari kiritilgan bo‘lib, bu korporativ boshqaruv madaniyatini shakllantirishning eng barqaror mexanizmlarini aniqlash imkonini berdi. Tadqiqot davomida ilmiy adabiyotlarni tahlil qilish, universitetlarni boshqarishning xorijiy modellarini qiyosiy tahlil qilish, ilmiy yondashuvlarni tizimlashtirish va umumlashtirish, shuningdek, olingan natijalarni mantiqiy sharhlash uslublaridan foydalanildi. Qiyosiy tahlil turli mamlakatlar universitetlarida korporativ boshqaruv madaniyatining rivojlanishiga xos umumiy qonuniyatlar va o‘ziga xos xususiyatlarni aniqlashga imkon berdi.

**Tadqiqot natijalari**

Xorijiy tajribaning tahlili shuni ko‘rsatdiki, zamonaviy universitetlarda korporativ boshqaruv madaniyatini rivojlantirish asta-sekin ma’muriy tartibga solish doirasidan chiqib, ta’lim tashkilotining institutsional barqarorligini ta’minlovchi mustaqil omil sifatida qaralmoqda.

Milliy oliy ta’lim tizimlaridagi farqlarga qaramay, yetakchi xorijiy universitetlar faoliyatida korporativ boshqaruv madaniyatini shakllantirish borasida umumiy yondashuvlar kuzatilmoqda. Eng avvalo, boshqaruvning an’anaviy vertikal modelidan ma’muriyat, professor-o‘qituvchilar tarkibi, talabalar va tashqi manfaatdor tomonlar o‘rtasidagi o‘zaro hamkorlikning yanada moslashuvchan mexanizmlariga o‘tilayotgani diqqatni tortadi.

Endersning tadqiqotlari shuni ko‘rsatadiki, baynalmilallashuv jarayonlari universitet boshqaruvining roli haqidagi tasavvurlarni tubdan o‘zgartirib yubordi [6]. Agar ilgari universitet asosan muxtor akademik tuzilma sifatida qaralgan bo‘lsa, hozirgi sharoitda u xalqaro ta’lim va ilmiy makonga integratsiyalashgan ochiq tizim sifatida tobora ko‘proq faoliyat yuritmoqda. Bunday sharoitda boshqaruv samaradorligi nafaqat faoliyatning ichki tashkil etilishi, balki hamkorlik, ishonch va jamoaviy mas’uliyat madaniyatini shakllantirish qobiliyati bilan ham belgilanadigan bo‘ldi.

Buyuk Britaniya tajribasi alohida qiziqish uyg‘otadi. De Boer, Huisman va Meister-Scheytt asarlarining tahlili korporativ boshqaruv madaniyatini rivojlantirishda universitet kengashlari hamda kuzatuv organlari muhim rol o‘ynashini ko‘rsatadi. Ularning faoliyati nazorat funksiyalari bilangina cheklanib qolmaydi. Aslida, ular qarorlar qabul qilish jarayonlarining shaffofligini hamda ta’lim jarayoni ishtirokchilarining turli guruhlari manfaatlari muvozanatini ta’minlagan holda korporativ qadriyatlarning o‘tkazuvchisi vazifasini bajaradi [3].

Shuni ta’kidlash joizki, Britaniya amaliyotida “boshqaruv” va “nazorat” tushunchalari bir-biriga teng emas. Aksincha, boshqaruv samaradorligi bo‘linmalar va xodimlarning mustaqil tashabbus ko‘rsatishi uchun sharoit yaratish bilan bog‘liqdir. Aynan shu sababli ham yuqori darajadagi akademik muxtoriyat hisobdorlik va faoliyat natijalarini baholashning rivojlangan tizimi bilan uyg‘unlashgan.

AQSH universitetlarida korporativ boshqaruv madaniyatining rivojlanishi biroz boshqacharoq kechadi. Bu yerda tashkilot ichida yetakchilik muhitini shakllantirishga katta e’tibor qaratiladi. Kochan va Rubinstein tadqiqotlari tahlilidan xulosa qilish mumkinki, boshqaruv tizimining barqarorligi ko‘p jihatdan manfaatdor tomonlarning keng doirasini universitetning strategik rivojlanishiga jalb etish orqali ta’minlanadi. Bu yerda gap nafaqat o‘qituvchilar va talabalar, balki ish beruvchilar, bitiruvchilar, xayriya jamg‘armalari, biznes vakillari va mahalliy hamjamiyatlar haqida ham bormoqda [9].

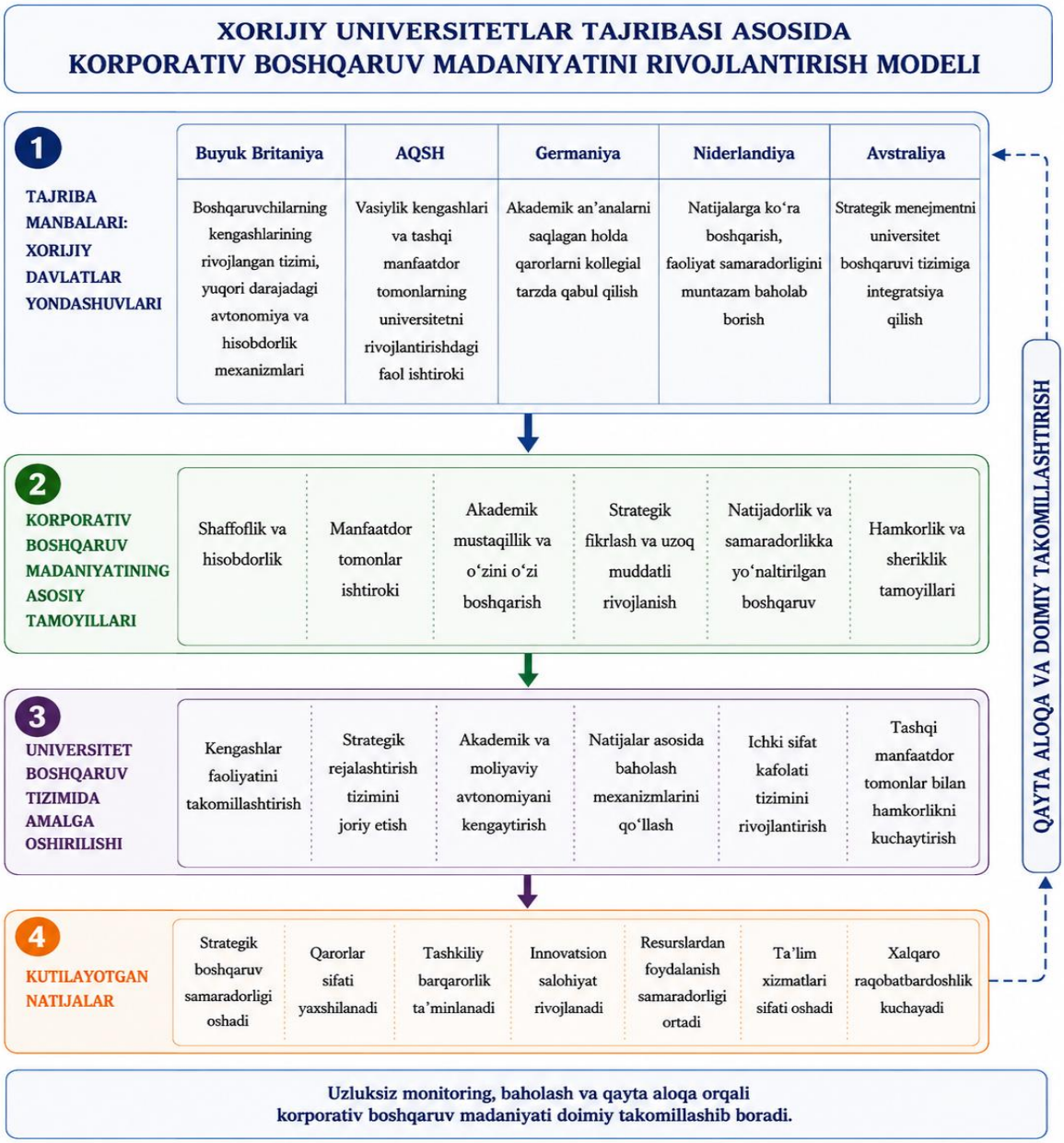
Diqqatga sazovor jihati shundaki, Amerika universitetlari manfaatdor tomonlar ishtirokini qarorlarni kelishishning rasmiy tartibi sifatida emas, balki korporativ o‘ziga xoslikni shakllantirish vositasi sifatida qaraydi. Natijada xodimlar va talabalar universitetning strategik maqsadlarini o‘zlariniki sifatida qabul qiladi, bu esa o‘z navbatida tashkiliy sadoqat darajasiga ijobiy ta’sir ko‘rsatadi.

Yevropa boshqaruv modellarini o‘rganish yana bir o‘ziga xos xususiyatni aniqlash imkonini berdi. Dobbins, Knill va Vyogtlening fikricha, so‘nggi o‘n yilliklarda aksariyat Yevropa mamlakatlari “natijalar orqali boshqarish” deb ataladigan modelga bosqichma-bosqich o‘tib bormoqda. Bunda davlat universitetlarning tezkor faoliyatiga bevosita aralashishdan asta-sekin voz kechib, asosiy e’tiborni samaradorlikning strategik ko‘rsatkichlariga qaratmoqda [5].

Bunday yondashuv Germaniya va Niderlandiyada keng tarqalgan. Bu mamlakatlarda korporativ boshqaruv madaniyati erishilgan natijalar uchun mas’uliyat, faoliyat ochiqligi va ichki jarayonlarni doimiy takomillashtirish tamoyillari asosida shakllanadi. Ta’lim sifati, ilmiy faoliyat va resurslardan foydalanish samaradorligini muntazam baholab borish muhim omilga aylanmoqda.

Universitetlarni boshqarishni raqamli transformatsiya qilish masalasi alohida e’tiborga loyiqdir. Zamonaviy tadqiqotlar tahlili shuni ko‘rsatadiki, raqamlashtirish nafaqat ta’lim jarayoniga, balki umuman korporativ madaniyatga ham ta’sir ko‘rsatadi. Xususan, raqamli platformalardan foydalanish boshqaruv jarayonlarining shaffofligini oshirishga yordam beradi, bo‘linmalar o‘rtasida axborot almashinuvini tezlashtiradi va xodimlarning boshqaruv qarorlari muhokamasida ishtirok etish imkoniyatlarini kengaytiradi.

Ferlie, Musselin va Andresani o‘z asarlarida zamonaviy universitet boshqaruvi korporativ sektordan olingan strategik menejment tamoyillariga tobora ko‘proq tayanishini ta’kidlaydilar [7]. Shu bilan birga, universitet muhitida biznes-modellardan to‘g‘ridan-to‘g‘ri nusxa ko‘chirish cheklangan samaradorlik namoyon etmoqda. Xorijiy tajriba shuni ko‘rsatadiki, akademik qadriyatlarni saqlab, ayni paytda yuqori darajadagi boshqaruvchanlik egiluvchanligini ta’minlaydigan modellar muvaffaqiyatli bo‘lmoqda.




**1-rasm. Xorijiy universitetlarda korporativ boshqaruv madaniyatini rivojlantirishga doir yondashuvlarning qiyosiy tavsifi**

O‘tkazilgan tahlil yetakchi xorijiy universitetlarga xos bo‘lgan korporativ boshqaruv madaniyatining bir qancha barqaror unsurlarini ajratib ko‘rsatish imkonini beradi. Bularga, jumladan, quyidagilar kiradi: aniq shakllantirilgan korporativ qadriyatlar va universitet missiyasining mavjudligi, boshqaruv jarayonlarining yuqori darajada shaffofligi, manfaatdor tomonlarning strategik boshqaruvga jalb etilishi, akademik avtonomiya va hisobdorlikning uyg‘unligi, barcha darajadagi rahbarlarning yetakchilik kompetensiyalarini rivojlantirish, boshqaruv ochiqligi va samaradorligini oshirish uchun raqamli vositalardan foydalanish, uzoq muddatli strategik rivojlanishga yo‘naltirilganlik (1-rasm).

Olingan natijalar shundan dalolat beradiki, xorijiy universitetlarda korporativ boshqaruv madaniyati tashkiliy tizimning qo‘shimcha bir elementi emas, balki raqobatbardoshlik,

barqarorlik va tashqi muhitning tez o‘zgaruvchan sharoitlariga moslashish qobiliyatini ta’minlashning asosiy omillaridan biri hisoblanadi.

**O‘zbekiston oliy ta’lim muassasalari uchun xorijiy tajribalarning ijobiy jihatlari.**

Xorijiy amaliyot tahlili shuni ko‘rsatadiki, O‘zbekiston universitetlarida korporativ boshqaruvni yanada takomillashtirishni nafaqat tashkiliy islohotlar nuqtayi nazaridan, balki tegishli boshqaruv madaniyatini rivojlantirish orqali ham ko‘rib chiqish maqsadga muvofiqdir (1-jadval).

**1-jadval.**

**Xorijiy universitetlarda korporativ boshqaruv madaniyatini rivojlantirishning asosiy mexanizmlari va ularni O‘zbekistonga moslashtirish imkoniyatlari.**

| Aniqlangan mexanizm | Xorijiy amaliyot | O‘zbekiston OTMlarida moslashtirish imkoniyatlari |
|---|---|---|
| Manfaatdor tomonlarni boshqaruvga jalb qilish | Universitetlar kengashlari faoliyatida ish beruvchilar, bitiruvchilar va jamoatchilik ishtirokini ta’minlash | Kollegial boshqaruv organlarida tashqi manfaatdor tomonlar ishtirokini kengaytirish |
| Akademik mustaqillikni rivojlantirish | Universitetlarning strategik qarorlarni mustaqil qabul qilishi | Sifat ustidan davlat nazoratini saqlagan holda oliy ta’lim muassasalarining boshqaruvdagi mustaqilligini kengaytirish |
| Shaffoflik madaniyatini shakllantirish | Boshqaruv jarayonlarining ommaga ochiqligi va hisobdorligi | Ichki va tashqi hisobot mexanizmlarini takomillashtirish |
| Akademik yetakchilarni tayyorlash | Fakultet va kafedra rahbarlarining malakasini oshirish bo‘yicha maxsus dasturlar | Akademik menejerlarni tayyorlash va ularning malakasini oshirish tizimini yaratish |
| Boshqaruvni raqamlashtirish | Boshqaruv va kommunikatsiya uchun raqamli platformalardan foydalanish | Korporativ hamkorlik va qarorlar qabul qilishning raqamli vositalarini joriy etish |

Taqdim etilgan ma’lumotlar shuni ko‘rsatadiki, oliy ta’lim tizimlarining milliy xususiyatlaridan qat’i nazar, korporativ boshqaruv madaniyatini rivojlantirish o‘xshash tamoyillarga: shaffoflik, keng ishtirok, mas’uliyat, strategik yo‘nalganlik va yetakchilik salohiyatini rivojlantirishga asoslanadi. Farqlar asosan ushbu tamoyillarni amalga oshirish mexanizmlarida kuzatiladi.

Bizningcha, universitetlarni rivojlantirishning strategik masalalarini muhokama qilishga ichki va tashqi manfaatdor tomonlarni kengroq jalb etish eng muhim yo‘nalishlardan biridir. Xorijiy tajriba shuni ko‘rsatadiki, bunday yondashuv qabul qilinadigan qarorlar sifatini oshirishga va boshqaruv institutlariga ishonchni mustahkamlashga imkon beradi.

