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“JOME’UL XUTUT” MATNINING LINGVISTIK XUSUSIYATLARI

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Annotatsiya: Ushbu maqolada To‘ra qo‘rg‘onlik xattot va olim Is‘hoqxon To‘ra Ibratning “Jome‘ul xutut” asari matnshunoslik nuqtayi nazaridan o‘rganiladi. Asarning yaratilish sababi, tarkibiy tuzilishi, matnning lingvistik xususiyatlari — leksik, uslubiy va sintaktik qatlamlari tahlil qilinadi. Tadqiqot jarayonida asarning kirish qismi (hamdu sano va sababi ta’lif), boblari, qo‘llangan terminlar tizimi hamda arabiy, forsiy va turkiy til unsurlarining o‘zaro uyg‘unligi aniqlanadi. Shuningdek, muallif tomonidan turli yozuvlar — Islomiy (kufiy, suls, riqo‘, rayhoniy va boshqalar), shuningdek, yevropa va sharq yozuvlari (yunon, xitoy, hindiy, yapon va boshqalar) haqida berilgan ma’lumotlar zamonaviy matnshunoslik tamoyillari asosida izohlanadi. Asardagi jadval, taqriz va e’tizor qismlarining mavjudligi uning ilmiy manba sifatidagi ahamiyatini yanada kuchaytiradi. Natijada “Jome‘ul xutut” yozuv san’ati tarixi va grafika madaniyatini o‘rganishda muhim manba ekanligi isbotlandi.

Kalit so‘zlar: Is‘hoqxon To‘ra Ibrat, Jome‘ul xutut, matnshunoslik, husnixat, lingvistik tahlil, yozuv tarixi, arab grafikasida yozuvlar, leksik qatlam, til-uslub, xattotlik san’ati.

Har bir ijokorning o‘ziga xos til uslubi u yashagan davr adabiy muhit, hudud va dunyoqarashi bilan shakllanadi. Biz o‘rganayotgan ushbu ishimizda ham asar tili ham o‘ziga xosdir. Shu o‘rinda matn masalasiga to‘xtalib o‘tish maqsadga muvofiqdir. E’tibor qilinsa, matn so‘zining luhaviy ma’nolari qaysidir darajada o‘zak tushunchada qarorlashgan: “narsaning ustki, yuza qismi”, “aks ettirilgan nutq”... Matnshunoslik ilmida o‘rganiladigan matn tilshunoslikdagi matn tushunchasidan farqlanadi. Tilshunoslikda matnning kuzinishi emas, tuzilishi ko‘proq e’tiborga olinadi... Matnshunoslikda esa har qanday yozuv matn sanaladi. Albatta, bu matnni tashkil etuvchi ma’no qatorlarining lisoniy qolipidan tashqaridagi, faqat yozuv va belgi ko‘rinishidagi beixtiyor sodir etilgan xatolarning qo‘lyozma matniga aloqasi yo‘q¹. Demak matnshunoslikdagi matn biz o‘rganayotgan matn, ya’ni ijodkorning ijodxonasidan xoh ilmiy, xoh badiiy asar bo‘lsin - hisoblanadi. Biz quyida

¹ Rashid Z. Matnshunoslik va adabiy manbashunoslik asoslari. O‘quv qo‘llanma. - T.: “Yashil yaproq nashr matbaa uyi”, 2023. B-94.

asarning matniy o‘ziga xosliklari: leksikasi, uslubi, sintaktik qurilishi haqida so‘z yuritamiz.

Matn arab tilidan olingan so‘z bo‘lib, “narsaning ustki, yuza qismi” ma’nosini anglatadi. Masalan, “Matnul arzi” – yerning ustki qattiq qismi. Shuningdek, uning “mustahkam, pishiq” kabi ma’nolari ham borki, tilimizga o‘zlashgan matonat, metin so‘zlari shu o‘zakdan paydo bo‘lgan. Bu uning lug‘aviy izohi.

Ayni vaqtda o‘zbek tili izohli va imlo lug‘atlarida mavjud hamda “matn” bilan teng ma’noda qo‘llanuvchi “tekst” so‘zi “Adabiyotshunoslik terminlari lug‘ati”da “avtorning asl so‘zi, asarning qo‘lyozmasi yoki nashr etilgan nusxasi”², “Словарь-справочник лингвистических терминов” kitobida “yozuv yoki nashrda aks ettirilgan nutqiy asar (bayon qilish)”³, “Hozirgi o‘zbek tili faol so‘zlarining izohli lug‘ati”da “matn – mazmunan va mantiqan o‘zaro aloqador bo‘lgan gaplar yoki alohida olingan gap”⁴, “Tilshunoslik terminlarining izohli lug‘ati”da “matn – yonma-yon harflar, yozuv orqali aks ettirilgan nutq, umuman, nutq parchasi, tekst”⁵ singari turli ko‘rinishlarda izohlanadi. Yuqorida ko‘p takrorlaganimiz tekst so‘zi, asli lotincha textus so‘zidan olingan bo‘lib, unga quyidagicha ta’rif beriladi:

1. tekst – yozuvda qayd etib qo‘yilgan nutq;
2. nutqiy asar, jumladan, adabiy asarning yozma (harflar) yoki og‘zaki (tovushlar) belgilar vositasida qayd etilgan konkret-hissiy (ko‘rish yoki eshitish) qabul qilinadigan tomoni;
3. nutqiy kommunikatsiyaning nisbiy butunlik, yaxlitlik kasb etgan va nisbiy avtonomlik, alohidalik xususiyatiga ega eng kichik birligi, ya’ni adabiy-badiiy asar”⁶. Bunda birinchi ta’rif bilan tekst og‘aki nutqqa qarshi qo‘yiladi. Ikkinchi ma’noda uning har ikki (og‘zaki va yozma) shakli aks ettirilib, yozish-o‘qish-eshitish kesimida izohlanadi. Uchinchi ta’rifda esa tekt yaxlit bir asar mazmunini ham berishi ayon bo‘ladi. Filologiya fanlari doktori, professor Shuhrat Sirojiddinovning “O‘zbek matnshunosligi qirralari”⁷ nomli monografiyasida “Matnshunoslikda matn tushunchasi keng qamrovli tushunchadir”, - deyiladi va uning ikki ta’rifi keltiriladi:
 - matn deganda, muallif ifoda etmoqchi bo‘lgan fikr va g‘oyaning yozuvdagi in’ikosi tushuniladi. Bu ko‘rinishdagi matn tadqiqida adabiyotshunoslar tilshunoslar bilan birgalikda ishtirok etishadi;
 - matn deganda, yaxlit bir asar, soha doirasida qaralganda qo‘lyozma nusxa ham anglashiladi. Ushbu holdagi matn tadqiqi bilan esa, asosan, matnshunoslar

² Homidiy H., Abdullayeva Sh., Ibohimova S. Adabiyotshunoslik teminlari lug‘ati. –T.: O‘qituvchi, 1970. B-222.

³ Rozental D.E., Telenkova M.A. –M.: Prosveshenie, 1976. B-483.

⁴ Hojiyev A., Omonov A. va boshqalar. –T.: Sharq, 2001. B-130.

⁵ Hojiyev A. –T.: O‘zbekiston milliy ensiklopediyasi, 2002. B-61.

⁶ Quronov D. va boshqalar. – T.: Akademnashr, 2010-yil. B-329.

⁷ Sirojiddinov Sh., Umarova S. O‘zbek matnshunosligi qirralari. – T.: Akademnashr, 2015. B-6.

shug‘ullanishadi va ular matni o‘rganish jarayonida adabiyotshunoslar, tilshunoslar, tarixchilarning manbashunoslik sohasi bilan bog‘liq tadqiq usullaridan foydalanadilar. Ko‘rishimiz mumkinki, matn matnshunoslik sohasi bilan bir qatorda tilshunoslik, manbashunoslik va butun adabiyotning asosidir. Matnning paydo bo‘lishidan to oxirgi holatigacha bo‘lgan o‘zgarishlar, ya’ni muallifning qoralamasi, kotibning ko‘chirgan nusxasi, shu asosda qilingan nashr shakllari, butun afzalliklari, yutuq va kamchiliklari bilan matn tarixini tashkil qiladi.

Matnshunosning vazifasi ana shu jarayondagi ishtirokchi subyektlarning (muallif, kotib, noshir, muharrir) hamda turli ijtimoiy tashqi omillarning (ya’ni, uzoq vaqt davomida manba qog‘oziga putur yetishi, yirtilishi, yozuvning o‘chib ketishi, hasharotlar zarari, suv tegishi kabi) matnga ta’sir darajasini aniqlash, o‘zgarishlar bo‘lsa qayd etish, ilmiy asoslar keltirgan holda asl matni tiklash va ilmiy muomalaga kiritishdir. Matn tarixi bu, muayyan matn haqida hamma narsa, ya’ni u haqidagi barcha ma’lumotlar jamlanmasi sanaladi. Undan asarning shakli va mazmuniga oid bo‘lgan aniq xulosalar, bevosita asarga aloqador hamda ikkilamchi ma’lumotlarni olish mumkin bo‘ladi. Ushbu vazifa matnshunos tomonidan amalga oshirilgan ekan, obyekt sifatida olingan matnning boshqa mavjud nusxalarini ham qiyosiy tahlilga jalb qilinadi. To‘liq matn, nuqsonli matn, tuzatishga uchragan va tugatilmagan matn sifatida qo‘lyozma va toshbosma nusxalar saralaniladi.

Asarning leksik tarkibi haqida so‘zlar ekanmiz, Ibrat yashagan muhitda 3 til: turkiy, arabiy, forsiy tillarning o‘zaro keng va teng miqyosda adabiy va ilmiy asarlarda qo‘llanilishi odatiy hol edi. Shundan kelib chiqib asarda shu uch qatlamga oid so‘zlar o‘rinli ravishda qo‘llangan. Asarning nomlanishi ham an’anaviy arabiy izofa. Asarning kirish va boshlanishi ko‘proq arabiy va forsiy leksik qatlamdan foydalangan. Asosiy qism, ya’ni yozuvlar haqida ma’lumot berilayotganda turkiy - o‘zbekcha leksikadan foydalangan.

Asarning so‘z va so‘z shakllarining ifodalanishiga kelsak, odatda hozirgi o‘zbek tili va eski o‘zbek tilida so‘z shakllari bo‘lmish grammatik suffikslarda farqlar ko‘zga tashlanadi. Masalan, -gan o‘tgan zamon sifatdoshi o‘rnida - g‘an shaklida (5-ilovaga qaralsin).

Asarda o‘zlashma qatlamga oid ya’ni rus va boshqa tillar orqali kirib kelgan so‘zlar ham uchraydi. Lamfa, gugurd, choy, choynek, samavar, ayruflon, gramafun, fotograf, litograf, tifograf, abtomobil, valisifid, tilsiztelegrom, angliz, Yovruboniylar, Yunoniylar, ieroglif, Yunoniya, Angliya, Fransuya, Girmoniya, Rusiya, Assiri, Demotika, Kichik Oziya, Kanstantin Griyl, axbornoma, raput, Yapuniya, Mang‘uliy kabi.

Asarning qurilish uslubidagi ahamiyatli tarafi - saj uslubida yozilganligidadir. Hindiston, Buxoro, Turkiston, Farg‘ona, Qoshg‘ar ahli Islom diyorlarida joriydir.

Bunga sabab bu mulklarga Eron podshohlarining ixtiloti bo‘lib, Buxoro-yu bo‘laklarni olub, ul vaqtlarda joriy qilgan ekan. Eroniylarni, turoniylarni olgani tarix kitoblarida mazkur va mashhurdir. Xo‘ja Mir Ali vaz’ xat kitobi husni xatdagi mahorati va martabasi ayon va bayondur. Chunonchi, soilga bir alif tartib e’hsan qilsalar, xazinai podshohinda ming tanga qiymat ila xazinaga olur ekanlar. Ul zotni shoir tabida masalligi mashhurdir.

FOYDALANILGAN ADABIYOTLAR RO‘YXATI.

1. Habibullaev A. Adabiy manbashunoslik va matnshunoslik. - Toshkent: Toshkent davlat sharqshunoslik instituti, 2000. - 172b.
2. Madraimov A., Fuzailova G. Manbashunoslik. - Toshkent: Fan, 2007. - 295 b.
3. Is’hoqov Y. Klassik adabiyot poetikasidan ma’lumotlar. // O‘zbek tili va adabiyoti. – Toshkent, 1970.
4. Is’hoqov Y. Navoiy poetikasi. – Toshkent: Fan, 1983.
5. Hojiahmedov A. She’riy san’atlar va mumtoz qofiya. – Toshkent: Sharq, 1998.
6. Mallayev N. O‘zbek adabiyoti tarixi. Birinchi kitob. – Toshkent: O‘qituvchi, 1965.
7. Nosirov O., Jamolov S., Ziyovuddinov M. O‘zbek klassik she’riyati janrlari. – Toshkent: O‘qituvchi, 1979.
8. Qur’onov D., Mamajonova Z., Sheraliyeva M. Adabiyotshunoslik lug‘ati. – Toshkent: O‘qituvchi, 2010.
9. Rustamov A. Navoiyning badiiy mahorati . – Toshkent, 1979.

ABU ABBOS MAROKESHIY: MATEMATIKA, ASTRONOMIYA VA TILSHUNOSLIK SOHALARIDAGI ILMIY MEROSINING TADQIQI

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Annotatsiya: Ushbu maqolada XIII–XIV asrlarda yashab ijod qilgan mashhur mag'riblik olim — Abu Abbas Marokeshiy ning ko'p qirrali ilmiy merosi tahlil qilinadi. U matematika, astronomiya, balog'at, til va falsafa sohalarida ellikdan ortiq asarlar yaratgan. Maqolada uning matematikaga oid asarlarining ahamiyati va ular orqali Mag'rib mintaqasida algebra hamda geometriya rivojiga qo'shgan hissasi bayon etiladi. Shuningdek, "Kitab al-anva", "Al-Yasar fi ta'dil al-kavakib" singari astronomiyaga oid asarlari o'rganilib, ularning o'sha davr taqvimshunoslik va yulduzlar harakatini hisoblash amaliyotidagi o'rni yoritiladi. Muallifning bayon va balog'at ilmlariga bag'ishlangan "Ar-Ravdu-l-mari' fi sina'ati-l-bad" kabi asarlari esa uning tilshunoslikdagi ilmiy merosini namoyish etadi. Maqolada shuningdek, Abu Abbasning ustozlari va shogirdlari haqida ma'lumot berilib, uning ilmiy maktabi orqali Ibn Xaldun, Al-Obuliy kabi yirik allomalar shakllanganligi ta'kidlanadi. Tadqiqot natijalari Abu Abbas Marokashiyning islom ilm-fani tarixida alohida o'rin tutganini ko'rsatadi.

Kalit so'zlar: Abu Abbas Marokashiy, matematika tarixi, astronomiya, algebra, Mag'rib ilmiy maktabi, balog'at, ilmiy meros.

Abu Abbasning matematika ilmlarga doir quyidagi asarlari ham mavjud: Al-Maqolot fiy ilmil-hisab, KitaAbu-usul val-muqaddamot fil-jabri val-muqobala, Muxtasar fiy ashkaalil-misaahiyya, KitaAbu-jabr val-muqobala, Kitaab fiy zavaatil-asmaa val-munfasilaat, KitaAbu-fusuul fil-faroiz, Muqaddima ala Oklidis, Al-Qavaaniyn fil-adad, Al-Iqtidob fil-amal bir-rumiy fil-hisab, Tanbihul-albaab ala masaailil-hisab, At-Tamhid vat-taysir fiy qavaaidit-taksir¹.

Uning astronomiya ilmiga oid asarlari:

- Kitaabul-anva', muallif bu asarda Andalusiyaning an'anaviy ziroat taqvimini bilan atrof-muhitning shartlarini tadqiq qilib bu narsalarga ta'sir qiladigan sabablarni astronomik jihatdan tahlil qilgan. Bu asar H.P.J. Renaud tarafidan «Le calendrier d'ibn Banna de Marrakech» nomi bilan 1948-yilda Parijda nashr qilingan².

¹ Miknasiy. Jazvatul-iqtibos. – Bayrut: Noshir nabil, 1999. – B. 67-68.

² O'sha asar.

- Kita Abu-manox, taqvimga taalluqli bo'lgan bu asarning eng muhim xususiyati «manox» (iqlim) kalimasining ilk marta taqvim ma'nosida qo'llanilganidir.

Abu Abbos Marokashiy bu sohada quyidagi asarlarda ham qalam tebratgan: Minhaajut-tolib li-ta'dilil-kavaakib, Al-Yasaaro fiy ta'dilil-kavaakibis-sayyaro yoki Al-Yasaaro fiy taqvimil-kavaakibis-sayyaro, Qonun fiy ma'rifatil-avqot bil-hisab, Risala ala safihatiz-zarqaliyyatil-jaami'a, Al-Munasibut-taysiriyya fiy va'dil-avtaaril-kulliyya, Al-Qismur-robi' minal-munasibit-taysiriyya fiy Sharhiz-zaairjas-sabtiyya, Risala fin-nujum, Zayirjas-sabti, Sharhu zayirjal-ma'olim fiy manaafi'il-avaalim, Al-Jasaarotu fiy ta'dilil-kavaakibis-sayyaro³.

Uning til, adabiyot va falsafaga oid asarlari:

- Ar-Rovdul-mari' fiy sinaa'til-badi', bu asar bayon va balog'at ilmlariga oid san'atlar, va ular o'rtasidagi ilmiy aloqa borasida yozilgan bo'lib, Aristotelning ta'sirida shakllangan Mag'rib balog'at ilmi mohiyatini ifodalaydi. Bu asarning Rizvon ibn Shaqrun tarafidan tahliliy nashri 1985-yilda Dorul Bayzo shahrida amalga oshirilgan⁴.

- Marosimut-tariqa fiy fahmil-haqiqa min hallil-xaliqa, muallif tarafidan «Sharhu marosimit-tariqa» nomi bilan sharh qilingan bu asar islom falsafasi bo'yicha nafs va bilim nazariyasi qanday bo'lishi kerakligi haqida so'z boradi.

Uning ustozlari:

Abu Abdulloh Yusr Al-Mubashshir, Ali As-Solih Al-Ahdab, Imron Muso Az-Zannatiy, Al-Qoziy Al-Katib Abu Husayn Muhammad ibn Abdurrahmon Al-Mag'iliy, Abu Valid Ali ibn Abu Bakr Muhammad ibn Hajjoj, Abu Abdulloh Ali ibn Muhammad ibn Abdulmalik ibn Said Al-Avsiy Al-Ansoriy, Abu Is'hoq ibn Abdussalom As-Sanhojiy Al-Attor, Abu Muso Al-Jazuliy, Ibn Hajala Ar-Riyoziylardan tahsil olgan.

Abu Abbos Marokashiy arab tilidan Qozi Abu Abdulloh Muhammad ibn Ali ibn Yahyo Ash-Sharifdan ham ta'lim olgan. U «Kitaabu fiqhil-hisab» asarining muallifi Ibnul Mun'imning (vafoti 626/1228) talabasi bo'lib, matematik ilmlarda ko'zga ko'ringan olimlardan bo'lgan. Abu Abbos Marokashiy bu ustozidan geometriyani ham o'rganib, xususan Oklidisning «Usul-handasa» kitobidan tahsil qilgan. Muallif keyinchalik ustozining ushbu asarini o'zining «Kitaabu-usul li-Oklidis» asarida sharh qilgan va «tanosub»ga (sonlarda mutanosiblik) taalluqli masalalarda ustoz Ash-Sharifni tanqid qilgan. Bu narsa ham uning matematikaga oid fikrlarining shakllanishida Ash-Sharifning o'rnini bildiradi. Abu Abbos Marokashiy bir muddat ustoz Ash-Sharifning yonida qolib undan Sibavayhning «Al-Kitaab» asaridagi ba'zi bo'limlarni ham ta'lim olgan⁵.

Bundan tashqari, Abu Abbos Marokashiy Fa's shahrida Qozi Al-Jamaa'a Abu-Hajjoj Yusuf ibn Ahmad ibn Hakam At-Tajibiy Al-Miknasiy, Abu Yusuf Ya'qub ibn Abdurrahmon Al-Jazuliy Al-Miknasiy, Abu Muhammad Al-Fishtoliy va Abu Abdulloh Muhammad ibn Usmon

³ Miknasiy. Jazvatul-iqtibos. – Bayrut: Noshir nabil, 1999. – B. 69-70.

⁴ O'sha asar. – B. 70-71.

⁵ Tinbuktiy. Jazvatul-iqtibos. – Bayrut: Noshir nabil, 1999. – B. 90-93.

ibn Said kabi zamonasining eng zabardas ulamolaridan dars olgan. Xususan, Ibn Hajala va Abu Abdulloh ibn Maxluf As-Sijilmaasiy kabi olimlar Abu Abbas Marokashiyning shu darajaga ko'tarilishiga hissa qo'shgan ulamolardan sanaladi. Shu bilan birga, uning Mirrix nomli bir hakimdan tibbiyotni o'rgangani ham naql qilinadi⁶.

Uning shogirdlari:

Manbalarda keltirilishicha, Abu Abbas Marokashiy ilk tahsilini Marokashda boshlab Fa's shahrida tamomlagan. Keyinchalik yana tug'ilgan shahri Marokashga qaytib, hayotining oxirigacha bu yerda talabalarni ilm bergan va bir qancha asarlarni ta'lif qilgan. Ibn Hajar Asqaloni uning Marokashdagi bir masjidida har kuni bomdod namozidan zavol paytigacha dars berganini ta'kidlaydi. Keyinchalik o'sha shogirdlari XIV-asrning muhim mag'riblik matematik olimlari yetishib chiqishiga sabab bo'lgan.

Uning talabalaridan eng mashhuri faylasuf Muhammad ibn Ibrohim Obuliy (vafoti 757/1356) bo'lib, u asli tilimsonlik bo'lgan. U hijriy 710-yilda Marokashga boradi va o'sha yerda Abu Abbas Marokashiydan ilm tahsil oladi. Al-Obuliy ham keljakda ikki mashhur shogirdlari yetishib chiqadi. Bular shayx Al-Maqarriy va Ibn Xaldunlar bo'lib, Al-Obuliy ularga matematika sohasida ustozlik qiladi⁷.

Ikkinchisi, Ibnul Imom nomi bilan tanilgan Abu Zayd Abdurrahmon ibn Muhammad Lajoiy Tilmisoniy (vafoti 773/1371) bo'lib, u mujtahid faqihlardan hisoblanadi. Bu olim Abu Abbas Marokashiyning darslarini tinglash uchun Fa'sdan Marokashga keladi. Uning Abu Abbas Marokashiy haqida bergan ma'lumotlari ilk davr manbalarining asosini tashkil qildi. Masalan, Tilimsoniyning Attoriyn madrasasida bergan darslarini tinglagan ibn Haydur va Ibn Kunfuz kabi olimlar Abu Abbas Marokashiy haqidagi bir qancha ma'lumotlarni undan olganlar⁸.

Abu Zayd Abdurrahmon ibn Muhammad Al-Lajoiy At-Tilimsoniyning ukasi bo'lgan. Zamonasining mujtahid faqihlaridan sanalgan Abu Muso Iso ibn Muhammad ham Abu Abbas Marokashiyning talabalaridan bo'lgan.

Shuningdek, Ibnun Najjor deb tanilgan Muhammad ibn Ali At-Tilimsoniy (vafoti 749/1348) Ibnul Haaj Al-Billifikiy⁹ va Abu Zayd Abdurrahmon ibn Sulaymon Al-Lajoiy¹⁰ ham uning talabalaridan hisoblanadi¹¹.

Abu Abbas Marokashiy yashagan davrning siyosiy, madaniy va ilmiy holatini bilish, avvalo uning yashagan mintaqalarni yaxshi tanish bilan bog'liqdir. Abu Abbas Marokashiyning yashagan tarixiy davrning (654-721-yillar) Mariniylar davlatining bu mintaqada hukmronlik qilgan yillariga to'g'ri kelganiga ko'ra, ham mazkur davlat haqida, ham ushbu olimning

⁶ O'sha asar.

⁷ Miknasiy. Jazvatul-iqtibos. – Bayrut: Noshir nabil, 1999. – B. 305.

⁸ Fazlio'g'li. Abu Abbas Marokashiy. — Bayrut: Daru insho, 1978. – B.. Abu Abbas Marokashiy Abu Abbas Marokashiy. — Bayrut: Daru insho, 1978. – B. 530.

⁹ Miknasiy. Jazvatul-iqtibos. – Bayrut: Noshir nabil, 1999. – B. 87-88.

¹⁰ O'sha asar. – B. 302.

¹¹ Fazlio'g'li. Abu Abbas Marokashiy. — Bayrut: Daru insho, 1978. – B. 56-57.

yashagan tarixlarda hukm surgan sultonlar haqida ma'lumotlarga ega bo'lishning foydali ekani ko'zda tutiladi.

Abu Abbos Marokashiy hayotining ko'p qismini bu yerda o'tkazgani va mana shu shaharga nisbatan unga Abu Abbos Marokashiy deb nomlangani avval aytib o'tilgan edi. Lug'at kitoblarida Marokash yoki Marrakush so'zlarining ma'nosi haqida aniq bir ma'lumot bo'lmasada, bu so'zning barbar tilidagi «Allohning tuprog'i» ma'nosida keladigan «mirrakush» kalimasidan kelib chiqqani aytiladi. Bundan tashqari, bu yerdagi devorlar va uylar qizil tuproqdan qurilgani sababli, u «qizil shahar» ma'nosida ham keladi. Hozirgi kunda ham u yerdagi binolar qizil rangga bo'yaladi¹².

FOYDALANILGAN MANBA VA ADABIYOTLAR RO'YXATI

1. Abu Abbos Ahmad ibn Yahyo ibn Jobir Balozuriy. Futuhul-buldon. – Bayrut: Muassasatul Maorif, 1987. – B. 258.
2. Abu Abdulloh Muhammad ibn Is'hoq ibn Yasor ibn Xiyar Al-Muttalibiy Al-Qurashiy Al-Madaniy. Kitaabus-siyar val-mag'oziy. – 1-nashr. Dorul Fikr, 1978. – B. 523.
3. Abu Dovud Sulaymon ibn Ash'as ibn Is'hoq Sijistoniy Azdiy. Kitaabu-l-Masohif. – Qohira, 2002. – B. 452.
4. Abu Faraj Muhammad ibn Abu Ya'qub Is'hoq An-Nadim. Kitabu-l-Fihrist. – Bayrut: Dorul Ma'rifat, 1997. – B. 6-8.
5. Abu Husayn Ahmad ibn Foris ibn Zakariyo Ar-Roziy. As-Sohibi fiy fiqhil-lug'atil-arabiyyati va sunanil-arabi fiy kalaamiha. Tahqiq: Dr. Umar Foruq Daabba. – 1-nashr. Bayrut: Maktabatul Maorif, 1993. – B. 587.

¹² Toha Qilich. "Mag'ribning saltanat poytaxtlari-Ahvoli dunyo". — Istanbul: Diyonat oylik jurnali, 2019. – B. 338.

THE DEVELOPMENT OF CAMPUS NOVELS IN THE WORKS OF DAVID LODGE

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Abstract: This article explores the evolution of the campus novel genre in the works of British novelist and academic David Lodge. It focuses on his Campus Trilogy—*Changing Places* (1975), *Small World* (1984), and *Nice Work* (1988)—tracing how Lodge blends satire, cultural critique, and literary theory to both entertain and interrogate the academic world. Lodge's fiction mirrors transformations in academia from the 1970s to the 1990s, including globalization, theory-driven scholarship, and the increasing intersection between universities and external socio-economic forces. His contribution reshaped the campus novel, elevating it beyond parody into a serious literary form.

Keywords: David Lodge, campus novel, satire, academic fiction, university, literary theory, globalization, cultural critique.

The campus novel, also known as the academic novel, is a literary genre that revolves around the lives of university professors, students, and academic institutions. Emerging prominently in the post-World War II era, the genre reflects the shifting role of the university in society and often uses satire to critique academic life. The genre's trajectory from localized satire to global critique mirrors broader changes in academia, including globalization, corporatization, and debates over the relevance of the humanities. Often marked by satire and introspection, the genre became especially popular in the postwar period. Among its most influential voices is David Lodge, whose novels depict not only the intellectual pursuits of scholars but also the absurdities, hypocrisies, and transformations of academic life. A former professor himself, Lodge brings authenticity and insight into the academic world through his fiction. His major contribution to the genre lies in the so-called Campus Trilogy: *Changing Places*, *Small World*, and *Nice Work*. These novels mark a progression—from humorous transatlantic satire to broader explorations of globalization, professional ambition, and the interaction between academia and industry.

“*Changing Places*” (1975) is the great example of a thematic and structural evolution in Campus Trilogy. Set between the fictional University of Rummidge (England) and Euphoria State University (USA), *Changing Places* humorously

explores academic exchange programs and cultural contrasts. Lodge juxtaposes British and American academic cultures through two professors who swap roles and lives. The novel satirizes the pretensions and limitations of academic life, while also questioning personal identity, professional ambition, and institutional expectations.

Themes explored include:

- Cultural displacement
- Academic ambition vs. personal stagnation
- The performative nature of academic roles

Lodge experiments with narrative form, using letters, newspaper clippings, and reports to mirror the fragmentation of experience. The novel critiques the illusion of academic stability, showing that identity and status are often contextual and malleable.

The next novel is “Small World”: An Academic Romance (1984). In *Small World*, Lodge expands the scope of the campus novel by portraying the international academic conference circuit. Professors become globe-trotting intellectuals, chasing prestige and elusive academic prizes. The novel parodies the “quest” structure of medieval romance, mirroring the often futile search for scholarly recognition. It also introduces literary theory as both subject and structure, making the academic pursuit itself a kind of literary game. Key elements include:

- The rise of global academic networks
- Intellectual tourism and prestige
- Satirical portrayal of literary theorists
- Structural allusions to medieval romance

The novel is metafictional and highly intertextual, reflecting the rise of poststructuralist theory and the commodification of scholarship. Lodge uses the romance narrative to parody the inflated self-importance of modern academics, turning scholarly conferences into farcical performance arenas. The title “Small World” reflects both the shrinking geographical boundaries of academia and the incestuous, often absurdly interconnected nature of scholarly circles.