Ochiqlik madaniyatini shakllantirish ham kam ahamiyatga ega emas. Ko‘plab xorijiy universitetlarda strategik maqsadlar, faoliyat natijalari, resurslarning taqsimlanishi va amalga oshirilayotgan loyihalar to‘g‘risidagi ma’lumotlar akademik jamoatchilik uchun ochiqdir [1,2,8]. Bunday amaliyot tashkiliy mas’uliyatni rivojlantirishga ko‘maklashadi va boshqaruv mojarolari yuzaga kelishi ehtimolini kamaytiradi.

Akademik xodimlarning yetakchilik salohiyatini rivojlantirish alohida e’tiborni talab qiladi. Dunyoning aksariyat yetakchi universitetlarida boshqaruv maxsus tayyorgarlikni talab etadigan kasbiy kompetensiya sifatida ko‘riladi [3,6]. Shu munosabat bilan kafedra mudirlari, dekanlar va ma’muriy xodimlarni tayyorlash hamda ularning malakasini oshirish dasturlarini kengaytirish maqsadga muvofiqdir.

Shu bilan birga, xorijiy tajriba tahlili shuni ko‘rsatadiki, chet el modellaridan mexanik tarzda nusxa ko‘chirish har doim ham kutilgan natijalarni beravermaydi. Har bir korporativ boshqaruv tizimi milliy an’analar, qonunchilikning o‘ziga xos jihatlari va shakllangan akademik madaniyat ta’sirida vujudga keladi. Shu sababli, xorijiy amaliyotlarni joriy etishda O‘zbekiston oliy ta’limining rivojlanish xususiyatlarini hisobga olish lozim.

Shafaffoflik, mas’uliyatlilik va ishtirokchilik kabi xalqaro tamoyillarni mamlakatimiz oliy ta’lim tizimining tarixan shakllangan xususiyatlari bilan uyg‘unlashtirgan korporativ boshqaruv madaniyatining milliy modelini yaratish eng istiqbolli yo‘nalishdir. Bunday yondashuv universitetlarning uzoq muddatli barqarorligini ta’minlashga hamda ularning milliy va xalqaro miqyosdagi raqobatbardoshligini oshirishga xizmat qiladi.

**Muhokama**

Olingan natijalar jahon amaliyotida universitet muhitida korporativ boshqaruvning roli bosqichma-bosqich qayta ko‘rib chiqilayotgani haqida xulosa qilish imkonini beradi. Agar ilgari boshqaruv asosan ma’muriy tartib-taomillar va nazorat mexanizmlari majmuyi sifatida qaralgan bo‘lsa, hozirgi sharoitda boshqaruvning madaniy jihati tobora katta ahamiyat kasb etmoqda. Mohiyatan, korporativ madaniyat universitetning strategik maqsadlari bilan uning xodimlarining kundalik faoliyati o‘rtasidagi bog‘lovchi bo‘g‘inga aylanmoqda.

Ushbu xulosa E. Sheyn konsepsiyasi bilan sezilarli darajada mos keladi. Unga ko‘ra, tashkiliy madaniyat tashkilot a’zolari xulq-atvorining tub modellarini belgilaydi va qabul qilinadigan boshqaruv qarorlari samaradorligiga ta’sir ko‘rsatadi [10]. O‘tkazilgan tahlil shuni ko‘rsatdiki, yetakchi xorijiy universitetlar tashkiliy tuzilmalarni rasman takomillashtirishga emas, balki qadriyatlarni, o‘zaro hamkorlik me’yorlarini va jamoaviy javobgarlik mexanizmlarini shakllantirishga ko‘proq e’tibor qaratmoqda. Aynan shu unsurlar yuqori noaniqlik va tashqi muhitning doimiy o‘zgarishlari sharoitida boshqaruv tizimining barqarorligini ta’minlaydi.

Shu bilan birga, tadqiqot natijalari universitet boshqaruvining zamonaviy konsepsiyalaridagi ayrim qoidalarga aniqlik kiritish imkonini beradi. Jumladan, Ferlie, Musselin va Andresani yangi davlat menejmenti yondashuvlarining universitetlar faoliyatiga ta’siri kuchayib borayotganini ta’kidlaydi [7]. Biroq Buyuk Britaniya, AQSH va bir qator Yevropa mamlakatlari amaliyoti tahlili shuni ko‘rsatadiki, samarali korporativ boshqaruv korporativ sektor usullarini akademik muhitga mexanik ravishda ko‘chirish bilan cheklanib qolmaydi. Aksincha, eng yuqori natijalarga akademik muxtoriyat tamoyillari va strategik menejmentning zamonaviy vositalari o‘rtasidagi muvozanatni saqlay olgan universitetlar erishadi.

Universitetni boshqarishda manfaatdor tomonlarning ishtiroki masalasi alohida e’tiborga loyiq. K. Kochan va S. Rubinshteynning tadqiqotlari tashkiliy jarayonlarning turli ishtirokchi guruhlari manfaatlarini hisobga olishni ko‘zda tutuvchi steykxolder yondashuvining samaradorligini asoslab beradi. O‘tkazilgan tahlil natijalari ham ushbu fikrni tasdiqlaydi. Ko‘rib chiqilgan deyarli barcha boshqaruv modellarida strategik qarorlar qabul qilishda o‘qituvchilar, talabalar, ish beruvchilar, bitiruvchilar va jamoatchilik vakillarining ishtirokini kengaytirish tendensiyasi kuzatilmoqda. Bunda gap vakolatlarni qayta taqsimlash haqida emas, balki ko‘proq ishonch va hamkorlik muhitini shakllantirish haqida bormoqda [9].

Qizig‘i shundaki, aksariyat xorijiy tadqiqotlarda akademik avtonomiya hisobdorlikka zid tushuncha sifatida emas, balki uning mantiqiy davomi sifatida ko‘rib chiqiladi. F. De Boer, J. Huisman va Ch. Meister-Scheyttning asarlari universitetlar mustaqilligining kengayishi faoliyat shaffofligi va ichki boshqaruv mexanizmlari sifatiga qo‘yiladigan talablarning kuchayishi bilan birga kechishini ko‘rsatadi [3]. Boshqacha aytganda, avtonomiya faqat tashkilot ichida tegishli mas’uliyat madaniyati shakllangandagina samarali bo‘ladi.

O‘tkazilgan tahlil raqamli transformatsiyaning korporativ boshqaruv rivojiga ta’siriga yangicha qarash imkonini ham beradi. Ko‘plab tadqiqotlarda raqamlashtirish asosan texnologik jarayon sifatida ko‘rib chiqiladi. Biroq xorij tajribasi uning oqibatlari ancha kengroq ekanini ko‘rsatmoqda. Raqamli platformalar universitet ichidagi muloqotlar tabiatini o‘zgartiradi, axborotdan foydalanish imkoniyatlarini kengaytiradi va yanada ochiq tashkiliy muhit shakllanishiga yordam beradi. Natijada raqamlashtirish nafaqat boshqaruv vositasi, balki korporativ madaniyatni transformatsiya qiluvchi omilga ham aylanadi.

O‘zbekiston oliy ta’lim tizimini takomillashtirish nuqtayi nazaridan, tashkiliy madaniyat darajasi bilan universitet avtonomiyasini amalga oshirish samaradorligi o‘rtasida aniqlangan o‘zaro bog‘liqlik alohida qiziqish uyg‘otadi. So‘nggi yillarda mamlakatimizda oliy ta’limni boshqarish tizimi keng ko‘lamli modernizatsiya qilinib, bu oliy ta’lim muassasalarining mustaqilligini kengaytirish, strategik rejalashtirishni joriy etish va ichki boshqaruv mexanizmlarini rivojlantirishni ko‘zda tutadi. Biroq tadqiqot natijalari kutilayotgan natijalarga erishish nafaqat institutsional o‘zgarishlarga, balki universitetlarning ochiqlik, mas’uliyatlilik hamda xodimlarni qaror qabul qilish jarayonlariga jalb etish madaniyatini shakllantira olish qobiliyatiga ham bog‘liq bo‘lishini ko‘rsatmoqda.

Fikrimizcha, mahalliy tadqiqotlarda aynan shu jihat yetarlicha o‘rganilmay qolgan. Aksariyat ishlar oliy ta’lim muassasalarining tashkiliy tuzilmasi, strategik boshqaruvi yoki faoliyatini me’yoriy tartibga solish masalalariga bag‘ishlangan. Shu bilan birga, tashkiliy o‘zgarishlarning barqarorligini ta’minlaydigan korporativ boshqaruvning madaniy mexanizmlari ancha kam ko‘rib chiqiladi. Vaholanki, xorijiy tajriba islohotlar samaradorligi ko‘p jihatdan boshqaruv mexanizmlarining o‘zgargani bilan emas, balki akademik hamjamiyatning bu o‘zgarishlarni qabul qilishga va qo‘llab-quvvatlashga tayyorligi bilan belgilanishini ko‘rsatadi.

Demak, tadqiqot natijalari korporativ boshqaruvni asosan ma’muriy tushunishdan uning madaniy-qadriyatli talqiniga o‘tish zarurligini tasdiqlaydi. Zamonaviy sharoitda korporativ boshqaruv madaniyati tashkiliy tizimning yordamchi unsuri emas, balki universitet rivojining mustaqil strategik resursi sifatida namoyon bo‘ladi. Aynan umumiy qadriyatlarni shakllantirish, ishonchni mustahkamlash, manfaatdor tomonlar ishtirokini kengaytirish va akademik tashabbusni qo‘llab-quvvatlash orqali oliy ta’lim muassasalarining uzoq muddatli barqarorligi hamda raqobatbardoshligi ta’minlanadi.

**Xulosa**

O‘tkazilgan tahlil shuni ko‘rsatdiki, xorijiy universitetlarda korporativ boshqaruv madaniyati ma’muriy nazorat yoki vakolatlarni taqsimlash tizimidan ancha kengroq tushuncha sifatida qaraladi. U qadriyatlar majmuyi, o‘zaro hamkorlik me’yorlari, ta’lim jarayoni ishtirokchilari o‘rtasidagi ishonch darajasi va ularning universitet rivojlanishidagi ishtiroki orqali shakllanadi.

Buyuk Britaniya, AQSH, Germaniya, Niderlandiya va Avstraliyaning o‘rganilgan tajribasi bir nechta barqaror tendensiyani qayd etish imkonini beradi. Ular orasida akademik avtonomiyani kengaytirish, boshqaruv jarayonlari shaffofligini oshirish, strategik qarorlar qabul qilishda manfaatdor tomonlarning faol ishtirok etishi hamda raqamli boshqaruv vositalaridan foydalanish kabi yo‘nalishlar mavjud. Bunda boshqaruv samaradorligi ko‘p jihatdan boshqaruv organlarining rasmiy tuzilishi bilan emas, balki shakllangan tashkiliy madaniyat sifati bilan belgilanadi.

Ayniqsa, yetakchi xorijiy universitetlar nazoratni kuchaytirishdan ko‘ra, akademik hamjamiyat ichida mas’uliyat va hamkorlikni rivojlantirishga urg‘u berayotgani diqqatga sazovordir. Aynan shu holat universitetning barqaror rivojlanishi va tashqi muhit o‘zgarishlariga moslashish qobiliyati uchun sharoit yaratadi.

Fikrimizcha, O‘zbekiston oliy ta’lim muassasalari uchun ochiqlik madaniyatini shakllantirish, xodimlarni va ta’lim oluvchilarni boshqaruv jarayonlariga jalb etish, shuningdek, akademik personalning yetakchilik kompetensiyalarini rivojlantirish mexanizmlari eng katta amaliy qiziqish kasb etadi. Shu bilan birga, xorijiy tajriba korporativ boshqaruvning muvaffaqiyatli modellari hamisha milliy xususiyatlar va shakllangan institutsional sharoitlarni hisobga olgan holda yaratilishini ko‘rsatadi.

Shu munosabat bilan, mamlakatimiz universitetlarida korporativ boshqaruvni yanada takomillashtirishni nafaqat tashkiliy o‘zgartirishlar, balki boshqaruv madaniyatining o‘zini rivojlantirish bilan ham bog‘lash maqsadga muvofiq. Aynan boshqaruv madaniyati oliy ta’lim tizimidagi islohotlar va strategik vazifalarning qay darajada samarali amalga oshirilishini ko‘p jihatdan belgilab beradi.

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# ASTRONOMIYA FANINI O‘QITISHDA RAQAMLI DASTURIY-METODIK TA’MINOTNING PEDAGOGIK SAMARADORLIGI

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***Annotatsiya.*** *Mazkur maqolada raqamli ta’lim sharoitida kompetensiyaviy yondashuv asosida pedagogika oliy ta’lim muassasalarida astronomiya fanini o‘qitishning dasturiy-metodik ta’minotini takomillashtirish masalalari yoritilgan. Tadqiqotda astronomiya ta’limining pedagogik imkoniyatlari tahlil qilinib, kompetensiyaviy yondashuvga asoslangan metodik tizim, o‘qitish modeli hamda raqamli ta’lim resurslari ishlab chiqildi. Shuningdek, virtual laboratoriyalar, astronomik kuzatuv platformalari, interaktiv multimediya vositalari va veb-texnologiyalarni ta’lim jarayoniga integratsiya qilishning metodik asoslari taklif etildi. Olingan natijalar Styudent t-kriteriyasi asosida matematik-statistik tahlil qilinib, tajriba guruhlarida bilimga yo‘naltirilgan, amaliy faoliyat va ilmiy-tadqiqotga yo‘naltirilgan, mustaqil ish hamda kuzatuv-reflektiv kompetensiyalar bo‘yicha 15–18 foiz samaradorlik o‘sishi aniqlandi.*

***Kalit so‘zlar:*** *astronomiya ta’limi, kompetensiyaviy yondashuv, raqamli ta’lim, dasturiy-metodik ta’minot, pedagogik tajriba-sinov, kasbiy kompetensiya, TPACK, SAMR, raqamli texnologiyalar, virtual laboratoriya, astronomik kuzatuv, pedagogik innovatsiyalar.*

***Abstract.*** *This article examines the improvement of software and methodological support for teaching astronomy based on a competency-based approach in digital learning environments at pedagogical higher education institutions. The pedagogical potential of astronomy education was analyzed, and a competency-based methodological system, instructional model, and digital educational resources were developed. The study proposes methodological approaches for integrating virtual laboratories, astronomical observation platforms, multimedia technologies, and web-based educational tools into the teaching process. The obtained data were analyzed using Student’s t-test, confirming statistically significant improvements of 15–18% in knowledge-oriented, practical and research-oriented, independent learning, and reflective competencies among students in the experimental groups.*

***Key words:*** *astronomy education, competency-based approach, digital education, software and methodological support, pedagogical experiment, professional competence, TPACK, SAMR, digital technologies, virtual laboratory, astronomical observation, educational innovation.*

***Аннотация.*** *В статье рассматриваются вопросы совершенствования программно-методического обеспечения обучения астрономии на основе*

*компетентностного подхода в условиях цифрового образования в педагогических высших учебных заведениях. Проведен анализ педагогических возможностей преподавания астрономии, разработаны методическая система, модель обучения и цифровые образовательные ресурсы, основанные на компетентностном подходе. Предложены методические основы интеграции виртуальных лабораторий, платформ астрономических наблюдений, мультимедийных технологий и веб-ресурсов в образовательный процесс. Результаты обработаны с использованием критерия Стьюдента и подтвердили статистически значимое повышение эффективности обучения на 15–18 % по когнитивному, практико-исследовательскому, самостоятельному и рефлексивному компонентам компетентности.*

***Ключевые слова:*** *астрономическое образование, компетентностный подход, цифровое образование, программно-методическое обеспечение, педагогический эксперимент, профессиональная компетентность, TPACK, SAMR, цифровые технологии, виртуальная лаборатория, астрономические наблюдения, педагогические инновации.*

**Kirish.** So‘nggi yillarda dunyo miqyosida ta’lim tizimini raqamlashtirish, ta’lim mazmunini kompetensiyaviy yondashuv asosida takomillashtirish hamda innovatsion pedagogik texnologiyalarni o‘quv jarayoniga keng joriy etish ustuvor yo‘nalishlardan biriga aylandi. UNESCO, OECD va Yevropa Ittifoqining Erasmus+ dasturi doirasida amalga oshirilayotgan islohotlar ta’lim jarayonini raqamli transformatsiya qilish, XXI asr ko‘nikmalarini shakllantirish va bo‘lajak mutaxassislarning kasbiy kompetensiyalarini rivojlantirishni asosiy vazifalardan biri sifatida belgilamoqda [1,2,3]. Shu nuqtai nazardan oliy ta’lim muassasalarida zamonaviy raqamli ta’lim muhitida kompetensiyaviy yondashuv asosida o‘qitish metodikasini takomillashtirish dolzarb ilmiy-amaliy muammo hisoblanadi [4,5,6]. Tadqiqotning maqsadi pedagogika oliy ta’lim muassasalarida raqamli ta’lim sharoitida kompetensiyaviy yondashuv asosida astronomiya fanini o‘qitishning dasturiy-metodik ta’minotini takomillashtirish hamda uning pedagogik samaradorligini ilmiy asoslashdan iborat. Mazkur maqsadga erishish uchun astronomiya ta’limining pedagogik imkoniyatlari tahlil qilindi, kompetensiyaviy yondashuvga asoslangan metodik tizim va o‘qitish modeli ishlab chiqildi, zamonaviy raqamli texnologiyalarni o‘quv jarayoniga integratsiyalash mexanizmlari taklif etildi hamda ularning samaradorligi pedagogik tajriba-sinov ishlari asosida matematik-statistik usullar yordamida baholandi [7,8,9].

**Tadqiqot metodologiyasi.** Mazkur tadqiqot raqamli ta’lim sharoitida kompetensiyaviy yondashuv asosida pedagogika oliy ta’lim muassasalarida astronomiya fanini o‘qitishning dasturiy-metodik ta’minotini takomillashtirishga qaratilgan. Tadqiqot metodologik jihatdan kompetensiyaviy yondashuv, tizimli yondashuv, faoliyatga yo‘naltirilgan ta’lim, konstruktivistik ta’lim nazariyasi hamda raqamli pedagogika tamoyillariga asoslandi. Shuningdek, TPACK (Technological Pedagogical Content Knowledge), SAMR (Substitution–Augmentation–Modification–Redefinition), 4C/ID (Four-Component Instructional Design) va Team-Based Learning (TBL) modellari nazariy asos sifatida qo‘llanildi. Tadqiqot jarayonida nazariy, empirik va matematik-statistik usullar majmuasidan foydalanildi. Nazariy bosqichda astronomiya ta’limi, kompetensiyaviy yondashuv va raqamli pedagogikaga oid mahalliy hamda xorijiy ilmiy adabiyotlar qiyosiy va tizimli tahlil qilindi [10,11]. Shuningdek, mavjud o‘quv dasturlari, davlat ta’lim standartlari va o‘quv-metodik hujjatlar o‘rganilib, astronomiya fanini o‘qitishning zamonaviy holati baholandi. Empirik tadqiqot bosqichida pedagogik kuzatish, anketa so‘rovlari, suhbat, ekspert baholash hamda pedagogik tajriba-sinov usullaridan foydalanildi. Tajriba-sinov

ishlari O‘zbekiston milliy pedagogika universiteti, Termiz davlat pedagogika instituti va Qo‘qon davlat pedagogika institutida tashkil etilib, ularda jami 361 nafar talaba ishtirok etdi. Ishtirokchilar tajriba (180 nafar) va nazorat (181 nafar) guruhlariga ajratildi. Tajriba-sinov ishlari davomida ishlab chiqilgan dasturiy-metodik ta’minot, jumladan AstroEdu pedagogik dasturiy mahsuloti, https://astro-edu.netlify.app/uz elektron ta’lim platformasi, virtual astronomik kuzatuv vositalari, interaktiv multimedia resurslari hamda raqamli baholash tizimi o‘quv jarayoniga integratsiya qilindi. Talabalarning kompetensiyalarini baholash maqsadida uch turdagi topshiriqlar ishlab chiqildi: astronomik bilimlarni aniqlashtirishga qaratilgan topshiriqlar; astronomiya fanini o‘qitishda raqamli texnologiyalarni qo‘llash va loyihalashga oid topshiriqlar; integrativ kompetensiyalarni aniqlashga yo‘naltirilgan topshiriqlar. Har bir topshiriq bilimga yo‘naltirilgan, amaliy faoliyat va ilmiy-tadqiqotga yo‘naltirilgan, mustaqil faoliyatga yo‘naltirilgan hamda kuzatuv-reflektiv mezonlar asosida baholandi. Tadqiqot natijalarining ishonchliligini aniqlash uchun olingan ma’lumotlar matematik-statistik usullar yordamida qayta ishlandi. Guruhlar o‘rtasidagi farqlarning statistik ahamiyatliligi Styudent t-kriteriyasi asosida tekshirildi. Statistik gipotezalarni tekshirishda 95 % ishonchlilik darajasi ($\alpha$=0,05) qabul qilindi hamda hisoblangan t qiymatlari kritik qiymatlar bilan taqqoslandi. O‘rtacha qiymatlar, ishonch oraliqlari va samaradorlik ko‘rsatkichlari aniqlanib, tajriba natijalarining statistik ishonchliligi baholandi.

**Tadqiqot natijalari va muhokama.** Pedagogik tajriba-sinov ishlari natijalari ishlab chiqilgan dasturiy-metodik ta’minotning astronomiya fanini kompetensiyaviy yondashuv asosida o‘qitish samaradorligiga ijobiy ta’sir ko‘rsatganligini tasdiqladi. Tadqiqot davomida talabalarning astronomik bilimlari, raqamli texnologiyalardan foydalanish kompetensiyalari, mustaqil ta’lim faoliyati hamda reflektiv ko‘nikmalari kompleks baholandi. Summativ baholash natijalariga ko‘ra, tajriba guruhidagi talabalar barcha mezonlar bo‘yicha nazorat guruhiga nisbatan yuqori natijalarni qayd etdilar. Ayniqsa, interfaol va faol darajadagi talabalar ulushining ortishi, reaktiv va passiv darajadagi talabalar sonining esa sezilarli kamayishi ishlab chiqilgan metodikaning samaradorligini ko‘rsatdi. Birinchi turdagi, ya’ni astronomik bilimlarni aniqlashtirishga qaratilgan topshiriqlar bo‘yicha tajriba guruhi barcha baholash mezonlarida nazorat guruhiga nisbatan yuqori natijaga erishdi. Bu holat ishlab chiqilgan raqamli o‘quv materiallari, interaktiv modellar va astronomik vizualizatsiyalar nazariy bilimlarni o‘zlashtirish sifatini oshirganligini ko‘rsatadi. Ikkinchi turdagi topshiriqlarda, ya’ni raqamli texnologiyalarni qo‘llash va loyihalash kompetensiyalarini baholashda samaradorlik 15–16 % ni tashkil etdi. Ushbu natijalar AstroEdu platformasi, virtual laboratoriyalar, NASA, ESA Sky, Stellarium, Aladin Sky Atlas va boshqa raqamli astronomik resurslardan foydalanish talabalarning kasbiy-amaliy kompetensiyalarini rivojlantirishga sezilarli ta’sir ko‘rsatganligini tasdiqlaydi. Uchinchi turdagi integrativ kompetensiyalarni aniqlashga yo‘naltirilgan topshiriqlarda esa eng yuqori natijalar qayd etildi. Bilimga yo‘naltirilgan mezon bo‘yicha samaradorlik 18 %, amaliy faoliyat va ilmiy-tadqiqot kompetensiyalari bo‘yicha 16 %, mustaqil ta’lim faoliyati bo‘yicha 17 %, kuzatuv-reflektiv kompetensiyalar bo‘yicha esa 16 % ni tashkil etdi. Mazkur natijalar ishlab chiqilgan metodikaning faqat nazariy bilimlarni emas, balki talabalarning integrativ va kasbiy kompetensiyalarini ham rivojlantirish imkoniyatiga ega ekanligini ko‘rsatadi. Olingan natijalar Styudent t-kriteriyasi yordamida matematik-statistik tahlil qilindi. Barcha mezonlar va topshiriqlar bo‘yicha hisoblangan t qiymatlari kritik qiymatdan ($t>1,96$; $\alpha$=0,05) yuqori ekanligi aniqlandi. Shu bilan birga, tajriba va nazorat guruhlari o‘rtacha qiymatlarining 95 % ishonch

oraliqlari o‘zaro kesishmadi. Bu esa tajriba davomida kuzatilgan farqlarning tasodifiy emasligini hamda ishlab chiqilgan metodikaning statistik jihatdan ishonchli ekanligini tasdiqlaydi.

**Pedagogik tajriba-sinov natijalarining statistik tahlili.** Pedagogik tajriba-sinov ishlari natijalarini ilmiy asosda baholash maqsadida tajriba va nazorat guruhlarining summativ baholash natijalari matematik-statistik usullar yordamida tahlil qilindi. Statistik tahlilda guruhlar o‘rtacha qiymatlarini taqqoslash uchun Styudentning mustaqil tanlanmalar uchun t-kriteriyasidan foydalanildi. Hisoblashlarda statistik ahamiyatlilik darajasi $\alpha=0,05$ deb qabul qilindi, kritik qiymat esa $t=1,96$ etib belgilandi. Baholash jarayoni bilimga yo‘naltirilgan, amaliy faoliyat va ilmiy-tadqiqotga yo‘naltirilgan, mustaqil ishga yo‘naltirilgan hamda kuzatuv-reflektiv baholash mezonlari asosida amalga oshirildi. Har bir mezon bo‘yicha uch turdagi topshiriqlar: astronomik bilimlarni aniqlashtirish, raqamli texnologiyalardan foydalanish va ularni loyihalash hamda integrativ kompetensiyalarni aniqlashga qaratilgan topshiriqlar natijalari alohida tahlil qilindi. Tajriba-sinov natijalarining umumlashtirilgan ko‘rsatkichlari shuni ko‘rsatdiki, tajriba guruhidagi talabalarning barcha mezonlar bo‘yicha o‘rtacha o‘zlashtirish darajasi nazorat guruhiga nisbatan yuqori bo‘lgan. Xususan, 1-tur topshiriqlar bo‘yicha tajriba guruhi o‘rtacha 4,02–4,09 ballni, nazorat guruhi esa 3,45–3,50 ballni tashkil etdi. 2-tur topshiriqlarda tajriba guruhi 4,06–4,11 ball, nazorat guruhi 3,49–3,53 ball natija qayd etdi. Integrativ kompetensiyalarni baholovchi 3-tur topshiriqlarda esa tajriba guruhining o‘rtacha ko‘rsatkichlari 4,13–4,18 ballni, nazorat guruhida esa 3,54–3,57 ballni tashkil etdi. Styudent t-kriteriyasi bo‘yicha hisoblangan empirik qiymatlar barcha holatlarda kritik qiymatdan yuqori bo‘ldi. Jumladan, bilimga yo‘naltirilgan mezon bo‘yicha $t=6,38–6,87$, amaliy faoliyat va ilmiy-tadqiqotga yo‘naltirilgan mezon bo‘yicha $t=6,36–6,72$, mustaqil ishga yo‘naltirilgan mezon bo‘yicha $t=6,66–7,19$ hamda kuzatuv-reflektiv mezon bo‘yicha $t=6,43–6,83$ oralig‘ida qayd etildi. Barcha hisoblangan qiymatlar $t>1,96$ shartini qanoatlantirgani sababli nol gipoteza ($H_0$) rad etildi va muqobil gipoteza ($H_1$) qabul qilindi. Mazkur natijalar tajriba va nazorat guruhlari o‘rtasidagi farqlar statistik jihatdan ishonchli ekanligini ko‘rsatadi.

Hisoblangan 95 % ishonch oraliqlari ham tajriba va nazorat guruhlari natijalari o‘rtasida kesishuv mavjud emasligini ko‘rsatdi. Masalan, bilimga yo‘naltirilgan mezon bo‘yicha tajriba guruhining ishonch oralig‘i 3,92–4,12, nazorat guruhiniki esa 3,35–3,56 ni tashkil etdi. Xuddi shunday holat qolgan barcha mezonlarda ham kuzatildi. Bu esa ishlab chiqilgan metodika ta’sirida yuzaga kelgan o‘zgarishlarning tasodifiy emasligini va statistik jihatdan ahamiyatli ekanligini tasdiqlaydi.

Pedagogik tajriba-sinov natijalari samaradorlik ko‘rsatkichlari bo‘yicha ham tahlil qilindi (1-rasm). Tahlillar natijasida astronomik bilimlarni aniqlashtirishga qaratilgan topshiriqlarda samaradorlik barcha mezonlar bo‘yicha o‘rtacha 17 % ni tashkil etdi. Raqamli texnologiyalarni qo‘llash va loyihalashga oid topshiriqlarda ushbu ko‘rsatkich 15–16 %, integrativ kompetensiyalarni baholashga yo‘naltirilgan topshiriqlarda esa 16–18 % oralig‘ida qayd etildi. Ayniqsa, integrativ kompetensiyalarni rivojlantirishga qaratilgan topshiriqlarda bilimlarni amaliy vaziyatlarda qo‘llash, raqamli vositalardan mustaqil foydalanish, ilmiy kuzatuvlarni tashkil etish hamda reflektiv tahlil olib borish ko‘nikmalarining sezilarli rivojlanganligi kuzatildi. Bu holat ishlab chiqilgan dasturiy-metodik ta’minotning faqat nazariy bilimlarni emas, balki kasbiy kompetensiyalarni kompleks rivojlantirishga xizmat qilganligini ko‘rsatadi.

Shunday qilib, statistik tahlil natijalari tajriba guruhida qo‘llanilgan kompetensiyaviy yondashuvga asoslangan dasturiy-metodik ta’minot astronomiya fanini o‘qitish samaradorligini sezilarli darajada oshirganligini ilmiy jihatdan tasdiqladi. Olingan natijalar ishlab chiqilgan

metodikaning pedagogik samaradorligi va amaliy qo‘llash imkoniyatlarini ishonchli statistik dalillar bilan asoslab berdi.

**Xulosa.** Tajriba guruhida barcha mezonlar bo‘yicha 15–18 % samaradorlik o‘sishi kuzatildi. Tadqiqot natijalari pedagogika oliy ta’lim muassasalarida astronomiya fanini zamonaviy raqamli ta’lim muhitida o‘qitishning metodik asoslarini boyitadi. Ishlab chiqilgan dasturiy-metodik ta’minot ta’lim jarayoniga zamonaviy raqamli texnologiyalarni tizimli integratsiya qilish, talabalarning kasbiy kompetensiyalarini rivojlantirish hamda astronomiya ta’limining sifatini oshirish uchun samarali vosita sifatida tavsiya etiladi. Kelgusida ushbu metodikani sun’iy intellekt, adaptiv ta’lim tizimlari, virtual va kengaytirilgan reallik texnologiyalari bilan integratsiya qilish, shuningdek, astronomiya ta’limida xalqaro ochiq ilmiy ma’lumotlar bazalari va masofaviy observatoriyalardan foydalanish bo‘yicha ilmiy izlanishlarni davom ettirish maqsadga muvofiq hisoblanadi.