Returning to Rummidge, *Nice Work* presents a more serious engagement with the socioeconomic context of academia. The story follows a female English literature professor who is paired with a factory manager as part of an industry-academic liaison program. Through their relationship, Lodge explores feminism, capitalism, and the relevance of literary theory to real-world problems. Unlike the earlier novels, *Nice Work* positions the university as embedded within broader economic and political systems. Major themes include:

- The impact of Thatcher-era economics on education
- Gender and feminism in academic and corporate spaces
- Theory vs. practice (literary theory vs. industrial reality)

- The university's role in society

Unlike the earlier novels, *Nice Work* is less fantastical and more grounded in social realism. The academic setting is no longer insulated but is portrayed as directly affected by external economic and political pressures. The novel explores how education and industry can (or cannot) understand each other, challenging the notion of academic detachment from "real life."

Lodge's contribution to the campus novel is not limited to comic portrayals of university life; rather, he uses humor as a vehicle for **critical reflection**. Through his innovative integration of **satire**, **cultural critique**, and **literary theory**, Lodge crafts fiction that entertains while simultaneously interrogating the epistemological foundations, institutional practices, and ideological conflicts that shape the academic world.

Satire is perhaps the most immediately recognizable feature of Lodge's campus novels. From the transatlantic caricatures of British and American academia in *Changing Places* to the parody of international academic conferences in *Small World*, Lodge deploys satire to exaggerate and thereby critique the foibles of academic culture. His satirical mode, however, is not merely ridiculing; it is diagnostic.

In *Changing Places*, the cultural and professional exchange between Philip Swallow, a conservative British lecturer, and Morris Zapp, a brash American professor, initiates a farcical yet pointed exploration of differing academic ideologies. The absurdity of the exchange highlights not just individual quirks but systemic disparities between the American emphasis on ambition and productivity and the British predilection for modesty and tradition. This binary is, of course, exaggerated for comic effect, yet it illuminates real tensions within transatlantic academic relations during the Cold War era. Satire in Lodge's work is often **double-edged**: while academics are lampooned for their vanity, competitiveness, and detachment, there is also a clear affection for the intellectual life. Lodge's satire, then, is not destructive but **corrective**—a means of revealing the need for reform and reflection within institutions that claim to value critical inquiry but often fail to practice it.

Beyond the microcosm of academic personalities, Lodge situates his novels within the shifting cultural and economic landscape of late 20th-century Britain. His works reflect and critique the broader social forces that are reshaping the university—from bureaucratization and managerialism to the marketization of knowledge.

Nice Work is perhaps Lodge's most explicit engagement with these forces. The novel follows the enforced collaboration between Robyn Penrose, a temporary lecturer in English literature, and Vic Wilcox, the manager of an engineering firm, as part of an industrial "shadowing" program. The juxtaposition of their worlds exposes the mutual incomprehension between the academy and industry but also critiques the increasing

demand for universities to justify their existence in economic terms. Robyn's academic discourse, rooted in feminist and poststructuralist theory, is shown to be ill-equipped to grapple with the material realities of the working class. At the same time, Wilcox's utilitarian worldview is revealed to be equally limited. Through this encounter, Lodge critiques the narrowing of education to vocational training and the devaluation of the humanities. He questions whether the university can retain its critical autonomy under the pressures of neoliberal reform. His novels thus become spaces of cultural contestation, where competing ideologies—liberal humanism, technocracy, feminism, and capitalism—are dramatized and interrogated.

One of Lodge's most distinctive innovations is his integration of literary theory into the form and content of his novels. His fiction is not merely about academics; it also **enacts** the theoretical discourses it portrays. In this way, Lodge brings poststructuralism, narratology, and reader-response theory into the mainstream of British fiction, without sacrificing readability or humor.

Small World, for instance, is structured around the tropes of romance and quest literature, as identified by Northrop Frye. The novel's globe-trotting academics, chasing conference invitations and prestigious appointments, become modern-day knights in search of the Holy Grail—an apt metaphor for the elusive pursuit of scholarly validation. At the same time, the novel is riddled with intertextual allusions, narrative self-reflexivity, and metafictional commentary, placing it in dialogue with postmodern literary theory.

Nice Work features Robyn Penrose, a specialist in postmodern and feminist theory, who ironically finds herself living a plotline akin to a Victorian industrial novel. The tension between her theoretical worldview and the realist genre she inhabits foregrounds the limitations and possibilities of theory itself. Lodge's fiction thus becomes a site of theoretical experimentation, inviting the reader to reflect on the processes of reading, interpretation, and representation.

What distinguishes Lodge from many of his contemporaries is his ability to balance entertainment with critique. His novels are richly comic, full of witty dialogue, farcical scenarios, and sharply drawn characters. Yet beneath the humor lies a serious engagement with questions of institutional power, disciplinary identity, and cultural change.

In conclusion, David Lodge transformed the campus novel from a niche subgenre into a rich form of social and cultural critique. Through the Campus Trilogy, he charted the evolution of the university from an insular community into a globally networked, economically entangled institution. His novels remain both humorous and intellectually stimulating, blending academic satire with serious engagement in literary theory, gender politics, and the societal role of education. Lodge's work not only

reflects changes in higher education but also invites ongoing reflection on the value and purpose of intellectual life in the modern world.

LIST OF USED LITERATURE

- Bradbury, Malcolm. *The History Man*. London: Secker & Warburg, 1975.
- Lodge, David. *Changing Places*. London: Secker & Warburg, 1975.
- Lodge, David. *Small World: An Academic Romance*. London: Secker & Warburg, 1984.
- Lodge, David. *Nice Work*. London: Secker & Warburg, 1988.
- Lodge, David. *The Art of Fiction*. London: Penguin Books, 1992.
- Lodge, David. *Consciousness and the Novel: Connected Essays*. Harvard UP, 2002.
- Showalter, Elaine. *Faculty Towers: The Academic Novel and Its Discontents*. Oxford UP, 2005.
- Waugh, Patricia. *Metafiction: The Theory and Practice of Self-Conscious Fiction*. London: Methuen, 1984.
- Zelle, Carina. “Academic Satire and the British Campus Novel.” *The Yearbook of Research in English and American Literature*, vol. 28, 2012, pp. 73–89.

ЎЗИНИ ЎЗИ БАНД ҚИЛГАН ШАХСЛАРНИ СОЛИҚҚА ТОРТИШ МЕХАНИЗМИДАГИ МУАММОЛАР ТАҲЛИЛИ

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Аннотация: Мазкур мақолада Ўзбекистонда ўзини ўзи банд қилган шахсларни солиққа тортиш механизми таҳлил қилинган. Тадқиқотда амалдаги солиқ тизимининг афзалликлари билан бирга мавжуд муаммо ва бўшлиқлар ёритиб берилган. Хусусан, ҳисобот юритишдаги қийинчиликлар, рақамлаштириш жараёнининг тўлиқ қамраб олмагани ва ижтимоий ҳимоя билан уйғунлашмаган механизмлар асосий муаммолар сифатида қайд этилган. Шу билан бирга, халқаро тажрибага таянган ҳолда, механизмни такомиллаштиришнинг институционал ва амалий йўналишлари асослаб берилган.

Калит сўзлар: ўзини ўзи банд қилган шахслар, солиқ механизми, норасмий сектор, рақамлаштириш, ижтимоий ҳимоя, иқтисодий самарадорлик.

КИРИШ

Мамлакатдаги институционал ва иқтисодий трансформация жараёнларида ўзини ўзи банд қилган шахслар учун қулай шарт-шароитлар яратиш, уларнинг ҳуқуқий мақомини аниқлаш, солиқ юқини енгиллаштириш, ҳисобот юритишда соддалик ва рақамли хизматларга кенг кириш имконини таъминлаш бўйича бир қатор норматив-ҳуқуқий чоралар кўрилмоқда. Хусусан, ушбу ислохотлар соҳасида қабул қилинган муҳим ҳужжатлар — Ўзбекистон Республикаси Президентининг 2020 йил 8 июндаги ПҚ–4742-сон қарори ҳамда Вазирлар Маҳкамасининг 2020 йил 23 декабрдаги 806-сон қарори орқали ўзини ўзи банд қилган шахслар институтига аниқ ҳуқуқий ва иқтисодий мезонлар белгилаб берилди¹. Бу қарорларнинг қабул қилиниши мамлакатимизда меҳнат бозорининг сегментларини расмийлаштириш, норасмий иқтисодиёт улушини қисқартириш ва солиқ базасини кенгайтиришга қаратилган кенг қамровли ислохотлар стратегиясининг бир қисмидир². Шу билан бирга, мазкур ҳужжатлар орқали солиқ маъмурчилигини соддалаштириш, аҳолига қулай ва самарали шарт-шароит яратиш, шахсларнинг меҳнат фаолиятини ҳуқуқий мақомда амалга

¹Ўзбекистон Республикаси Вазирлар Маҳкамасининг қарори. Ўзини ўзи банд қилган шахс сифатида фаолиятни амалга ошириш тартиби тўғрисидаги низомни тасдиқлаш ҳақида. 2020 йил 23 декабрь, 806-сон.

² Рузиев Ғ.У. Аҳоли бандлигини таъминлашда ўзини ўзи банд қилишни янада ривожлантириш масалалари. “Молия” журнали. 2021 й. №5. 168-181 б.

ошириши учун асосий омиллар шакллантирилди. Илмий таҳлиллар шуни кўрсатмоқдаки, бундай ёндашув меҳнат ресурсларини тўлиқ рўйхатга олиш, бюджет даромадларини ошириш ва ижтимоий ҳимоя тизимини кенгайтириш имконини беради.

Ушбу жиҳатдан, ўзини ўзи банд қилган шахслар фаолиятининг ҳуқуқий асосларини яратиш, уларни солиқ тизимига жалб этиш ва амалий механизмларни йўлга қўйишда юқоридаги норматив-ҳуқуқий ҳужжатлар ҳал қилувчи аҳамият касб этади. Бу, нафақат солиққа тортишдаги тизимли ёндашувни юзага келтиради, балки мамлакатда ижтимоий адолат ва иқтисодий инклюзияни таъминлашда ҳам муҳим вазифаларни бажаради³. Шу сабабли, юқоридаги норматив ҳужжатлар нафақат ҳуқуқий базанинг шаклланиши, балки амалдаги солиқ сиёсатининг инклюзив ва барқарор йўналишда ривожланишида дастлабки пойдевор бўлиб хизмат қилди.

Ушбу истиқболда, авваламбор, ЎЎБ шахслар ва улар фаолиятини тартибга солиш борасида мавжуд қонунчилик нормаларини таҳлил қилиш зарур. Шундай қонунчиликлардан бири Ўзбекистон Республикаси Президентининг 2020 йил 8 июндаги ПҚ - 4742-сон “Тадбиркорлик фаолияти ва ўзини ўзи банд қилишни давлат томонидан тартибга солишни соддалаштириш чора-тадбирлари тўғрисида”ги қарори бўлиб, у ушбу соҳани ҳуқуқий жиҳатдан ислоҳ этишда асосий меъёрий базани шакллантирди. Мазкур қарор орқали “ўзини ўзи банд қилган шахс” категорияси ҳуқуқий жиҳатдан эътироф этилиши ва унинг меҳнат фаолиятини амалга ошириш шакллари, давлат рўйхатидан ўтиш усуллари ҳамда маъмурий тартиб-таомилларини белгилаб берди. Бу ўз навбатида мамлакатда меҳнат муносабатларининг янги, ҳуқуқий мақомга эга бўлган шакли - ўзини ўзи банд қилиш институти шаклланишига замин яратди⁴.

Ушбу қарорда белгиланган асосий мазмун-моҳияти қуйидаги жадвалда умумлаштирилган.

1-жадвал

Ўзбекистон Республикаси Президентининг ПҚ - 4742-сон қарорининг асосий мазмун-моҳияти⁵

Қарорнинг	
№ асосий мақсад ва мазмуни	Қисқача изох

³ Забелина О.В., Мирзабалаева Ф.И. (2020) Фриланс как новая гибкая форма самозанятости на российском рынке труда// Экономика. № 4. - с.308-320.

⁴ Ўзбекистон Республикаси Президентининг 2020 йил 8 июндаги ПҚ - 4742-сон “Тадбиркорлик фаолияти ва ўзини ўзи банд қилишни давлат томонидан тартибга солишни соддалаштириш чора-тадбирлари тўғрисида”ги қарори

⁵ Муаллиф томонидан шакллантирилган

1	Янгича рўйхатга олиш тартиби	QR-код орқали мобил илова ва шахсий кабинет орқали хабар бериш йўли билан рўйхатдан ўтиш
2	100 млн. сўмгача даромадга солиқдан озод	Солиқ даврида даромади 100 млн. сўмдан ошмаган ЎЎБнинг даромади солиққа тортиладиган жами даромади таркибига киритилмайди
3	Ижтимоий солиқда енгиллик	БХМнинг 50% миқдорида ижтимоий солиқ тўлаш тартиби
4	Ёлланма ишчиларни ёллаш ҳуқуқига эга эмас	ЎЎБ шахслар фақат мустақил меҳнат фаолияти юритиши мумкин
5	Фрилансерларга солиқ ва тўлов эркинлиги	Контрактсиз, оферта асосида хизмат кўрсатиш ва хорижий валютада тўлов қабул қилишга рухсат берилади
6	Махсус мобил иловалар	Даромад ва харажатларни ҳисоблаш, электрон ҳисоб-китоб ва реклама имконияти берилади
7	Оилавий корхоналар учун имтиёз	3 нафардан ортиқ иштирокчи бўлган ЎЎБ фаолиятига эга оилавий корхоналар 50% айланма солиқ имтиёзи олади

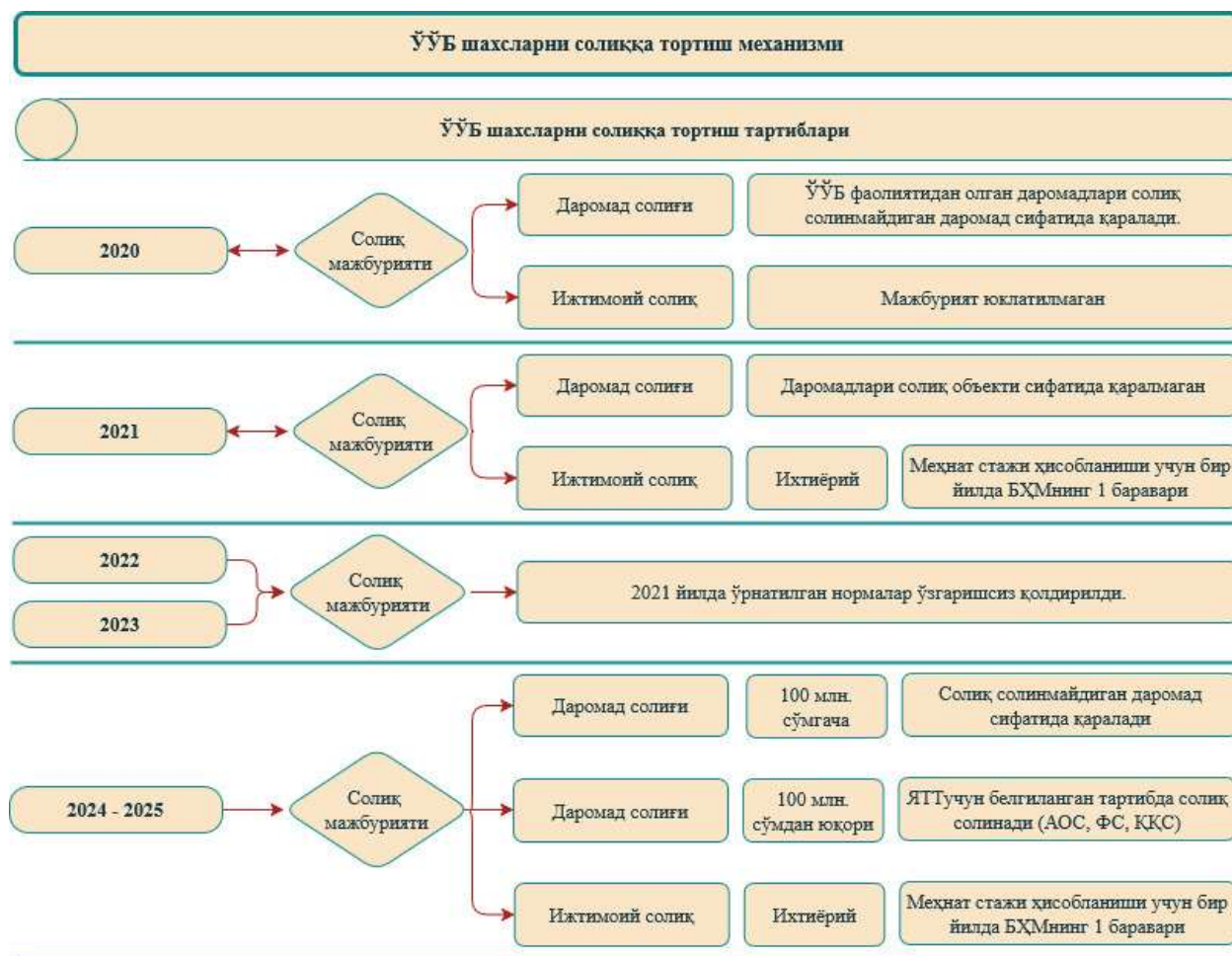
Жадвалдан кўриш мумкинки, қарор асосида ЎЎБ шахсларни рўйхатдан ўтказишда янгича, яъни рақамли ёндашув асосида QR-код бериш орқали соддалаштирилган тизим жорий этилди. Бу механизм анъанавий бюрократик гувоҳномалар бериш амалиётини бекор қилди ва ахборот-коммуникация технологияларига асосланган автоматлаштирилган ёндашувни таъминлади. Амалда бу жараён солиқ маъмурчилигининг рақамлашуви билан уйғунликда амалга оширилмоқда ва электрон ҳисобот, мобил платформа орқали фаолият юритиш имконини яратмоқда.

Шунингдек, қарор ЎЎБ шахсларнинг йиллик даромади 100 млн. сўмлик чегара доирасида бўлса, бу даромад жисмоний шахснинг умумий даромадига қўшилмайди ва солиқ солиш объекти сифатида қаралмаслигини белгилаб берди. Бундан кўзланган мақсад ЎЎБ субъектларини расмий секторга жалб этиш учун рағбатлантирувчи инструмент сифатида фойдаланиш бўлган.

Мазкур қарор том маънода, нафақат ўзини ўзи банд қилган шахслар институтининг ҳуқуқий асосини яратди, балки бу тоифани иқтисодий ва солиқ тизимига интеграция қилишда институционал, молиявий ва рақамли механизмларни жорий этди. Бу эса Ўзбекистонда меҳнат бозорини диверсификация қилиш, солиқ базасини кенгайтириш ва ижтимоий ҳимоя

тизимини кучайтиришга хизмат қилувчи стратегик асосий қадамлардан бири бўлиб ҳисобланади⁶.

Ўзини ўзи банд қилган (ЎЎБ) шахсларни солиққа тортиш тизими 2020 - 2025 йиллар мобайнида босқичма-босқич такомиллаштирилиб, босқичли солиқ сиёсати ва ижтимоий кафолатлар билан уйғунлашган ҳолда ривожлантирилди. Мазкур механизмнинг таҳлили шуни кўрсатадики, мамлакатда расмий бандликни кенгайтириш, норасмий сектор улушини қисқартириш ва аҳоли фаоллигини қонуний асосда кенгайтириш мақсад қилинган. Ушбу субъектлар фаолиятини солиққа тортиш механизминини ривожланиши ҳар бир босқичда муайян ҳуқуқий-иқтисодий мезонларга асосланган ҳолда шакллантирилган.



1-расм. ЎЎБ қилган шахсларни солиққа тортиш механизмининг ривожланиш босқичлари⁷

Хусусан, 2020 ва 2021 йилларда ўзини ўзи банд қилган шахслар учун жуда енгиллаштирилган солиқ режими жорий этилди. Жумладан, меҳнат фаолиятдан олинган даромадлар жисмоний шахслардан олинган даромад солиғидан

⁶ Рузиев, Ғ. (2023). Ўзини ўзи банд қилишни солиқлар воситасида тартибга солишни янада такомиллаштириш масалалари. *Иқтисодий тараққиёт ва таҳлил*, 6, 220–230.

⁷ Муаллиф томонидан шакллантирилди.

тўлик озод этилди. Бу норма амалдаги Солиқ кодексининг 369-моддаси 9-банди асосида “солиқ солинмайдиган даромадлар” сифатида белгиланган.

Шу билан бирга, 2021 йилдан бошлаб ижтимоий солиқни ихтиёрий асосда тўлаш тартиби белгиланди. Бунда меҳнат стажи ҳисобланиши учун солиқ тўловчидан бир йилда камида базавий ҳисоблаш миқдорининг (БХМ) 1 баравари миқдорида ижтимоий солиқ тўлаш талаби қилинган⁸.

2022 ва 2023 йилларда амалдаги солиққа тортиш тартиби ўзгаришсиз қолдирилди. Бундан асосий мақсад фуқароларни қўшимча тартибларсиз ва барқарор шартларда ўзини ўзи банд қилиш фаолиятига жалб қилиш, тизимга ишончни кучайтириш ва қонунийлаштириш жараёнларини секин-аста амалга ошириш бўлган.

2024 ва 2025 йилларда бир қатор муҳим нормалар қабул қилинди. Энг катта янгиликлардан бири бу ЎЎБ шахснинг йиллик даромади 100 млн. сўмдан кам бўлса, у ҳолда субъектнинг даромади солиқ солинмайдиган даромад сифатида қаралади. Агар ЎЎБ шахснинг йиллик даромади 100 млн. сўмдан ошса, у ҳолда у яқка тартибдаги тадбиркор учун белгиланган нормалар доирасида солиқ тўлаш мажбурияти жорий этилди. Бу тартиб ЎЎБ шахсларнинг йиллик меҳнат даромадини белгиланган чегараларидан келиб чиқиб айланмадан олинмайдиган солиқ, фойда солиғи ва қўшилган қиймат солиғини тўлашни назарда тутди.

Ижтимоий солиқ тўлаш мажбурияти 2025 йилда ҳам ихтиёрийлигича қолдирилди. Бу орқали ЎЎБ шахснинг меҳнат стажи расмийлаштирилиши мумкин ва мазкур тўловлар тўғридан-тўғри Пенсия жамғармасига йўналтирилади. Шу билан биргаликда фаолият, фаолият вақтинча тўхтатилганда, электрон хабарнома орқали ижтимоий солиқ тўлаш ҳам тўхтатилиши мумкин. Бу тартиб нафақат қонунийликни таъминлаш, балки ижтимоий барқарорликни таъминлашда ҳам муҳим аҳамият касб этади.

Юқоридагилардан келиб чиқиб, ЎЎБ шахсларни солиққа тортиш механизмини такомиллаштириш учун қуйидаги илмий ва амалий тавсиялар шакллантириш мумкин.

Биринчидан, назарий жиҳатдан, ўзини ўзи банд қилган шахслар бозорда меҳнат таклифини амалга ошираётган жисмоний шахслар сифатида қаралиши лозим. Уларни тадбиркорлик субъекти эмас, балки меҳнат ресурслари таклиф этувчи шахслар сифатида ҳуқуқий мақомда тан олиш зарур. Бу Европанинг бир қатор давлатларида (масалан, Германияда “freelancer”лар, Францияда “auto-entrepreneur”лар) қўлланиладиган институтчионал моделларга мос келади. Бундай ёндашув уларни тадбиркорликнинг тўлик қонунчилиги асосида эмас,

⁸ Ўзбекистон Республикаси Солиқ Кодекси (2025 йилги таҳрир)

балки меҳнат ва фуқаролик-ҳуқуқий муносабатлар доирасига солиққа тортиш имконини беради.

Иккинчидан, институционал жиҳатдан, ЎЎБ шахсларнинг солиққа тортилишида индивидуаллаштирилган солиқ модели (progressive flat-tax model) асосида, даромад чегаралари бўйича босқичма-босқич ставка белгиланиши мақсадга мувофиқ. Бу модель даромадлар ошган ҳолда солиқ юқини адолатли ва нисбий тарзда ошириш имконини беради, бироқ тўсатдан яқка тартибдаги тадбиркор мақомига ўтиш каби радикал ўзгаришларсиз амалга оширилади. Масалан, Швеция ва Канадада ўзини ўзи банд қилган шахслар учун прогрессив солиқ ставкалари қўлланилади, аммо уларга тадбиркорлик регуляциялари эмас, фуқаролик регуляциялари татбиқ этилади.

Учинчидан, маъмурилик жиҳатдан, ЎЎБ шахсларнинг даромад ва харажатларини аниқ ва содда усулда ҳисобга олиш, уларнинг молиявий фаоллигини рақамлаштириш ва солиқ маъмурияти билан интерактив алоқаларини кучайтириш талаб этилади. Бунда мобил иловада даромад-харажат баланси юритилиши, автоматик солиқ ҳисоб-китоб платформалари, ва солиқ органлари билан реал вақт режимида маълумот алмашинув тизимларини жорий қилиш самарали ҳисобланади.

Хулоса қилиб айтганда, Ўзбекистонда ўзини ўзи банд қилган шахслар сонидаги динамик ўсиш ва уларнинг хизмат кўрсатиш соҳаларидаги кенгайиши амалга оширилган солиқ ислохотлари самараси бўлиб, бу тизимни янада такомиллаштириш учун илмий асосланган институционал, маъмурий ва назарий ёндашувлар зарур. Бу фуқароларни расмий иқтисодиётга жалб этиш, бандлик даражасини ошириш ва солиқ тушумларини барқарорлаштиришда хизмат қилади.

Шу билан бирга, таҳлиллар шуни кўрсатмоқдаки, ўзини ўзи банд қилган шахсларни солиққа тортиш амалиёти Ўзбекистонда нисбатан янги йўналиш бўлганлиги сабабли ушбу тоифани солиққа тортишда қўлланилаётган механизмлар ҳали ҳам тўлиқ шаклланмаган бўлиб, бир қатор фундаментал, институционал ва маъмурий муаммолар мавжуд.

Фундаментал муаммолар қаторига аввало, ўзини ўзи банд қилган шахсларнинг аниқ иқтисодий-ҳуқуқий мақомининг кенг қамровли тушунчаси шаклланмаганлиги киради. Улар жисмоний шахсми, тадбиркорми ёки махсус меҳнат субъектими - бу борадаги юридик муайянлик етишмаётгани ҳуқуқий амалиётда турли таъбирларга сабаб бўлмоқда. Шу билан бирга, институционал жиҳатдан, ўзини ўзи банд қилганлар билан ишлашда масъул ташкилотлар ўртасида вазифалар тақсимоти аниқ белгиланмаган. Солиқ органлари, маҳаллий

хокимиятлар ва бандлик муассасалари ўртасида самарали мувофиқлаштирувчи механизмлар шаклланмагани амалиётда муаммолар келтириб чиқармоқда⁹.

ХУЛОСА

Хулоса қилиб айтганда, ўзини ўзи банд қилган шахсларни солиққа тортиш амалиётини самарали ташкил этиш учун мавжуд ҳуқуқий асослар етарлича илғор ва замонавий бўлса-да, унинг амалдаги татбиқи кўплаб муаммоларга дуч келмоқда. Бу муаммоларни бартараф этиш учун норматив-ҳуқуқий базани аниқлаштириш, давлат органлари ўртасидаги институционал мувофиқликни таъминлаш, рақамли платформаларни такомиллаштириш, шунингдек, аҳоли ўртасида ҳуқуқий ва солиқий саводхонликни ошириш бўйича кенг қамровли чора-тадбирларни амалга ошириш талаб этилади. Зеро, ўзини ўзи банд қилганлар сектори - иқтисодиётнинг стратегик аҳамиятга эга бўлган, юқори салоҳиятга эга сегменти ҳисобланади. Уларни солиқ тизимига самарали жалб қилиш орқали иқтисодиётнинг барқарорлиги ва солиқ базасининг кенгайишига эришиш мумкин.

АДАБИЁТЛАР РЎЙХАТИ

1. Ўзбекистон Республикаси Вазирлар Маҳкамасининг қарори. Ўзини ўзи банд қилган шахс сифатида фаолиятни амалга ошириш тартиби тўғрисидаги низомни тасдиқлаш ҳақида. 2020 йил 23 декабрь, 806-сон.
2. Рузиев Ғ.У. Аҳоли бандлигини таъминлашда ўзини ўзи банд қилишни янада ривожлантириш масалалари. “Молия” журнали. 2021 й. №5. 168-181 б.
3. Забелина О.В., Мирзабалаева Ф.И. (2020) Фриланс как новая гибкая форма самозанятости на российском рынке труда// Экономика. № 4. - с.308-320.
4. Ўзбекистон Республикаси Президентининг 2020 йил 8 июндаги ПҚ - 4742-сон “Тадбиркорлик фаолияти ва ўзини ўзи банд қилишни давлат томонидан тартибга солишни соддалаштириш чора-тадбирлари тўғрисида”ги қарори
5. Рузиев, Ғ. (2023). Ўзини ўзи банд қилишни солиқлар воситасида тартибга солишни янада такомиллаштириш масалалари. *Иқтисодий тараққиёт ва таҳлил*, 6, 220–230.
6. Ўзбекистон Республикаси Солиқ Кодекси (2025 йилги таҳрир)
7. Сафарова, Н. А. (2023). Ўзини ўзи банд қилиш тизимини ривожлантириш истиқболлари. *Ўзбекистон сугурта бозори журнали*, (1).

⁹ Сафарова, Н. А. (2023). Ўзини ўзи банд қилиш тизимини ривожлантириш истиқболлари. *Ўзбекистон сугурта бозори журнали*, (1).

HUDUDIY IQTISODIY RIVOJLANISH OMILLARI VA RAQAMLI TRANSFORMATSIYA TA'SIRI

Buxoro innovatsiyalar universiteti “Molyaviy texnologiyalar, iqtisodiyot va logistika”
kafedrası o‘qituvchisi

Kamolova Dilsora Jamolovna

Annotatsiya: Ushbu maqolada hududiy iqtisodiy o‘shish modelida raqamli transformatsiyaning tizimli ta’siri xalqaro va milliy ko‘rsatkichlar asosida tahlil qilingan. Tadqiqotda OECD va UNDP indeklari bilan bir qatorda Buxoro viloyati uchun ishlab chiqilgan “Raqamli iqtisodiy integratsiya indeksi (REII)” konseptual modeli taklif etiladi. Empirik tahlil natijalariga ko‘ra, raqamli infratuzilma, ta’lim tizimidagi raqamlashtirish darajasi va innovatsion faoliyat o‘rtasida kuchli ko‘pyo‘nalishli bog‘liqlik mavjud. Natijalar hududiy siyosatda raqamli transformatsiyani barqaror rivojlanishning strategik komponenti sifatida qarash zarurligini asoslaydi.

Kalit so‘zlar: raqamli iqtisodiyot, hududiy o‘shish, raqamli transformatsiya, innovatsion klasterlar, inson kapitali, REII, intellektual iqtisodiyot, hududiy samaradorlik.

Global miqyosda raqamli transformatsiya endi faqat texnologik jarayon emas — u hududiy iqtisodiy tizimlarning o‘shishini qayta modellashtirayotgan **metastrategik omil**dir. OECD (2024) hisobotiga ko‘ra, raqamli infratuzilmaga sarmoya kiritilgan 1% YaIM o‘shishini o‘rtacha 0,42% ga tezlashtiradi. UNDP “Digital Maturity Index” (2023) ma’lumotlariga ko‘ra, raqamli rivojlanish darajasi yuqori bo‘lgan davlatlarda (Singapur, Finlyandiya, Estoniya) hududiy ijtimoiy tengsizlik koeffitsienti (GINI) 5 yil ichida o‘rtacha 8–10% ga qisqargan.

Shu nuqtai nazardan, raqamli iqtisodiyot nafaqat innovatsion o‘shish drayveri, balki **hududiy ijtimoiy-iqtisodiy barqarorlik mexanizmi** sifatida ham qaralmoqda.

Quyidagi jadvalda ayrim rivojlangan mamlakatlarda raqamli transformatsiya va YaIM o‘shish sur’atlari o‘rtasidagi solishtiruv keltiriladi.

Jadval 1. Raqamli iqtisodiyot investitsiyalari va hududiy iqtisodiy o‘shish o‘rtasidagi bog‘liqlik

Mamlakat	Raqamli iqtisodiyotga YAIMdan ajratilgan ulush (%)	Mehnat unumdorligi o‘shishi (%)	Hududiy raqamli tenglik indeksi	Innovatsion faoliyat o‘shishi (%)
Finlyandiya	4.8	3.9	0.89	7.2

Mamlakat	Raqamli iqtisodiyotga YAIMdan ajratilgan ulush (%)	Mehnat unumdorligi o'sishi (%)	Hududiy raqamli tenglik indeksi	Innovatsion faoliyat o'sishi (%)
Janubiy Koreya	5.1	4.3	0.92	8.5
Singapur	5.7	4.9	0.94	9.1
Estoniya	4.2	3.5	0.88	6.7
O'zbekiston	2.1	2.4	0.74	4.3

Manba: OECD Digital Economy Report (2024), UNDP Global Digital Development Index (2023).

Mazkur solishtirma tahlil shuni ko'rsatadiki, raqamli investitsiya ulushi yuqori bo'lgan davlatlarda mehnat unumdorligi o'sish sur'atlari ham yuqoriroqdir. Bu holat **Buxoro viloyati** uchun ham bevosita dolzarb — chunki u raqamli ta'lim, innovatsion texnoparklar va startap infratuzilmasi rivojlanishining mintaqaviy markaziga aylanmoqda.

Hududiy raqamli rivojlanishni baholash uchun muallif tomonidan **Raqamli iqtisodiy integratsiya indeksi (REII)** taklif etildi. Bu indeks uchta asosiy komponent asosida shakllantiriladi:

- Raqamli infratuzilma (DI):** internet qamrovi, keng polosali tarmoq sifati, raqamli xizmatlar soni.
- Inson kapitali (HC):** raqamli kompetensiyalar darajasi, STEM-ta'lim ulushi, innovatsion faoliyatda ishtirok.
- Iqtisodiy integratsiya (EI):** hududiy ishlab chiqarish samaradorligi, texnologik klasterlar ulushi, startap ekotizimi rivojlanishi.

Formulasi

Raqamli iqtisodiy integratsiya indeksi (REII) quyidagi formulaga asosan hisoblanadi:

$$REII = 0.4DI + 0.35HC + 0.25EI$$

Bu yerda:

DI — raqamli infratuzilma indeksi;

HC — inson kapitali indeksi;

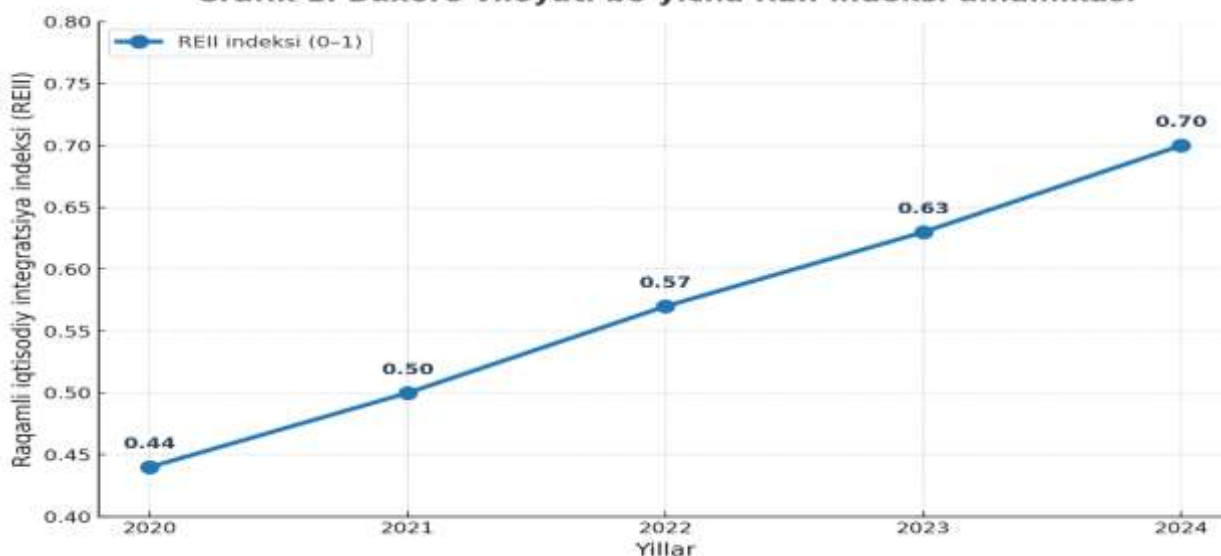
EI — iqtisodiy integratsiya indeksi.

Formulaning og'irlik koeffitsientlari empirik tahlil asosida aniqlangan bo'lib, raqamli iqtisodiy tizimning hududiy rivojlanishga ta'sirini kompleks baholash imkonini beradi.

Buxoro viloyati uchun hisob-kitoblar quyidagi natijani berdi:

Yil	DI	HC	EI	REII (0–1)
2020	0.45	0.48	0.39	0.44
2021	0.52	0.55	0.46	0.50
2022	0.60	0.61	0.53	0.57
2023	0.68	0.67	0.58	0.63
2024	0.76	0.72	0.63	0.70

Grafik 1. Buxoro viloyati bo'yicha REII indeksi dinamikasi



Grafik 1. Buxoro viloyati bo'yicha REII indeksi dinamikasi

Natijalar shuni ko'rsatadiki, 2020–2024 yillar davomida Buxoro viloyatining REII 0.44 dan 0.70 gacha oshgan, bu esa hududiy iqtisodiyotning raqamli integratsiya bosqichiga o'tganini bildiradi.

Raqamli infratuzilma o'sishi natijasida iqtisodiyotda **klasterlashuv (clusterization)** jarayoni kuchayadi.

McKinsey (2024) hisobotiga ko'ra, raqamli klasterlar mavjud hududlarda YaIM o'sishi klaster bo'lmagan hududlarga nisbatan 1,7 baravar yuqori.

Buxoro viloyatida 2024-yil holatiga quyidagi sohalar raqamli klaster shaklida faoliyat yuritmoqda:

- **Turizm-Tech klasteri** (raqamli xizmatlar, AR/VR-turizm platformalari);
- **Agro-Digital klasteri** (sun'iy intellekt asosida hosildorlik monitoringi);
- **EduTech va MedTech startap zonalari** (AI-ta'lim va tibbiy raqamli tizimlar).

Quyidagi jadval bu klasterlarning iqtisodiy natijalarini ifodalaydi:

Jadval 2. Raqamli klasterlarning Buxoro viloyatidagi iqtisodiy samaradorligi (2024 y.)

Klaster turi	Ish o‘rinlari soni	Investitsiya hajmi (mlrd so‘m)	YaHMga qo‘shgan ulushi (%)	Eksport hajmi (mln \$)
Turizm-Tech	2 400	187,5	1,2	12,6
Agro-Digital	3 100	245,3	1,6	15,8
EduTech & MedTech	1 850	163,4	1,0	9,4

Ushbu klasterlar o‘z navbatida “raqamli multiplikator” effekti yaratadi: har bir 1 mlrd so‘mlik sarmoya 2,3 baravar iqtisodiy faollikni rag‘batlantiradi.

Hududiy iqtisodiyotdagi raqamli omillar o‘rtasidagi bog‘liqlik koeffitsientlari quyidagicha aniqlangan:

Bog‘liqlik juftligi	Korrelyatsiya koeffitsienti (R)
REII ↔ YaHM o‘sishi	0.93
Raqamli ta’lim ↔ Mehnat unumdorligi	0.88
Raqamli klasterlar ↔ Innovatsion faoliyat	0.91
Inson kapitali ↔ Eksport hajmi	0.85

Bu raqamlar hududiy iqtisodiyotda raqamli transformatsiya tizimining **kompleks akseleratsion effekti** mavjudligini isbotlaydi.

Xalqaro va hududiy tahlillar natijasida aniqlanishicha, raqamli transformatsiya hududiy iqtisodiy rivojlanishning yangi paradigmasiga aylandi. Buxoro viloyati tajribasi shuni ko‘rsatadiki, raqamli infratuzilma, inson kapitali va klasterlashgan iqtisodiyot o‘rtasidagi uzviy bog‘liqlik YaHM o‘shishining barqaror omiliga aylanmoqda.

Kelajakda raqamli siyosatni “Smart Region” tamoyili asosida shakllantirish, REII indeksini muntazam o‘lchab borish va raqamli klasterlar sonini oshirish mintaqaning iqtisodiy raqobatbardoshligini keskin kuchaytiradi.

FOYDALANILGAN ADABIYOTLAR

1. OECD. (2024). *Digital Economy Outlook: Regional Transformations and Innovation Ecosystems*. Paris: OECD Publishing.
2. UNDP. (2023). *Global Digital Development Index and Regional Competitiveness Report*. New York.
3. World Economic Forum. (2024). *Future of Digital Regions: Growth through Connectivity*. Geneva.
4. McKinsey & Company. (2024). *Smart Clusters: The Economic Multiplier of Digital Transformation*.

5. O‘zbekiston Respublikasi Prezidenti Farmoni PF–60 (2022). *“Raqamli O‘zbekiston – 2030” strategiyasini amalga oshirish to‘g‘risida.*
6. Buxoro viloyati Raqamli texnologiyalar boshqarmasi. (2025). *Viloyat raqamli rivojlanish tahlili.*

RAQAMLI TA'LIM TRANSFORMATSIYASINING NAZARIY VA METODOLOGIK ASOSLARI

Buxoro innovatsiyalar universiteti
 “Molyaviy texnologiyalar, iqtisodiyot
 va logistika” kafedrası o‘qituvchisi
Kamolova Dilsora Jamolovna

Annotatsiya: Maqolada raqamli ta’lim transformatsiyasining nazariy va metodologik asoslari, uning inson kapitali rivojlanishidagi o‘rni hamda hududiy iqtisodiy o‘shish jarayonlariga ta’siri tahlil etilgan. Raqamli texnologiyalarni ta’lim tizimiga integratsiyalash orqali bilimlar iqtisodiyotining shakllanishi, mehnat unumdorligi va innovatsion salohiyatning oshishi bo‘yicha ilmiy asoslangan yondashuvlar ishlab chiqilgan. Tadqiqotda xalqaro tashkilotlar (UNESCO, OECD, World Bank) ma’lumotlari, shuningdek O‘zbekistonning 2020–2024 yillar oralig‘idagi statistik ko‘rsatkichlar tahlil qilingan.

Kalit so‘zlar: raqamli ta’lim, inson kapitali, iqtisodiy o‘shish, raqamli transformatsiya, bilimlar iqtisodiyoti, innovatsiya, raqamli infratuzilma, Smart Education.

Raqamli ta’lim transformatsiyasi — bu ta’lim tizimining raqamli texnologiyalar, ma’lumotlar tahlili (data analytics), bulutli xizmatlar (cloud computing), hamda sun’iy intellekt (AI) asosida tubdan o‘zgarishi jarayonidir. Mazkur jarayon nafaqat ta’lim sifati va samaradorligini oshiradi, balki hududiy mehnat bozori, inson kapitali va iqtisodiy o‘shishning yangi modelini shakllantiradi.

G.Bekker va T.Shults inson kapitali nazariyasiga ko‘ra, bilim va malakaga qaratilgan investitsiyalar iqtisodiy o‘shishning eng yuqori rentabellik darajasiga ega yo‘nalishlardir. Shu sababli raqamli ta’lim sohasiga yo‘naltirilgan investitsiyalar mehnat unumdorligi va ijtimoiy samaradorlikning muhim omiliga aylanadi.

Jahon miqyosida raqamli ta’limning rivojlanish bosqichlari quyidagicha tasniflanadi:

Bosqich	Davr	Asosiy texnologiyalar	Natijaviy o‘zgarishlar
I bosqich	1990–2000 yy.	Kompyuterlashtirish, Internet	Elektron o‘quv resurslari yaratiladi
II bosqich	2000–2010 yy.	E-learning platformalari	Masofaviy ta’lim tizimlari kengaydi
III bosqich	2010–2020 yy.	Big Data, LMS tizimlari	Raqamli baholash va o‘qitish integratsiyasi

Bosqich	Davr	Asosiy texnologiyalar	Natijaviy o'zgarishlar
IV bosqich	2020 y. – hozir	AI, VR/AR, IoT texnologiyalari	Smart Education ekotizimi shakllanmoqda

Manba: UNESCO “Global Education Monitoring Report”, 2024.

OECD (2023) ma'lumotlariga ko'ra, raqamli ta'limga YAIMning 1 foizi miqdorida investitsiya kiritgan mamlakatlarda o'rtacha mehnat unumdorligi 3,2 foizga oshgan. Bu esa raqamli ta'limning makroiqtisodiy samaradorligini yaqqol ko'rsatadi.

Inson kapitalining sifat omillari — bilim, malaka, sog'liq va ijtimoiy faollik — raqamli kompetensiyalar bilan boyitilganda, iqtisodiy tizimda ko'pkarра sinergetik ta'sir kuzatiladi. Quyidagi modelda ushbu o'zaro ta'sir mexanizmi ko'rsatilgan.

Grafik 1. Raqamli ta'lim - inson kapitali - iqtisodiy o'sish modeli



Grafik 1. Raqamli ta'lim – inson kapitali – iqtisodiy o'sish bog'liqligi modeli

Mazkur modelda raqamli ta'lim inson kapitali sifatini oshiruvchi asosiy katalizator sifatida namoyon bo'ladi. Shuningdek, raqamli ta'lim mehnat bozorining moslashuvchanligini ta'minlab, yangi kasblar va startap faoliyatini rag'batlantiradi.

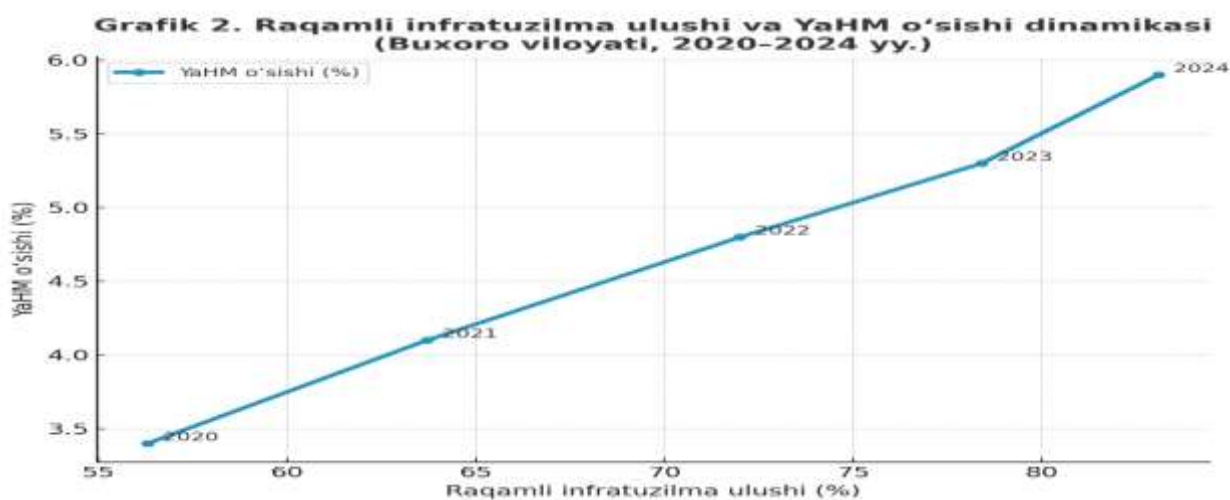
Hududiy iqtisodiy o'sishning asosiy indikatorlari — yalpi hududiy mahsulot (YaHM), bandlik darajasi, raqamli infratuzilma ulushi, va ta'lim sifati indeksidir. Quyida Buxoro viloyatida 2020–2024 yillardagi raqamlashtirish jarayonlarining iqtisodiy ta'siri tahlil qilingan.

Jadval 1. Raqamli ta'lim va iqtisodiy o'sish o'rtasidagi o'zaro bog'liqlik (Buxoro viloyati misolida)

Yil	Raqamli ta'limga yo'naltirilgan investitsiyalar (mlrd so'm)	Internet qamrovi (%)	Inson kapitali indeksi (0–1)	YaHM o'sishi (%)
2020	42,5	56,3	0,61	3,4
2021	49,8	63,7	0,65	4,1
2022	57,2	72,0	0,68	4,8

Yil	Raqamli ta'limga yo'naltirilgan investitsiyalar (mlrd so'm)	Internet qamrovi (%)	Inson kapitali indeksi (0–1)	YaHM o'sishi (%)
2023	64,6	78,4	0,71	5,3
2024	70,9	83,1	0,74	5,9

Manba: O'zbekiston Respublikasi Raqamli texnologiyalar vazirligi, Davstatqo'm (2025).



Grafik 2. Raqamli ta'lim infratuzilmasi ulushi va YaHM o'sishi dinamikasi

Korrelatsion tahlil natijalari shuni ko'rsatadiki, raqamli infratuzilmaning 1 foizga oshishi hududiy YaHM o'sishini o'rtacha 0,09 foizga oshiradi ($R=0,94$). Bu esa raqamli ta'lim infratuzilmasining hududiy iqtisodiy rivojlanishga kuchli ijobiy ta'sirini tasdiqlaydi.

Raqamli ta'lim transformatsiyasi zamonaviy iqtisodiy rivojlanish modelining markaziy komponentiga aylanmoqda. Tahlillar shuni ko'rsatadiki, Buxoro viloyatida raqamli ta'lim sohasiga qaratilgan har 1 milliard so'm investitsiya o'rtacha YaHM o'sishiga 0,08 foizlik ijobiy ta'sir ko'rsatadi. Bu esa raqamli transformatsiyani hududiy iqtisodiy siyosatning strategik yo'nalishlaridan biri sifatida ko'rib chiqish zarurligini ko'rsatadi.

FOYDALANILGAN ADABIYOTLAR

Becker, G. (1994). *Human Capital: A Theoretical and Empirical Analysis*. University of Chicago Press.

1. Schultz, T. (1961). *Investment in Human Capital*. The American Economic Review, 51(1), 1–17.

2. UNESCO. (2024). *Global Education Monitoring Report: The Role of Digital Learning in Human Development*. Paris.

3. OECD. (2023). *Education and Digital Transformation*. Paris: OECD Publishing.

4. World Bank. (2023). *Digital Economy and Skills Development in Central Asia*. Washington, D.C.
5. O‘zbekiston Respublikasi Prezidenti Farmoni PF–60 (2022). “Raqamli O‘zbekiston – 2030” strategiyasini amalga oshirish chora-tadbirlari to‘g‘risida.
6. Raqamli texnologiyalar vazirligi (2024). *Hududiy raqamli infratuzilma rivojlanish ko‘rsatkichlari*. Toshkent.
7. Davlat statistika qo‘mitasi (2025). *Buxoro viloyatining ijtimoiy-iqtisodiy ko‘rsatkichlari to‘plami*. Toshkent: Statkom.
8. Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W.W. Norton & Company.
9. McKinsey & Company. (2024). *Digital Education and the Future of Work: Global Outlook Report*.

MA'NAVIY MEROSDAN MIGRATSIYAGACHA

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Annotatsiya. Mazkur tadqiqot markaziy Osiyo hududida shakllangan o'zbek etnosining ijtimoiy-tarixiy taraqqiyoti, islomiy ma'naviyat va diniy ilm-madaniyat orqali milliy o'zlikni mustahkamlash hamda Saudiya Arabistonidagi o'zbek diasporasining shakllanishi, ijtimoiy-madaniy holati va milliy o'zlikni saqlash tajribasini birlashtirilgan kontekstda ko'rib chiqadi. Birinchi navbatda, o'zbek etnosi turli tarixiy sinovlar — mustamlaka davri, sovet tuzumi, xalqaro migratsiya — orqali o'tgan, shu bilan birga o'z tilini, urf-odatlarini va islomiy ma'naviyatni saqlab qolishga muvaffaq bo'lgan milliy birlik sifatida tahlil qilinadi. Ikkinchi jihatdan, islom dini va uning Markaziy Osiyodagi ilm-madaniy merosi — xususan buyuk olimlar (masalan, Imom al-Buxoriy, Imom at-Termiziy va boshqalar) — o'zbek jamiyatida ma'naviy va madaniy uyg'unlik yaratilishida hal qiluvchi rol o'ynagani ko'rsatiladi. Uchinchi jihat — Saudiya Arabistonidagi o'zbek diaspora holati bo'lib, u yerda yashayotgan yurtdoshlarimizning milliy o'zlikni saqlash, o'zbek tilida so'zlash, urf-odatlarini davom ettirish, shuningdek, xalqaro musulmon jamiyati bilan aloqalarni mustahkamlashdagi tajribalari tahlil qilinadi. Tadqiqot yakunida shuni belgilaydi-ki, o'zbek etnosining yashash hududidan qat'iy nazar — mintaqada ichida va diaspora holatida — bir ijtimoiy-madaniy birlik sifatida o'rganilishi milliy o'zlikni anglash, xalqlararo integratsiyani rivojlantirish va madaniy-tarixiy merosni davom ettirish uchun muhim manba hisoblanadi.

Kalit so'zlar: o'zbek etnosi, milliy o'zlik, Markaziy Osiyo, islomiy ma'naviyat, diniy ilm-madaniyat, diaspora, Saudiya Arabistoni, Migratsiya, madaniy integratsiya, etnik birlik

FROM SPIRITUAL HERITAGE TO MIGRATION

Abstract. This study examines the socio-historical development of the Uzbek ethnos formed in Central Asia, strengthening national identity through Islamic spirituality and religious science and culture, and the formation, socio-cultural status, and experience of preserving national identity of the Uzbek diaspora in Saudi Arabia in a unified context. First of all, the Uzbek ethnos is analyzed as a national unit that has gone through various historical tests - the colonial period, the Soviet regime, international migration - and at the same time managed to preserve its language, traditions, and Islamic spirituality. Secondly, it is shown that the Islamic religion and its scientific and cultural heritage in Central Asia - in particular, great scholars (for example, Imam al-

Bukhari, Imam at-Termizi, etc.) - played a decisive role in creating spiritual and cultural harmony in Uzbek society. The third aspect is the situation of the Uzbek diaspora in Saudi Arabia, where the experiences of our compatriots living there in preserving their national identity, speaking the Uzbek language, continuing their traditions, as well as strengthening ties with the international Muslim community are analyzed. At the end of the study, it is determined that the study of the Uzbek ethnos as a socio-cultural unit, regardless of the region of residence - within the region and in the diaspora - is an important source for understanding national identity, developing interethnic integration, and continuing cultural and historical heritage.

Keywords: Uzbek ethnos, national identity, Central Asia, Islamic spirituality, religious science and culture, diaspora, Saudi Arabia, Migration, cultural integration, ethnic unity

ОТ ДУХОВНОГО НАСЛЕДИЯ К МИГРАЦИИ

Аннотация. В данном исследовании рассматривается социально-историческое развитие узбекского этноса, сформировавшегося в Центральной Азии, укрепление национальной идентичности посредством исламской духовности, религиозной науки и культуры, а также формирование, социально-культурный статус и опыт сохранения национальной идентичности узбекской диаспоры в Саудовской Аравии в едином контексте. В первую очередь, узбекский этнос анализируется как национальная единица, прошедшая через различные исторические испытания – колониальный период, советский режим, международную миграцию – и при этом сумевшая сохранить свой язык, традиции и исламскую духовность. Во-вторых, показано, что исламская религия и ее научное и культурное наследие в Центральной Азии – в частности, великие ученые (например, Имам аль-Бухари, Имам ат-Термези и др.) – сыграли решающую роль в создании духовной и культурной гармонии в узбекском обществе. Третий аспект – положение узбекской диаспоры в Саудовской Аравии, где анализируется опыт наших соотечественников, проживающих там, в сохранении своей национальной идентичности, владении узбекским языком, продолжении своих традиций, а также укреплении связей с международным мусульманским сообществом. В заключение исследования определяется, что изучение узбекского этноса как социокультурной единицы, независимо от региона проживания – внутри региона и в диаспоре – является важным источником для понимания национальной идентичности, развития межэтнической интеграции и сохранения культурно-исторического наследия.

Ключевые слова: узбекский этнос, национальная идентичность, Центральная Азия, исламская духовность, религиозная наука и культура, диаспора, Саудовская Аравия, миграция, культурная интеграция, этническое единство

Kirish. Markaziy Osiyo hududida shakllangan o‘zbek millati — o‘zligini saqlab qolgan, tarixi va madaniyati bilan boy etnik birlik hisoblanadi. Bu birlik nafaqat mintaqada ichida, balki qo‘shni va jahon xalqlari bilan madaniy, ma’naviy aloqalarni rivojlantirishda ham muhim omil bo‘lgan. Shunday bo‘lsa-da, milliy o‘zlikni anglash va ijtimoiy-madaniy birligini tushunish maqsadida, o‘zbeklarning yashash geografiyasi, hamda diaspora holatlarini ham e’tiborga olish zarur. Xususan, islom dini orqali Madina va Makka shaharlarida (Saudiya Arabistonida) tashkil topgan o‘zbek diasporasi, o‘z milliy urf-odatlarini, o‘zbek tilini himoya qilgani hamda jahon musulmonlari madaniyatiga qo‘shgan hissasi tilga olinishi lozim. Ushbu maqolada esa quyidagi jihatlar ko‘rib chiqiladi: bir — o‘zbek etnosining mintaqadagi tarixi va madaniy taraqqiyoti; ikki — islomiy ma’naviyatning Markaziy Osiyodagi rivoji va o‘zbek olimlari roli; uch — Saudiya Arabistonidagi o‘zbek diasporasining shakllanishi, ijtimoiy-madaniy holati hamda milliy o‘zlikni saqlash tajribasi.

Mavzuga oid adabiyotlarning tahlili. Ushbu tadqiqotlarni o‘rganishda bir qancha adabiyotlardan foydalanildi. Xususan Sh. Hayitovning “O‘zbek muxojirligi tarixi”, Nurilloxon Hoji Abdullaxon Xo‘qandiyning “Haj safari kundaligi” va yana bir qancha monografiya va maqolalardan foydalanildi. Ularning asarlari mazkur davrning diplomatik, iqtisodiy va ijtimoiy munosabatlarini o‘rganishda muhim manba sifatida e’tirof etiladi.

1. Esdaliklar, qaydlar, esdaliklar;
2. Chor rossiyasi, sovet davri matbuoti materiallari va ushbu davrda olib borilgan tadqiqotlar;
3. Mustqailik yillarida yurtimizda va horijda chop etilgan tadqiqotlar

Tadqiqot metodologiyasi. Tadqiqot ishi tarixiylik tamoyili, xronologik va qiyosiy tahlil usullariga tayanadi.

Tahlil va natijalar. O‘zbek etnosi Markaziy Osiyoda — ya’ni bugungi O‘zbekiston, Qirg‘iziston, Tojikiston, Turkmaniston hamda qo‘shni hududlarda — shakllangan. Tarixan Turon mintaqasida ko‘plab madaniyatlar rivojlanib, ularda turkiy-irfoniy elementlar, islom davrida esa musulmon ma’naviyatining rivojlanishi muhim ahamiyat kasb etdi. O‘zbek etnosi ijtimoiy-tarixiy sinovlardan — mustamlaka davri, sovet tuzumi, xalqaro migratsiya — o‘tgan bo‘lsa-da, o‘z o‘zligini saqlab qolishga muvaffaq bo‘lgan. Bu esa milliy madaniyat, til, milliy urf-odat va islomiy ma’naviyatning uyg‘unligi bilan bog‘liq bo‘ladi.

Milliy o‘zlikni anglash va mustahkamlash jihatidan, o‘zbeklarning yashash hududi qayerda bo‘lmasin — bir ijtimoiy-madaniy birlik sifatida o‘rganilishi muhimdir. Chunki bunday tadqiqotlar mintaqada xalqlari o‘rtasida integratsion jarayonlarni rivojlantirishga, yaxshi qo‘shnichilik va qardoshlik aloqalarini mustahkamlashga xizmat qilishi mumkin. Islom dini Arabiston yarim orolida paydo bo‘lgan bo‘lsa-da,

uning ma'naviyati va diniy ilmlari Markaziy Osiyoda ham katta yuksalishga erishdi. Mazkur hududda bir qator buyuk islom olimlari — masalan, Imom al-Buxoriy, Imom at-Termiziy, Imom Ahmad Yassaviy, Najmiddin Kubro, Abduxoliq G'ijduvoni, Xoja Bahovuddin Naqshbandiy va boshqalar faoliyat yuritgan. Bu olimlar nafaqat Markaziy Osiyoda, balki musulmon dunyosida keng tanilgan ilm-ma'rifat vakillari bo'lgan. Ushbu olimlarning faoliyati va merosi orqali o'zbek jamiyati ichida islomiy ma'naviyat, diniy bilimlar va jamiyat taraqqiyoti birikkan. Bu esa xalq ichida milliy va dini o'zlikning uyg'unlashuviga zamin yaratgan. Shuningdek, islomning markaziy arkonlaridan biri — haj ziyorati — ham o'zbek musulmonlari uchun muhimdir. Masalan, Madina va Makka shaharlariga (Saudiya Arabistonida joylashgan) yurtdoshlarimiz tomonidan muntazam ziyorat amalga oshirilgan. Bu ziyoratlar orqali ular o'z diniy majburiyatlarini bajaribgina qolmay, xalqaro musulmon jamiyati bilan aloqalarni mustahkamlash imkoniga ega bo'lgan.