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# TA'LIM-TARBIYA SIFATI VA SAMARADORLIGINI JAMOATCHILIK NAZORATI BILAN BOG'LASH

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***Annotatsiya.*** *Maqolada umumiy o'rta ta'lim maktablarida ta'lim-tarbiya sifati va samaradorligini jamoatchilik nazorati bilan bog'lashning nazariy hamda tashkiliy asoslari yoritilgan. Ta'lim sifati jarayon, natija, muhit va manfaatdor tomonlar ehtiyojlarining uyg'unligi sifatida; samaradorlik esa erishilgan natijaning sarflangan resurs va boshqaruv harakatlariga nisbati sifatida talqin qilingan. Jamoatchilik nazoratining sifatga ta'siri ochiq axborot, dalillarni tekshirish, ishtirokli muhokama, asoslangan qaror, ijro monitoringi va qayta baholashdan iborat boshqaruv sikli orqali izohlangan. Ota-onalar, mahalla, maktab kengashi, nodavlat tashkilotlar hamda o'quvchilar vakillarining vakolatlari chegaralangan holda uyg'unlashtirilishi zarurligi asoslangan. Maqola nazariy-tahliliy xususiyatga ega bo'lib, unda taklif etilgan mexanizmning empirik samaradorligi da'vo qilinmaydi.*
***Kalit so'zlar:*** *ta'lim sifati, tarbiya samaradorligi, jamoatchilik nazorati, maktab boshqaruvi, ochiqlik, hisobdorlik, ishtirokchilik, qayta aloqa.*

***Abstract.*** *The article examines the theoretical and organizational foundations for linking the quality and effectiveness of teaching and upbringing with public oversight in general secondary schools. Education quality is interpreted as alignment among process, outcomes, the educational environment, and stakeholder needs, while effectiveness concerns the relationship between achieved outcomes, resources, and management actions. The influence of public oversight is explained through a management cycle comprising open information, evidence verification, participatory deliberation, a reasoned decision, implementation monitoring, and reassessment. The article substantiates the need to coordinate the delimited roles of parents, mahalla communities, school councils, non-governmental organizations, and student representatives. The study is theoretical and analytical; it does not claim that the proposed mechanism has already demonstrated empirical effectiveness.*
***Key words:*** *education quality, upbringing effectiveness, public oversight, school management, transparency, accountability, participation, feedback.*

***Аннотация.*** *В статье раскрыты теоретические и организационные основы взаимосвязи качества и эффективности учебно-воспитательного процесса с*

*общественным контролем в общеобразовательной школе. Качество образования рассматривается как согласованность процесса, результата, образовательной среды и потребностей заинтересованных сторон, а эффективность - как соотношение достигнутого результата с использованными ресурсами и управленческими действиями. Влияние общественного контроля объясняется посредством управленческого цикла, включающего открытую информацию, проверку доказательств, совместное обсуждение, обоснованное решение, мониторинг исполнения и повторную оценку. Обоснована необходимость согласования полномочий родителей, махалли, школьного совета, негосударственных организаций и представителей учащихся. Исследование имеет теоретико-аналитический характер; эмпирическая эффективность предложенного механизма не утверждается.*

***Ключевые слова:*** *качество образования, эффективность воспитания, общественный контроль, управление школой, открытость, подотчётность, участие, обратная связь.*

Umumiy o‘rta ta’lim maktabi faoliyati natijasi o‘quvchilarning bilim ko‘rsatkichlari bilangina belgilanmaydi. Ta’lim-tarbiya sifati o‘quvchining intellektual, axloqiy, ijtimoiy va jismoniy rivojlanishi, xavfsiz ta’lim muhiti, pedagogik munosabatlar, oila bilan hamkorlik hamda boshqaruv qarorlarining barqarorligini ham qamrab oladi. Shu bois sifatni boshqarish faqat ma’muriy tekshiruvlar tizimi sifatida emas, balki maktab faoliyatidan manfaatdor tomonlarning dalillarga asoslangan ishtirokini ta’minlaydigan uzluksiz jarayon sifatida qaralishi lozim.

O‘zbekiston Respublikasining Konstitutsiyasi fuqarolarning davlat va jamiyat ishlarini boshqarishdagi ishtiroki uchun umumiy huquqiy zamin yaratadi. “Ta’lim to‘g‘risida”gi Qonun ta’lim sohasidagi davlat siyosati, ta’lim oluvchilar huquqlari va ta’lim tashkilotlari faoliyatining asosiy qoidalarini belgilaydi. “Jamoatchilik nazorati to‘g‘risida”gi hamda davlat organlari faoliyatining ochiqligiga oid qonunlar esa axborot olish, jamoatchilik muhokamasi, monitoring va eshituv kabi shakllarning huquqiy asoslarini mustahkamlaydi [1–4].

Biroq jamoatchilik ishtirokining mavjudligi ta’lim sifatining avtomatik yaxshilanishini anglatmaydi. Ota-onalar yig‘ilishi, maktab rahbarining ochiq hisoboti yoki onlayn so‘rov faqat tashkiliy shakldir. Ularning boshqaruv qiymati aniqlangan muammo tekshirilgan dalilga, dalil muhokamaga, muhokama aniq qarorga, qaror esa kuzatiladigan natijaga aylangandagina yuzaga keladi. Maqolaning maqsadi ana shu bog‘lanishning nazariy mazmuni, funksional mexanizmi va amaliy shartlarini asoslashdan iborat.

Ta’lim sifati ko‘p o‘lchovli tushunchadir. Uning tarkibida kirish resurslari, pedagogik jarayon, o‘quvchi erishgan natija, maktab muhiti va natijaning barqarorligi mavjud. Sallis sifat menejmentini tashkilotning barcha bo‘g‘inlari ishtirok etadigan, foydalanuvchi ehtiyojlariga yo‘naltirilgan uzluksiz takomillashtirish jarayoni sifatida izohlaydi [8]. Mazkur yondashuv maktab faoliyatida bir martalik tekshiruvdan ko‘ra, muammoni aniqlash, sababni tahlil qilish, chora ko‘rish va natijani qayta baholash sikli muhimligini ko‘rsatadi.

Ta’lim-tarbiya samaradorligi sifat bilan aynan bir tushuncha emas. Sifat belgilangan maqsadlar, standartlar va o‘quvchi ehtiyojlariga muvofiqlikni ifodalasa, samaradorlik natijaning sarflangan vaqt, mablag‘, inson resurslari va boshqaruv harakatlariga nisbati bilan bog‘liq. Masalan, tadbirlar sonining ortishi tarbiyaviy samaradorlik oshganini bildirmaydi; o‘quvchi

xulqi, mas’uliyati, maktabga daxldorligi yoki xavfsiz muhitda kuzatilgan ijobiy o‘zgarish natija sifatida tekshirilishi kerak.

Shu nuqtayi nazardan jamoatchilik nazorati ikki savolni bir vaqtda qo‘yadi: maktab qanday natijaga erishdi va mazkur natijaga qanday boshqaruv vositalari orqali erishildi? Birinchi savol sifat darajasini, ikkinchisi esa samaradorlik va hisobdorlikni ochib beradi. Demak, jamoatchilik nazoratining predmeti pedagogning kundalik kasbiy faoliyatiga asossiz aralashish emas, balki maktabning ochiq majburiyatlari, qarorlari, resurslardan foydalanishi va umumlashtirilgan natijalari o‘rtasidagi muvofiqlikni baholashdir.

Jamoatchilik nazorati - fuqarolar va jamoat tuzilmalari tomonidan ijtimoiy ahamiyatga ega faoliyatning qonuniyligi, ochiqligi, natijadorligi va jamoat manfaatlariga muvofiqligini kuzatish, baholash hamda takliflar berish jarayonidir. Maktab sharoitida uning pedagogik mazmuni bola manfaatining ustuvorligi, ta’lim ishtirokchilari huquqlarining himoyasi va ta’lim-tarbiya natijalarini yaxshilashga yo‘naltirilganligi bilan belgilanadi.

Bovens hisobdorlikni tashkilot yoki mansabdor shaxsning o‘z xatti-harakatlari haqida ma’lumot berishi, savollarga javob qaytarishi va baholanishi mumkin bo‘lgan munosabat sifatida tavsiflaydi [6]. Ushbu talqin maktabda ochiq hisobotning faqat raqamlarni e’lon qilish bilan tugamasligini ko‘rsatadi. Hisobot tushunarli izoh, manfaatdor tomonlarning savol berish imkoniyati, qaror sabablarini asoslash va kelishilgan choralar ijrosini keyinchalik tekshirish bilan to‘ldirilishi kerak.

Jamoatchilik nazoratini davlat nazorati yoki ichki pedagogik nazorat bilan tenglashtirish ilmiy jihatdan to‘g‘ri emas. Davlat nazorati majburiy me’yorlarga rioya etilishini vakolatli organlar orqali tekshiradi; ichki nazorat maktab rahbariyati va pedagogik kengash tomonidan amalga oshiriladi; jamoatchilik nazorati esa manfaatdor tomonlarning ochiq axborot, muhokama, kuzatuv va taklif berish imkoniyatiga tayanadi. Mazkur uch yo‘nalishning vazifalari farqlangan bo‘lsa-da, ular o‘zaro axborot almashuvi va korreksion qarorlar orqali bir-birini to‘ldiradi.

Jamoatchilik nazoratining ta’lim-tarbiya sifatiga ta’siri bevosita emas. U, avvalo, maktab rahbariyati bilan manfaatdor tomonlar o‘rtasidagi axborot nomutanosibligini kamaytiradi. Keyin turli guruhlarning ehtiyoji va tajribasi muhokamaga kiritiladi, dalillar tekshiriladi, muammo bo‘yicha mas’ul va muddat belgilangan qaror qabul qilinadi. Ijro holati va natija qayta baholanganda nazorat boshqaruv siklining tarkibiy qismiga aylanadi. UNESCOning ta’limdagi hisobdorlik bo‘yicha tahlili ham mas’uliyatning aniqligi, ma’lumotning mavjudligi va javob berish qobiliyati o‘zaro bog‘lanishini ko‘rsatadi [5].

Maktabdagi jamoatchilik nazoratining asosiy subyektlariga ota-onalar, mahalla fuqarolar yig‘ini, maktab kengashi, nodavlat notijorat tashkilotlari, ommaviy axborot vositalari hamda yosh xususiyatiga mos ravishda o‘quvchilar vakillari kiradi. Ularning barchasi bir xil vakolatga ega emas. Ota-onalar bolaning ta’lim sharoiti va ehtiyojlari yuzasidan axborot beradi; mahalla ijtimoiy muhit va oilalar bilan aloqa imkoniyatlarini safarbar etadi; maktab kengashi takliflarni muhokama va qaror jarayoniga bog‘laydi; nodavlat tashkilotlar mustaqil ekspertiza yoki resurs bilan ko‘maklashishi mumkin.

O‘quvchi ovozini hisobga olish tarbiyaviy jarayonning demokratik va mas’uliyatli xususiyatini kuchaytiradi. Biroq o‘quvchi ishtiroki uning yoshi, xavfsizligi va shaxsiy ma’lumotlari himoyasiga mos shaklda tashkil etilishi kerak. Anonim so‘rov, sinf vakillari bilan moderatsiyalangan muloqot va o‘quvchilar kengashi orqali umumlashtirilgan takliflar berish

maqbul shakllardir. Individual o‘quvchi yoki pedagogga doir ma’lumotni ommaviy muhokamaga chiqarish jamoatchilik nazoratining maqsadiga zid.

**1-jadval**

**Jamoatchilik nazorati va ta’lim-tarbiya sifati o‘rtasidagi funksional bog‘lanish**[17]

| Nazorat elementi | Boshqaruvdagi vazifasi | Sifatga ta’sir kanali | Kutiladigan natija |
|---|---|---|---|
| Ochiq axborot | Holat va natijalarni tushunarli ko‘rsatish | Axborot nomutanosibligini kamaytirish | Muammoni o‘z vaqtida anglash |
| Jamoatchilik muhokamasi | Ehtiyoj va manfaatlarni aniqlash | Turli subyektlar fikrini qarorga kiritish | Qarorning ijtimoiy maqbulligi |
| Dalillar ekspertizasi | Fakt va subyektiv bahoni ajratish | Xato xulosalar xavfini kamaytirish | Asoslangan boshqaruv qarori |
| Hisobdorlik | Mas’ul, muddat va natijani belgilash | Javob berish majburiyatini kuchaytirish | Ijro intizomi va kuzatuvchanlik |
| Qayta aloqa | Qaror ta’sirini takroriy baholash | Kamchilikni korreksiya qilish | Barqaror sifat yaxshilanishi |

Epstein maktab, oila va jamoa sherikligini o‘quvchi rivojini qo‘llab-quvvatlaydigan o‘zaro mas’uliyat sohasi sifatida talqin qiladi [7]. Mazkur yondashuvdan kelib chiqib, subyektlar hamkorligi “hamma barcha ishga javobgar” degan mavhum qoida asosida emas, balki ma’lumot manbai, vakolat, qarorga ta’sir shakli va javobgarlik chegarasi bo‘yicha taqsimlanishi zarur. Vakolatlar aniqligi kasbiy pedagogik qarorlarni ommaviy bosimdan, jamoatchilik ishtirokini esa rasmiyatchilikdan himoya qiladi.

Birinchi bosqich - diagnostika. Maktab oldindan kelishilgan indikatorlar bo‘yicha ma’lumot to‘playdi: o‘quv natijalari dinamikasi, davomat, xavfsizlik, tarbiyaviy muhit, ota-onalar va o‘quvchilar fikri, murojaatlarni ko‘rib chiqish muddati hamda qabul qilingan qarorlar ijrosi. Har bir indikatorning ta’rifi, manbai, o‘lchash davriyligi va cheklovi ko‘rsatilmasa, raqamlar turlicha talqin qilinadi.

Ikkinchi bosqich - axborotni ochish va tushuntirish. Ochiqlik barcha ma’lumotni to‘liq e’lon qilish degani emas. Jamoatchilikka qaror qabul qilish uchun zarur, tekshirilgan va umumlashtirilgan axborot beriladi; o‘quvchi, pedagog yoki murojaatchining shaxsini aniqlash imkonini beradigan ma’lumotlar himoyalanadi. Axborot sodda tilda, ko‘rsatkichning boshlang‘ich qiymati va dinamikasi bilan birga taqdim etilishi lozim.

Uchinchi bosqich - dalillarni ekspertiza qilish va ishtirokli muhokama. Bitta shikoyat yoki bitta ko‘rsatkich yakuniy xulosa uchun yetarli emas. Muammo hujjat, kuzatuv, so‘rov, suhbat yoki boshqa mustaqil manba bilan tekshiriladi. Muhokamada muammo sababi, ta’sirlangan guruh, mavjud resurs, muqobil yechimlar va ehtimoliy xavflar ajratiladi. Shu tariqa hissiy munosabat dalillarga asoslangan taklifga aylantiriladi.

To‘rtinchi bosqich - qarorni rasmiylashtirish va ijroni monitoring qilish. Har bir qarorda vazifa, mas’ul shaxs yoki tuzilma, muddat, zarur resurs va natija indikatori ko‘rsatiladi. Jamoatchilik taklifi qabul qilinmasa, rad etish sababi ham qayd etilishi kerak. Bu talab boshqaruv

[17] *Muallif tomonidan nazariy manbalarni tizimlashtirish asosida ishlab chiqilgan.*

rahbariyatining javob berish majburiyatini kuchaytiradi, biroq jamoatchilik fikrini avtomatik ravishda majburiy qarorga aylantirmaydi.

Beshinchi bosqich - qayta baholash va korreksiya. Belgilangan muddatdan so‘ng natija boshlang‘ich holat bilan qiyoslanadi. Ijobiy o‘zgarish kuzatilmasa, muammo tashxisi, tanlangan chora yoki ijro sifati qayta ko‘rib chiqiladi. Mazkur yopiq sikl jamoatchilik nazoratini tadbirlar soni bilan emas, aniqlangan muammoning hal etilishi va sifat ko‘rsatkichlaridagi o‘zgarish bilan baholash imkonini beradi.

Jamoatchilik nazorati samaradorligini baholashda olti mezon yetakchi ahamiyatga ega: ochiqlik, ishtirokchilik, xolislik, hisobdorlik, qayta aloqaning tezkorligi va qarorga real ta’sir. Ochiqlik axborotning mavjudligi va tushunarliligini; ishtirokchilik turli guruhlar vakilligini; xolislik dalillarning bir necha manba bilan tekshirilishini; hisobdorlik mas’ul va muddatning aniqligini; qayta aloqa taklifga asoslangan javob berilishini; ta’sir esa qaror yoki amaliyotdagi kuzatiladigan o‘zgarishni bildiradi.

Jamoatchilik nazoratining noto‘g‘ri tashkil etilishi bir qator xavflarni yuzaga keltiradi. Faol ozchilik fikrining barcha ota-onalar pozitsiyasi sifatida talqin qilinishi vakillikni buzadi. Tekshirilmagan ma’lumotning ommalashtirilishi sha’n, qadr-qimmat va shaxsiy ma’lumotlar himoyasiga zarar yetkazadi. Tadbirlar sonini natija deb qabul qilish hisobotbozlikni kuchaytiradi. Ota-onalarning metodik yoki baholash masalalariga vakolatsiz aralashuvi pedagogik avtonomiyani cheklashi mumkin.

Ushbu xavflarni kamaytirish uchun jamoatchilik nazorati reglamenti, manfaatlar to‘qnashuvini oshkor qilish qoidasi, ma’lumotni tekshirish tartibi, maxfiylik talabi, murojaatga javob muddati va qaror ijrosini qayta ko‘rib chiqish sanasi oldindan belgilanishi lozim. Shuningdek, jamoatchilik vakillari uchun ta’lim sifati indikatorlarini talqin qilish, etik muloqot va bola huquqlariga oid qisqa o‘quv modullarini tashkil etish maqsadga muvofiq.

Ta’lim-tarbiya sifati jarayon, natija, muhit va manfaatdor tomonlar ehtiyojlarining uyg‘unligini, samaradorlik esa erishilgan natijaning sarflangan resurs va boshqaruv harakatlariga nisbatini ifodalaydi. Jamoatchilik nazorati maktab boshqaruvini almashtirmaydi; u ochiq axborotni tekshirilgan dalilga, dalilni ishtirokli muhokamaga, muhokamani mas’ul va muddati belgilangan qarorga, qarorni esa qayta baholanadigan natijaga aylantirish orqali boshqaruvning asoslanganligi va hisobdorligini kuchaytiradi. Ota-ona, mahalla, maktab kengashi, nodavlat tashkilotlar hamda o‘quvchilar vakillari ishtiroki ularning vakolat va javobgarlik chegarasi aniq belgilanganidagina natijador bo‘ladi. Nazorat tadbirlar soni bilan emas, murojaatga javob, qaror ijrosi, muammoning hal etilishi va sifat ko‘rsatkichlaridagi tekshiriladigan o‘zgarish bilan baholanishi kerak. Taklif etilgan mexanizm nazariy model bo‘lib, uning empirik samaradorligi turli hudud va maktablarda tajriba-sinov orqali tekshirilishi zarur.

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"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# JADID MA'RIFATPARVARLARI (M. BEHBUDIY, A. FITRAT, A. AVLONIY) MEROSIDA VATANPARVARLIK TARBIYASI: KONSEPTUAL MODELLAR VA ULARNING ZAMONAVIY TA'LIM SIYOSATIDAGI IFODASI

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***Annotatsiya.*** *Maqolada XX asr boshidagi Turkiston jadid ma'rifatparvarlari Mahmudxo'ja Behbudiy, Abdurauf Fitrat va Abdulla Avloniy merosida vatanparvarlik tarbiyasining pedagogik mazmuni tahlil qilinadi. Tarixiy-pedagogik germenevtika, sifat kontent-tahlili va me'yoriy hujjatlarni qiyoslash yordamida uch mutafakkir qarashlari o'zaro bog'liq, biroq farqli konseptual modellar sifatida qayta talqin etiladi. Behbudiy merosida maktab va jamoat institutlarini rivojlantirish, Fitratda bilim hamda tanqidiy tafakkur orqali ozod fikrlash, Avloniyda esa axloq, ma'rifat va shaxsiy mas'uliyat uyg'unligi markaziy o'rin egallaydi. Ushbu modellar 2018-2025-yillarda qabul qilingan oltita me'yoriy hujjat bilan solishtiriladi. Tahlilda jadidlarning institutsional va axloqiy g'oyalari zamonaviy ta'lim siyosatida nisbatan keng aks etishi, Fitratga xos munozara va mustaqil fikr metodlari esa sinfxona vositalarida yetarlicha ifodalanmasligi ta'kidlanadi. Qo'shimcha empirik kontekst sifatida muallif taqdim etgan 1192 o'quvchiga oid jamlangan tajriba-sinov natijalari tavsifiy ko'rib chiqilgan. Tajriba guruhida quyi kompetensiya ulushi 58,4 foizdan 23,9 foizga, nazorat guruhida 57,4 foizdan 57,7 foizga o'zgargan. Biroq bu taqsimotlar kompleks tarbiya modeliga tegishli bo'lib, jadid asarlarini o'qitishning alohida ta'sirini ko'rsatmaydi. Tadqiqot jadidlar merosidan tayyor shior sifatida emas, tarixiy kontekstda tanqidiy o'qiladigan pedagogik manba sifatida foydalanishni tavsiya qiladi. Shu asosda ongli fuqarolik va refleksiv vatanparvarlik tarbiyasini boyitish imkoniyatlari ochib beriladi.*

***Kalit so'zlar:*** *jadidchilik; vatanparvarlik tarbiyasi; fuqarolik ta'limi; Mahmudxo'ja Behbudiy; Abdurauf Fitrat; Abdulla Avloniy; milliy o'zlik; ta'lim siyosati; Yangi O'zbekiston.*

***Abstract.*** *The article examines conceptions of patriotic education in the intellectual legacy of three early twentieth-century Turkestan Jadid reformers: Mahmudkhoja Behbudi, Abdurauf Fitrat and Abdulla Avloni. Using historical-pedagogical hermeneutics, qualitative content analysis and comparison of policy documents, it reconstructs three complementary conceptual models. Behbudi emphasizes schools and public institutions; Fitrat emphasizes knowledge, emancipation and critical thought; and Avloni brings together morality, education*

*and personal responsibility. These models are compared with six regulatory documents adopted between 2018 and 2025. The analysis suggests that institutional and moral dimensions of Jadid thought are relatively visible in contemporary education policy, whereas Fitrat’s emphasis on debate and independent reasoning is less clearly translated into classroom practices. As supplementary empirical context, the paper descriptively reviews author-provided aggregated results for 1,192 pupils. The low competency category changed from 58.4% to 23.9% in the intervention group and from 57.4% to 57.7% in the comparison group. These figures refer to a broader educational model and do not identify the separate effect of studying Jadid texts. The article argues for treating Jadid heritage as historically situated material for critical study rather than a collection of ready-made slogans, thereby informing reflective patriotism and conscious citizenship.*

***Key words:*** *Jadidism; patriotic education; civic education; Mahmudkhoja Behbudi; Abdurauf Fitrat; Abdulla Avloni; national identity; education policy; New Uzbekistan.*

## 1. KIRISH

Postsovet davlatlarida vatanparvarlik tarbiyasi o‘ziga xos paradoks ichida qolmoqda: u ta’lim siyosatining ustuvor yo‘nalishi sifatida me’yoriy hujjatlarda mustahkam o‘rin egallagani holda, sinfxona amaliyotida ko‘pincha tadbir, shior va marosim bilan cheklanib qoladi. Raqamli platformalarda ulg‘ayayotgan avlod uchun milliy o‘zlik endi faqat oila, mahalla va maktab orqali emas, transmilliy axborot oqimlari orqali ham quriladi. Shunday sharoitda pedagogika oldidagi savol o‘zgaradi. Endi «yoshlarga Vatanni sevishni o‘rgatish kerakmi?» degan savol emas, «bu muhabbat qanday mazmun bilan to‘ldiriladi va qaysi mexanizmlar orqali ongli fuqarolik pozitsiyasiga aylanadi?» degan savol ustuvorlik kasb etadi. Davlat siyosati darajasida ham masala shu tarzda qo‘yilgan: Prezident Sh. Mirziyoyev yoshlarning intellektual salohiyati va dunyoqarashini yuksaltirish, vatanparvarlik va xalqqa sadoqat tuyg‘usi bilan yashaydigan barkamol avlodni tarbiyalashni davr talabi deb ataydi (Mirziyoyev, 2021).

O‘zbek pedagogik tafakkurida bu savolga bundan bir asr avval, mustamlaka boshqaruvi sharoitida jiddiy javob izlangan edi.

XX asr boshidagi Turkiston jadidchiligi usuli jadid maktablaridan boshlangan madaniy islohot harakati bo‘lib, qisqa vaqt ichida matbuot, teatr, darslik yaratish va ijtimoiy-siyosiy faollikni qamrab olgan keng loyihaga aylandi (Khalid, 1998). Jadidlar uchun maktab diniy savodxonlik maskani emas, millatning tarixiy omon qolish vositasi edi. Shu bois ularning vatanparvarlik haqidagi qarashlari hissiy deklaratsiya ko‘rinishida emas, pedagogik dastur shaklida bayon etilgan: Vatanga muhabbat bilim, ma’rifat va milliy birlik orqali mustahkamlanadigan, ya’ni o‘rgatiladigan va tarbiyalanadigan sifat sifatida talqin qilingan.

Mustaqillik yillarida jadidlar merosi qayta tiklanib, ilmiy va ta’limiy muomalaga keng kiritildi. Biroq mavjud tadqiqotlarning aksariyati ikki qutbdan birida qolmoqda. Bir tomonda mutafakkirlar fikrlarini iqtibos va aforizmlar to‘plami sifatida taqdim etuvchi tavsifiy-ma’rifiy yondashuv turadi; ikkinchi tomonda jadidchilikni asosan siyosiy va madaniy tarix hodisasi sifatida o‘rganuvchi xorijiy tarixshunoslik (Khalid, 1998, 2015). Behbudiy, Fitrat va Avloniyning vatanparvarlik tarbiyasiga oid qarashlarini alohida pedagogik konstruksiyalar sifatida qiyoslash, ularni bugungi ta’lim siyosati instrumentlari bilan tizimli solishtirish esa deyarli uchramaydi.

Maqolaning maqsadi - uch mutafakkir merosidagi vatanparvarlik tarbiyasi g‘oyalarini konseptual modellar darajasida qayta qurish va ularning zamonaviy O‘zbekiston ta’lim tizimidagi ifodasini baholash. Tadqiqot uchta savolga javob izlaydi: (1) Behbudiy, Fitrat va Avloniy vatanparvarlikni qanday pedagogik kategoriya sifatida talqin etgan va ularning yondashuvlari nimasi bilan farqlanadi? (2) Bu g‘oyalar 2018-2025-yillardagi me’yoriy hujjatlar va ta’lim instrumentlarida qay darajada aks etgan? (3) Jadid g‘oyalariga tayangan interaktiv usullar samaradorligi haqida qanday empirik dalillar mavjud va ular qanday cheklovlar bilan talqin etilishi lozim?

## 2. ADABIYOTLAR TAHLILI VA NAZARIY ASOS

### *2.1. Vatanparvarlik tarbiyasining xalqaro nazariy koordinatalari*

Millatchilik nazariyalari maktabni milliy o‘zlikni ishlab chiqaruvchi asosiy institut sifatida ko‘radi. E. Gellner (1983) zamonaviy millatni yagona ta’lim tizimi orqali takror yaratiladigan madaniy hamjamiyat deb ta’riflagan bo‘lsa, B. Anderson (2006) «tasavvurdagi hamjamiyat»ning tug‘ilishida bosma matbuot va ona tilidagi mutolaa madaniyatining hal qiluvchi rolini ko‘rsatgan. Ikkala nazariya ham jadidlar faoliyatini tushunish uchun samarali kalit beradi. Jadidlar bir vaqtning o‘zida yangi usuldagi maktablar ochgan, darsliklar yozgan va milliy matbuot yaratgan - ya’ni Gellner va Anderson tasvirlagan mexanizmlarni amalda, davlat ko‘magisiz va mustamlaka sharoitida ishga tushirganlar.

Fuqarolik ta’limi nazariyasida J. Westheimer va J. Kahne (2004) taklif etgan tipologiya alohida ahamiyatga ega. Mualliflar «shaxsan mas’uliyatli», «ishtirokchi» va «adolatga yo‘naltirilgan» fuqaro modellarini ajratib, maktab dasturlari ko‘pincha birinchi model bilan cheklanishini, ijtimoiy muammolarning ildizini tahlil qilish ko‘nikmasi esa chetda qolishini ko‘rsatgan. J. Banks (2008) globallashuv davrida madaniy, milliy va global identifikatsiyalar muvozanatda shakllanishi kerakligini, milliy identifikatsiyani boshqa sadoqatlarga qarama-qarshi qo‘yish fuqarolik ta’limini zaiflashtirishini asoslaydi. T. Lickona (1991) xarakter tarbiyasi konsepsiyasida fuqarolik burchi va milliy g‘urur demokratik jamiyat barqarorligining sharti ekanini qayd etsa, P. Freire (2000) ta’limni mazlum guruhlar tanqidiy ongini uyg‘otuvchi, ozodlikka olib boruvchi amaliyot sifatida talqin qiladi.

Rus pedagogikasida K. D. Ushinskiy xalqchillik tamoyilini ilgari surib, tarbiya Vatanga, oilaga va xalq an’analariga muhabbatga tayanishi zarurligini ta’kidlagan; uning fikricha, Vatanga muhabbat inson qalbiga tarbiya orqali yo‘l topishning eng ishonchli kalitidir (Ushinskiy, 1948). Turkiston jadidlari rus va tatar pedagogik an’analaridan, shuningdek, Usmonli va Misr islohotchiligi tajribasidan xabardor bo‘lgan, biroq bu g‘oyalarni mahalliy mustamlaka kontekstiga moslashtirgan (Khalid, 1998).

### *2.2. O‘zbek pedagogikasida vatanparvarlik muammosi*

Mustaqillik davrida vatanparvarlik masalasi ma’naviy tarbiya va fuqarolik mas’uliyati bilan bog‘liq holda ko‘rib chiqildi (Karimov, 2008). Mazkur maqolada foydalanilgan agregat tajriba-sinov chastotalari umumiy tarbiya amaliyotining qo‘shimcha kontekstidir; ular jadid matnlarining mustaqil ta’sirini o‘lchamaydi.

Adabiyotlar tahlili ikki bo‘shliqni ko‘rsatadi. Jadidlarning pedagogik g‘oyalari xalqaro fuqarolik ta’limi nazariyalari bilan kamdan-kam muloqotga kiritiladi. Merosning qaysi qatlamlari zamonaviy siyosatga ko‘chgani, qaysilari esa chetda qolgani hali baholanmagan.