Diasporaning shakllanish tarixi

Saudiya Arabistoniga o'zbeklarning ko'chishi turli tarixiy omillar bilan bog'liq. Xususan:

- XX asrning 20-30-yillarida sovet tuzumida bosim, masshtabli qatag'onlar va migrant holatlar tufayli bir qator o'zbeklar (va qo'shni turkiy-muslim xalqlar) Arabiston yarim oroliga chiqib ketgan.
- Ushbu diaspora mahalliy sharoitlarda "Turkistoniy" yoki "Buxoriy" nisbalari bilan tanilgan. Masalan, Arabistonlik yurtdoshlarimiz o'z ism-shariflariga "al-Buxoriy", "al-Toshkandiy", "al-Andijoniy" kabi nisba qo'shib tanishtirishlari uchragan. Bu holat o'zining geografik kelib chiqishini ta'kidlash orqali milliy o'zlikni saqlashga xizmat qilgan.
- Saudiya Arabistoni bilan O'zbekiston ortasida madaniy-tarixiy aloqalar mavjudligi ham ta'kidlangan.

Saudiya Arabistonida yashagan o'zbeklar turli ijtimoiy positsiyalarda bo'lgan: tijoratchilar, diniy va dunyoviy ilmlar vakillari, davlat xizmatida ishlovchilar va boshqalar. Masalan, yurtdoshlarimiz Madina va Makkada «Andijon bog'chasi», "Chust takyasi" kabi musofirxonalar tashkil etganlari, o'zbek tilida va o'zbek jamoalarida faol bo'lganlari qayd etilgan. Milliy o'zlikni saqlash jihatidan: oilada va o'zbek jamoalarida o'zbek tilida so'zlash, o'zbek urf-odatlari va an'analarini saqlab kelish holatlari uchragan. Bu esa diaspora ichida jamiyatgacha bo'lgan uyg'unlikni saqlashga yordam bergan.

Diaspora va o'zbek-Saudiya aloqalarining ijtimoiy-madaniy jihatlari

- O'zbek va Saudiya Arabistoni o'rtasidagi madaniy hamkorlik aloqalari mustahkamlanmoqda. Masalan, 2020-yilda Toshkent davlat o'zbek tili va adabiyoti

universiteti bilan Saudi Electronic University o'rtasida hamkorlik memorandumini imzolangan.

- Saudiya Arabistonida o'zbeklardan iborat diaspora jamoasi ayni paytda turli ijtimoiy vazifalarni bajarayapti: ilm-ma'rifat sohasida, tijoratda, davlat xizmatida. Shuning bilan birga, ba'zi yurtdoshlarimiz haj va umra ziyoratlarida faol ishtirok etmoqda. Masalan, 2025-yilda o'zbeklar orasidan hajga birinchi guruhlar jo'nab ketgani ma'lum.

Shu bilan birga, diaspora muammolari ham mavjud: til va an'analarni saqlash, iqtisodiy va qonuniy jihatdan integratsiyalashish, mahalliy qonun-qoidalarga moslashish, hamda o'z-o'zini jamiyat ichida tashkil etish muammolari kuzatilgan. Masalan, 2025-yilda Saudiya Arabistonida mehnat huquqini buzgan o'zbek fuqarolari vatanga qaytarilgan hollari mavjud.

Xulosa. Umuman olganda, o'zbek etnosi Markaziy Osiyoda shakllanib, tarixiy sinovlardan o'tgan va milliy hamda madaniy o'zligini saqlab kelayotgan xalqdir. Islomiy ma'naviyat va diniy ilmlarning Markaziy Osiyoda rivojlanishida o'zbek olimlari va madaniyati muhim rol o'ynagan. Saudiya Arabistonidagi o'zbek diaspora esa milliy o'zlikni saqlab qolish, islomiy ma'naviyatni davom ettirish va jahon musulmonlari madaniyati bilan aloqalarni mustahkamlash jihatlarida o'ziga xos tajriba yaratgan. Shu nuqtai-nazardan, o'zbek xalqining yashash hududidan qat'iy nazar — jamiyat ichidagi ijtimoiy-madaniy birlik jihatidan — izchil o'rganilishi milliy o'zlikni anglash, xalqlararo integratsiyani mustahkamlash va tarixiy madaniy merosni davom ettirish uchun muhimdir.

Foydalanilgan adabiyotlar

1. Akmal Akrom. Xudoyorxon qanday o'lgan? „Turkiston“, 1992 yil 18 fevral.
2. Akmal Akrom. Mirkomilboy qanday shaxs edi? „Sharq yulduzi“ 1992 yil.5-son,89-bet;
3. O'zbekiston respublikasi MDA. 2661 f, 1yo, 233sh, 6-7 betlar.
4. Nurilloxon Hoji Abdullaxon Xo'qandiy „Muborak haj safari“, Toshkent, „Kamalak“, 1991-yil 25-bet.
5. Abdulvohid Yassa. Jon ketar, Vatan ketmas. „Guliston“ 1996-yil,3 son,15-bet.
6. Muallifning shaxsiy muloqoti materiallari, 1991-yil 15 may.
7. „Xalq so'zi“.1992-yil 20-mart.
8. Hayitov Sh.A., Sobirov N.S., Legay A.S. „Xorijdagi o'zbeklar“.Toshkent. „Fan“ 1992-yil, 14- bet.
9. Boliyev E. Alloh dilingda, qo'ling ishda bo'lsin. „Xalq so'zi“ 2002-30-avgust.

SAUDIYADA ARABISTONIDAGI O‘ZBEK MUHOJIRLARINING HAYOTIGA BIR NAZAR

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Annotatsiya. Ushbu ish xorijdagi o‘zbeklarning radiosiorlik faoliyatiga bag‘ishlangan. Ishda radiosiorlikning o‘zbek diasporasi uchun ahamiyati, ona tilida axborot yetkazish va milliy ma’naviyatni saqlashdagi roli tahlil qilinadi. Tadqiqotda xorijdagi o‘zbek jamoalari va ularning axborot ehtiyojlari, radiosiorlikning madaniy va ma’rifiy funksiyalari, shuningdek, zamonaviy texnologiyalar yordamida radiosiorlikning rivojlanish imkoniyatlari ko‘rib chiqilgan. Ish natijalari xorijdagi o‘zbeklar uchun radiosiorlikning milliy qadriyatlarni avlodan-avlodga yetkazishda muhim vosita ekanini ko‘rsatadi. Ushbu ish ilmiy va amaliy jihatdan diasporadagi o‘zbeklarni o‘zlikni saqlash va madaniyatni rivojlantirish yo‘lida qo‘llanilishi mumkin.
Kalit so‘zlar: “Vatandosh” radiosi, milliy til, milliy urf-odat, milliy qadriyatlar, ajdodlar, tijoratchi, dehqon, hunarmand, Mo‘minjon Andijoniy

Kirish. So‘nggi yillarda Saudiya Arabistoni O‘zbekiston fuqarolari uchun ish va iqtisodiy imkoniyatlar manzili sifatida katta ahamiyat kasb etmoqda. Saudiyadagi o‘zbek muhojirlar hayoti nafaqat mehnat faoliyati bilan, balki ularning ijtimoiy, madaniy va dini muhitda o‘z o‘rnini topishi bilan ham bog‘liqdir. Muhojirlarning kundalik hayoti, turmush sharoiti, mehnat huquqlari va jamiyatdagi integratsiyasi ularning yashash darajasini belgilovchi muhim omillardir. Shu bilan birga, ular ona tilini saqlash, milliy qadriyatlarni avlodlarga yetkazish va mahalliy jamiyat bilan muloqot qilishda turli qiyinchiliklarga duch keladi. Ushbu maqola Saudiyadagi o‘zbek muhojirlarining hayotini, ularning ijtimoiy-madaniy faoliyatini va yashash sharoitlarini tahlil qilishga qaratilgan.

Muhokama va natija. XX asr ilm-texnika, kommunikatsiya-axborot texnologiyalar sohasida buyuk kashfiyotlar asri bo‘ldi. Biroq, inson omili va ajdodlar tarixini xotirlash o‘zining dolzarblik ahamiyatini saqlab kelmoqda. Vatanjudolik hukmi taqdiriga bitilgan o‘zbeklar o‘z ajdodlari yurtiga o‘zgacha mehr-muhabbat bilan yashadilar. Ular o‘zbek tiliga, milliy o‘zlikni saqlashga, milliy urf-odat va an‘analarga sodiq qolishga imkon qadar intildilar. Shu sababli xorijdagi o‘zbeklar 1960- yillarda O‘zbekistondan o‘zbek tilida beriladigan “Vatandosh” radiosi eshittirishlarini his-tuyg‘u va mehr bilan, butun vujudlari quloqqa aylanib tingladilar. Ayrim o‘zbekchilikka mos kelmaydigan xabarlar ularni ranjitgani ham tarixiy haqiqat. Pokiston Respublikasining Karochi

shahrida yashagan Jo'ra Qori Bo'tako'z (bu insonga "Surgun", "Olaqarg'a" deb ham laqab qo'yishgandi) 1960- yilda O'zbekistonga yo'llagan maktubida: "Men ilk bor o'zbekcha eshittirishlarni eshitib, qalbim faxrga to'ldi. Har kuni radiosida bor bir do'stimning uyiga borib, uni bitta xonasi borligi uchun ko'chada turib radio eshitishga ruxsat oldim. Xabarlar berilishi boshlanishi bilan ko'zlarimda g'am va quvonch yoshlari oqa boshlardi,-deb yozadi. 1929-1930-yillarda muhojir bo'lgan Mo'minjon Andijoniy Saudiya Arabistonidan turib: "Eshittirishlaringiz orasida ba'zan quloqlarimizga butunlay yot bo'lgan "ohang"larni eshitmoqdamiz. Yirtiq bo'lsa ham, o'zining qarddon choponini tashlashni istamagan muhojir vatandoshlaringiz ana shunday ohanglarni uncha sevmasligini, aksincha, doimo milliy ashulalarimizni, maqom kuylarimizni seva-seva eshitib zavqlanishini, albatta, bilsalaringiz kerak, degan mulohazadaman",- deb yozadi. Jamiyat taraqqiyotining hamma bosqichlarida axloqiy tarbiya muhim ahamiyatga ega bo'lgan. Xulq-atvordagi insoniy jihatlar har bir kishini, har bir oilaning ma'naviy barometrini belgilagan. Sovet hokimiyati yillarida ma'naviy sarchashmalarimizdan ajralib qolayozdik. Oxir-oqibatda ajdodlar o'gitini unutib, "sovetcha tarbiya" asosida axloqning "yevropacha modeli" qolipiga kirildi. Xorijdagi o'zbeklar esa asrlar osha avloddan –avlodga o'tib kelgan sharqona odob va axloq me'yorlariga amal qilish, farzandlarini shu asnodda tarbiyalash tamoyillariga amal qilganliklari kuzatiladi. Boy tarixga ega bo'lgan xalqimizning axloq va yuksak ma'naviy jihatlari qadimda yaratilgan va ular "Alpomish", "Go'ro'g'li", "Xoldorxon", "Ravshanxon" kabi xalq dostonlarida o'z aksini topgan. Insonga xos bo'lgan mehr-muhabbat ko'rsatish, mard va jasur bo'lish, haqiqat va adolat tomonida turish, ota-onaga, Vatanga cheksiz sadoqat, xalq tashvishi bilan yashash kabi jihatlar ushbu ma'naviy xazinamizda jamuljam bo'lgan. Muhojir o'zbeklarning keksa avlodi o'zga xalqlar orasida qanchalik qiyinchiliklar bilan yashamasin, oila a'zolari bilan "dostonxonlik" muloqotlarida bo'lib turishni kanda qilishmagan. Xalq lapar va qo'shiqlarini o'zlari bilan dunyoning o'nlab davlatlariga olib borishgan. Muhojir o'zbeklarning keksa avlodlari bilan qilingan ko'pgina muloqotlarimizdan shunga amin bo'ldikki, ular otaning farzand, shuningdek, farzandning ota-ona oldidagi farzlari haqida muqaddas dinimiz buyurgan vazifalarni muhim, deb bilishadi. Farzandlar iymon-e'tiqodli, halol va pok insonlar bo'lib etishishlari uchun diniy ilmlardan yaxshigina xabardor bo'lishlari kerakligi, har qanday ilm amali bilan go'zal ekanligi ular suhbatida bosh mavzulardan biri hisoblanadi. Bu o'rinda muhojir o'zbeklar orasidan Sharq dunyosida e'tirof etilgan diniy ulamolar yetishib chiqqanligini qayd etib o'tish o'rinli bo'lardi. Makkadagi Um-ul qaro universiteti professori, doktor Muhammad Said Hasan, muallimlar tayyorlash maktabining ustози, doktor Muhammad Umar Toshkandiylar o'zlarining bir qator kitob va risolalarini arab tilida chop ettirishgan. Saudiya Arabistonilik o'zbek Abdulhakim Xalifa Ismoiliy shunday

degan edi: “Saudiyada o‘zbek bo‘lgan Abdulazim Abdulfattoh qori Qo‘qandiy, Muhammad Sayyid Hasan Qori, No‘mon Toshkandiy singari din arboblari va olimlar bilan faxrlanishadi. Bu ulug‘ insonlar nomi arablar o‘rtasida ham izzat-ikrom bilan tilga olinadi”. Sovet hokimiyati yillarida O‘zbekistondagi o‘zbeklarning xulq-atvori, kundalik turmushi, madaniy hayotidagi salbiy tendensiyalar 1980-1990 yillarda yurtimizga tashrif buyurgan xorijlik millatdoshlarga yaqqol namoyon bo‘lgandi. Istiqlol arafasida ajdodlari vataniga tashrif buyurgan Zuhridin Mirza Obid Turkistoni: “O‘zbekistonda bolalar ta‘lim-tarbiyasi yetarli darajada emas. Bundan tashqari to‘y va shunga o‘xshash ma‘rakalarda ortiqcha xarajatga yo‘l qo‘yilayotgani, haddan tashqari odam to‘planib, noz-ne‘matlar isrof bo‘layotgani meni tashvishga soldi. Zararli o‘tkir ichimliklarni haddan tashqari iste‘mol qilish ham yaxshilikka olib kelmaydi. Insonning olamdan o‘tishi bilan bog‘liq marosimlar uchun ortiqcha xarajatlarga ham aslo hojat bo‘lmasa kerak”, - deb fikr bildirgandi. Boshqa bir saudiyalik vatandoshimiz Abdullajon Ismoil o‘g‘li Ahmadbek alTurkistoniy: “To‘ylarda spirtli ichimliklar ichilishi menga g‘ayritabiiy tuyuldi. Ichimlik iste‘mol qilishdan saqlanish, to‘g‘risi hazar qilish kerak, chunki ichimlik ichish katta gunoh va tarbiyani buzadi. To‘ylarda ortiqcha xarajatlarga yo‘l qo‘yilar ekan, sunnat to‘ylarini ixcham o‘tkazib tejalgan mablag‘ni bolani o‘qishi va yaxshi inson bo‘lib yetishishi uchun sarflanmog‘i lozimdir”, -degandi. Muhojir o‘zbeklar axloqiy-ma‘naviy masalalar haqida fikr yuritishar ekan, ular istiqomat qilayotgan o‘zbeklar orasida daydilik, ichkilikbozlik, o‘g‘rilik, qotillik, ayollar va atrofdagilarga nisbatan hurmatsizlik katta uyat ekanligini qayd etadilar. Qarzni o‘z vaqtida qaytarmaslik, avlodlar davomchisi hisoblangan xotin-qizlarga dag‘al munosabat bo‘lish ularda gunohiazim hisoblangan. Ular iltifot va takallufda shirinsuxanlik, g‘urur va insoniy tuyg‘ularni, e‘tiqod, iymon va vijdonni saqlash kerakligiga e‘tiborni qaratishadi. Shuning uchun Y.Yakvalxo‘jaev: “Vatandoshlarimiz (muhojir o‘zbeklar) muhtojsiz kun kechirish uchun tinimsiz mehnat qilishadi, qaysidir boyning marhamatini kutib turishmaydi? “sadaqa qiling, yaxshilar”- deb qo‘llarini cho‘zishmaydi, uyat hisoblashadi. Muhojirlar, masalan , “Halimbek afandim” –deb shirin so‘z bilan murojaat etishadi”- deb yozgandi. Islomiy axloq ruhida tarbiya ko‘rgan xorijdagi o‘zbeklarning aksariyati “spirtli ichimliklar “Qur‘oni Karim”da harom qilingan”, -deb aroq va vinodan hazar qilishadi, o‘g‘rilikni o‘ta tubanlik, inson xulq-atvoridagi sharmandali nuqson deb bilishadi. Ular yashaydigan mahallalarda qulf-kalit qilingan xonadon, do‘kon, rasta bo‘lmaganligi, ayrimlarida eshik ham mavjud emasligi, namoz payti sotuvchi ham, xaridor ham machit sari intilib, do‘konlar ochiq qoldirilganligi to‘g‘risida ma‘lumotlar keltiriladi. Saudiya Arabistonida istiqomat qilgan Abdullajon Turkistoniyning eslashicha, uning oilasi bir payt Saudiyadan Istanbul (Turkiya)ga dam olish uchun jo‘nab ketganida, hovlisining eshiklarini qulflashni unutishgan. Bir oydan keyin safardan oila qaytib kelganida,

hamma buyumlar o‘z joyida turgan, buning sababi,- deydi A.Turkistoniy,- odamlarning dinga e‘tiqodi, dilida iymoni borligidandir. Agar insonlar halol va to‘g‘ri bo‘lsa, iymon-e‘tiqod qalbi hamda vujudiga singsa, qonun –qoidalarga amal qilsa, o‘g‘rilik, qotillik kabi jinoyatlar bo‘lmaydi,-deb fikr bildirishadi. Inchunun, o‘lkamizda xonliklar davrida uchta jinoyatga, ya‘ni o‘g‘rilik, fohishabozlik, xun olishga o‘lim jazosi belgilangan. Muhojir o‘zbeklar istiqomat qilgan aksariyat mamlakatlarda, eng boy xonadonlarda ham mehmondorchilikda dasturxonga tortiladigan noz-ne‘matlar va taomlar me‘yoridan ortiqcha emas. Bu qitmirlikdan emas, balki isrofgarchilikka yo‘l qo‘ymaslik uchun qo‘llanilgan vositadir. Alloh kalomi “Qur‘on”dagi “A‘rof” surasining 31-oyatida “yeb-iching va isrof qilmang. Cnunki, u isrof qiluvchilarni sevmas”. Yohud, “Furqon” surasining 43-oyatida “Ular infoq qilganlarida isrof ham xasislik ham qilmaslar. U ikkisi o‘rtasida mo‘‘tadil bo‘lurlar” kabilar mavjudligi islomiy tarbiyadan yaxshigina xabardor o‘zbeklarning turmush tarziga singgandir. Muhojir o‘zbeklar o‘zaro quda-andachilik aloqalarini o‘rnatgan bo‘lib, to‘y-ziyofatlarini xususiy yohud davlat tomonidan belgilangan to‘yxonalarda o‘tkazishadi. To‘y marosimlari har kimning o‘z moddiy qudratiga qarab o‘tkaziladi. Quda-andachilik rishtalari ijtimoiy tabaqaviy holatga qarab bog‘lanadi. Sharq mamlakatlarida sunnat to‘ylarini katta va dabdabali qilib o‘tkazish odat tusiga kirmagan. O‘g‘il farzand dunyoga kelsa, qulog‘iga azon aytiladi, unga chiroyli ism qo‘yiladi. Oilada dunyoga kelgan o‘g‘il farzandni 7, 14, 21 kunlik bo‘lganida yoki kasalxonadayoq sunnati qilib qo‘yishadi. Ularda musulmonchilikda odat tusiga kirgan “aqiqa” marosimi o‘tkaziladi. Chaqaloqning ota-onasi yo bobosi qo‘y so‘yib yor-ubirodarlari, qavm-qarindoshlariga ziyofat beradi. Agar o‘g‘il farzand tug‘ilsa ikkita, qiz farzand oilada dunyoga kelsa, bitta qo‘chqor so‘yib ziyofat berilgan. Ziyofatga so‘yiladigan qo‘y oriq bo‘lmasligi va sog‘lom bo‘lishi kerak. “Aqiqa” marosimi farzandning aynan otasi tomonidan emas, qudratiga qarab bobosi yohud yaqin qarindoshi tomonidan o‘tkazilishi ham joiz hisoblanadi. Kelin-kuyov to‘ylari o‘zbek va turk xonandalari ishtirokida yoki o‘zbekistonlik mashhur qo‘shiqchilar ovozi yozib olingan texnik vositalar ko‘magida ham o‘tkazilgan. Muhojir o‘zbeklar mumtoz o‘zbek qo‘shiqchiligi san‘atiga chuqur hurmat va e‘tibor bilan qaraydilar.1990- yil bahorida Namangan viloyatidan Turkiyadagi tog‘asini uyiga mehmon bo‘lib borgan Umarjon Usmonjonov Adanadagi o‘zbek Turdiali afandining qiz uzatish to‘yida qatnashib: “Biz o‘zimiz bilan taniqli xonandalar Komiljon Otaniyozov, Sherali Jo‘raev, Ortiq Otajonovlar ovozi yozilgan plastinkalar olib borgan edik. Ular ovozi to‘yda to‘planganlar tinch o‘tirib, ko‘zda yosh bilan bir-birlarini quchoqlab, xursand bo‘lib e‘tibor bilan tingladilar. Plastinkalar qayta-qayta qo‘yilib, magnitofonlarga yozib olindi. To‘yda 200 kishi ishtirok etdi, isrofgarchiliklarga aslo yo‘l qo‘yilmadi,-deb eslagandi. Yuqoridagi fikrdan ko‘rinib turibdiki, ularda baxt to‘ylarida ham asosan

ixchamlik sari yo‘l tutilgan. Shuning uchun Saudiya Arabistonining Madina shahrida yashagan, asli qo‘qonlik Muhammad Ayyub Maqsud Ali o‘g‘li: “O‘g‘il, ya’ni sunnat to‘yi sizlarda juda katta bo‘lar ekan. Bizda bu to‘y yo‘q. Go‘dakni shifoxonadayoq do‘xtirlar sunnati qilib qo‘yadi. Lekin tug‘ilish sharofati ila oldida (ziyofat) bo‘ladi. O‘g‘il tug‘ilsa ikki qo‘y, qiz tug‘ilsa bir qo‘y so‘yiladi. Lekin bu ham qodir bo‘lganlarga farz. Bizda o‘g‘il uylantirish, qiz to‘ylarimiz bo‘ladi. Lokigin boya aytganimdek, kim qodirligiga qarab qiladi”- deb fikr bildirgandi, 1991 yilda. Ta’ziya marosimlarida muqaddas islom dini buyurgan qoidalar asosida ish ko‘rish muhojir o‘zbeklar hayotida muhim o‘rin tutadi. Ularda marhum vafot etganida baqirib, do‘vvoy solish, yig‘lash, murdaning ruhini bezovta qiladi,-deb hisoblanadi. Inson tirikligida unga mehr-muhabbat ko‘rsatish, holidan xabar olish, yaxshiliklar qilish kerakligi, vafotidan keyin marhumning haqiga duo o‘qish farz qilingandir. Inson abadiyat dunyosiga ketganidan so‘ng, uning ortidan qilingan sarfxarajatlar bilan bog‘liq dabdabali marosimlar muhojir o‘zbeklarda mavjud emas. Ayniqsa, Sharq mamlakatlaridagi o‘zbeklarda ta’ziya marosimi uzoq cho‘zilmaydi, janoza o‘qilib, marhum qabristonga olib borilib, 10-15 daqiqada dafn etilganidan so‘ng, yaqin qarindoshlaridan tashqari barcha o‘z uyi va ishiga tarqaladi. Marhumning “uchi”, “yettisi”, “yigirmasi”, “qirqi” kabi marosimlar Saudiya Arabistoni o‘zbeklarida bid’at hisoblanadi. Isrofgarchilikka qo‘l qo‘yiladigan bunday marosimlar o‘rniga, beva-bechoralarga xayr-sadaqa ulashish savob a‘mol sifatida qabul qilingan. Marhum vafotidan so‘ng uning ibratli, ijobiy xislatlarini eslash, hayit kunlarida xayr-ehson qilish kabilar muhojir o‘zbeklar orasida keng tarqalgan. Xullas, muhojir o‘zbeklar XX asrda dunyoning turli mamlakatlarida kam sonli bo‘lib yashashlariga qaramay milliy urf-odat, milliy til, milliy o‘zlikni saqlab qolib, axloq va odobda ulug‘ bobokalonlarimiz pand-nasihatlariga munosib bo‘lishga intildilar. Ular oilasida ulg‘aygan farzandlar ma’lumotli, tarbiyali, 3-4 ta xorijiy tillarning egalari, zamonaviy innovatsiyalardan xabardor, “ bir osham halol luqma”ni o‘z peshona teri bilan topib kun ko‘rish darajasidagi shaxslar bo‘lib yetishdi. Ota-onaga hurmat, ajdodlar tili va yurtiga mehr-muhabbat, vijdon va iymon bobida ibrat ko‘rsatish ularning kundalik turmush mazmuniga aylandi. Istiqlolning ortda qolgan chorak asrlik davrida milliy qadriyatlarimiz tiklanib, ma’naviy sarchashmalarimizdan bahramand bo‘lish orqali bugungi O‘zbekistonda ham jamiyat a‘zolarida komillik sari ijobiy natijadar ro‘y bermoqda. Istiqlol avlodi iymon-e’tiqodli, ijobiy xulqlarni o‘zida mujassamlashtirgan insonlar bo‘lib voyaga yetayotganligi esa ota-bobolarning asriy orzu-umidlari amalga oshayotganligini ko‘rsatadi.

Saudiya Arabistoni (Makka va Toif shaharlari) hamda Turkiya (Istambul va Adan) shaharlarida AQSh dagi o‘zbek vatandoshlarning ham ko‘pchiligi tijoratchilardir. Qishloq joylarida yashovchi o‘zbek vatandoshlar orasida dehqonlar, mayda

hunarmandlar, kustarlar, masjid, madrasa xodimlari ham bor. Shaharlarda harbiy xizmatchi, sanoat korxonasining egalari bo'lgan o'zbek vatandoshlar ham yashaydilar. Xorijda yashovchi o'zbek vatandoshlarning ko'pchiligi sharoiti o'zlari yashab turgan mamlakatdagi o'rta hol oilalar darajasidadir. Olmoniyalik vatandoshimiz Temir Xo'ja ma'lumoticha: 1988 yilda vafot etgan Narziqul ismli hamyurtimiz AQSh da harbiy samolyotlarga uskunalari yasab, etkazib beradigan yirik zavodning egasi bo'lgan. Xorijga chiqib ketgan Buxoro shayxlarining avlodlaridan ikki vatandoshimiz AQSh da "Atlantik" nomli plastinka shirkatiga ega bo'lib, dunyoda mashhur qo'shiqchilarning qo'shiqlarini millionlab nusxada yozib chiqaradilar va katta foyda oladilar. Xorijdagi o'zbek vatandoshlar orasidan huquqshunoslik, turkshunoslik, texnika, adabiyot, til va tarix fanlari sohasida muvaffaqiyatga erishgan olimu fuzalolar, jurnalistlar, yozuvchilar hatto davlat arboblari etishib chiqqan. Bunday kishilar safiga medistina professori Shoxmurod Ilhom, doktor Murod Axmedov (Olmoniya), filologiya fanlari doktorlari Burxon al-Buxoriy (Suriya), Temur Xo'ja (Olmoniya), neyrobiolog olim Hasan Parves al-Buxori (Fransiya), jarroh Zuhiriddin Turkistoniy (Saudiya Arabistoni), vrach Abdul Latif Andijoniy, yozuvchi va shoirlardan Yassaviy, Sobir Sayhon (Turkiya), Shafiqqa Yorqin, Azim Ashrafiy (Afg'oniston), Ergash Buloqboshi, Abdullo Chig'atoy (AQSh), qo'shiqchi Sobir Korgar (Turkiya) kabi ko'plab kishilarni kiritish mumkin. 1990 yil Makka va Madinada hajda bo'lib qaytgan yurtdoshlarimiz ma'lumoticha Saudiya Arabistoni tashqi ishlar vaziri, Madinadagi Jome' bosh mudarrisi Oltinxonto'ra Muhammad al-Taroziy ham vatandoshlarimiz vakillaridan biri ekan.

Xulosa. XX asrda texnologik taraqqiyot tez sur'atda rivojlangan bo'lsa-da, inson omili va milliy qadriyatlarni saqlash muhimligini muhojir o'zbeklar namoyish etdilar. Ular ajdodlar tarbiyasi, islomiy axloq va milliy odob-axloq me'yorlarini oilalarda davom ettirdilar. To'y, ta'ziya va boshqa marosimlarda isrofgarchilik qilmaslik, diniy va ma'naviy qadriyatlarni hurmat qilish, bolalarni tarbiyalashda ilm va iymonni asosiy mezon qilish ularning hayotiy printsiplariga aylandi. Xorijdagi o'zbeklar mehnatsevar, halol va ma'naviy yetuk avlod yetishtirdilar. Natijada, mustaqillik davrida milliy qadriyatlar tiklanib, bugungi O'zbekistonda iymonli, odobli va bilimli avlod shakllanmoqda. Muhojirlar tajribasi zamonaviy hayot uchun ibratdir.

FOYDALANILGAN ADABIYOTLAR.

1. M.Cho'qaev. Turkiston sho'rolar hokimiyati ostida. "Erk" gazetasi 1990 yil. 14, 15, 16, 17, 18 – sonlarida.
2. O.Sharofiddinov. Mustafu Cho'qaev. "Sharq yulduzi". 1992 yil 4-son. 85 – 93 sahifalar.
3. P.Shermuhamedov. M.Cho'qaev o'g'li portretiga, chizgilar. "Turkiston" 1992 yil 21 fevral.