## 3. METODOLOGIYA

Tadqiqot sifat yondashuviga asoslangan tarixiy-pedagogik dizaynga ega bo‘lib, jamlangan miqdoriy kontekst bilan to‘ldirilgan. Aralash dizayn tanlovi tadqiqot savollarining

tabiatidan kelib chiqadi: birinchi ikki savol matnlarni talqin qilishni, uchinchisi esa mavjud agregat ko‘rsatkichlarning talqin chegaralarini aniqlashni talab etadi.

Tahlil korpusi uch qatlamdan iborat (1-jadval). Birlamchi matnlar qatlamini Behbudiy, Fitrat va Avloniyning vatanparvarlik va tarbiya masalalariga oid asarlari tashkil etadi; ular zamonaviy nashrlar bo‘yicha o‘rganildi. Me’yoriy qatlam 2018-2025-yillarda qabul qilingan oltita hujjatni qamrab oladi. Empirik qatlam muallif tomonidan taqdim etilgan 2022-2025-yillardagi tajriba-sinovning jamlangan chastotalaridan iborat.

**1-jadval**

*Tadqiqot korpusining tarkibi*

| Qatlam | Manba | Yil | Tahlildagi vazifasi |
|---|---|---|---|
| Birlamchi matn | M. Behbudiy: Tanlangan asarlardagi ma’rifiy maqolalar | XX asr boshi / 1999 | Institutsional model |
| Birlamchi matn | A. Fitrat: «Munozara», «Rahbari najot», «O‘zbek yoshlariga» | XX asr boshi / 2000-2010 | Epistemik-emansipativ model |
| Birlamchi matn | A. Avloniy: Turkiy guliston yoxud axloq | 1913 / 1992 | Axloqiy-rivojlantiruvchi model |
| Me’yoriy | VM qarori № 140 - harbiy-vatanparvarlik konsepsiyasi | 2018 | Fidoyilik tamoyili ifodasi |
| Me’yoriy | VM qarori № 1059 - uzluksiz ma’naviy tarbiya konsepsiyasi | 2019 | Tarbiya konsepsiyasi ifodasi |
| Me’yoriy | «Ta’lim to‘g‘risida»gi Qonun (O‘RQ-637) | 2020 | Huquqiy asos |
| Me’yoriy | PF-60 - Yangi O‘zbekiston taraqqiyot strategiyasi | 2022 | Strategik maqsadlar |
| Me’yoriy | PF-158 - «O‘zbekiston - 2030» strategiyasi | 2023 | Strategik maqsadlar |
| Me’yoriy | Vazir buyrug‘i № 308 - «Kelajak soati» | 2025 | Sinfxona instrumenti |
| Empirik | Muallif taqdim etgan agregat qaydlar (2022-2025) | 2022-2025 | Samaradorlik dalili |

*Izoh.* Birlamchi matnlar uchun birinchi yil asl nashrni, ikkinchisi tahlilda foydalanilgan nashrni bildiradi. VM - O‘zbekiston Respublikasi Vazirlar Mahkamasi; PF - Prezident Farmoni.

Matnlar uch bosqichli kodlash orqali tahlil qilindi. Ochiq kodlash bosqichida *vatan, millat, ilm, maktab, tarbiya* va *axloq* tushunchalari qo‘llangan barcha fikrlar ajratib olindi. O‘qli kodlash bosqichida ular beshta tahliliy o‘lchovga guruhlandi: institutsional (ta’lim muassasasining roli), epistemik (bilimning o‘rni), emansipativ (mustamlaka qaramligidan xalos bo‘lish), axloqiy (shaxsiy fazilatlar) va identitar (til, tarix va madaniyat orqali o‘zlikni anglash). Selektiv kodlash bosqichida har bir mutafakkir uchun yetakchi o‘lchov aniqlanib, uning konseptual modeli qayta qurildi. Shundan so‘ng modellar me’yoriy hujjatlardagi maqsad va vazifalar bilan qiyoslandi; bu bosqichda qiyosiy-taqqoslash va konseptual modellashtirish usullari qo‘llanildi.

Ikki metodologik cheklov oldindan qayd etiladi. Birlamchi matnlar arab yozuvidagi asl nusxalardan emas, keyingi davr kirill va lotin yozuvidagi nashrlaridan o‘rganildi; tabdil jarayonida ayrim atamalarning ma’no qirralari o‘zgargan bo‘lishi mumkin. Empirik qo‘shimcha faqat guruhlar bo‘yicha jamlangan chastotalarni qamrab oladi: individual oldingi-keyingi ballar

va klaster darajasidagi qaydlar tekshirilmagani sababli juft o‘lchovlar hamda klasterga mos sababiy samara baholanmadi.

## 4. NATIJALAR

### *4.1. Behbudiy: maktab - milliy barqarorlik infratuzilmasi*

Mahmudxo‘ja Behbudiy (1875-1919) jurnalist, noshir, dramaturg va pedagog sifatida faoliyat yuritgan bo‘lsa-da, uning barcha faoliyat yo‘nalishlarini birlashtiruvchi markaz maktab edi. Uning fikricha, ilm va ma’rifatdan mahrum millat kelajakdan ham mahrumdir (Behbudiy, 1999). Behbudiy Vatanni millatning joni deb ataydi va mantiqiy zanjirni oxirigacha davom ettiradi: Vatanni sevish millatni sevish demakdir, yoshlar qalbida bu tuyg‘u bo‘lmasa, millatning kelajagi ham bo‘lmaydi. Bu yerda vatanparvarlik shaxsiy kechinma emas, avlodlar o‘rtasida uzatiladigan, shu sababli maxsus institut talab qiladigan jamoaviy resurs sifatida namoyon bo‘ladi.

Behbudiy pedagogikasining yadrosi uchta formulada mujassam. «Maktab - millatning qal’asi» formulasi ta’lim muassasasini milliy xavfsizlikning tayanchi sifatida belgilaydi. «Ilm - vatan uchun xizmat vositasi» formulasi bilim olishni shaxsiy manfaatdan Vatan ravnaqiga yo‘naltirilgan faoliyatga aylantiradi. «Ma’rifat - millatni ozod qiladigan kuch» formulasi esa ta’limni mustamlaka asoratidan xalos bo‘lish yo‘li sifatida ko‘rsatadi (Behbudiy, 1999). Uchala formulada ham sub’ekt alohida shaxs emas, institutdir.

Behbudiy qarashlarida tarixiy xotira va dunyoviy bilim milliy o‘zlikni anglash bilan bog‘lanadi (Behbudiy, 1999). Uning ma’rifatchilik faoliyatini uch yo‘nalishda umumlashtirish mumkin: o‘z tili va tarixini bilish; jaholat hamda qaramlikni yengishga intilish; bilimni xalq manfaatiga xizmat qildirish. Bu muallifning pedagogik talqini bo‘lib, alohida asardan so‘zma-so‘z olingan tasnif emas. Tarix, geografiya va tabiiy fanlarga qiziqish milliy taraqqiyotning ta’limiy sharti sifatida ko‘rib chiqiladi.

Behbudiyda vatanparvarlik his-tuyg‘u emas, infratuzilma masalasidir. Uning yondashuvini institutsional model deb atash mumkin: Gellner (1983) tilida aytganda, millat maktab orqali takror ishlab chiqariladi, maktabsiz esa tarqoqlikka yuz tutadi. Behbudiy nashr ettirgan «Oyina» jurnali (1913-1915) shu modelning ikkinchi qanoti - Anderson (2006) ta’riflagan bosma hamjamiyatni shakllantirish vositasi edi.

### *4.2. Fitrat: bilim, faollik va ozodlik*

Abdurauf Fitrat (1886-1938) merosida ma’rifat va jamiyatni yangilash masalalari o‘zaro tutashadi (Fitrat, 2000-2010). “Rahbari najot”ni pedagogik nuqtai nazardan o‘qiganda bilim va faoliyat birligi muhim yo‘nalish sifatida ajraladi. Ushbu maqolada bu yo‘nalish ilmni yoshlarning Vatan manfaatidagi faoliyati bilan bog‘lash tarzida umumlashtiriladi. Bu analitik formula muallifning konseptual talqini bo‘lib, Fitratdan olingan so‘zma-so‘z iqtibos emas.

Yoshlarga qaratilgan murojaatlarida Fitrat vatanparvarlikni o‘zlik bilan tenglashtiradi: «Vatansiz, millatsiz xalq yo‘qdir. Agar sen o‘z vataningni sevmasang, sen ham o‘zligingni yo‘qotasan» (Fitrat, 2000-2010). Vatan bu yerda tashqi obyekt emas, shaxs identifikatsiyasining ichki sharti sifatida talqin etiladi.

Fitrat metodining eng o‘ziga xos jihati - tashqi nigoh orqali o‘z jamiyatini tanqidiy baholash. «Munozara» (1909) asarida Hindistonda uchrashgan yevropalik sayyoh bilan buxorolik mudarris o‘rtasidagi bahs orqali muallif yangi usul maktabiga qarshi dalillarni birma-bir rad etadi va jaholat mustamlaka zulmi uchun qulay zamin yaratishini ko‘rsatadi. Bundan kelib chiqadigan xulosa aniq: haqiqiy vatanparvar o‘z xalqining kamchiliklarini ko‘ra oladigan va uni taraqqiyot sari boshlay oladigan bilimli shaxsdir. Fitrat yoshlarni maktab va madrasalarda

zamonaviy ilmlarni egallashga, dunyo xalqlari tajribasini o‘rganishga va bu bilimni milliy taraqqiyotga sarflashga undaydi.

Shu bilan birga Fitrat bilimni axloqdan ajratmaydi. Uning nazdida axloqsiz ilm ham, ma’rifatsiz g‘urur ham haqiqiy vatanparvarlikni shakllantira olmaydi; halollik, sabr-toqat va fidoyilik millat qadriyatlarini asrashning sharti hisoblanadi (Fitrat, 2000-2010).

Fitrat yondashuvini epistemik-emansipativ model sifatida ta’riflash mumkin. U Freire (2000) konsepsiyasidan yarim asr avval ta’limni ozodlik amaliyoti sifatida talqin etgan; Westheimer va Kahne (2004) tipologiyasida esa «adolatga yo‘naltirilgan fuqaro» modeliga eng yaqin turadi. Vatanparvarlik bu yerda mavjud tartibga so‘zsiz sadoqat emas, uni yaxshilash uchun o‘zgartirishga tayyorlik demakdir.

***4.3. Avloniy: tarbiya - millat taqdiri***

Abdulla Avloniy (1878-1934) jadid pedagoglari orasida tarbiyaning tizimli nazariyasini yaratishga eng yaqin kelgan mutafakkirdir. «Turkiy guliston yoxud axloq» (1913) va «Maktab gulistoni» (1917) asarlari bugungi kungacha o‘zbek pedagogik tafakkurining tayanch matnlari sifatida o‘qiladi (Avloniy, 1992). Uning eng mashhur xulosasi tarbiyani millat uchun ikki qutbli tanlov sifatida qo‘yadi: «Al-hosil tarbiya bizlar uchun yo hayot - yo mamot, yo najot - yo halokat, yo saodat - yo falokat masalasidir» (Avloniy, 1992).

Aforizmning ta’sir kuchi uning mantiqiy qat’iyligida: tarbiya ixtiyoriy ma’naviy bezak emas, millat mustaqilligi va farovonligining zaruriy shartidir. Avloniy bu fikrni xavfsizlik tiliga ham ko‘chiradi - jaholatda qolgan millat hech qachon o‘z Vatanini himoya qila olmaydi. «Turkiy guliston yoxud axloq»da ilm insonni g‘aflatdan uyg‘otuvchi, jaholat zanjiridan qutqaruvchi va saodatga yetaklovchi kuch sifatida ta’riflanadi (Avloniy, 1992). Demak, Avloniyda ham vatanparvarlikning poydevori bilim va ma’rifatdir, biroq bu poydevor axloqiy tarbiya orqali quriladi.

Avloniy yondashuvining o‘ziga xos qirrasi - rivojlanish nuqtai nazari. Uning fikricha, Vatanga muhabbat bola qalbida ilk yoshdan, ona allasi va oilaviy tarbiya orqali shakllanadi. Shu bilan mutafakkir qadriyatlarni shaxs kamolotining bosqichlariga mos ravishda singdirish g‘oyasini ilgari suradi; bu g‘oya hozirgi kompetensiyaviy yondashuvdagi yoshga mos tarbiya tamoyiliga bevosita mos keladi.

Avloniyning Vatan ta’rifi tahliliy jihatdan ayniqsa muhim. U Vatanni insonning tug‘ilib o‘sgan shahri va mamlakati deb belgilaydi va har kim o‘z yurtini jonidan ortiq sevishini ta’kidlaydi; shu o‘rinda turkistonliklarning o‘z yurtiga, arablarning qumli issiq cho‘llariga, eskimoslarning esa qor va muzli shimol yerlariga bo‘lgan muhabbatini yonma-yon qo‘yadi (Avloniy, 1992). Qiyos chuqur ma’noga ega: Vatanga muhabbat bir xalqning boshqalardan ustunligi sifatida emas, barcha xalqlarga xos umuminsoniy fazilat sifatida taqdim etiladi. Bunday inklyuziv, raqobatsiz vatanparvarlik Banks (2008) asoslagan madaniy, milliy va global identifikatsiyalar muvozanatini bir asr oldin oldindan ko‘ra bilgandek tuyuladi. Avloniy yondashuvini axloqiy-rivojlantiruvchi model deb atash maqsadga muvofiq.

***4.4. Uch modelning sintezi: «ma’rifatli vatanparvarlik»***

Uch mutafakkirning yondashuvlari bir-birini takrorlamaydi, balki to‘ldiradi (2-jadval). Behbudiy vatanparvarlikni institut darajasida, Fitrat bilim va ijtimoiy faollik darajasida, Avloniy esa shaxs va uning axloqiy kamoloti darajasida ko‘radi. Farq tahlil birligida: biri «qal’a»ni, ikkinchisi «kurash»ni, uchinchisi «tarbiya»ni markazga qo‘yadi.