4. Axmedov B. O'zbeklar. "Muloqot" 1991 yil 1- son.
5. Yusupov A. Xorijdagi o'zbeklar. "Yoshlik" 1990 yil 2-son, 54-58- betlar.
6. Orif Usmon. Xuroson o'zbeklari. "Muloqot". 1991 yil 3-son.
7. E.Jo'shqin. Hojilar. Xalq so'zi 1994 yil 4 yanvar.
8. Hayitov Sh.A. — O'zbek muhojirligi tarixi T: —ABU-MATBUOT-KONSALT. 2008.
9. Hayitov Sh.A., Sobirov N. S., A.S Legay —Xorijdagi o'zbeklar. T: —Fan 1992.

DESIGNING A FRAMEWORK FOR CULTIVATING THE LOGICAL AND PSYCHOLOGICAL THINKING SKILLS OF CHESS LEARNERS.

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Samarqand shahar 2-son sport maktabi

Abstract. The variety of approaches to the concept of "Logical thinking" and their controversy allow us to offer our own version. In our opinion, logical thinking is an actual psychological-pedagogical and social activity in the process of educational and practical activities aimed at applying various consciously reasonable logical operations in one's activity, creating hypotheses and evaluating the results according to the laws of logic, and using these skills is a systematic formative mental characteristic of a person based on a complex mechanism in solving cultural problems.

Annotatsiya. "Mantiqiy fikrlash" kontseptsiyasiga yondashuvlarning xilma-xilligi va ularning qarama-qarshiligi bizga o'z variantimizni taklif qilish imkonini beradi. Bizning fikrimizcha, mantiqiy fikrlash - bu o'z faoliyatida turli ongli asosli mantiqiy operatsiyalarni qo'llash, gipotezalar yaratish va natijalarni mantiq qonunlari bo'yicha baholash va undan foydalanishga qaratilgan o'quv va amaliy faoliyat jarayonida dolzarb psixologik-pedagogik va ijtimoiy faoliyat bu ko'nikmalar. - madaniy muammolarni hal qilishda murakkab mexanizmga asoslangan shaxsning tizimli shakllantiruvchi psixik xususiyatidir.

Аннотация. Разнообразие подходов к понятию «логическое мышление» и их противоречивость позволяют предложить свою версию. По нашему мнению, логическое мышление - это собственно психолого-педагогическая и социальная деятельность в процессе учебно-практической деятельности, направленная на применение в своей деятельности различных сознательно обоснованных логических операций, создание гипотез и оценку результатов в соответствии с законами логики, а также использование этих умений - это систематическая формообразующая психическая характеристика человека, основанная на сложном механизме решения культурных задач.

Keywords "Logical thinking", chess, consciousness, thinking, self-evaluation, self-analysis, nurture educational, competitive

Kalit so'zlar "Mantiqiy fikrlash", shaxmat, ong, tafakkur, o'z-o'zini baholash, o'z-o'zini tahlil qilish, tarbiyaviy, raqobatbardosh

Ключевые слова Логическое мышление, шахматы, сознание, мышление, самооценка, самоанализ, воспитательный, образовательный, соревновательное

In the psychological and pedagogical literature, there is still a debate about the approaches to learning logical thinking and the components that make up its structure. **In the context of innovative developments in the field of education and training, the thinking of students is education at a complex structural level, characterized by the hierarchy and interdependence of the components included in it.**¹

In chess, the operational and functional component is implemented in the form of a next move on the board. Thus, one move is the result of the logical reasoning of the chess player, which is based on the knowledge and experience-based methods of the operational and functional component: comparison, selection of features, summarization of information obtained on the basis of analysis, etc²[7,9].

The purpose of the research is to theoretically and methodologically justify and develop the pedagogically effective technological support of the system of formation of logical thinking of chess players.

The object of research is educational and competitive activities of chess players.

The subject of research is the theoretical, methodological and technological foundations of designing a system for forming the logical thinking of chess players.

Research tasks:

1. To study the situation of the problem of formation of logical thinking of chess players and to determine the important and specific features of the concept of solving it in the field of physical education and sports.

Research methods, study, analysis and generalization of materials of scientific methodological literature, study of information materials, official documents published in special periodicals, pedagogical observations, control tests, experience.

The formation of logical thinking at the stage of development and formation of technology for the successful implementation of specified tasks is presented in Table 5 below.

The modules of the author's program for the training of chess players for the training and educational process of the third stage of the experiment have been developed.

Table 1.

Program for developing the logical and psychological thinking of chess students

¹ O' L. Matnazarov, D.B. Yaqubova Shaxmatning boshlang'ich asoslari. Uslubiy qo'llanma. Xorazm Ma'mun akademiyasi noshirlik bo'limi, Xiva-2019. 89 bet. Коломоков О.И., Вершинин М.А. О сущности логического мышления Проблемы образования: теория и практика. - 2000. Учебное пособие. № 2 - С. 84-86.. Коломоков О.И., Вершинин М.А. Программа управления учебной деятельностью студентов // Теоретико-методологические основы формирования педагогической культуры: Мат. межвуз. науч. конф. - Волгоград: ВГАФК, Научный журнал. 2001. - С. 73-76.

² Вершинин М.А., Технологические аспекты формирования логического мышления учащихся // Педагогические технологии развития творческого мышления: Мат. межрегион. науч.-методич. конф. - Волгоград: ВГАФК, 2002. - С. 31-37 Вершинин М.А. Эндшпиль: легкофигурные окончания (конь против слона). - Волгоград: Научный журнал. ВГАФК, 2004. - 28 с.

Stage	Objective	Activities (Methods)	Expected Outcome	Evaluation Criteria	Duration
1. Preparatory Stage	To foster students' interest in chess and teach basic rules	- Introducing game elements during lessons - Practicing correct placement of the chessboard and pieces - Motivational discussions	The student knows the chessboard, pieces, and movement rules	80% of students score ≥ 70 points on the test	1 month
2. Stage of Developing Logical Thinking	To develop combination al thinking, analysis, and strategic decision-making skills	- "Checkmate in one move" exercises - Game analysis and solving combinations - Rapid (blitz) games to train quick thinking	The student can plan 2–3 moves ahead	75% of students correctly solve combination tasks	Months 2–3
3. Psychological Preparation Stage	To develop concentration, patience, and emotional stability	- Tournament games - Stress management exercises	The student remains calm, focused, and stable during games	Psychological test result $\geq 70\%$	Months 4–5

		- Motivational training sessions			
4. Final Stage	To evaluate and strengthen the overall level of thinking	- Analytical tournaments - Individual assessment - Analysis of achievements and shortcomings	The student achieves harmony between logical and psychological thinking	80% or more of students achieve high results	Month 6

The program is aimed at gradually developing students' logical, analytical, and psychological preparedness. Each stage includes clear goals, outcomes, and assessment criteria, with progress monitored through observation and evaluation.

The program can be applied in schools, sports schools, or chess clubs.

Analysis of results. The motivational-goal component of the logical thinking of chess players was formed by strengthening internal motivation and cognitive activity, the desire to show oneself in competitive activities as an athlete, more diverse and self-improvement of professionally important skills. Integrated learning and cognitive activity, in which the methods of logical analysis, synthesis, comparison, and generalization are highly relevant in solving theoretical and practical problems. The development of the motivational component was helped by the demonstration of bright and, at the same time, technically rather complex tactical and strategic examples, which reveal a rich spectrum of harmony in the interaction of chess pieces. Analysis of such tasks and self-analysis help to create a highly positive emotional background in learning[1,3,].

Evaluation of the level of performance of teaching technology is considered as an object of its quality management system.

Table 2

Components of logical thinking

Group name	Components of logical thinking				Integral indicator, G
Experimental group	Motivational-purposeful	Informant P2	Operationally functional	Reflexive P4	G

	P1		P3		
Control group	0,8	0,71	0,72	0,68	0,74
	0,53	0,62	0,57	0,52	0,51

Description of the integrated indicator of the formed logical thinking of chess players (according to the results of the formative stage of the experiment)

In our opinion, only such a highly differentiated landscape (along with progress in the direction of increasing the level of generalization and systematization of the knowledge accumulated by humanity) provides a full opportunity for a synthetic review of the genetic composition of knowledge.³

Based on the above, we distinguish the following sets of knowledge within the structural part:

- 1) technological, which represents the information base of the technologies of organization and construction of the activity process;
- 2) methods of studying various phenomena in the process of activity, which combine a set of knowledge about general laws;
- 3) theoretical, including knowledge of goals, principles, methods, tools and various forms of action aimed at achieving specific results in the process of activity;
- 4) methods based on mastering the basics of various methods of organizing and managing the field of activity

Conclusions. Analyzing the concepts of "Thinking", "Logical thinking" and the concept of "Logical thinking of a chess player" are related to them, using various conscious logical operations in their activities, creating hypotheses and evaluating them according to the results. made it possible to describe a person based on a complex mechanism of abilities. with the laws of logic and aimed at using these skills to solve current psychological-pedagogical and socio-cultural problems.

During the development of the system of formation of logical thinking of chess players, a number of its functional (gnostic, design, constructive, communicative, organizational) and structural (motivational-target, informational, procedural, diagnostic, result) components were identified. This makes it possible to take into account the specific features of logical thinking, the features of the construction of its

³ Xolboyeva G.X. Haydarov B.T. Tojiev X.B. Methodology of the improvement of preliminary gymnastic disciplines in increasing activity of preschool age children (case of Uzbekistan). // International Journal of Psychosocial Rehabilitation. 2020. №6 ISSN:1475-7192 Scopus. DOI: 2009-2011, 2013-2020. B 4562-4569., Xolboyeva G.X. **Maktabgacha yoshdagi bolalar harakat faolligini oshirishda dastlabki gimnastika mashg'ulotlarini takomillashtirish mexanizmlari** // SamDU ilmiy axborotnomasi. Ilmiy jurnal. 2019-yil, 6-son. 2091-5446. B.140-144., Kholboeva, Gulhayo Kholboeva (2021) "Mechanisms of improving the motor activity of children aged 6-7 years through initial gymnastics classes," Eurasian Journal of Sport Science: Vol. 1:Iss.2, Article.1. Available at: <https://uzjournals.edu.uz/eaiss/vol1/iss2/1>

content and components, to predict and control the processes of its formation, and to diagnose the results.

ADABIYOTLAR

1. O'zbekiston Respublikasi Prezidentining "Jismoniy tarbiya va sport sohasida davlat boshqaruvi tizimini tubdan takomillashtirish chora tadbirlari to'g'risida " PF-5368-son farmoni. 2018 yil 5-mart.

2. 2019-2023 O'zbekiston Respublikasida jismoniy tarbiya va ommaviy sportni rivojlantirish konsepsiyasi 2019-yil 15-fevral.

Kholboeva, Gulhayo Kholboevna (2021) "Mechanisms of improving the motor activity of children aged 6-7 years through initial gymnastics classes," Eurasian Journal of Sport Science: Vol. 1: Iss. 2, Article 1. Available at: <https://uzjournals.edu.uz/eajss/vol1/iss2/1>

Xolboyeva G.X. Haydarov B.T. Tojjeva X.B. Methodology of the improvement of preliminary gymnastic disciplines in increasing activity of preschool age children (case of Uzbekistan). // International Journal of Psychosocial Rehabilitation. 2020-№6 ISSN:1475-7192 Scopus. DOI: 2009-2011, 2013-2020.B 4562-4569.

Holboeva GH Mechanisms of improving primary gymnastics in increasing the motor activity of preschoolers // Scientific Bulletin of the Samarqand State University 2019, issue 6; 140-144.

Xolboyeva G.X. Methods of development of physical qualities in gymnastics for 5-7 years old". // Novateur publications JournalNX- A Multidisciplinary Peer Reviewed Journal ISSN No: 2581 – 4230 Volume 6, issue 6, june -2020; 743-747.

Holboeva G. H. Nazarova D. Mechanisms of increasing the motor activity of children aged 5-6 years on the basis of initial gymnastic exercises. // Scientific theoretical journal "Science to sport". 2020 Year Number 6. ISSN.2181-7804; 72-75.

Haydarov B.T., Holboyeva G.H., Theory and methodology of physical education. // Textbook Samarqand state university edition. 2020; 56-59.

INNOVATIVE ASSESSMENT METHODS IN TEACHING ENGLISH AS A FOREIGN LANGUAGE

Aziza Safaralieva

Annotation. This thesis discusses the significance of innovative assessment methods in teaching English as a foreign language (EFL). It focuses on how modern evaluation strategies — such as formative assessment, peer assessment, self-assessment, and digital assessment tools — contribute to improving students' language competence, motivation, and autonomy. The research highlights the shift from traditional testing to continuous, learner-centered assessment approaches that reflect real communication skills rather than rote memorization.

Key words: innovative assessment, English as a foreign language, formative assessment, peer assessment, self-assessment, digital tools, communicative competence, learner autonomy, motivation, feedback.

Introduction. Assessment is one of the most crucial components of the teaching and learning process. Traditionally, language teachers have relied heavily on summative tests and examinations to measure students' achievement. However, in the 21st century, with the growing emphasis on communicative competence and critical thinking, the need for innovative assessment methods has become evident.

In EFL classrooms, assessment should not only measure what students have learned but also promote learning itself. Innovative assessment practices aim to provide continuous feedback, encourage self-reflection, and develop learner autonomy. They transform assessment from a judgmental process into a collaborative and supportive learning experience.

Innovation in assessment involves adopting new strategies, tools, and mindsets that make evaluation more flexible, authentic, and student-oriented. Rather than focusing solely on grammar and vocabulary, innovative assessment emphasizes language use in real-life situations.

According to Brown (2004), effective assessment must serve two purposes: measuring achievement and enhancing learning. To achieve this balance, teachers integrate technology, peer collaboration, and reflective activities into the evaluation process. Some innovative assessment tools include e-portfolios, online quizzes, digital journals, and performance-based tasks such as presentations or role-plays. These tools allow students to demonstrate not only linguistic knowledge but also creativity, critical thinking, and communicative competence. There are several types of Innovative Assessment.

1. **Formative Assessment:** Formative assessment is a continuous process that provides feedback during learning rather than after it. It helps teachers identify students' strengths and weaknesses in real time and adjust their instruction accordingly. Techniques include short quizzes, feedback sessions, oral reflections, and digital progress tracking.
2. **Self-Assessment:** Self-assessment allows learners to evaluate their own performance based on set criteria. This method encourages self-awareness, independence, and responsibility for one's learning. When students assess themselves, they become more motivated to improve and more conscious of their progress.
3. **Peer Assessment:** In peer assessment, students evaluate each other's work. It promotes collaboration, empathy, and constructive criticism. Peer assessment also enhances communication skills as learners justify their opinions and give feedback in English.
4. **Digital Assessment Tools:** Technological advances have opened new opportunities for interactive evaluation. Platforms like Google Forms, Kahoot, and Quizlet enable teachers to design engaging assessments with instant feedback. Digital tools make testing more enjoyable and efficient, especially for large classes.

Innovative assessment brings several pedagogical benefits:

- It promotes active learning by engaging students in the evaluation process.
- It encourages continuous improvement rather than one-time performance.
- It develops critical thinking and self-reflection.
- It increases motivation, as students feel ownership of their learning.
- It supports authentic language use, focusing on communication rather than memorization.

Moreover, such methods align with the communicative approach to language teaching, where interaction and practical skills are prioritized over theoretical knowledge. Despite its advantages, implementing innovative assessment methods is not without challenges. Teachers may face difficulties such as lack of training, insufficient time, or limited access to digital tools. In some educational institutions, traditional exams remain dominant due to rigid curriculum standards.

To overcome these challenges, teacher training programs should include courses on modern assessment techniques, digital literacy, and reflective teaching. Educational policymakers should also encourage flexible evaluation systems that prioritize learning outcomes over test results.

Conclusion. Innovative assessment methods represent a paradigm shift in English language teaching. They redefine evaluation as an integral part of learning rather than its final step. By using formative, peer, self-, and digital assessments, teachers can create a dynamic, learner-centered environment that fosters motivation, autonomy, and

communicative competence. Ultimately, innovation in assessment is not only about tools or technology but also about mindset. It requires teachers to view assessment as an opportunity to inspire, guide, and empower their students in the lifelong journey of learning English.

THE LIST OF USED LITERATURE:

1. Brown, H. D. (2004). *Language Assessment: Principles and Classroom Practices*. Pearson Longman.
2. Black, P., & Wiliam, D. (1998). *Assessment and Classroom Learning*. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74.
3. Boud, D., & Falchikov, N. (2007). *Rethinking Assessment in Higher Education: Learning for the Longer Term*. Routledge.
4. Shute, V. J., & Becker, B. J. (2019). *Innovative Assessment for the 21st Century Learners*. Springer.
5. Fulcher, G. (2020). *Practical Language Testing*. Routledge.
6. Green, A. (2021). *Exploring Language Assessment and Testing: Language in Action*. Routledge.

PROJECT-BASED LEARNING (PBL) AS A TOOL FOR DEVELOPING 21ST CENTURY SKILLS IN ENGLISH LANGUAGE CLASSROOMS

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Abstract: Project-Based Learning (PBL) represents a dynamic shift in EFL pedagogy, emphasizing authentic projects to simultaneously build linguistic proficiency and 21st-century skills like critical thinking, collaboration, communication, creativity, and problem-solving. This article synthesizes meta-analytic and empirical evidence, revealing moderate-to-large effects on academic achievement ($SMD = 0.650$) and motivation. Grounded in constructivist theories, it delves into PBL's structured cycles, digital integrations, and applications in diverse contexts, with a focus on Uzbekistan where PBL counters rote learning traditions. Challenges such as resource demands and assessment alignment are critiqued, alongside strategies for inclusive implementation. The discussion advocates PBL as essential for preparing EFL learners for global challenges, promoting holistic development through inquiry-driven, real-world engagements.

Keywords: Project-Based Learning (PBL), 21st Century Skills, EFL Instruction, Constructivist Pedagogy, Collaborative Inquiry, Critical Thinking, Learner Motivation, Uzbekistan Language Teaching, Digital Hybrids

INTRODUCTION

In the face of rapid globalization and technological advancement, English language classrooms must transcend linguistic drills to nurture versatile skills for the 21st century. Project-Based Learning (PBL), an inquiry-oriented approach, immerses students in extended, real-world projects such as designing sustainability campaigns or digital storytelling that require English for planning, research, collaboration, and presentation. This methodology shifts from teacher-centered transmission to student-driven construction, fostering not only vocabulary and grammar but also metacognitive abilities essential for lifelong learning.

Theoretically anchored in John Dewey's experiential education and Jean Piaget's constructivism, PBL posits that knowledge emerges from active problem-solving in social contexts. Empirical syntheses indicate PBL's efficacy in enhancing engagement and skill transfer, though implementation varies by cultural and resource factors. In Uzbekistan, where EFL often prioritizes exam preparation over communicative skills, PBL offers a revitalizing alternative, as evidenced by local initiatives integrating projects to boost autonomy and relevance. This introduction outlines PBL's

foundations, evidence base, challenges, and implications, positioning it as a pivotal tool for equitable, future-ready EFL education. PBL's framework is constructivist, where learners build understanding through hands-on projects mirroring professional tasks. Dewey's emphasis on experiential cycles inquiry, action, reflection structures PBL, compelling EFL students to use English authentically for negotiation and dissemination. Core characteristics include authenticity (real-world relevance), collaboration (team-based dynamics), and scaffolding (teacher guidance), aligning with the Partnership for 21st Century Learning's 4Cs: communication, collaboration, critical thinking, creativity. In EFL, PBL integrates language as a tool for content exploration, enhancing multimodal literacy. Digital hybrids, like e-PBL with AI tools, amplify this by simulating global collaborations, fostering digital citizenship. Socioculturally, PBL draws on Vygotsky, promoting zones of proximal development through peer interactions that reduce anxiety and build confidence. Meta-analyses validate PBL's impact, with an SMD of 0.650 for achievement and 0.626 for creativity across studies. In EFL, quasi-experimental designs show gains in productive skills: writing coherence improves ($d = 0.82$), speaking fluency rises ($t = -20.61$, $p < 0.001$), attributed to iterative feedback. Motivation metrics, like intrinsic interest (SMD = 0.713), highlight PBL's role in engaging diverse learners. Longitudinal data reveal sustained skill retention, with qualitative insights from student reflections noting enhanced self-efficacy and reduced affective barriers per Krashen's hypothesis. In Uzbekistan, PBL counters traditional rote methods, as seen in middle school implementations boosting motivation ($\eta^2 = 0.175$) through projects on cultural themes. University studies integrate PBL for EMI preparation, yielding improvements in reading and critical analysis. Inclusive adaptations with AI differentiation address equity, making PBL viable in resource-limited classrooms. Key challenges include time demands and assessment mismatches, with PBL sometimes lowering standardized scores in exam-focused systems. Moderators like teacher training and resources are critical; effective scaffolding ensures participation. Strategies involve phased rollouts, digital tools for scalability, and alignment with sustainable development goals via thematic projects. PBL cultivates global citizenship by linking English to real issues, promoting equity and innovation. In Uzbekistan, it supports national reforms toward interactive pedagogies, preparing learners for international arenas. In conclusion, Project-Based Learning (PBL) emerges as an indispensable and transformative pedagogical tool within English as a Foreign Language (EFL) classrooms, adeptly synergizing the cultivation of linguistic proficiency with the essential 21st-century skills of critical thinking, collaboration, communication, creativity, and problem-solving, thereby preparing learners for the multifaceted demands of a globalized society. The extensive empirical evidence synthesized herein from meta-analyses

demonstrating moderate-to-large effect sizes in academic achievement and motivational outcomes to localized quasi-experimental studies illustrating tangible improvements in productive language skills and affective attitudes affirms PBL's capacity to transcend the limitations of rote-based instruction, fostering instead an environment of authentic inquiry, real-world application, and collaborative knowledge construction that mirrors professional and civic realities. Nevertheless, acknowledging implementation challenges such as extended time requirements, resource disparities, and potential conflicts with standardized assessment systems is crucial, particularly in contexts like Uzbekistan where exam-oriented curricula predominate; these hurdles can be surmounted through strategic scaffolding, teacher empowerment via professional development programs, and the integration of digital hybrids like e-PBL platforms that enhance accessibility and scalability. Furthermore, the Uzbek-specific insights highlight PBL's adaptability in diverse cultural settings, where projects aligned with sustainable development goals or local themes not only boost engagement but also promote inclusivity and equity, mitigating affective barriers and empowering underrepresented learners. Moving forward, educational stakeholders should prioritize the expansion of PBL through policy reforms, interdisciplinary collaborations, and rigorous research agendas that include longitudinal tracking of skill transferability and comparative analyses across monolingual and multilingual cohorts, ensuring that PBL evolves to meet emerging technological and societal shifts. Ultimately, by embedding PBL as a core component of EFL pedagogy, we can equip learners with a comprehensive toolkit that extends beyond mere language acquisition to encompass metacognitive resilience, innovative thinking, and global citizenship, enabling them to excel in an interconnected, innovation-driven world where adaptability and holistic competence are paramount for personal and collective success.

References

1. Mergendoller, J. R., et al. (2006). Project-Based Learning for the 21st Century: Skills for the Future. ERIC.
2. Kokotsaki, D., et al. (2016). Project-based learning: A review of the literature. Improving Schools.

REFLECTION OF NATIONAL CULTURE THROUGH PHRASEOLOGICAL UNITS: A LINGUOCULTURAL APPROACH

Zokirova Sevara

Abstract: The thesis provides an in-depth analysis of the reflection of national culture through phraseological units in a linguo-cultural approach. The cultural codes of Uzbek phraseology are revealed through component analysis, conceptual analysis and metaphorical modeling, and the anthropocentric paradigm and linguo-cultural themes are discussed based on the theories of V. Teliya, V. Maslova and A. Verjbicka. Nomadic and agricultural elements, professional and somatic components in the Uzbek language are highlighted through examples. The results shed light on the inextricable link between language and culture, revealing ethnic creativity and national mentality, which suggests comparative and ethnolinguistic approaches for modern linguistic research.

Keywords: Phraseological units, national culture, linguoculturology, anthropocentrism, concept, cultural images, ethnic creativity, linguoculturemes, component analysis, metaphorical modeling, nomadic elements, elements of agriculture, ethnic stereotypes, cultural archetypes, Sapir-Whorf hypothesis, ethnolinguistics, pragmatic functions, discursive functions, perception of reality, isomorphism of Turkic languages.

FRAZEOLGIK BIRLIKLAR ORQALI MILLIY MADANIYATNI AKS ETTIRISH: LINGVOKULTUROLOGIK YONDASHUV

Zokirova Sevara

Anotatsiya: Tezis frazeologik birliklar orqali milliy madaniyatni aks ettirishni lingvokulturologik yondashuvda chuqur tahlil qiladi. Komponent tahlili, kontseptual tahlil va metaforik modellashtirish orqali o'zbek frazeologiyasining madaniy kodlari ochiladi, shuningdek, V. Teliya, V. Maslova va A. Verjbicka nazariyalari asosida antropotsentrik paradigma va lingvokulturemalar muhokama qilinadi. O'zbek tilidagi nomadik va dehqonchilik elementlari, kasbiy va somatik komponentlar misollar orqali yoritiladi. Natijalar til va madaniyat o'rtasidagi uzviy bog'lanishni yoritib, etnik ijodkorlik va milliy mentalitetni ochib beradi, bu zamonaviy lingvistik tadqiqotlar uchun qiyosiy va etnolingvistik yondashuvlarni taklif qiladi.

Kalit so'zlar: Frazeologik birliklar, milliy madaniyat, lingvokulturologiya, antropotsentrizm, kontsept, madaniy obrazlar, etnik ijodkorlik, lingvokulturemalar, komponent tahlili, metaforik modellashtirish, nomadik elementlar, dehqonchilik unsurlari, etnik stereotiplar, madaniy arxetiplar, Sapir-Uorf gipotezasi, etnolingvistika, pragmatik funksiyalar, diskursiv funksiyalar, voqelik idroki, turkiy tillar izomorfligi.

ОТРАЖЕНИЕ НАЦИОНАЛЬНОЙ КУЛЬТУРЫ ЧЕРЕЗ ФРАЗЕОЛОГИЗМЫ: ЛИНГВОКУЛЬТУРОЛОГИЧЕСКИЙ ПОДХОД

Закирова Севара

Аннотация: В диссертация представлен углубленный анализ отражения национальной культуры посредством фразеологических единиц в лингвокультурологическом подходе. Культурные коды узбекской фразеологии раскрываются посредством компонентного анализа, концептуального анализа и метафорического моделирования, а антропоцентрическая парадигма и лингвокультурема рассматриваются на основе теорий В. Телии, В. Масловой и А. Вержбицкой. На примерах иллюстрируются кочевые и земледельческие, профессиональные и соматические составляющие узбекского языка. Результаты исследования проливают свет на неразрывную связь языка и культуры, раскрывая этническое творчество и национальный менталитет, что предполагает применение сопоставительного и этнолингвистического подходов в современных лингвистических исследованиях.

Ключевые слова: Фразеологизмы, национальная культура, лингвокультурология, антропоцентризм, концепт, культурные образы, этническое творчество, лингвокультуремы, компонентный анализ, метафорическое моделирование, кочевые элементы, элементы земледелия, этнические стереотипы, культурные архетипы, гипотеза Сепира-Уорфа, этнолингвистика, прагматические функции, дискурсивные функции, восприятие действительности, изоморфизм тюркских языков.

Linguoculturology studies the relationship between language and culture and sees phraseological units as a mirror of national culture. This article analyzes phraseologisms in the Uzbek language from a linguoculturological approach, highlighting the reflection of national mentality. The reflection of national culture through phraseological units is a mechanism for revealing the cultural code of the language in a linguoculturological approach, which preserves the mentality, traditions and historical experience of the people. Linguoculturological theory (V. Teliya, V. Maslova, A. Verjbicka) studies phraseological units as a mirror of national culture through component analysis, conceptual analysis and metaphorical modeling. Phraseological units reflect the values of the speaker of the language and provide an anthropocentric paradigm; for example, the concept of “home” is expressed through frames as a place of residence, family and cultural unity. National culture is reflected in phraseological units, preserving geographical, social and lifestyle elements, which emphasizes the inextricable link between language and culture (E. Sapir, V. Humboldt). Phraseological units in the Uzbek language, while reflecting national culture, retain nomadic and agricultural elements, emphasize honesty “on the shepherd’s staff is correct”, and hard work “in the rain is quiet”. Uzbek phraseologisms, reflecting national and cultural characteristics, are based on historical and social

context; for example, units with the “doppi” component (“to throw doppisini osmonga otmoq” – great joy, “doppi toraydi” – difficult situation) reflect cultural artifacts, demonstrating elements of harmony and resilience of the national mentality. In the linguoculturological approach, phraseological units are studied as linguoculturemas, integrating language forms and cultural meanings; reveals isomorphic features in Turkic languages through component analysis and comparative methods, illuminating national identity. Phraseological units, performing pragmatic functions in reflecting national culture, enrich the cultural layers of the language; when studied in comparison in Italian and Uzbek, they reflect ethnic creativity and perception of reality. Linguoculturological comparative analysis of phrases with an adjective component in English and Uzbek reveals national mentality, for example, the English “as sly as a fox” and its Uzbek equivalent show the difference in cultural images, which are analyzed through simple, comparative and incremental classifications. Linguo-culturology and the anthropocentric approach to language description see phraseological units as expressions of national culture, linking them with the geographical environment, social forms and traditions. The Sapir-Whorf hypothesis explains phraseological units as the influence of language structure on worldview, presenting them as units that preserve ethnic identities. The reflection of phraseological units in national culture is analyzed through the methods of ethnolinguistics and culturology, revealing cultural archetypes and stereotypes. Phraseological units in the Uzbek language perform pragmatic and discursive functions in reflecting national culture, enriching the cultural layers of the language.

Phraseological units reflect national culture through a linguoculturological approach, revealing the cultural and cognitive foundations of language, which remains a relevant object of research in modern linguistics.

LIST OF USED LITERATURE

1. Rahmatullayev Sh. Phraseological dictionary of the Uzbek language. Tashkent: National Encyclopedia of Uzbekistan, 1978.
2. Jamolkhonov H. The current Uzbek literary language. Tashkent: Fan, 2004.
3. Sharipova O., Yuldoshev I. Fundamentals of Linguistics. Tashkent: National University of Uzbekistan, 2010.
4. Turaboyeva L. On the study of phraseological issues in the Uzbek language. Karakalpakstan State University, 2022.
5. Ermatov I. Current Uzbek literary language (Lexicology, phraseology, lexicography). Tashkent: Scienceweb, 2023.

O‘ZBEKISTONDA FUQAROLARNING ELEKTORAL MADANIYATNI YANADA YUKSALTIRISHNING JORIY MUAMMOLARI VA ISTIQBOLLARI

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Annotatsiya: Mazkur maqolada O‘zbekistonda fuqarolarning elektoral madaniyatni yanada yuksaltirishning joriy muammolari va istiqbollari to‘g‘risida aytiladi. Shuningdek maqolada respublikadagi saylov tizimini, aholi orasidagi saylov madaniyatini yuksaltirish bo‘yicha amaliy tavsiyalar aytiladi.

Kalit so‘zlar: saylov, elektoral, fuqaro, aholi, demokratik, xorijiy, tizim, islohot.

O‘zbekiston Respublikasida demokratik islohotlarning chuqurlashuvi fuqarolarning siyosiy faolligi va elektoral madaniyatining yuksalishini talab etmoqda. Saylovlar — har bir fuqaroning o‘z kelajagini belgilash imkonini beruvchi muhim demokratik jarayon bo‘lib, unda fuqarolarning faol ishtiroki mamlakat siyosiy barqarorligi va ijtimoiy taraqqiyotining muhim omilidir. Biroq bu yo‘nalishda ayrim muammolar ham mavjud. **Asosiy muammolar sifatida huquqiy madaniyatning pastligi, siyosiy partiyalar faoliyatining sustligi, ommaviy axborot vositalarining ta’sir doirasining cheklanganligi va ijtimoiy-iqtisodiy muammolarni ko‘rsatish mumkin.** Ko‘plab fuqarolar saylov to‘g‘risida yetarli bilimga ega emasligi sababli jarayonda ayrim kamchiliklar kuzatiladi. Siyosiy partiyalar saylovchilar bilan **yetarli darajada ishlamayapti, OAV** esa siyosiy kuchlar ta’sirida bo‘lgani sababli saylov jarayonlarini xolis yoritishda cheklovlarga duch kelmoqda. Shu bilan birga, ishsizlik va kambag‘allik aholining saylovlarga bo‘lgan qiziqishini pasaytiruvchi omil bo‘lib qolmoqda. Mazkur muammolarni bartaraf etish uchun bir qator chora-tadbirlarni amalga oshirish zarur. Avvalo, aholining, ayniqsa yoshlarning **huquqiy madaniyatini oshirish, huquqiy bilimlarni targ‘ib qilish va ta’lim tizimida huquqshunoslik fanlarini rivojlantirish** muhimdir. Siyosiy partiyalar faoliyatini kuchaytirish, ularning saylovchilar bilan ishlashini takomillashtirish, siyosiy ongini oshirish va moliyaviy mustaqilligini ta’minlash lozim. OAVning rolini kuchaytirish, saylov jarayonlarini xolis va to‘liq yoritish, nomzodlar va partiyalar dasturlarini keng ommaga yetkazish ham dolzarb masaladir. Shu bilan birga, ijtimoiy-iqtisodiy ahvolni yaxshilash, ishsizlikni kamaytirish va aholi farovonligini oshirish orqali saylovlarda faol ishtirok

etish uchun zarur sharoit yaratish zarur. Mahalla institutining saylovlardagi rolini oshirish, fuqarolarni faollikka undash va ularni siyosiy jarayonlarga jalb etish ham muhim ahamiyat kasb etadi. Mustaqillikning dastlabki yillarida iqtisodiy tanglik va tajriba yetishmasligi sababli fuqarolarning siyosiy faolligi past bo'lgan bo'lsa-da, bugungi kunda demokratik qadriyatlar mustahkamlanib, saylov tizimi va fuqarolarning siyosiy ongi izchil yuksalib bormoqda.

O'zbekiston mustaqillikka erishgach, siyosiy islohotlar doirasida saylov tizimi tubdan yangilandi. Saylov qonunchiligi zamonaviy talablar asosida qayta ko'rib chiqilib, jarayonning ochiqligi, shaffofligi va adolatliligi ta'minlandi. Natijada, saylovlar xalqaro kuzatuvchilar tomonidan ijobiy baholanib, demokratik jarayonlar rivojiga hissa qo'shmoqda. "Fuqarolarning saylov huquqlari kafolatlari to'g'risida", "O'zbekiston Respublikasi Prezidenti saylovi to'g'risida" va "O'zbekiston Respublikasi Oliy Majlisiga saylov to'g'risida"gi qonunlarda fuqarolarning saylov huquqi erkinligi mustahkamlangan. Ushbu qonunlar har bir fuqaroning saylovlarda bevosita ishtirok etish, o'z fikrini erkin bildirish huquqini kafolatlaydi.

Saylov tizimini demokratik tamoyillar asosida takomillashtirish bo'yicha izchil ishlar olib borilmoqda. 2014-yil 16-aprelda qabul qilingan qonun bilan Konstitutsiyaning 117-moddasiga o'zgartishlar kiritilib, Markaziy saylov komissiyasining huquqiy maqomi takomillashtirildi. Shuningdek, 2014-yil 4-sentyabrdagi qonun bilan "Markaziy saylov komissiyasi to'g'risida"gi qonunga o'zgartishlar kiritilib, komissiyaning faoliyat prinsiplari, tuzilishi va vakolatlari aniq belgilandi. Markaziy saylov komissiyasiga xalqaro hamkorlikni rivojlantirish, xorijiy kuzatuvchilarga ruxsat berish kabi yangi vakolatlar berildi. Uning faoliyatini moliyalashtirish davlat byudjetidan alohida tartibda amalga oshiriladigan bo'ldi. Bu o'zgarishlar saylovlarning yanada ochiq, shaffof va adolatli o'tishini ta'minlashga xizmat qilmoqda.

O'zbekistonda saylov qonun hujjatlarini buzganlik uchun ma'muriy javobgarlik joriy etildi. Saylov komissiyalari, davlat organlari va mansabdor shaxslarning g'ayriqonuniy harakatlari ustidan sudga shikoyat qilish huquqi mustahkamlandi. Shu maqsadda "Ma'muriy javobgarlik to'g'risida"gi kodeksga "Saylov va referendumni tashkil etish hamda o'tkazish sohasidagi huquqbuzarliklar uchun ma'muriy javobgarlik" nomli V bob kiritildi.

Fuqarolar, nomzodlar va ularning vakillarining huquq va manfaatlarini himoya qilish mexanizmlari kuchaytirildi. 2016–2017-yillarda qabul qilingan Prezident farmonlariga muvofiq ma'muriy sudlar tashkil etilib, sud tizimi tubdan takomillashtirildi. 2017-yil 8-sentyabrdagi farmon bilan tasdiqlangan "Ma'muriy islohotlar konsepsiyasi"da esa ma'muriy adliya tizimini yanada rivojlantirish vazifalari belgilandi.

2015-yil 29-dekabrda qabul qilingan qonun orqali saylovga oid bir qator hujjatlarga o'zgartish va qo'shimchalar kiritildi. Bu o'zgarishlar Konstitutsiyaning 117-

moddasidagi yangiliklarni qonunchilikda aks ettirish va saylov tizimini yanada takomillashtirishga xizmat qildi.

So‘nggi yillarda aholining saylov madaniyatini oshirish bo‘yicha amalga oshirilgan ishlar natijasida saylov tizimida ijobiy o‘zgarishlar kuzatilmoqda. Muhim yangiliklardan biri — Markaziy saylov komissiyasining siyosiy partiyalarga ajratilgan mablag‘lardan foydalanish tartibini belgilash vakolati bekor qilindi. Chunki “Siyosiy partiyalar to‘g‘risida”gi qonunga ko‘ra, davlat organlari partiyalarning ichki ishlariga aralasha olmaydi. Endilikda siyosiy partiyalar saylovoldi tashviqot mablag‘laridan mustaqil ravishda foydalanadilar.

Xulosa qilib aytganda, O‘zbekistonda saylov tizimining istiqbollari yorqin. So‘nggi yillardagi islohotlar natijasida saylov jarayoni tobora ochiq, shaffof va adolatli tus olib, mamlakatning demokratik rivojlanishiga xizmat qilmoqda.

FOYDALANILGAN ADABIYOTLAR RO‘YXATI:

1. Ўзбекистон Республикаси Президентининг 2018 йил январдаги “2017-2021 йилларда Ўзбекистон Республикасини ривожлантиришнинг бешта устувор йўналиши” бўйича Ҳаракатлар стратегияси 2018 йил- “Фаол тадбиркорлик, инновацион ғоялар ва технологияларни қўллаб қувватлаш йили” да амалга оширишга оид Давлат дастури тўғрисида”ги ПФ 5308- сон Фармони // Қонун ҳужжатлари маълумотлари миллий баъзаси. 23.012018. 06/18/5308/0610-сон; 25.052018 й. 06/18/5447/1269-сон.
2. Джўрайев Қ. Замонавий сайлов тизимларининг шаклланиши демократик тараққиёт омили сифатида. (Франция тажрибаси мисолида) Сиёсий фанлар доктори илмий даражасини олиш учун ёзилган диссертацияси. Тошкент.2009. – Б. 9
3. Насриддинов Ф. Ўзбекистонда сайлов комиссиялари фаолиятининг ташкилий-ҳуқуқий асосларини такомиллаштириш. Юридика фанлари бўйича фалсафа доктори (PhD) илмий унвонини олиш учун ёзган диссертацияси. Тошкент- 2019
4. Абдурахмонов Х. Мамлакатда демократик ислохотларни чуқурлаштириш шароитида сайлов қонунчилигини такомиллаштириш. Юридик фанлар бўйича фалсафа доктори (PhD) даражасини олиш учун тайёрлаган диссертацияси. – Тошкент, 2018.
5. Каримов И.А. Мамлакатимизда демократик ислохотларни янада чуқурлаштириш ва фуқаролик жамиятини ривожлантириш концепсияси. –Т.: Ўзбекистон 2010. –Б. 35.
6. Ўзбек тилининг изоҳли луғати 8000 дан ортиқ сўз ва сўз бирикмаси. ЎзРФА Тилва адабиёт инситути –Т.: Ўзбекистон миллий инциклопедияси. Давлат илмий нашёти, 2006. –Б.108

7. Белавская М.С. конституционно-правовой статус избирательных комиссий, осуществляющих подготовку и проведение муниципальных выборов в Российской Федерации: ... канд. юрид. наук. Ставропол. 2009, - С.56.
8. Рўзиназаров Ш. Ўзбекистон Республикаси Марказий сайлов комиссиясининг еркин демократик сайловларни ташкил етиш ва ўтказишда роли. / Ўзбекистон Республикаси Марказий сайлов комиссияси. Т.: Ўзбекистон, 2014, –Б..26

МЕХАНИЗМЫ ПУБЛИЧНОЙ КОММУНИКАЦИИ В ФОРМИРОВАНИИ КОГНИТИВНЫХ И ЦЕННОСТНЫХ МОДЕЛЕЙ ОБЩЕСТВЕННОГО СОЗНАНИЯ

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Аннотация: В условиях стремительной цифровизации и усложнения информационной среды современные общества сталкиваются с серьёзными вызовами в сфере публичной коммуникации. Возрастающие объёмы информации, распространение недостоверных сообщений, а также усиление медиавлияния приводят к формированию неоднородных когнитивных и ценностных установок у населения. Эти процессы усиливают фрагментацию общественного сознания и затрудняют формирование устойчивых ценностных моделей, соответствующих требованиям современного информационного общества.

Ключевые слова: публичная коммуникация, общественное сознание, когнитивные модели, ценностные ориентации, медиатизация, цифровая среда.

На сегодняшний день публичная коммуникация представляет собой сложную систему взаимодействий, которая играет определяющую роль в формировании когнитивных схем и ценностных ориентиров современного общества. В условиях стремительной цифровизации и медиатизации социальных процессов актуализируется необходимость комплексного анализа механизмов, посредством которых публичный дискурс воздействует на коллективное сознание и индивидуальные представления о реальности.

По концепции П. Бурдьё, публичное пространство функционирует как поле символической борьбы, где различные акторы конкурируют за право определять доминирующие интерпретации социальной действительности. Данный подход позволяет рассматривать публичную коммуникацию не просто как процесс передачи информации, но как механизм производства и воспроизводства социальных смыслов, непосредственно влияющих на структуру общественного сознания. Изучение механизмов публичной коммуникации базируется на междисциплинарной методологии, интегрирующей достижения теории коммуникации, социальной психологии и политической философии. Ю. Хабермас в своей теории коммуникативного действия подчёркивает, что публичная сфера представляет собой пространство рационального дискурса, где формируется общественное мнение через аргументированный обмен позициями.

Однако современные исследования демонстрируют, что процессы формирования общественного сознания значительно сложнее и включают не только рациональные, но и эмоциональные, символические компоненты.

По Никласу Луману, публичная коммуникация – это процесс, где массмедиа, действуя как самодостаточная система, создают наше представление о реальности. Они делают это, выбирая и объясняя события, что определяет, на что общество обращает внимание. Эта точка зрения важна для понимания того, как медиа формируют наше восприятие мира. Публичная коммуникация воздействует на когнитивные структуры общественного сознания через несколько взаимосвязанных механизмов.

Во-первых, это механизм фрейминга – способ представления информации, который определяет интерпретационные рамки восприятия событий. Исследования показывают, что изменение фрейма может радикально трансформировать отношение аудитории к одним и тем же фактам, что свидетельствует о конструктивистской природе публичного дискурса.

Во-вторых, важнейшую роль играет механизм повестки дня (agenda-setting), описанный М. Маккомбсом и Д. Шоу, согласно которому медиа определяют не столько то, что думать, сколько о чём думать. В эпоху цифровых технологий этот механизм усложняется влиянием алгоритмической курации контента и феноменом эхо-камер, где пользователи преимущественно сталкиваются с информацией, подтверждающей их существующие убеждения.

Третий механизм связан с социальным конструированием реальности через нарративы. Как отмечают П. Бергер и Т. Лукман, реальность конструируется через символические системы и дискурсивные практики. Публичные нарративы создают общие смысловые структуры, которые организуют индивидуальный и коллективный опыт, формируя устойчивые когнитивные модели восприятия социальной действительности.

Публичная коммуникация не только формирует когнитивные схемы, но и трансформирует систему ценностных ориентаций общества. Процесс нормализации определённых дискурсов в публичном пространстве постепенно изменяет границы морально приемлемого, влияя на коллективные представления о добре и зле, справедливости и несправедливости. Это происходит через механизм дискурсивной легитимации, когда определённые ценности и практики получают публичное признание и институциональную поддержку.

Особую роль в этом процессе играют публичные интеллектуалы, лидеры мнений и медиа-персоны, которые функционируют как агенты символического влияния. Их высказывания и позиции становятся референтными точками для

формирования общественного консенсуса по ценностным вопросам. В цифровой среде эта функция частично перешла к инфлюенсерам и создателям контента, чья способность влиять на ценностные ориентации аудитории основана на механизмах парасоциального взаимодействия и идентификации.

Цифровизация радикально трансформировала механизмы публичной коммуникации, создав новые каналы влияния на общественное сознание. Социальные сети изменили структуру публичной сферы, сделав её более фрагментированной и децентрализованной. Если традиционные массмедиа создавали общее информационное пространство, то современные платформы генерируют множественные публичные сферы с различными дискурсивными режимами и ценностными системами.

Алгоритмизация коммуникации привела к возникновению феномена «пузырей фильтров», когда пользователи получают персонализированный контент, подкрепляющий их существующие убеждения. Это создаёт риск поляризации общественного сознания и затрудняет формирование общих когнитивных и ценностных оснований для социального диалога.

Одновременно цифровые технологии демократизировали доступ к публичной коммуникации, позволив широким слоям населения участвовать в производстве публичного дискурса. Это привело к диверсификации голосов в публичном пространстве, но также породило проблемы верификации информации и борьбы с дезинформацией, которые непосредственно влияют на когнитивные модели восприятия реальности.

В заключении отметим, что механизмы публичной коммуникации представляют собой мощные инструменты формирования когнитивных и ценностных моделей общественного сознания. Через фрейминг, установление повестки дня, конструирование нарративов и дискурсивную легитимацию публичная коммуникация определяет не только то, как общество воспринимает реальность, но и какие ценности признаёт легитимными. В условиях цифровой трансформации эти механизмы усложняются, приобретают новые формы и создают как возможности для демократизации публичного дискурса, так и риски фрагментации общественного сознания и распространения дезинформации. Понимание этих механизмов критически важно для разработки стратегий медиаграмотности, регулирования цифровых платформ и укрепления демократических институтов публичной коммуникации. Дальнейшие исследования должны сосредоточиться на изучении долгосрочных эффектов алгоритмической курации контента на когнитивные способности и ценностные ориентации, а также на разработке методологий анализа трансформации

общественного сознания в условиях гибридной медиасреды, где традиционные и цифровые формы коммуникации взаимодействуют комплексным образом.

СПИСОК ЛИТЕРАТУРЫ

1. Бурдьё П. Социология социального пространства / Пер. с франц. – М.: Институт экспериментальной социологии; СПб.: Алетейя, 2007. – 288 с.
2. Habermas J. The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society. – Cambridge: MIT Press, 1991. – 301 p.
3. Luhmann N. The Reality of the Mass Media / Trans. by K. Cross. – Stanford: Stanford University Press, 2000. – 153 p.
4. Entman R.M. Framing: Toward Clarification of a Fractured Paradigm // Journal of Communication. – 1993. – Vol. 43, No. 4. – P. 51-58.
5. McCombs M., Shaw D. The Agenda-Setting Function of Mass Media // Public Opinion Quarterly. – 1972. – Vol. 36, No. 2. – P. 176-187.
6. Berger P., Luckmann T. The Social Construction of Reality: A Treatise in the Sociology of Knowledge. – New York: Anchor Books, 1966. – 219 p.
7. Pariser E. The Filter Bubble: What the Internet Is Hiding from You. – New York: Penguin Press, 2011. – 294 p.
8. Castells M. Communication Power. – Oxford: Oxford University Press, 2009. – 571 p.
9. Van Dijck J. The Culture of Connectivity: A Critical History of Social Media. – Oxford: Oxford University Press, 2013. – 228 p.
10. Bennett W.L., Segerberg A. The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics // Information, Communication & Society. – 2012. – Vol. 15, No. 5. – P. 739-768.

PHRASEOLOGICAL UNITS IN ENGLISH AND UZBEK: A SEMANTIC AND TYPOLOGICAL ANALYSIS

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Abstract. This paper explores the phraseological systems of English and Uzbek, focusing on their semantic organization and typological distinctions. Phraseology — which includes idioms, proverbs, and set expressions — mirrors a nation's worldview, creative thinking, and cultural values. Through a comparative approach, the study uncovers both universal tendencies and culture-specific traits. The results demonstrate that while idioms in both languages share metaphorical and context-dependent qualities, they diverge in imagery, symbolic interpretation, and pragmatic use. The research emphasizes that phraseology plays a crucial role not only in theoretical linguistics but also in translation studies, intercultural communication, and the methodology of foreign language teaching.

Keywords: phraseology, idioms, proverbs, semantics, typology, metaphor, cultural linguistics, English, Uzbek, comparative analysis, translation, intercultural interaction, linguistic worldview.

Annotatsiya. Mazkur maqolada ingliz va o'zbek tillaridagi frazeologik birliklarning semantik tuzilishi hamda tipologik farqlari o'rganiladi. Frazeologiya — xalq dunyoqarashi, madaniy qadriyatlari va ijodiy tafakkurini ifodalovchi idiomalar, maqollar hamda turg'un birikmalardan tashkil topgan soha sifatida talqin etiladi. Ingliz va o'zbek tillari frazeologiyasining qiyosiy tahlili umumiy qonuniyatlarni ochib berish bilan bir qatorda, har bir tilga xos milliy-madaniy o'ziga xosliklarni ham yoritadi. Tadqiqot natijalari shuni ko'rsatadiki, har ikkala tilda idiomalar ko'pincha metaforik va kontekstga bog'liq bo'lsa-da, ularning tasviriylik, ramziy mazmun va nutqdagi amaliy vazifalari jihatidan farqlari mavjud. Shuningdek, maqolada

frazeologiyaning nafaqat nazariy tilshunoslik, balki tarjimashunoslik, madaniyatlararo muloqot va xorijiy tillarni o'qitishdagi ahamiyati ham ta'kidlanadi. Kalit so'zlar: frazeologiya, idiomalar, maqollar, semantika, tipologiya, metafora, madaniy tilshunoslik, ingliz tili, o'zbek tili, qiyosiy tahlil, tarjima, madaniyatlararo muloqot, til dunyoqarashi.

Аннотация. В статье исследуются фразеологические системы английского и узбекского языков, их семантическое устройство и типологические различия. Фразеология, включающая идиомы, пословицы и устойчивые выражения, отражает мировоззрение, культурные ценности и творческое мышление народа. Сравнительный анализ показывает как общие закономерности, так и национально-культурную специфику. Установлено, что в обоих языках идиомы в основном метафоричны и зависят от контекста, однако различаются по образности, символике и прагматической функции. Исследование подчеркивает значимость фразеологии не только в теоретическом языкознании, но и в переводоведении, межкультурной коммуникации и методике преподавания иностранных языков.

Ключевые слова: фразеология, идиомы, пословицы, семантика, типология, метафора, культурная лингвистика, английский язык, узбекский язык, сопоставительный анализ, переводоведение, межкультурная коммуникация, языковая картина мира.

INTRODUCTION

Phraseological expressions represent one of the most vivid and culturally loaded components of any language, encapsulating collective experience, traditions, and imaginative thought. In English linguistics, idioms and proverbs are often regarded as stylistic and expressive means that enhance discourse, enriching it with emotional and figurative depth. In the Uzbek language, phraseological units are closely intertwined with oral folklore, national mentality, and cultural symbolism, serving as carriers of collective wisdom and ethics. In today's globalized world, the study of phraseology from a comparative perspective between English and Uzbek has become increasingly relevant. Many idiomatic expressions resist literal translation, resulting in semantic ambiguity or miscommunication. Therefore, detailed semantic and typological analyses are crucial for revealing the inner mechanisms of figurative meaning and for identifying equivalents across languages. The present research seeks to systematize and classify English and Uzbek phraseological units according to semantic and typological criteria. Particular emphasis is placed on idioms, proverbs, and metaphoric phrases that expose the cultural underpinnings and symbolic thinking inherent in both linguistic traditions. Ultimately, this study aims to contribute to translation studies, intercultural

understanding, and foreign language pedagogy by deepening the comprehension of phraseological meaning.

Literature Review

The study of phraseology has attracted considerable attention within various linguistic traditions. The foundational framework for modern phraseological theory was established by Vinogradov (1977), who categorized word combinations into free combinations, phraseological units, and idioms. Building upon this, Kunin (1996) and Cowie (1998) advanced English phraseological studies by examining idioms in terms of their semantic transparency — distinguishing between transparent, semi-transparent, and opaque forms. Within Uzbek linguistics, the works of G‘ulomov (1990) and Madrahimov (2002) played a significant role in identifying the folkloric origins and educational value of phraseological expressions, highlighting their deep-rooted connection to national culture and worldview. Similarly, Moon (1998) emphasized that English idioms function as cultural codes, conveying metaphoric patterns that vary from one language to another. Comparative investigations (Kunin, 1996; Moon, 1998) have revealed that while figurative language demonstrates universal mechanisms of metaphorization, cultural differences often complicate direct translation. English idioms tend to originate from religious, literary, and maritime traditions, whereas Uzbek phraseology is largely influenced by agriculture, pastoral life, and folk wisdom. This contrast reflects the historical experiences and sociocultural evolution of each linguistic community.

Semantic Characteristics of Phraseological Units

1. Metaphorical Idioms.

In both English and Uzbek, metaphor serves as a central cognitive and linguistic mechanism that allows speakers to convey abstract or emotional meanings through vivid and imaginative imagery.

English examples: Break the ice (to initiate a conversation), Kick the bucket (to die).

Uzbek examples: Yuzini yorug‘ qilish (to bring honor), Ko‘ngli tog‘dek (to be generous).

While English idioms often rely on irony, everyday experiences, or symbolic references to common objects, Uzbek idioms are more frequently drawn from natural elements, moral values, and emotional states. This variation mirrors broader cultural distinctions — English phraseology tends to reflect an individualistic and pragmatic worldview, whereas Uzbek expressions are rooted in collectivism and nature-oriented perspectives.

2. Proverbs as Cultural Codes.

Proverbs encapsulate centuries of wisdom and serve as condensed reflections of moral and cultural norms within each linguistic community.

English examples: A stitch in time saves nine; Don't count your chickens before they hatch.

Uzbek examples: Mehnat qilgan odam to'yadi ("He who works will be satisfied"); Oltin topilsa ham, or topilmaydi ("Gold may be found, but honor cannot").

English proverbs usually emphasize rationality, foresight, and practical behavior, while Uzbek proverbs prioritize ethical values such as honor, diligence, and respect. This contrast reveals the differing historical, social, and moral foundations underlying the two languages.

3. Semantic Transparency and Opacity

Idioms vary in their degree of transparency — that is, how easily their figurative meaning can be inferred from their literal form.

Transparent examples: See the light (to understand) / Ko'zini ochmoq (to realize).

Opaque examples: Spill the beans (to reveal a secret) / Osh pishdi, qozon qaynadi (the matter is settled). Transparent idioms preserve a recognizable link between literal and figurative meanings, whereas opaque idioms require prior cultural or contextual knowledge. For linguists, translators, and language learners, understanding this difference is key to accurate interpretation and communication.

Typological Features of Phraseological Units Findings and Discussion

The comparative investigation highlights both shared linguistic mechanisms and culturally distinct elements in the phraseological systems of English and Uzbek. Metaphorical reasoning — a universal aspect of human cognition — manifests in both languages, yet the imagery and associative meanings differ according to cultural background. English idioms commonly originate from urban life, religion, and literature, whereas Uzbek idioms are rooted in agrarian traditions, kinship relations, and ethical values. From a pedagogical and practical perspective, the study underscores the value of phraseological analysis in translation and language teaching. Literal interpretation of idioms often leads to semantic distortions and communicative failures. For instance, translating Kick the bucket into Uzbek word-for-word produces no meaningful equivalent. Therefore, adopting a contrastive approach in language education helps learners comprehend idioms contextually and culturally, facilitating more accurate and natural language use. Typologically, English idioms tend to be shorter, colloquial, and syntactically flexible, while Uzbek idioms are more elaborate, stylistically elevated, and frequently contain moral or didactic undertones. This structural and functional contrast reflects the communicative orientation of each

culture: English emphasizes practicality and expressiveness, whereas Uzbek favors artistry, morality, and collective wisdom. The findings further affirm that phraseological meanings are shaped by historical experience, cultural symbolism, and social consciousness. Thus, understanding idioms extends beyond linguistic competence — it requires familiarity with the cultural and cognitive worldview of each speech community. Mastering idiomatic language, therefore, is a bridge not only to linguistic proficiency but also to intercultural awareness and empathy.

Conclusion

Phraseological expressions in both English and Uzbek encapsulate the national mindset, value system, and artistic creativity of their speakers. While metaphor, symbolism, and exaggeration are shared linguistic mechanisms, the imagery and conceptual basis of these idioms are molded by each culture's unique historical and social evolution. The comparative findings reveal that a full understanding of idiomatic meaning demands not only lexical and grammatical knowledge but also cultural insight and contextual awareness. For translators and educators, it is vital to consider semantic transparency, cultural origin, and pragmatic function when dealing with phraseological units. In practical terms, the study contributes to translation studies, intercultural communication, and foreign language teaching by emphasizing how culturally informed phraseological competence enhances comprehension and communication. Future research may further investigate idiomatic equivalence in translation practice, the cognitive processing of idioms in bilingual learners, and the systematic documentation of idiomatic parallels in bilingual dictionaries.

References

1. Cowie, A. P. (1998). *Phraseology: Theory, analysis, and applications*. Oxford: Oxford University Press.
2. G'ulomov, A. (1990). *O'zbek tilining frazeologiyasi*. Toshkent: Fan.
3. Kunin, A. V. (1996). *Course in Phraseology of English*. Moscow: Vysshaya Shkola.
4. Madrahimov, N. (2002). *Frazeologik birliklarning semantik va stilistik xususiyatlari*. Toshkent.
5. Moon, R. (1998). *Fixed Expressions and Idioms in English*. Oxford: Oxford University Press.
6. Vinogradov, V. V. (1977). *Lexicology and Lexicography*. Moscow: Nauka.

TEACHER IMAGES IN “THE PROFESSOR” BY CHARLOTTE BRONTE

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Abstract: This article explores the representation of teacher figures in Charlotte Bronte’s *The Professor* (1857), focusing on how Bronte constructs the teacher’s role as both a moral and intellectual symbol. Through the analysis of William Crimsworth, Mademoiselle Reuter, and Frances Henri, the study reveals contrasting educational philosophies shaped by ethics, ambition, and sincerity. Bronte’s depiction of the teacher transcends professional identity, portraying education as a means of personal growth, moral discipline, and social transformation. The paper also examines how gender dynamics and Victorian educational ideals influence the portrayal of authority and emotional restraint within pedagogical relationships. The research concludes that Bronte envisions teaching as a spiritual vocation rooted in truth, empathy, and intellectual independence.

Keywords: Charlotte Bronte, *The Professor*, teacher figures, Victorian education, moral philosophy, gender dynamics, literary analysis, pedagogy, William Crimsworth, Frances Henri.

Introduction

Charlotte Bronte’s *The Professor* (published posthumously in 1857) stands as one of her most intellectually grounded works, offering a unique portrayal of education, social mobility, and moral integrity through the eyes of William Crimsworth — a young Englishman who becomes a teacher in a Belgian school. Unlike Bronte’s later novels such as *Jane Eyre* or *Villette*, *The Professor* presents a male perspective on the profession of teaching, yet the novel remains deeply rooted in Bronte’s personal experiences as a governess and her critical understanding of pedagogical relationships. The image of the teacher in *The Professor* is not merely a professional figure but also a symbol of authority, discipline, and personal development. Through the characters of William Crimsworth, Mademoiselle Reuter, and Frances Henri, Bronte explores contrasting educational ideologies — one driven by self-interest and manipulation, and the other grounded in sincerity, knowledge, and moral strength. The novel, therefore, functions as both a social commentary and a psychological study of teaching as a vocation in the 19th century.