**2-jadval**

*Behbudiy, Fitrat va Avloniy vatanparvarlik tarbiyasi konsepsiyalarining qiyosiy tavsifi*

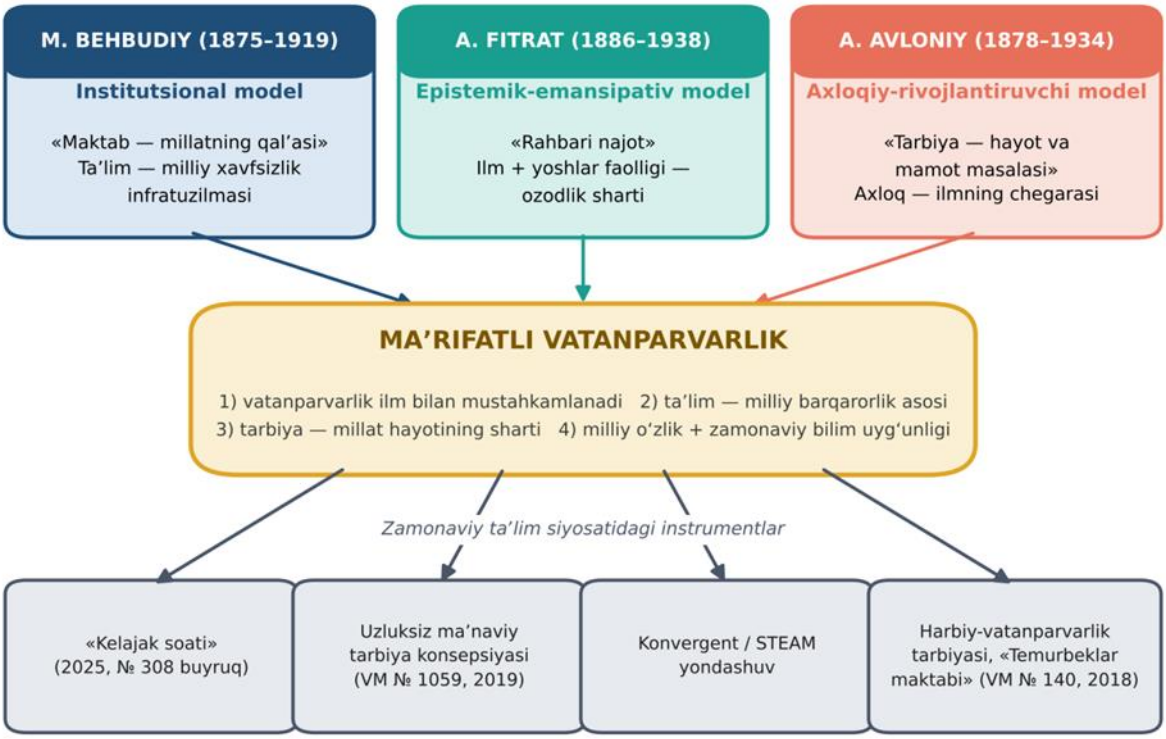
| O‘lchov | M. Behbudiy | A. Fitrat | A. Avloniy |
|---|---|---|---|
| **Hayot yillari** | 1875-1919 | 1886-1938 | 1878-1934 |
| **Yadro formulasi** | «Maktab - millatning qal’asi» | «Rahbari najot - ilm va yoshlarning Vatan uchun kurashi» | «Tarbiya - hayot va mamot masalasi» |
| **Tahlil birligi** | Institut (maktab, matbuot) | Bilimli va faol yosh avlod | Shaxs va uning axloqiy kamoloti |
| **Bilimning roli** | Vatanga xizmat vositasi | Ozodlik va tanqidiy anglash sharti | G‘aflatdan uyg‘otuvchi, axloq bilan cheklangan kuch |
| **Yetakchi mexanizm** | Tarixiy xotira, dunyoviy fanlar | Munozara, tashqi nigoh, o‘zini tanqid | Ilk yoshdan tarbiya, oila, ona allasi |
| **Vatan talqini** | Millatning «joni» | Shaxs o‘zligining sharti | Inklyuziv: har bir xalqqa xos muhabbat |
| **Xalqaro parallel** | Gellner (1983); Anderson (2006) | Freire (2000); Westheimer va Kahne (2004) | Banks (2008); Lickona (1991) |
| **Model turi** | Institutsional | Epistemik-emansipativ | Axloqiy-rivojlantiruvchi |

*Izoh.* Muallif ishlanmasi; birlamchi matnlarning kontent-tahlili asosida.

Farqlarga qaramay, uch modelda to‘rtta umumiy tamoyil kesishadi (1-rasm). Vatanparvarlik ilm bilan mustahkamlanishi shart - uch mutafakkir ham uni hissiy tuyg‘u sifatida emas, bilim bilan boyitilgan ongli pozitsiya sifatida ko‘rgan. Ta’lim milliy barqarorlikning asosi hisoblanadi. Tarbiya millat hayotining sharti sifatida qaraladi. Nihoyat, milliy o‘zlikni saqlagan holda zamonaviy bilimlarni egallash talab etiladi. Ushbu tamoyillar majmuini *ma’rifatli vatanparvarlik* deb nomlash taklif etiladi.

**1-rasm**

*Jadid ma’rifatparvarlari merosidagi vatanparvarlik tarbiyasining konseptual modeli va uning zamonaviy ta’lim instrumentlari bilan aloqasi*



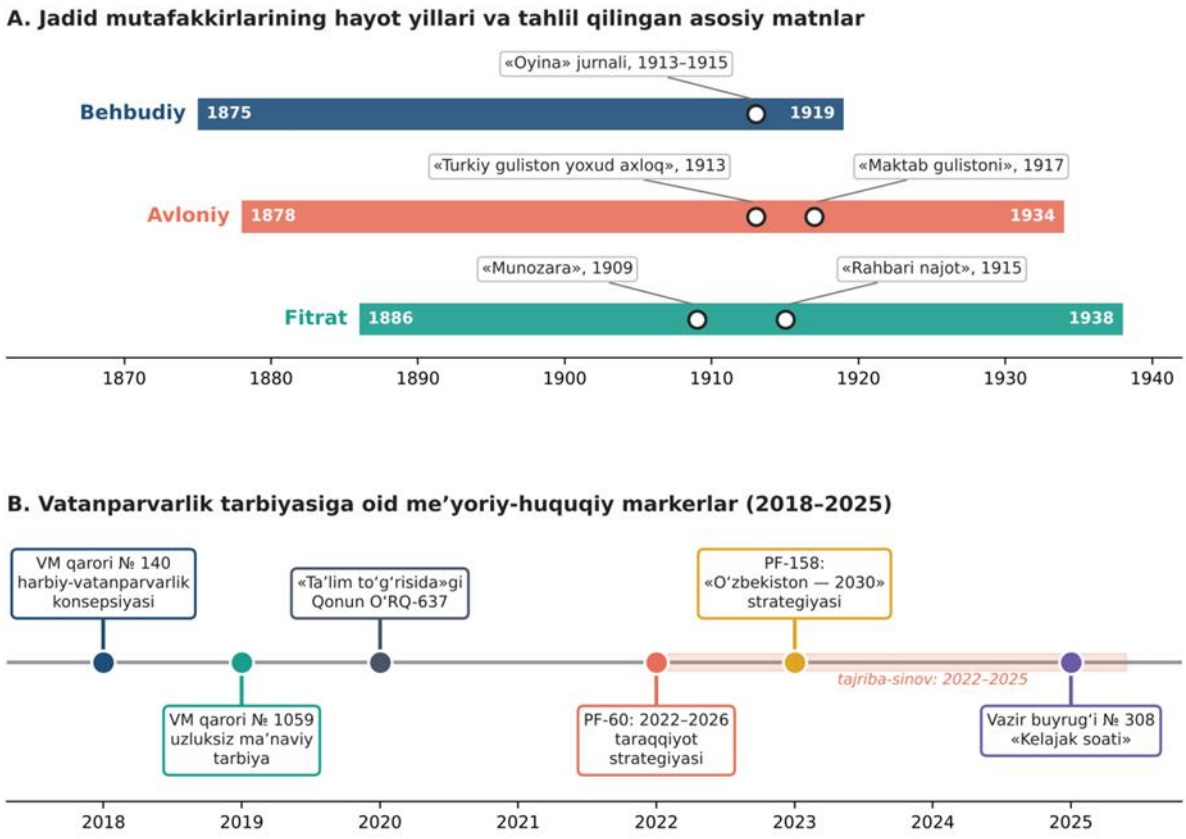

*Izoh.* Yuqori qator uch mutafakkirning yetakchi modellarini, markaziy blok ularning umumiy tamoyillarini, pastki qator esa 2018-2025-yillardagi siyosat instrumentlarini ko‘rsatadi. Muallif ishlanmasi.

### *4.5. Meros va zamonaviy ta’lim siyosati*

So‘nggi yetti yilda vatanparvarlik tarbiyasining me’yoriy asosi sezilarli darajada zichlashdi (2-rasm). 2018-yilda yoshlarni harbiy-vatanparvarlik ruhida tarbiyalash konsepsiyasi tasdiqlandi (Vazirlar Mahkamasi, 2018). 2019-yil oxirida qabul qilingan uzluksiz ma’naviy tarbiya konsepsiyasida o‘quvchilarni ona Vatanga muhabbat va sadoqat, davlat ramzlariga hurmat ruhida tarbiyalash chora-tadbirlari belgilandi (Vazirlar Mahkamasi, 2019). Keyingi yillarda bu yo‘nalish «Ta’lim to‘g‘risida»gi Qonun, 2022-2026-yillarga mo‘ljallangan taraqqiyot strategiyasi va «O‘zbekiston - 2030» strategiyasida huquqiy-strategik maqomga ega bo‘ldi (O‘zbekiston Respublikasi, 2020; O‘zbekiston Respublikasi Prezidenti, 2022, 2023).

**2-rasm**

*Jadid matnlari (A) va vatanparvarlik tarbiyasiga oid me’yoriy-huquqiy markerlar (B) xronologiyasi*




*Izoh. B panelidagi soyali oraliq tahlilga kiritilgan tajriba-sinov davrini bildiradi. VM - Vazirlar Mahkamasi; PF - Prezident Farmoni.*

Amaliy darajada jadid g‘oyalari bir nechta instrumentlar orqali davom etmoqda (3-jadval). Maktabgacha va maktab ta’limi vazirining 2025-yil 25-avgustdagi 308-son buyrug‘iga muvofiq, umumta’lim maktablarida har dushanba birinchi soatda «Kelajak soati» mashg‘ulotlari o‘tkazilmoqda; ular yoshlarni kelajakka tayyorlash, vatanparvarlik va fuqarolik tuyg‘ularini shakllantirish, milliy g‘oya va qadriyatlarni singdirishga qaratilgan (Maktabgacha va maktab ta’limi vazirligi, 2025). Prezident tashabbusi bilan tashkil etilgan «Temurbeklar maktabi» harbiy-akademik litseylari Behbudiy ilgari surgan fidoyilik tamoyilini harbiy-vatanparvarlik ta’limi shaklida amalga oshirmoqda. Milliy qadriyatlarni STEAM ta’limi bilan uyg‘unlashtiruvchi konvergent yondashuv esa «Ilm - vatan uchun xizmat vositasi» g‘oyasining zamonaviy talqini sifatida qaralishi mumkin.

Siyosiy diskursda ham jadid mantiqi yaqqol ko‘rinadi. Mirziyoyev (2021) vatanparvarlikni har bir davlat hayotining ma’naviy asosi va jamiyat taraqqiyotining eng muhim safarbar etuvchi kuchi deb ta’riflaydi, ta’lim tizimini esa Uchinchi Renessansning to‘rt tayanch ustunidan biri sifatida belgilaydi. Yaponiya tajribasidan olingan «Yapon ma’naviyati + G‘arb bilimi = Yapon mo‘jizasi» formulasining o‘zbekcha talqini - «O‘zbek ma’naviyati + G‘arb bilimi = O‘zbek mo‘jizasi» - jadidlarning milliy o‘zlikni saqlagan holda zamonaviy bilimlarni egallash g‘oyasining bevosita davomi hisoblanadi (Boqiev, 2025).

**3-jadval**

*Jadid g‘oyalarining zamonaviy ta’lim instrumentlaridagi ifodasi*

| Jadid g‘oyasi | Zamonaviy ta’limdagi ifodasi | Me’yoriy asos | Ifoda darajasi |
|---|---|---|---|

| Jadid g‘oyasi | Zamonaviy ta’limdagi ifodasi | Me’yoriy asos | Ifoda darajasi |
|---|---|---|---|
| «Maktab - millatning qal’asi» (Behbudiy) | «Kelajak soati», «Tarbiya» fani | Buyruq № 308 (2025); O‘RQ-637 (2020) | Yuqori |
| «Ilm - vatan uchun xizmat vositasi» (Behbudiy) | STEAM ta’limi, kompetensiyaviy yondashuv | PF-60 (2022); PF-158 (2023) | O‘rta |
| «Rahbari najot - ilm va yoshlar kurashi» (Fitrat) | «Yangi O‘zbekiston» strategiyasi, Uchinchi Renessans g‘oyasi | PF-60 (2022) | O‘rta (asosan deklarativ) |
| «Tarbiya - hayot va mamot masalasi» (Avloniy) | Uzluksiz ma’naviy tarbiya konsepsiyasi | VM № 1059 (2019) | Yuqori |
| Milliy o‘zlikni anglash | Milliy tarbiya dasturlari, tarixiy xotira | VM № 1059 (2019) | Yuqori |
| Vatan uchun fidoyilik | Harbiy-vatanparvarlik sinflari, «Temurbeklar maktabi» | VM № 140 (2018) | Yuqori |
| Tanqidiy-munozarali tafakkur («Munozara» metodi, Fitrat) | Tizimli instrument aniqlanmadi | - | Past |

*Izoh.* «Ifoda darajasi» ustuni muallifning sifat bahosini aks ettiradi: g‘oya me’yoriy hujjatda nomlangan va sinfxona instrumentiga ega bo‘lsa - yuqori; faqat strategik hujjatda nomlangan bo‘lsa - o‘rta; ikkalasida ham aniqlanmagan bo‘lsa - past.

3-jadval meros va siyosat o‘rtasidagi assimetriyani ochib beradi. Behbudiyning institutsional va Avloniyning axloqiy-tarbiyaviy g‘oyalari me’yoriy hujjatlarda keng va izchil aks etgan. Fitrat merosidan esa asosan safarbar etuvchi qatlam - yoshlar faolligi va «najot» ritorikasi - strategik hujjatlarga ko‘chgan, uning tanqidiy-munozarali metodi hech bir tizimli instrumentda ifodasini topmagan. Boshqacha aytganda, siyosat jadidlardan «nima»ni olgan, ammo «qanday»ni - mustaqil fikrlash va o‘z jamiyatini tanqidiy baholash usulini - hali to‘liq o‘zlashtirmagan.

### *4.6. Empirik dalillar*

Muallif taqdim etgan agregat chastotalar 2022-2025-yillarda Toshkent shahri, Farg‘ona va Navoiy hududlaridagi maktablarni qamrab olgan kompleks tarbiya tajribasini tavsiflaydi; unda 1192 nafar o‘quvchi qatnashgani qayd etilgan (4-jadval). Mazkur ko‘rsatkichlar jadid matnlari yoki biror alohida interaktiv metodning samaradorligini mustaqil tekshirmaydi.

**4-jadval**

*Tajriba-sinov ishlarining asosiy parametrlari*

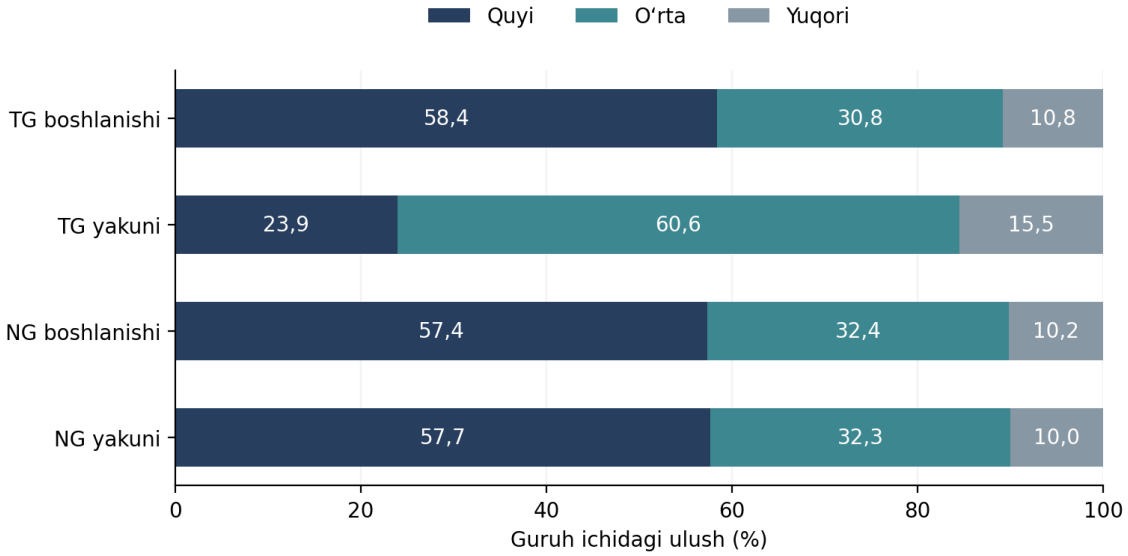
| Parametr | Tavsif |
|---|---|
| Dizayn | Tajriba va nazorat guruhli pedagogik tajriba-sinov |
| Davr | 2022-2025-o‘quv yillari |
| Hududlar | Toshkent shahri, Farg‘ona va Navoiy hududlari |
| Muassasa turi | Umumiy o‘rta ta’lim maktablari |
| Ishtirokchilar | N = 1192: TG - 594, NG - 598 nafar |
| Tajriba omili | Innovatsion, interaktiv va shaxsga yo‘naltirilgan vatanparvarlik tarbiyasi usullari |
| Natija ko‘rsatkichi | O‘quvchilarning vatanparvarlik kompetensiyasi ko‘rsatkichlari |
| Asosiy natija | TGda quyi daraja 58,4% → 23,9%; NGda 57,4% → 57,7% |

*Izoh. Muallif taqdim etgan jamlangan chastotalar asosida tuzildi.*

Taqdim etilgan agregat mutlaq chastotalar bo‘yicha TGda quyi daraja ulushi 34,51 foiz punktiga kamaygan; NGda u 0,33 foiz punktiga oshgan. 3-rasmda boshlang‘ich va yakuniy taqsimotlar beriladi. Bu kompleks tarbiya modelining umumiy natijasi bo‘lib, jadid matnlari ta’sirining alohida bahosi emas.

**3-rasm**

*Tajriba va nazorat guruhlarida kompetensiya darajalari taqsimoti*




*Izoh. Manba: muallif taqdim etgan agregat tajriba-sinov chastotalari; hisob-kitob mazkur maqolada bajarilgan. TG - 594, NG - 598 nafar. Quyi, o‘rta va yuqori darajalar ulushi foizlarda ko‘rsatilgan.*

Individual kuzatuvlar va hisoblash protokoli mustaqil tekshirilmagani uchun standartlashtirilgan ta’sir kattaligi yoki sababiy samara bahosi berilmadi. Ushbu maqolada mutlaq chastotalardan qayta hisoblangan ulushlar qo‘llanildi. Kompleks dastur natijasidan jadid matnlari, interaktiv metod yoki oila ta’sirini ajratib bo‘lmaydi. Shu sababli tarixiy merosning bugungi samarasiga oid xulosa pedagogik faraz darajasida qoladi.

## 5. MUHOKAMA

Natijalarni kengroq - mustamlakadan keyingi va mustaqillikdan keyingi institutsional transformatsiya - kontekstida ko‘rib chiqish o‘rinli. Jadidlar merosi murakkab tarixiy yo‘lni bosib o‘tgan: 1920-yillarda u sovet milliy qurilishiga qisman jalb etilgan, 1930-yillarda esa qatag‘on qilingan (Khalid, 2015). Behbudiy 1919-yilda qatl etilgan, Fitrat 1938-yilda qatag‘on qurboni bo‘lgan. Mustaqillikdan keyin bu meros milliy davlatchilik g‘oyaviy poydevorining tarkibiy qismiga aylandi. Bunday reabilitatsiya postkolonial jamiyatlar uchun xos jarayon: tarixiy islohotchilar milliy panteonga kiritiladi, biroq bu jarayonda ularning g‘oyalari ko‘pincha kanonlashadi.

Kanonlashuv jadidlar uchun alohida xavf tug‘diradi, chunki ular aynan kanonga qarshi chiqqan islohotchilar edi.

Behbudiy, Fitrat va Avloniy o‘z davrining an’anaviy ta’lim muassasalari - eski usul maktablari va madrasalari bilan ochiq bahs yuritgan. Agar ularning fikrlari bugun tanqidsiz yodlanadigan tayyor shiorlar to‘plami sifatida o‘qitilsa, merosning shakli saqlanib, mohiyati yo‘qoladi. Bu holatni institutsional inersiya tushunchasi orqali izohlash mumkin: yangi g‘oyalar eski tashkiliy shakllar - tadbir, yig‘ilish, devoriy shior - orqali amalga oshirilganda islohot mazmuni marosimga aylanadi. Westheimer va Kahne (2004) ogohlantirgan holat ham shunga

borib taqaladi: maktab vatanparvarlik tarbiyasini «shaxsan mas’uliyatli fuqaro» darajasida to‘xtatib qo‘ysa, muammolarning ildizini tahlil qila oladigan, adolatga yo‘naltirilgan fuqaro shakllanmaydi.

3-jadvalda aniqlangan assimetriya ham shu bilan bog‘liq. Me’yoriy hujjatlarning zichligi va ularning sinfxona amaliyotiga yetib borishi o‘rtasida islohot salohiyatining kechikishi kuzatiladi: hujjatlar tez qabul qilinadi, o‘qituvchilar tayyorgarligi va metodik ta’minot esa ancha sekin rivojlanadi. Mazkur nomuvofiqlikni kamaytirish uchun interaktiv metodlar va o‘quvchini faol subyektga aylantiruvchi baholash vositalarini mustaqil tajribada sinash zarur.

Avloniyning inklyuziv Vatan ta’rifi zamonaviy fuqarolik ta’limining yana bir dolzarb muammosiga javob beradi. Globallashuv sharoitida milliy identifikatsiyani global madaniyatga qarama-qarshi qo‘yuvchi himoyaviy model raqamli muhitda ulg‘aygan yoshlar uchun kamdan-kam ishontiruvchi bo‘ladi. Jadidlar taklif etgan yo‘l boshqacha: Vatanga muhabbat dunyo tajribasini o‘rganish bilan uyg‘unlashadi, milliy o‘zlik esa raqobat orqali emas, bilim va ijod orqali mustahkamlanadi. Aynan shu yo‘nalish Banks (2008) taklif etgan muvozanatli identifikatsiyalar modeli bilan hamohang bo‘lib, jadidlar merosini xalqaro pedagogik muloqot uchun ochiq qiladi.

Kelgusi izlanishlar yo‘nalishlari ham aniq. Matnlarni arab yozuvidagi asl nusxalar bilan solishtirish, jadid maktablarining amaliy faoliyatini arxiv manbalari asosida o‘rganish, shuningdek, jadid matnlari asosidagi o‘quv modullarini randomizatsiyalangan dizayn va standartlashtirilgan o‘lchov vositalari yordamida sinovdan o‘tkazish zarur.

## 6. XULOSA VA TAKLIFLAR

Tadqiqot jadid ma’rifatparvarlari vatanparvarlikni shior yoki hissiy tuyg‘u sifatida emas, ilm-ma’rifat, milliy o‘zlikni anglash va xalq manfaati yo‘lidagi fidoyilik bilan uzviy bog‘langan pedagogik konsepsiya sifatida talqin etganini ko‘rsatdi. Uch mutafakkir merosidan uchta o‘zaro to‘ldiruvchi model ajratildi - Behbudiyning institutsional, Fitratning epistemik-emansipativ va Avloniyning axloqiy-rivojlantiruvchi modeli; ularning kesishmasida «ma’rifatli vatanparvarlik» tamoyillari shakllanadi.

Zamonaviy ta’lim siyosatida jadid merosini uzluksiz tarbiya va “Kelajak soati” orqali rivojlantirish imkoniyati mavjud. Mazkur korpus doirasida Behbudiy va Avloniy qarashlariga mos tashkiliy hamda axloqiy yo‘nalishlar ko‘proq ko‘rinadi; Fitratning munozara usulini izchil tatbiq etish esa alohida metodik vazifadir. 1192 o‘quvchiga oid jamlangan tavsifiy ko‘rsatkichlar umumiy tarbiya dasturining natijalarini ifodalaydi, lekin jadid merosining alohida sababiy ta’sirini isbotlamaydi.

Olingan natijalar asosida quyidagi takliflar ilgari suriladi:

1. «Tarbiya», «Tarix» va «Adabiyot» fanlari uchun jadidlarning vatanparvarlikka oid matnlarini tanqidiy o‘qish va munozara shaklida o‘rganishga mo‘ljallangan o‘quv modullarini ishlab chiqish.
2. «Kelajak soati» mashg‘ulotlariga jadidlar pedagogik merosiga bag‘ishlangan mavzular kiritish va ularni Fitratning «Munozara»si namunasidagi bahs-munozara, rolli o‘yin va loyiha usullari orqali o‘tkazish.
3. Behbudiy, Fitrat va Avloniyning vatanparvarlikka oid asarlarini raqamli formatlarda (podkast, videorolik, animatsiya) qayta nashr etib, milliytarbiya.uz platformasiga joylashtirish.
4. O‘qituvchilar uchun «Jadidlar merosi va zamonaviy vatanparvarlik tarbiyasi» malaka oshirish kursini tashkil etish.

5. O‘quvchilar o‘rtasida «Maktab - millatning qal’asi», «Ilm - vatan uchun xizmat» mavzularida loyiha tanlovlarini o‘tkazish.
6. «Oila - maktab - mahalla» hamkorligida Avloniyning ilk yoshdagi tarbiya haqidagi g‘oyalarini oilaviy tarbiyaga singdiruvchi metodik qo‘llanmalar yaratish.

Qo‘shimcha tavsifiy tahlil muallif taqdim etgan agregat chastotalarga asoslangan; ular 4-jadvalda keltirilgan. Individual va maktab kesimidagi dastlabki qaydlar hamda rozilik hujjatlari bu maqolada mustaqil tekshirilmagan.

**Manfaatlar to‘qnashuvi.** Muallif manfaatlar to‘qnashuvi mavjud emasligini ma’lum qiladi.

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# 18.00.00 – ARCHITECTURAL SCIENCES

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# 18.00.00 - ARXITEKTURA FANLARI

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# 18.00.00 – АРХИТЕКТУРА

"ADVANCED JOURNAL OF UNIVERSITY SCIENCE AND CREATIVE INNOVATIONS"

# EVALUATING WASTEWATER TREATMENT DESIGN EFFICACY FOR MICROPLASTIC PARTICLE CAPTURE_ A 2025 REVIEW

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***Abstract.*** *Microplastic (MP) pollution has reached a critical global threshold, with wastewater treatment plants (WWTPs) acting as the primary centralized node for managing particle flux between urban environments and natural ecosystems. While 2025 meta-analyses indicate high cumulative removal efficiencies—often exceeding 88.1% by particle count—the absolute daily discharge from large facilities remains ecologically concerning. 1 Recent 2025 and 2026 field studies have identified a "fragmentation paradox" in primary units and documented extreme long-term persistence of MPs in terrestrial sinks following sludge application. 2 This paper assesses current design efficiencies, evaluates high-performance tertiary technologies such as Membrane Bioreactors (MBR) and AI-integrated detection methods, and reviews 2025 regulatory shifts toward biosolid management and chemical co-pollutant risks. 5*

## Introduction

Global plastic production reached approximately 400.3 million metric tons by 2022, resulting in a persistent legacy of microplastics (MPs) synthetic particles between 1 μm and 5 mm throughout the anthropogenic water cycle. [2] WWTPs, though not originally designed for MP removal, are now the primary infrastructure preventing these particles from entering environmental compartments. [4] While facilities can effectively sequester over 90% of incoming particles, the residual load remains a significant point source; for example, a February 2026 study by the ICMR found that Indian STPs, which often operate at just 39% capacity, continue to discharge significant quantities of polyethylene and polyester into surface waters. [3]

### *Anthropogenic Loading and Influent Dynamics*

Influent concentrations exhibit significant spatial heterogeneity, with 2025 studies in mega-cities like Chengdu reporting 177 to 517 particles/L. [4] Industrial catchments serving textile or paint manufacturing often exhibit loads 3–6 times higher than municipal systems. [1]

### Sources and Morphological Distribution

Textiles remain the dominant contributor, with fleeces shedding up to 170% more fibers than other garments. 2025 research confirms that fibers are particularly resistant to standard

gravity-based removal and account for the majority of MPs in urban effluents. [8] Smaller MPs (<0.1 mm) have also been shown to enhance microbial growth rates on their surfaces more than larger fragments, increasing their potential as biological vectors. [9]

***Efficiency of Primary Treatment: Physical Interception and Fragmentation***

Primary treatment involves screening, grit removal, and sedimentation. While sedimentation captures large, dense fragments (e.g., PET) with >90% efficiency, capture for particles <200 μm remains as low as 37%. [4]

**The Fragmentation Paradox (2025/2026 Evidence)**

A critical engineering challenge identified in 2025 is mechanical fragmentation. High-shear pumps and fine screens can break down larger debris, increasing the total MP count. In Western China, 2025 investigations showed a 13.45% increase in MP abundance following primary treatment due to this shearing effect. [4] Findings in early 2026 emphasize that conventional STPs are not currently optimized to obstruct these mobile fractions before they enter the effluent stream. [3]

***Secondary Treatment: Biological Flocculation and the Plastisphere***

Biological stages achieve removal through entanglement in extracellular polymeric substances (EPS).

**Biofilm Growth and Vector Risks**

The "plastisphere"—biofilms forming on MP surfaces—can increase settling velocities by up to 5 times. However, these particles serve as reservoirs for pathogens and antimicrobial resistance genes (ARGs). 2025 findings indicate that MPs facilitate horizontal gene transfer (HGT) between bacteria, with higher abundances of resistant taxa found on plastic surfaces compared to the surrounding wastewater. [1]

***Advanced and Tertiary Treatment Technologies***

To mitigate fine MP escape, advanced polishing technologies are increasingly mandated.

| Sl. No | Technology | 2025 Removal Efficacy (%) | Primary Mechanism |
|---|---|---|---|
| 1 | MBR | 99.4% – 99.9% | Size Exclusion/Membrane Barrier [1] |
| 2 | RSF | 90.2% – 97.1% | Straining/Adhesion to Media [1] |
| 3 | DAF | 93.0% – 95.0% | Bubble Attachment/Flotation [1] |
| 4 | RO | 99.9% – 99.99% | Ultra-fine Diffusion/Exclusion [6] |

Membrane Bioreactors (MBR) remain the performance benchmark, though MPs can reduce EPS levels in the sludge cake, potentially altering membrane properties. [1]

***The Biosolids Dilemma: Sludge as a Global Sink***

WWTPs transfer up to 99% of the incoming MP burden into the sludge phase. [9] In South Korea, 2025 data estimates an annual generation of 364 tons of MPs from WWTPs, with 75% of particles being 0.1 mm or smaller. [9]

**Long-Term Persistence and Soil Health (2025)**

A landmark 25-year study by the James Hutton Institute (March 2025) revealed that soil MP levels increased by 1,450% after just four years of sludge application. [2] These levels remained relatively unchanged 22 years after the final application, confirming the extreme environmental persistence. [2] Furthermore, the US EPA's January 2025 Draft Risk Assessment highlights that MPs in sludge act as carriers for persistent pollutants like PFAS (PFOA/PFOS), which can migrate from soils to groundwater. [5]

***Analytical and Regulatory Trajectories***

In 2025, AI-driven methods using Convolutional Neural Networks (CNN) achieved 93% accuracy in particle identification, facilitating high-throughput analysis. [7] Regulatory shifts are accelerating; a 2025 UK Defra report recommends slashing sludge-to-land application by up to 95% by 2030 to curb MP and PFAS pathways. [5]

***Conclusions on Design Efficacy***

Current WWTP designs are effective capture mechanisms but fail at total elimination. [1] High cumulative removal rates mask a massive absolute flux that contributes to persistent terrestrial pollution. [2] Efficient 2025-ready designs must integrate upstream capture with advanced tertiary barriers and innovative thermal sludge management (e.g., gasification) to permanently remove synthetic polymers from the environmental cycle. [5]

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