This study aims to examine the representation of teacher figures in *The Professor* in the context of Victorian educational ideals, gender dynamics, and moral philosophy. By analyzing the narrative techniques and characterizations Bronte employs, the paper seeks to uncover how she constructs the image of the teacher as both a product of social conditions and a reflection of inner moral struggle.

Research Methods and Materials

This research employs a qualitative literary analysis method, focusing on close reading and interpretive examination of Charlotte Bronte's *The Professor*. The study investigates the portrayal of teacher figures through textual evidence, narrative structure, and character development. The analysis is grounded in a combination of descriptive, analytical, and comparative approaches, which allow for a deeper understanding of how Bronte constructs the image of the teacher as both a social and moral entity. The primary material for this research is the full text of *The Professor* (1857), while secondary sources include critical essays, biographical studies of Charlotte Bronte, and scholarly articles on Victorian education and gender ideology. These materials provide the theoretical foundation to interpret the author's depiction of teaching and authority.

The study also integrates historical-contextual analysis, exploring how 19th-century educational systems, particularly in England and Belgium, shaped the representation of teachers in literature. Furthermore, comparative elements are used to relate *The Professor* to Bronte's other works such as *Jane Eyre* and *Villette*, highlighting the evolution of her perspective on education, discipline, and intellectual independence. By combining literary, historical, and philosophical frameworks, this study seeks to offer a comprehensive understanding of the teacher's role in *The Professor* — not only as a profession but as a moral and ideological construct reflecting Victorian values and Bronte's personal worldview.

Results and Discussion

The analysis of *The Professor* reveals that Charlotte Bronte constructs her teacher characters as moral and intellectual archetypes that mirror the tensions between self-discipline, independence, and emotional restraint within Victorian society. Each teacher figure — William Crimsworth, Mademoiselle Reuter, and Frances Henri — represents a distinct attitude toward education and personal ethics, reflecting Bronte's own struggle between authority and empathy in pedagogical contexts.

William Crimsworth, the novel's protagonist, embodies the ideal of moral integrity and intellectual labor. His transformation from a disillusioned clerk to a disciplined educator illustrates Bronte's belief in education as a means of self-realization. Crimsworth's teaching style values honesty, self-control, and merit-based achievement, opposing the manipulative and superficial methods of others around him.

His classroom becomes a microcosm of social justice, where knowledge replaces privilege. In contrast, Mademoiselle Reuter, headmistress of the girls' school, represents the corrupting influence of ambition and emotional manipulation in education. Bronte uses her character to critique the moral hypocrisy often hidden behind professional respectability. Reuter's use of charm and deceit in her teaching and relationships highlights how power can distort the genuine purpose of education — turning it into an instrument of control rather than enlightenment.

Frances Henri, on the other hand, symbolizes purity, diligence, and spiritual strength. As a humble teacher of lace-mending who later becomes Crimsworth's intellectual equal, Frances illustrates Bronte's vision of the "true educator" — one who teaches with humility and emotional sincerity. Her independence and commitment to moral principles make her the embodiment of Bronte's ideal woman educator, contrasting sharply with Reuter's artificiality. The interaction among these three figures demonstrates that Bronte viewed teaching not merely as a profession but as a moral calling. The results of the analysis show that Bronte's representation of teachers reflects broader Victorian debates about gender roles, moral authority, and the social purpose of education. Male teachers, such as Crimsworth, are depicted as rational and principled, while female teachers embody either moral virtue or manipulation, depending on their ethical stance.

Furthermore, the study finds that Bronte's portrayal of the teacher's role aligns with her personal experiences in Brussels and her reflections on the limitations faced by women in intellectual professions. Through *The Professor*, she advocates for a model of education based on moral sincerity, emotional discipline, and respect for individuality — qualities she believed essential to both teaching and personal growth. In summary, the discussion reveals that the teacher figures in *The Professor* are not static or stereotypical; rather, they serve as complex symbols of human character development, mirroring Bronte's evolving philosophy of education as both a personal and social reforming force.

Conclusion

The analysis of teacher images in *The Professor* by Charlotte Bronte demonstrates that the act of teaching, for Bronte, extends far beyond the classroom. It embodies the moral, intellectual, and emotional dimensions of human development. Through William Crimsworth, Frances Henri, and Mademoiselle Reuter, Bronte explores the power dynamics of education, revealing how authority can either nurture or corrupt depending on the individual's moral foundation.

Bronte's portrayal of Crimsworth as an honest and disciplined educator emphasizes her belief in teaching as a means of moral enlightenment and self-respect. In contrast, Mademoiselle Reuter's manipulative tendencies expose the dangers of vanity and

ambition in education, while Frances Henri's quiet strength and devotion reflect the true essence of a virtuous teacher. Ultimately, The Professor presents teaching as a sacred duty tied to moral authenticity rather than social status or gender. Bronte's nuanced depiction of teacher figures encourages readers to reconsider education not as a mechanical transmission of knowledge, but as a humanistic exchange rooted in empathy, truth, and self-cultivation. Her reflections remain profoundly relevant, resonating with contemporary discussions on ethics, gender, and the transformative role of education.

References

1. Bronte, Charlotte. **The Professor**. London: Smith, Elder & Co., 1857.
2. Alexander, Christine. **The Early Writings of Charlotte Bronte**. Oxford University Press.
3. Eagleton, Terry. **The English Novel: An Introduction**. Blackwell Publishing.
4. Gilbert, Sandra M., and Susan Gubar. **The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination**. Yale University Press, 1979.

THE ROLE OF CHEMICAL ADMIXTURES IN THE PRODUCTION OF MODERN CONSTRUCTION MATERIALS: A COMPARATIVE STUDY OF INTERNATIONAL PRACTICES

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Abstract: This article analyzes the role of chemical admixtures in the production of modern construction materials, their influence on physical and mechanical properties, and the global experience of their application. Today, chemical admixtures play a crucial role in the production of environmentally friendly, energy-efficient, and high-strength concretes. The study compares the practices of European countries, the USA, Japan, China, Korea, and CIS states, focusing on the use and efficiency of polycarboxylate-based superplasticizers, accelerators, retarders, air-entraining, and hydrophobic agents. The findings highlight that these admixtures significantly enhance concrete strength, durability, and frost resistance while reducing water absorption. The paper concludes with recommendations for developing admixtures suitable for Uzbekistan's local climate and raw material base.

Keywords: concrete, chemical admixture, superplasticizer, water-cement ratio, hydrophobic agent, international standards.

In recent years, the global construction industry has been developing under the principles of environmental sustainability and energy efficiency. Chemical admixtures play a vital role in improving the quality of concrete and reinforced concrete products by affecting the hydration process of cement, reducing the water-cement ratio, and improving the rheological properties of the mixture. Modern production technologies, especially those using **polycarboxylate ether (PCE)-based superplasticizers**, allow for a 30–35% reduction in water consumption while maintaining or even improving workability and strength. Therefore, studying international practices and developing locally adapted chemical admixtures are of great importance for Uzbekistan's construction materials industry.

Chemical admixtures are classified according to their functional purpose. The main types include:

- **Water-reducing and superplasticizing agents** – disperse cement particles, reduce water demand, and increase the density and strength of concrete.
- **Accelerators and retarders** – control the setting and hardening rate, optimizing the construction schedule.

- **Air-entraining agents** – create micro air bubbles in concrete, increasing its frost resistance.
- **Hydrophobic additives** – decrease water absorption and enhance the waterproofing capacity of concrete.
- **Corrosion inhibitors and antifreeze admixtures** – protect steel reinforcement and ensure concreting at low temperatures.

Modern polycarboxylate superplasticizers form an electrostatic barrier around cement particles, preventing agglomeration and allowing for a uniform hydration process, which can increase compressive strength by up to 25%.

The effectiveness of admixtures depends largely on **accurate dosing and the sequence of mixing**. Superplasticizers are typically used at 0.5–1.2% of the cement mass, with optimal dosage determined experimentally to avoid segregation. By using admixtures, the **water-cement ratio (W/C)** can be reduced from 0.45 to 0.30, resulting in:

- Increased workability and flowability;
- 15–25% higher compressive strength;
- Reduced water absorption and enhanced frost resistance;
- Slower carbonation and lower risk of corrosion.

In modern plants, production is monitored through **online control sensors** that measure real-time rheological behavior, moisture, temperature, and setting time. This automation minimizes human error and ensures product consistency.

Europe (Germany, France, Italy):

According to **EN 934-2**, admixtures are classified by their function. In Germany, **PCE-based superplasticizers (e.g., BASF Glenium series)** are widely used, achieving up to 35% water reduction and 25% strength increase. In France, the **Vicat LC3 system** (limestone–calcined clay cement) reduces CO₂ emissions by 15%.

USA and Canada:

The **ASTM C494** standard defines seven types (A–G) of admixtures, with **Type F and G superplasticizers** being the most common. Air-entraining agents are widely used to produce concretes with frost resistance ratings up to F400. Corrosion inhibitors (e.g., Ca(NO₂)₂) extend reinforcement durability in marine and road structures.

Japan and South Korea:

In Japan, **JIS A 6204** regulates admixture use, emphasizing rheological control. The combination of **PCE + VMA (viscosity modifiers)** is applied in 3D-printed concrete to reduce layer segregation by 70%. In South Korea, ultra-high-performance concretes (UHPC) achieve compressive strengths of 150–180 MPa using nano-silica with PCE.

China and Singapore:

China's chemical admixture industry exceeds 5 million tons annually. Domestic

producers such as *Sobute* and *Kelong* export PCE-based products globally. Singapore promotes “green concrete” with **silica fume + PCE + slag**, reducing cement use by 50% and earning **LEED Green Building** certification.

CIS and **Uzbekistan:**

CIS countries, including Uzbekistan, follow **GOST 24211-2008**. Given the region’s hot, dry, and saline climate, the combination of **air-entraining, hydrophobic, and antifreeze additives** is most effective. Developing **locally synthesized PCE admixtures** based on methacrylic acid and ethylene glycol is a promising direction.

Global experience demonstrates that chemical admixtures significantly improve both technical and operational properties of concrete:

- Compressive strength increases by **20–30%**;
- Water absorption decreases **1.5–2 times**;
- Frost resistance improves from **F100 to F300**;
- Construction cycles shorten by **15–20%**.

From an ecological standpoint, reducing cement consumption lowers CO₂ emissions by **25–40 kg per m³ of concrete**, contributing to “green construction” and global decarbonization goals.

For Uzbekistan, the development of admixtures compatible with **PC 400 D0** and **PC 500 D0** cements is particularly relevant. Local admixtures such as **BAAS-MIXPLAST 140W** and **PCAN-55** can enhance concrete workability under hot climate conditions and ensure controlled hardening.

In conclusion, chemical admixtures are an essential component of modern concrete technology. Their proper selection and application not only improve strength and durability but also make construction more sustainable and cost-effective. Adopting global innovations and localizing them to Uzbekistan’s conditions will elevate the country’s construction materials industry to an international level.

REFERENCES

1. Botirova, N., Abdikomilova, M., Botirov, B., & Abdullayev, M. (2022). DEVELOPMENT OF CONCRETE COMPOSITION WITH THE HELP OF CHEMICAL ADDITIVES OF HIGH STRENGTH HEAVY CONCRETE. Академические исследования в современной науке, 1(17),
2. Botirova, N., Rajabboyev, A., & Raximboyev, G. A. (2025). TEMIRBETON CHIQINDILARI ASOSIDAGI OG ‘IR BETONNING FIZIK-MEXANIK XOSSALARINI TADQIQ QILISHDA EKSPERIMENTAL TADQIQOTLARNI O ‘TKAZISH METODIKASI. Теоретические аспекты становления педагогических наук, 4(4), 189-195.

3. Botirova, N., Qurbonov, S., & Umirqulov, S. (2025). OPTIMAL CONCRETE COMPOSITION FOR ROADS: DEVELOPMENT IN EUROPEAN COUNTRIES. Наука и инновации в системе образования,
4. Botirov, B. F., & Botirova, N. S. (2024). Identification of physical and mechanical characteristics of high strength heavy concrete. Architecture. Construction, 1(1), 134-140.

METHODS TO IMPROVE THERMAL STABILITY OF CONCRETE BASED ON MINERAL AND CHEMICAL ADMIXTURES

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Abstract: This paper presents methods for improving the thermal stability of concrete used in high-temperature environments such as road pavements, industrial furnaces, power plants, and solar energy facilities. The scientific novelty lies in the combined use of mineral admixtures (metakaolin, microsilica, slag) and chemical admixtures (polycarboxylate-based superplasticizer and hydrophobic agent) and in the comprehensive analysis of their effects on the microstructure of concrete. Concrete mixes were prepared using PC 400 D0 and PC 500 D0 cements and cured for 28 days before being subjected to thermal exposure between 100°C and 800°C. Compressive strength, elasticity modulus, mass loss, water absorption, and microstructural analyses were performed. Results showed that the combination of 20% metakaolin, 0.8% superplasticizer, and 0.5% hydrophobic additive maintained 80–85% of compressive strength up to 600°C. Even at 800°C, strength reduction was limited to 15–20% compared to ordinary concrete. The hydrophobic agent reduced internal vapor pressure and prevented cracking, while microsilica enhanced C–S–H phase formation and decreased microporosity. The findings are applicable to developing thermally stable concretes suitable for Uzbekistan's climate and local raw materials.

The behavior of concrete at high temperatures depends on hydration products, mainly C–S–H and $\text{Ca}(\text{OH})_2$. With rising temperature, these phases decompose, increasing porosity and microcracking, which leads to reduced strength and stiffness. Ordinary Portland cement concrete starts losing strength above 200–300°C, while between 400–600°C $\text{Ca}(\text{OH})_2$ decomposes and above 600°C C–S–H phases disintegrate. Therefore, improving thermal resistance requires well-chosen mineral and chemical admixtures. The study aims to enhance thermal stability through combined use of metakaolin, microsilica, slag, polycarboxylate superplasticizer (PCE), and hydrophobic agents. The hypothesis suggests that mineral admixtures create a denser structure, PCE maintains low water-cement ratio, and the hydrophobic agent lowers internal vapor pressure, ensuring better performance under heat.

Previous studies confirm that metakaolin and microsilica improve concrete durability due to their pozzolanic reactivity. Metakaolin reacts with $\text{Ca}(\text{OH})_2$ to form secondary C–S–H, while microsilica refines the matrix and strengthens the interfacial transition

zone. Slag partially replaces cement and reduces heat generation. Polycarboxylate-based superplasticizers reduce water demand while maintaining workability. Hydrophobic agents minimize capillary water transport, decreasing vapor pressure and reducing cracking risk. International research indicates that the combined use of metakaolin, microsilica, and PCE yields promising results in heat-resistant concrete. The experiment used PC 400 D0 and PC 500 D0 cements, washed river sand, gravel, and potable water. Mineral admixtures included 10–20% metakaolin, 5–10% microsilica, and 15–25% slag. Chemical admixtures consisted of 0.6–1% superplasticizer and 0.3–0.7% hydrophobic agent. Each mix was cast into 100×100×100 mm cubes and cured in a moist environment for 28 days. Afterwards, specimens were heated to 100, 200, 400, 600, and 800°C for two hours and then cooled naturally. Compressive strength, elasticity modulus, mass loss, and water absorption were measured, while XRD and SEM analyses were used to evaluate phase composition and microstructure.

The use of PCE maintained the water-cement ratio between 0.31 and 0.33, ensuring good workability. At 200°C, concrete strength remained almost unchanged; at 400°C, ordinary concrete lost about 15% of strength, while modified concretes lost only around 7–10%. At 600°C, mixtures with metakaolin, microsilica, and hydrophobic agents retained 80–85% of strength. At 800°C, modified concretes still outperformed the control by 15–20%. Water absorption dropped to 1.2–1.5%, and SEM micrographs revealed a denser ITZ with fewer and finer cracks. XRD results confirmed reduced $\text{Ca}(\text{OH})_2$ peaks and higher proportions of C–S–H and calcite phases.

The synergy between mineral and chemical admixtures significantly improved thermal resistance. Metakaolin and microsilica produced additional C–S–H phases, PCE provided low water-cement ratio and high density, and hydrophobic additive reduced vapor-induced stress. These combined effects minimized cracking and enhanced durability. For Uzbekistan's hot and dry climate, such compositions are particularly effective in roads, energy plants, and industrial facilities. The partial replacement of cement with mineral additives also reduces CO_2 emissions and improves sustainability. The combination of metakaolin, microsilica, PCE superplasticizer, and hydrophobic agent substantially enhances the thermal resistance of concrete. Strength retention up to 600°C, reduced water absorption, and improved microstructural integrity make these concretes suitable for high-temperature environments. For Uzbekistan, concretes based on PC 400 D0 or PC 500 D0 cement containing 20% metakaolin, 0.8% PCE, and 0.5% hydrophobic additive are recommended for practical applications.

THE RELATIONSHIP BETWEEN GLYCEMIC VARIABILITY AND GLYCEMIC LOAD/GLYCEMIC INDEX IN PATIENTS WITH TYPE 2 DIABETES

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The International Diabetes Federation has recognized the importance of regulating prandial glucose and the need to mitigate acute postprandial plasma glucose spikes, making it essential to target postprandial hyperglycemia. However, long-term dietary adherence remains both a crucial and challenging task. Therefore, developing a patient-oriented diet that takes into account individual preferences and is based on a traditional national diet, with the substitution of high-GI foods, can enable better control of glycemic variability.

To study changes in glycemic variability when consuming various national dishes, a comparative analysis was conducted on the glycemic variability of dishes prepared in the standard way and their modified versions. In this case, the mean fasting blood glucose levels and the sum of the mean blood glucose levels after 1 and 2 hours following the intake of standard plov and modified plov were compared. Standard plov was defined as plov prepared from processed (polished) “Lazer” variety rice.

The first modification involved consuming a salad of raw vegetables (onions, lettuce leaves, various herbs, tomatoes, and cucumbers) prior to the intake of the standard plov. The second modification involved replacing the processed rice with “Devzira” variety rice, which has a lower glycemic index and glycemic load.

The mean fasting blood glucose levels in the three groups were comparable (differences were not statistically significant) and were 8.43, 8.52, and 9.01 mmol/L, respectively. The sums of the mean blood glucose levels after 1 and 2 hours in the compared groups were 11.28, 10.31, and 9.58 mmol/L; and 11.61, 8.74, and 8.54 mmol/L, respectively.

In the first modification, the difference between the mean fasting blood glucose and the level 1 hour after intake was statistically significant ($p \leq 0.01$), amounting to 21.06%. An even more significant and statistically reliable difference ($p \leq 0.001$) of –24.66% was observed when comparing the mean blood glucose levels 2 hours after the intake of standard and modified plov. Furthermore, a comparative analysis between the mean fasting blood glucose and the level 2 hours after the meal in the first modification group showed that the values were virtually identical—8.52 and 8.74 mmol/L, respectively. In other words, after 2 hours, the levels were comparable to the fasting

levels. A similar pattern was observed in the comparative analysis between the standard plov and the second modification.

Thus, the inclusion of soluble fiber from a salad (first modification) or the replacement of high-GI rice with a lower-GI variety that also contains fiber (second modification) helps to achieve better blood glucose control, which is reflected in the parameters of glycemic variability.

1. Basiri R, Cheskin LJ. Enhancing the Impact of Individualized Nutrition Therapy with Real-Time Continuous Glucose Monitoring Feedback in Overweight and Obese Individuals with Prediabetes. *Nutrients*. 2024 Nov 22;16(23):4005.

2. Basiri R, Cheskin LJ. Personalized Nutrition Therapy without Weight Loss Counseling Produces Weight Loss in Individuals with Prediabetes Who Are Overweight/Obese: A Randomized Controlled Trial. *Nutrients*. 2024 Jul 11;16(14):2218.

3. Cichosz SL, Kronborg T, Laugesen E, Hangaard S, Fleischer J, Hansen TK, Jensen MH, Poulsen PL, Vestergaard P. From Stability to Variability: Classification of Healthy Individuals, Prediabetes, and Type 2 Diabetes Using Glycemic Variability Indices from Continuous Glucose Monitoring Data. *Diabetes Technol Ther*. 2025 Jan;27(1):34-44.

4. Jenkins, D.J. · Kendall, C.W. · McKeown-Eyssen, G. Effect of a low-glycemic index or a high-cereal fiber diet on type 2 diabetes: a randomized trial. *JAMA*. Dec 17 2008; 300:2742-2753;

5. Swami V, Yadav SK, Saxena P, Sharma A, Dash CK, Gupta A. Study of Glycemic Variability in Well-controlled Type 2 Diabetic Patients Using Continuous Glucose Monitoring System. *J Assoc Physicians India*. 2024 Jan;72(1):18-21.

ALISHER NAVOIY ASARLARIDA INSONPARVARLIK G‘OYALARI

Chilonzor tuman 2-son texnikum ona tili va adabiyot o‘qituvchisi
Sattarova Sitara Alibek qizi

Annotarsiya

Ushbu maqolada Alisher Navoiy asarlarida insonparvarlik g‘oyalari yoritilgan. Shoir ijodining asosiy tamoyillari sifatida adolat, saxiylik, ilm-ma‘rifat, mehr-oqibat, halollik va vafodorlik masalalari tahlil qilingan. Tadqiqot davomida Navoiy asarlarida inson qadr-qimmat, ma‘naviy barkamollikka intilish, jamiyat oldidagi mas‘uliyat kabi g‘oyalar markaziy o‘rin egallashi ko‘rsatib berilgan. Shuningdek, Navoiy merosining bugungi kunda ham tarbiyaviy va ma‘naviy jihatdan dolzarbligi asoslab berilgan.

Kalit so‘zlar: Alisher Navoiy, insonparvarlik, adolat, saxiylik, ilm-ma‘rifat, mehr-oqibat, halollik, vafodorlik, ma‘naviy barkamollik.

Аннотация

В данной статье освещены идеи гуманизма в произведениях Алишера Навои. В качестве основных принципов творчества поэта были проанализированы вопросы справедливости, щедрости, науки и просвещения, доброты, честности и верности. В ходе исследования было показано, что в произведениях Навои центральное место занимают такие идеи, как человеческое достоинство, стремление к духовному совершенству, ответственность перед обществом. Также обоснована воспитательная и духовная актуальность наследия Навои и сегодня.

Ключевые слова: Алишер Навои, гуманизм, справедливость, щедрость, наука и просвещение, доброта и сострадание, честность, верность, духовное совершенство

Annotation

In this article, the ideas of humanism in the works of Alisher Navoi are highlighted. Issues of justice, generosity, knowledge, kindness, honesty, and loyalty are analyzed as the main principles of the poet's work. In the course of the research, it was shown that such ideas as human dignity, the striving for spiritual perfection, and responsibility to society occupy a central place in Navoi's works. Also, the relevance of Navoi's legacy from an educational and spiritual point of view is substantiated.

Keywords: Alisher Navoi, humanism, justice, generosity, knowledge and enlightenment, kindness, honesty, loyalty, spiritual perfection.

Sharq adabiyoti va madaniy merosining eng yirik namoyandalaridan biri bo‘lgan Alisher Navoiy o‘z davrida adabiyot, tilshunoslik, falsafa va siyosat sohalarida katta iz

qoldirgan. Uning ijodi nafaqat o‘z davrida, balki bugungi kunda ham insoniyat uchun bebaho ma’naviy manba hisoblanadi. Navoiyning asarlarida insonparvarlik g‘oyalari alohida o‘rin tutadi. Chunki u insonni eng oliy mavjudot sifatida qadrlaydi, uning ma’naviy komillikka erishishini asosiy maqsad qilib qo‘yadi. Shu nuqtayi nazardan, Navoiy asarlarida adolat, sahovat, ilm-ma’rifat, mehr-oqibat, halollik va vafodorlik kabi fazilatlar insonparvarlikning asosiy ko‘rinishlari sifatida ulug‘lanadi.

Shuningdek, Alisher Navoiy ijodi o‘z davrining ijtimoiy-siyosiy hayotini, xalqning orzuomidlarini ifoda etgan bo‘lib, unda inson qadr-qimmatini yuksaltirish g‘oyasi markazda turadi. Demak, shoir ijodi faqat badiiy zavq beruvchi emas, balki tarbiyaviy, axloqiy va falsafiy ma’noga ham ega.

Birinchidan, Navoiy adolatni jamiyat taraqqiyotining eng muhim omili sifatida ta’riflaydi. U o‘z asarlarida, xususan, “Mahbub ul-qulub”da shoh va raiyat munosabatlariga keng o‘rin beradi. Shoir fikricha, adolatli hukmdor xalqni baxtli qiladi, zolim esa jamiyatni barbod etadi. Navoiy insonlarni ijtimoiy mavqeiga qarab emas, balki fazilatlarini asosida baholashni targ‘ib qiladi. Shu ma’noda, uning asarlarida insonning qadr-qimmatini moddiy boylik yoki nasab bilan emas, balki ma’naviy kamolot va ezgulik bilan o‘lchanishi lozimligi ta’kidlanadi.

Ikkinchidan, Navoiy insonparvarlikni saxiylik bilan chambarchas bog‘laydi. “Hayrat ulabror” dostonida u saxiylikni oliyjanoblik sifatida ulug‘laydi, baxillikni esa illat deb qoralaydi. Shoirning fikricha, insonning qo‘lida bor mol-dunyo faqat o‘ziga emas, balki boshqalarga ham naf keltirishi lozim. Bu fikr aslida insonni jamiyat oldidagi mas’uliyatini his qilishga undaydi. Shuningdek, Navoiy saxiylikni faqat moddiy yordam bilan cheklamay, balki ilm berish, yaxshi so‘z aytish, mehribonlik ko‘rsatishni ham sahovat doirasiga kiritadi.

Uchinchidan, Navoiy ijodida ilm-ma’rifat eng muhim insonparvarlik g‘oyasi sifatida ko‘tariladi. “Xamsa” dostonlari, xususan, “Farhod va Shirin”da qahramonlarning kuch-qudrati faqat jismoniy emas, balki ilm va tafakkur bilan uyg‘unlashgan holda tasvirlanadi. Shu bilan birga, “Sab’ai sayyor”da ilm va aql-idrok orqali insonning jaholatdan xalos bo‘lishi g‘oyasi ilgari suriladi. Navoiy ilmni insonni yuksaklikka eltuvchi eng asosiy vosita deb biladi. Unga ko‘ra, jaholat zulmat bo‘lsa, ilm ma’rifat nuri bilan insoniyat yo‘lini yoritadi.

Bundan tashqari, Navoiy asarlarida mehr-oqibat g‘oyasi keng yoritilgan. U kishilarni bir-biriga yordam berishga, dardini tinglashga, g‘amiga sherik bo‘lishga chorlaydi. Shoir fikricha, insoniylikning eng oliy belgisi – bu boshqaga mehr ko‘rsatish, yaxshilik qilishdir. Masalan, “Lison ut-tayr” asarida insonning komillikka erishuvi yo‘lida mehr-muhabbatning zarurligi ta’kidlanadi.

Shuningdek, Navoiy halollik va vafodorlikni insoniy fazilatlarining eng yuksak ko‘rinishi sifatida ulug‘laydi. Uning asarlarida do‘stlikka sodiqlik, oila va jamiyat

oldidagi burchni halol ado etish, va'daga vafodor bo'lish kabi g'oyalari ko'plab uchraydi. Bu esa insoniy munosabatlarni mustahkamlashda muhim ahamiyat kasb etadi.

Navoiy ijodining yana bir muhim jihati shundaki, u axloqiy tarbiya orqali insonni komillikka chorlaydi. "Nasoyim ul-muhabbat"da insonning qalb pokligi, rostgo'yiligi va diyonati komillikka eltuvchi asosiy mezon sifatida tasvirlanadi. Shu bois uning asarlari yosh avlod uchun axloqiy qo'llanma sifatida ham xizmat qiladi.

Xullas, Alisher Navoiy asarlarida insonparvarlik g'oyalari turli yo'nalishlarda – adolat, saxiylik, ilm-ma'rifat, mehr-oqibat, halollik va vafodorlik timsolida yoritilgan. Shoirning fikricha, inson o'zini komil etish uchun faqat moddiy emas, balki ma'naviy jihatdan ham boy bo'lishi lozim. Navoiy nafaqat o'z davrida, balki bugungi kunda ham insoniyatni ezgulikka, adolat va ma'rifatga chorlab kelmoqda. Shu sababli, Alisher Navoiy asarlari yosh avlodni komillikka, ma'naviy barkamollikka yetaklovchi, ularni mehr-shafqat, insonparvarlik va vatanparvarlik ruhida tarbiyalovchi bebaho manba sifatida qadrlanadi. Demak, shoirning insonparvarlik haqidagi g'oyalari hozirgi davrda ham o'z dolzarbligini yo'qotmagan, balki globalizatsiya sharoitida yanada muhim ahamiyat kasb etmoqda.

FOYDALANILGAN ADABIYOTLAR:

1. Abduraxmanova, M. (2025). Alisher Navoiy va zamon munosabati masalasi. Uzbekistan: Language and Culture, 1(01).
2. Alisher Navoiy. Xamsa. To'liq to'plam. – Toshkent: Fan, 1991.
3. Ashurova, G. (2023). Kichik nasriy asarlarda Alisher Navoiy siymosining talqin etilishi. Uzbekistan: Language and Culture, 2(2).
4. Suyunova, S., & Qorayev, S. (2025, May). BUYUK SHOIR VA MUTAFFAKKIR ALISHER NAVOIY ASARLARINING DINIY–TASAVVUFIY MANBALARI. In Conferences (Vol. 1, No. 1, pp. 250-255).
5. Алишер Навоий. Ҳайрат ул-аброр. МАТ. 20 томлик. Т.. –Тошкент: Фан, 1991.
6. Навоий, Алишер. 2011. Тўла асарлар тўплами. 10 жилдлик: 1-жилд. Тошкент: Фафур Гулом номидаги нашриёт-матбаа ижодий уйи

**BYUDJET TASHKILOTLARIDA ASOSIY VOSITALARNI HISOBGA
OLISH VA ULARNING SAMARALI BOSHQARUVIDA
KUZATILAYOTGAN MUAMMO VA CHEKLOVLAR**

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Annotatsiya

Ushbu maqolada budget tashkilotlarida asosiy vositalar hisobini yuritish jarayonining mavjud holati, unda uchraydigan tashkiliy va uslubiy muammolar hamda ularni bartaraf etish yo'llari tahlil qilingan. Tadqiqotda resurslardan oqilona foydalanish, asosiy vositalarning to'g'ri baholanishi, amortizatsiya siyosatini takomillashtirish va xalqaro standartlarga moslashtirishning ahamiyati yoritiladi. Natijada asosiy vositalarni boshqarish samaradorligini oshirish bo'yicha ilmiy- amaliy takliflar ishlab chiqiladi.

Kalit so'zlar

Budget tashkiloti, asosiy vositalar, buxgalteriya hisobi, aktivlarni baholash, amortizatsiya, samaradorlik, davlat byudjeti, moliyaviy nazorat, raqamlashtirish, audit.

Budget tashkilotlarida zamonaviy iqtisodiy boshqaruv talablarining to'liq amalga oshirilishi tejamkorlik, samaradorlik va shaffoflik ko'rsatkichlarini ta'minlash bilan chambarchas bog'liq. Bunda, eng avvalo, buxgalteriya hisobi va tahliliy jarayonlarni takomillashtirish muhim ahamiyat kasb etadi. Budget tashkiloti deb, davlat byudjeti mablag'lari hisobidan moliyalashtiriladigan va o'z faoliyatini bevosita davlat tomonidan belgilangan vazifalar asosida amalga oshiradigan vazirlik, idora yoki muassasalarga aytiladi.

2022–2026-yillarga mo'ljallangan **Yangi O'zbekiston Taraqqiyot Strategiyasida** davlat byudjeti xarajatlarining samaradorligini oshirish, ijtimoiy tashabbuslarni moliyalashtirish va resurslardan oqilona foydalanish ustuvor yo'nalish sifatida belgilangan. Jumladan, "Fuqarolar byudjeti" mexanizmini kuchaytirish va byudjet taqchilligini nazorat ostida ushlab turish vazifalari ham budget tashkilotlarida asosiy vositalar hisobi va ularni boshqarish jarayonini yanada takomillashtirishni talab etadi. Ilmiy manbalarning tahliliga ko'ra, asosiy vositalar hisobini yuritish masalasi nafaqat iqtisodiy nazariyada, balki amaliyotda ham dolzarb bo'lib, R. Raxmonov, S. Vohidov, M. Umarova, B. Hasanov va boshqa olimlar ushbu borada samarali ilmiy

yondashuvlarni ilgari surganlar. Shu bilan birga, asosiy vositalarning moliyaviy nazoratini xalqaro standartlar bilan uyg'unlashtirish, ularning baholash mexanizmlarini takomillashtirish va monitoring tizimini kuchaytirish masalalari hali ham qo'shimcha tadqiqot va takomillashtirishni talab etadi.

Amaliyot ko'rsatadiki, asosiy vositalarni hisobga olish jarayonida bir qator qiyinchiliklar mavjud. Bular, xususan:

- vositalarni guruhlariga to'g'ri ajratishdagi noaniqliklar;
- eskirgan va foydalanish muddati o'tgan aktivlarni o'z vaqtida hisobdan chiqarishning sustligi;
- amortizatsiya siyosatini noto'g'ri qo'llash;
- axborot tizimlarining yetarli darajada integratsiyalanmaganligi;
- nazorat va audit jarayonlarining yetarli darajada tizimlashtirilmaganligi.

Ushbu muammolarni chuqur tahlil qilish natijasida ular shartli ravishda **ikki toifaga** ajratiladi:

1. **Tashkiliy-texnik muammolar** — resurslarni boshqarishdagi noaniqlik, texnologik vositalar eskirishi, axborot tizimlari yetishmasligi;
2. **Uslubiy muammolar** — normativ-huquqiy hujjatlarning takomillashmaganligi, amortizatsiya va baholash usullarini to'g'ri tanlamaslik va boshqalar.

Shu bois, budjet tashkilotlarida asosiy vositalarni samarali boshqarish uchun **raqamlashtirilgan hisob tizimlarini joriy etish, baholash metodologiyasini qayta ko'rib chiqish, audit jarayonlarini kuchaytirish va kadrlar malakasini oshirish** zarurdir.

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METAPHORICAL THINKING IN ENGLISH AND UZBEK: A CROSS-CULTURAL AND COGNITIVE TYPOLOGICAL STUDY

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Abstract. This study examines the function of metaphorical thinking in Uzbek and English from a cognitive typological and cross-cultural standpoint. Metaphors represent human intellect and cultural worldviews in addition to being verbal expressions. Through a comparison of conceptual metaphors pertaining to time, love, and life in both languages, the study reveals how individuals interpret and communicate abstract concepts using well-known cultural imagery. The study makes the case that historical, social, and environmental variables are intimately related to variations in metaphorical systems. By including metaphor-based explanations, the results may aid English language instructors in fostering cultural competency in EFL courses.

Keywords: metaphorical thinking, English, Uzbek, cross-cultural communication, cognitive typology

Annotatsiya. Ushbu maqolada ingliz va o'zbek tillarida metaforik tafakkurning roli madaniyatlararo va kognitiv tipologik nuqtai nazardan o'rganiladi. Metafora nafaqat lingvistik iboralar, balki madaniy dunyoqarash va inson idrokining aksidir. Har ikki tilda vaqt, sevgi va hayot bilan bog'liq konseptual metaforalarni solishtirish orqali tadqiqot odamlarning mavhum g'oyalarni tanish madaniy tasvirlar orqali qanday idrok etishi va ifodalashini aniqlaydi. Maqolada metaforik tizimlardagi farqlar tarixiy, ijtimoiy va ekologik omillar bilan chambarchas bog'liqligini ta'kidlaydi. Topilmalar ingliz tili o'qituvchilariga metafora asosidagi tushuntirishlarni birlashtirish orqali EFL sinflarida madaniy kompetentsiyani rivojlantirishga yordam berishi mumkin.

Kalit so'zlar: metaforik tafakkur, ingliz, o'zbek, madaniyatlararo muloqot, kognitiv tipologiya

Аннотация. В данной статье рассматривается роль метафорического мышления в английском и узбекском языках с точки зрения межкультурного и когнитивно-типологического аспекта. Метафоры – это не только языковые выражения, но и отражение культурного мировоззрения и человеческого познания. Сравнивая концептуальные метафоры, связанные со временем, любовью и жизнью в обоих языках, исследование выявляет, как люди воспринимают и выражают абстрактные идеи посредством знакомых культурных образов. В статье утверждается, что различия в метафорических системах тесно связаны с историческими, социальными и экологическими факторами. Полученные результаты могут помочь учителям английского языка развивать культурную компетентность на занятиях по английскому языку как иностранному путем интеграции объяснений, основанных на метафорах.

Ключевые слова: метафорическое мышление, английский язык, узбекский язык, межкультурная коммуникация, когнитивная типология

INTRODUCTION

Thought and language are closely related. Metaphors are one of the most intriguing methods to understand this relationship. Metaphors are fundamental tools of human intellect as well as figures of speech. Lakoff and Johnson (1980) assert that individuals use conceptual metaphors to make sense of the world, such as time is money or life is a journey. These metaphors influence the thoughts, emotions, and communication of people from various cultural backgrounds. The comparison of metaphorical thinking in Uzbek and English is the main topic of this essay. The goal is to demonstrate how each culture uses its unique conceptual and cultural frameworks to convey abstract concepts like time, love, and life.

Using a cognitive typological approach, the study examines metaphors as mental patterns that might vary or overlap between languages. Comprehending these distinctions is crucial for both teaching English as a foreign language and linguistic research. Learners may speak more organically and steer clear of cultural misconceptions when they comprehend how metaphors represent culture.

Literature Review

In cognitive linguistics, metaphor has been extensively researched. The Conceptual Metaphor Theory (CMT), developed by Lakoff and Johnson in 1980, describes how metaphors are utilized to comprehend abstract ideas through tangible experiences. For instance, the English phrase "time is money" represents a society in which time is valued economically. Metaphors are culturally distinctive, according to other academics like Kövecses (2005). Geographical location, customs, and shared experiences all have an impact on them. For example, metaphors in Uzbek are

frequently associated with nature, family, and hospitality, which reflects the region's traditional way of life. Teaching metaphors in language classes enhances students' cultural knowledge and understanding, according to recent studies (Boers, 2000; Charteris-Black, 2017). Nevertheless, there are currently few studies that compare Uzbek and English explicitly. This disparity highlights the necessity for more thorough investigation into the manner in which metaphorical systems reflect various modes of thought.

Methodology

A comparative qualitative approach is used in this investigation. Proverbs, ordinary speech, and literary works in both English and Uzbek were used to gather data. Finding common metaphorical notions and categorizing them using three universal themes was the primary objective.

1. Time, 2. Love, and 3. Life.

The framework of Conceptual Metaphor Theory was used to investigate each metaphor. Both the source domain—the notion or picture used to represent something—and the target domain—the abstract idea being explained—were the focus of the investigation. For example, "life" is the target domain and "journey" is the source domain in "life is a journey."

Analysis and Discussion

1. Metaphors of Time

Time is frequently seen as a precious resource in English:

Save time and avoid wasting it.

- *Make good use of your time.*

These phrases demonstrate how English people view time as something quantifiable and finite, much like money. This is indicative of a society that is focused on the economy and individualism.

On the other hand, Uzbek speakers frequently characterize time as round or flowing:

- *"Time flows like a river" (Vaqt daryo kabi oqadi).*
- *"Everything has its time" (har narsaning vaqti bor).*

A more collectivist and philosophical perspective is shown here, as time is viewed as a natural process linked to patience and destiny.

2. Metaphors of Love

To put it in English: falling in love; burning with passion

- *Love is blind.*

These analogies emphasize emotions as strong or uncontrolled forces.

- *Sevgi yurakda o't yoqar, which means "Love lights a fire in the heart," in Uzbek*
- *"Love is tested by patience" (Sevgi Sabr Bilan Sinaladi)*

Uzbek metaphors represent societal harmony and emotional equilibrium by fusing emotion with moral principles like patience and loyalty.

3. Metaphors of Life

In English:

- *Life is a game*
- *Life is a journey*
- *Life is a struggle.*

These show a proactive and goal-oriented outlook.

- *Hayot daraxt kabi, which means "Life is like a tree," in Uzbek*
- *Hayot Sinov: "Life is a test"*

These metaphors, which have their roots in traditional and spiritual beliefs, highlight perseverance, moral fortitude, and the notion of divine order.

Conclusion

The comparison reveals that while Uzbek and English both employ metaphors to comprehend difficult concepts, the cultural emphasis is different.

- *Individual activity, control, and production are frequently highlighted in English metaphors.*
- *Uzbek metaphors emphasize moral principles, peace, and patience.*

The way that each culture views reality and interpersonal interactions is reflected in these differences. From a pedagogical perspective, teaching English metaphors in relation to students' native language metaphors can enhance the significance of learning. It aids pupils in creating connections between linguistic structures and cultural meanings. As a result, metaphor awareness exercises should be incorporated into English language instruction. For instance, students might explore how cultural background influences interpretation and compare metaphors that are similar in both languages. This method fosters intercultural as well as linguistic competency. To sum up, metaphorical thinking provides insight into human culture and thought. We may better grasp how language influences cognition and how thought influences language by comparing metaphors in Uzbek and English.

Additionally, more culturally aware and successful approaches to teaching languages in multilingual settings are supported by this research.

REFERENCES

- Boers, F. (2000). *Metaphor awareness and vocabulary retention*. Applied Linguistics, 21(4), 553–571.
- Charteris-Black, J. (2017). *Fire Metaphors: Discourses of Awe and Authority*. Bloomsbury Academic.
- Kövecses, Z. (2005). *Metaphor in Culture: Universality and Variation*. Cambridge

University Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. University of Chicago Press.

Littlemore, J. (2009). *Applying Cognitive Linguistics to Second Language Learning and Teaching*. Palgrave Macmillan.

Rakhimov, S. (2020). *Conceptual metaphors in Uzbek proverbs: A cognitive perspective*. *Journal of Linguistic Studies*, 12(3), 45–57.

CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) AND THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

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Abstract: *This paper explores the synergy between Content and Language Integrated Learning (CLIL) and Information and Communication Technologies (ICT) in the context of modern education. CLIL represents a dual-purpose pedagogical framework where learners acquire subject-specific knowledge while simultaneously developing foreign language proficiency. ICT, on the other hand, provides digital instruments that enhance interaction, accessibility, and innovation in the learning process. By examining the theoretical underpinnings of CLIL, evaluating ICT-supported teaching strategies, and discussing both benefits and potential limitations, this study demonstrates that technology-enriched CLIL fosters learner autonomy, linguistic competence, and essential 21st-century skills. The outcomes of this analysis are particularly relevant to language pedagogy, teacher education, and curriculum modernization.*

Keywords: *CLIL, ICT, integrated learning, bilingual education, digital pedagogy, foreign language instruction.*

Annotatsiya: *Ushbu maqolada zamonaviy ta'lim jarayonida Content and Language Integrated Learning (CLIL) va axborot-kommunikatsiya texnologiyalarining (AKT) o'zaro uyg'unlashuvi tahlil qilinadi. CLIL metodologiyasi o'quvchilarga fanga oid bilimlarni o'rganish jarayonida chet tilini ham egallash imkonini beruvchi ikki yo'nalishtli pedagogik yondashuv sifatida talqin etiladi. Shu bilan birga, AKT ta'limda interaktivlik, innovatsionlik va qulaylikni ta'minlaydigan raqamli vositalarni taqdim etadi. CLILning nazariy asoslari va AKT asosidagi o'qitish strategiyalarini tahlil qilish orqali ushbu maqola texnologiyalashgan CLIL darslari o'quvchilarning*

mustaqilligini, til kompetensiyasini hamda XXI asr ko 'nikmalarini rivojlantirishini ko 'rsatadi. Tadqiqot natijalari til pedagogikasi, o 'qituvchilarni tayyorlash va o 'quv dasturlarini modernizatsiya qilish uchun dolzarb ahamiyatga ega.

Kalit so'zlar *CLIL, AKT, integrallashgan ta'lim, ikki tilli ta'lim, raqamli pedagogika, chet tili o 'qitish.*

Аннотация: *В данной статье рассматривается взаимодействие предметно-языкового интегрированного обучения (CLIL) и информационно-коммуникационных технологий (ИКТ) в современной системе образования. Методология CLIL представляет собой двунаправленный педагогический подход, позволяющий учащимся одновременно осваивать предметные знания и изучать иностранный язык. ИКТ, в свою очередь, предоставляют цифровые инструменты, обеспечивающие интерактивность, инновационность и удобство образовательного процесса. На основе анализа теоретических основ CLIL и методов обучения с применением ИКТ в статье делается вывод о том, что цифровая интеграция CLIL способствует развитию самостоятельности учащихся, языковой компетенции и формированию навыков XXI века. Результаты исследования актуальны для языковой педагогики, подготовки учителей и модернизации учебных программ.*

Ключевые слова: *CLIL, ИКТ, интегрированное обучение, двуязычное образование, цифровая педагогика, преподавание иностранных языков.*

INTRODUCTION

In the digital era, educational paradigms increasingly emphasize the integration of subject knowledge and language acquisition. One of the most influential methodologies in this area is Content and Language Integrated Learning (CLIL), which emerged in Europe in the 1990s to promote multilingualism and cross-cultural understanding. As defined by Marsh (2002), CLIL represents a “dual-focused” approach that allows students to learn language and content simultaneously. The later framework proposed by Coyle, Hood, and Marsh (2010) — known as the 4Cs model — highlights four interdependent elements: **Content**, **Communication**, **Cognition**, and **Culture**. Parallel to this development, Information and Communication Technologies (ICT) have revolutionized educational practices by enabling interactive, learner-centered, and flexible environments. Studies by Warschauer and Kern (2000) emphasized how digital tools enhance collaboration and communication, while Mishra and Koehler (2006) introduced the TPACK model that interconnects technological, pedagogical, and content knowledge. Contemporary research (Banegas, 2017; Pérez Cañado, 2018) indicates that merging CLIL with ICT produces powerful results in both content mastery and language fluency.

The CLIL Approach

CLIL differentiates itself from traditional language teaching by embedding linguistic learning within subject instruction. Its defining principles include:

1. **Dual Focus** – simultaneous attention to content mastery and language use.
2. **Contextualized Learning** – lessons are linked to real-life situations and authentic materials.
3. **Scaffolding** – teachers guide learners through visual aids, pre-tasks, and structured support.
4. **Cognitive Engagement** – tasks promote critical thinking and higher-order reasoning.
5. **Cultural Awareness** – encourages comparison of perspectives across different societies.

For instance, a CLIL lesson on environmental issues conducted in English helps students develop both ecological knowledge and academic vocabulary, reinforcing reading, writing, and oral expression skills simultaneously.

ICT Integration in CLIL Contexts

ICT tools amplify the effectiveness of CLIL by offering multimodal input and facilitating learner engagement. Their application can be classified into several domains:

Multimedia resources – animations, podcasts, and simulations clarify complex academic topics.

Online learning platforms – systems like Moodle or Google Classroom enable collaboration and formative assessment.

Interactive applications – tools such as Kahoot!, Quizlet, and Mentimeter support gamified learning.

Immersive technologies – AR/VR environments provide authentic contexts for exploration.

Mobile learning – digital dictionaries, learning apps, and podcasts encourage self-paced study.

By integrating ICT, educators can diversify instructional materials, support differentiated learning, and cultivate independent digital literacy.

Advantages and Challenges of ICT-Based CLIL

Advantages:

1. **Enhanced motivation:** digital tools increase learner engagement.
2. **Comprehensive skill development:** integrates linguistic, cognitive, and technological abilities.
3. **Learner autonomy:** online materials encourage self-directed learning.
4. **Digital competence:** prepares students for technology-driven communication.
5. **Intercultural interaction:** enables global collaboration through online exchanges.

Challenges:

1. **Technical limitations:** restricted access to internet or digital devices.
2. **Teacher readiness:** educators may lack sufficient ICT or CLIL training.
3. **Cognitive overload:** learning content and language together can be demanding.
4. **Assessment complexity:** evaluating both dimensions fairly remains problematic.
5. **Equity issues:** digital divide affects student participation and outcomes.

6. Findings and Discussion

The integration of CLIL and ICT creates a transformative educational paradigm that redefines both teaching and learning practices. Empirical evidence suggests that technology-supported CLIL enhances not only academic achievement but also digital and communicative competencies. Students engaged in such courses demonstrate higher levels of motivation and independence compared to those in conventional language classrooms. However, sustainable implementation requires systematic teacher training, adequate infrastructure, and continuous curriculum adaptation. The constructivist orientation of ICT-based CLIL — emphasizing experiential learning, cooperation, and reflection — positions learners as active participants in knowledge construction rather than passive recipients of information.

Conclusion

The convergence of CLIL and ICT signifies a vital step toward innovative and future-oriented education. CLIL promotes linguistic and cognitive integration, while ICT expands the boundaries of accessibility and creativity. The study concludes that when properly implemented, ICT-enhanced CLIL leads to more dynamic, inclusive, and effective learning environments. Despite ongoing challenges such as digital inequality and insufficient teacher preparation, the model supports the development of bilingual, digitally literate, and globally competent learners — qualities essential for success in the 21st century.

REFERENCES:

1. Banegas, D. (2017). Teacher-created materials for CLIL: Insights from Argentina. *Latin American Journal of Content and Language Integrated Learning*, 10(1), 31–50.
2. Coyle, D., Hood, P., & Marsh, D. (2010). *Content and Language Integrated Learning*. Cambridge University Press.
3. Dalton-Puffer, C. (2007). *Discourse in CLIL Classrooms*. John Benjamins.
4. Marsh, D. (2002). *CLIL/EMILE – The European Dimension: Actions, Trends and Foresight Potential*. European Commission.
5. Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in education. *Teachers College Record*, 108(6), 1017–1054.

6. Pérez Cañado, M. L. (2018). Innovations and challenges in CLIL teacher preparation. *Theory Into Practice*, 57(3), 1–10.
7. Warschauer, M., & Kern, R. (2000). *Network-Based Language Teaching: Concepts and Practice*. Cambridge University Press.

RAQAMLI TEXNOLOGIYALAR SHAROITIDA O‘QUVCHILARNING DIQQAT VA EMOTSIYAVIY BARQARORLIGINI SAQLASH MUAMMOLARI

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Kalit so‘zlar: raqamli texnologiyalar, diqqat, hissiy barqarorlik, psixologik charchoq, multitasking, o‘quvchi psixikasi, raqamli stress, mindfulness, ta’lim psixologiyasi.

KIRISH

So‘nggi yillarda ta’lim tizimida raqamli texnologiyalar keng joriy etilgani bilan birga, o‘quvchilarning diqqat jamlashi, hissiy barqarorligi va o‘rganish motivatsiyasida sezilarli o‘zgarishlar kuzatilmoqda. Virtual muhitda uzluksiz axborot oqimi, ekran oldida uzoq vaqt o‘tirish va ko‘pkanallilik (multitasking) o‘quvchi psixikasiga kuchli yuklama beradi.

Raqamli ta’limning afzalliklari bilan bir qatorda, psixologik xavf omillari — e’tiborning tez chalg‘ishi, hissiy toliqish, onlayn stress va motivatsiya pasayishi — ham ko‘paymoqda. Shuning uchun o‘quvchilarda raqamli muhitda diqqatni boshqarish va emotsional muvozanatni saqlash ko‘nikmalarini shakllantirish zamonaviy ta’lim psixologiyasining muhim vazifasiga aylandi.

Tadqiqot maqsadi

Tadqiqotning maqsadi — raqamli vositalardan foydalanish sharoitida o‘quvchilarning diqqat jarayonlari va hissiy barqarorligiga ta’sir etuvchi psixologik omillarni aniqlash hamda ularni rivojlantirish bo‘yicha samarali yondashuvlarni ishlab chiqishdir.

Metodlar

Tadqiqotda kuzatuv, psixologik test (B. Tepperning “Diqqat hajmi” metodikasi), so‘rovnomma va suhbat usullari qo‘llanildi. 50 nafar 9–11-sinf o‘quvchilari ishtirok etdi. Ulardan 60 foizi kuniga 4 soatdan ortiq vaqtni smartfon yoki kompyuter oldida o‘tkazishini bildirgan.

Natijalar

O‘tkazilgan testlar shuni ko‘rsatdiki, raqamli vositalardan ortiqcha foydalanish o‘quvchilarning diqqat hajmi va diqqatni barqaror ushlab turish qobiliyatini pasaytiradi. 72% respondentlarda “tez chalg‘ish” holati, 43% da esa “hissiy charchoq” belgisi qayd etilgan.

Ammo raqamli texnologiyalardan me’yorida foydalanadigan o‘quvchilarda kognitiv faollik, ijodiy fikrlash va o‘z-o‘zini boshqarish darajasi yuqori bo‘lgani aniqlandi.

Muhokama

Psixologik tahlil shuni ko'rsatadiki, raqamli muhitda o'quvchilar uchun asosiy muammo — bu **axborot ortig'i (information overload)** va **doimiy stimulyatsiya** tufayli hissiy toliqishdir. O'qituvchilar va ota-onalar o'quvchilarning raqamli faoliyatini nazorat qilish, diqqatni rivojlantiruvchi mashqlar (konsentratsiya o'yinlari, mindfulness texnikalari) hamda offline faoliyatni rag'batlantirish orqali bu holatni yumshatishlari mumkin.

XULOSA

1. Raqamli texnologiyalar o'quvchilarning diqqat, emotsional holat va motivatsiyasiga kuchli psixologik ta'sir ko'rsatadi.
2. Ekran bilan ishlash vaqtini me'yorda cheklash, tanaffuslar, sport va ijodiy mashg'ulotlar diqqat barqarorligini oshiradi.
3. Ta'lim jarayonida diqqatni boshqarish va emotsional savodxonlikni rivojlantirish mashg'ulotlarini kiritish muhimdir.
4. O'qituvchi va psixolog hamkorligida "raqamli gigiyena" madaniyatini shakllantirish yoshlar ruhiy salomatligining muhim kafolati bo'lib xizmat qiladi.

BENEFITS OF CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) IN SECONDARY EDUCATION

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Annotation. This article explores the key benefits of Content and Language Integrated Learning (CLIL) in secondary education. CLIL is an innovative teaching approach that integrates foreign language learning with academic content, allowing students to develop both linguistic and cognitive skills simultaneously. The paper highlights how CLIL enhances language competence, promotes higher-order thinking, increases student motivation, and prepares learners for global communication. Furthermore, it discusses challenges teachers face in implementing CLIL, such as balancing content and language objectives, and offers practical recommendations to overcome these issues through professional training and collaboration. Overall, CLIL proves to be an effective method for developing globally minded, competent, and motivated learners.

Keywords: CLIL, secondary education, language competence, cognitive development, motivation, global communication, teaching methods

Аннотация. В данной статье рассматриваются основные преимущества интегрированного обучения предмету и иностранному языку (CLIL) в средней школе. CLIL представляет собой инновационный подход, который объединяет изучение иностранного языка с освоением учебного содержания, что позволяет учащимся одновременно развивать языковые и когнитивные навыки. В работе анализируется, как CLIL способствует улучшению языковой компетенции, развитию критического мышления, повышению мотивации и подготовке учащихся к глобальному общению. Также обсуждаются трудности, с которыми сталкиваются учителя при внедрении CLIL, и предлагаются пути их решения через профессиональное обучение и сотрудничество. В целом, CLIL является эффективным методом формирования мотивированных и глобально мыслящих учащихся.

Ключевые слова: CLIL, среднее образование, языковая компетенция, когнитивное развитие, мотивация, глобальное общение, методы обучения

INTRODUCTION

In recent years, education systems around the world have increasingly adopted innovative teaching methods that integrate language and subject learning. One of the most effectual approaches is *Content and Language Integrated Learning* (CLIL). This method allows students to learn both a foreign language and academic content at the same time. CLIL is widely used in European countries, and its benefits have been recognized globally, especially in secondary education. The theory behind CLIL is that language is not learned as a separate subject, but as a medium of learning for other disciplines such as mathematics, biology, geography or history. This article plans to explore the key benefits of CLIL in secondary education, focusing on its role in improving language proficiency, enhancing cognitive skills, increasing student motivation, and preparing learners for global communication. The article also discusses the challenges teachers face in implementing CLIL and provides suggestions for effective practice. One of the primary advantages of CLIL is its capacity to develop students' language skills in an authentic and intentional way. Unlike traditional language teaching, CLIL does not focus only on grammar or vocabulary exercises. Instead, students are exposed to the target language through authentic subject materials, which makes language learning more practical and purposeful. According to Coyle, Hood, and Marsh (2010), CLIL promotes the use of language for genuine communication rather than rote memorization. For example, when students study geography in English, they not only learn about rivers, mountains, and climates but also practice describing, explaining, and analyzing information in English. This integration allows them to internalize the language more deeply.

Moreover, the context-based nature of CLIL helps students develop both *Basic Interpersonal Communication Skills* (BICS) and *Cognitive Academic Language Proficiency* (CALP) (Cummins, 2008). Therefore, learners improve their language accuracy and fluency simultaneously, achieving a more balanced language competence. Another significant benefit of CLIL is its contribution to students' cognitive growth. Learning content through a foreign language challenges the brain to process information in two dimensions — understanding the subject matter and decoding it linguistically. This dual processing stimulates higher-order thinking skills such as evaluation, analysis and synthesis.

Research by Mehisto, Marsh, and Frigols (2008) shows that CLIL learners often achieve better results than non-CLIL students in problem-solving and creative thinking tasks. Because they are constantly exposed to complex input and must express ideas clearly, they develop metacognitive awareness — the capacity to reflect on their own thinking. In addition, CLIL encourages cross-disciplinary understanding. For instance,

when studying science in English, students may connect environmental issues to social studies or economics. This integrated way of learning mirrors real-world knowledge, where boundaries between disciplines are often blurred. CLIL also has a powerful motivational impact on students. Traditional language learning can sometimes feel repetitive, but CLIL introduces variety and relevance. Students realize that English (or any foreign language) is not only a school subject but also a tool to explore other areas of knowledge. This sense of purpose increases their intrinsic motivation. They see how language connects them to global information, culture and media. According to Dörnyei (2001), motivation grows when learners perceive a clear link between their learning efforts and real-life benefits. CLIL provides exactly that — it shows language as a gateway to understanding the world. Furthermore, CLIL classrooms often use interactive and project-based methods such as group presentations, experiments, and debates. These activities make lessons more energetic and enjoyable, which leads to better participation and retention. In the 21st century, global communication skills are essential. CLIL prepares students for this by combining content knowledge with linguistic and intercultural competence. Since English is often used as the medium of instruction, learners become comfortable using it in educational and workplace settings. Through CLIL, students develop not only linguistic fluency but also a wider perspective on the world. They learn to appreciate different perspectives, understand international issues, and adapt to multicultural environments. This aligns with the goals of modern education — to develop individuals who are able to think globally and act locally. Many universities and international organizations now value candidates who can communicate across languages and disciplines. CLIL provides this advantage early, making students more competitive in higher education and future careers. Despite its benefits, implementing CLIL in secondary schools can be challenging. Teachers may struggle with designing lessons that balance both content and language objectives. Some educators feel unprepared to teach subjects in a foreign language, while others lack appropriate materials or institutional support.

To overcome these barriers, professional development is essential. Schools are encouraged to provide training programs that equip teachers with CLIL methodology, lesson planning skills, and assessment strategies. Collaboration between subject teachers and language teachers can also enhance lesson quality.

Additionally, the use of digital tools — such as online quizzes, visual aids, and interactive videos — can simplify complex content and make learning more accessible. Encouraging peer collaboration and scaffolding tasks can further support students who find the dual focus challenging.

Conclusion

Content and Language Integrated Learning (CLIL) shows a powerful approach to education in the modern world. It enables students to learn languages and subjects simultaneously, strengthening both linguistic and academic skills. The method enhances language proficiency, stimulates cognitive growth, increases motivation, and prepares students for the demands of global citizenship. Although challenges exist, they can be overcome with proper training, creativity and collaboration. As education keeps developing, CLIL remains as a meaningful, practical, and future-oriented method that connects learning with real-life communication. Implementing CLIL in secondary education not only transforms classrooms but also empowers learners to become confident, knowledgeable, and globally minded individuals.

REFERENCES

- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press.
- Cummins, J. (2008). *BICS and CALP: Empirical and theoretical status of the distinction*. In B. Street & N. H. Hornberger (Eds.), *Encyclopedia of Language and Education* (2nd ed., Vol. 2, pp. 71–83). Springer.
- Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge University Press.
- Mehisto, P., Marsh, D., & Frigols, M. J. (2008). *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan Education.
- Nikula, T., Dalton-Puffer, C., & Llinares, A. (2013). *CLIL classroom discourse: Research from Europe*. *Journal of Immersion and Content-Based Language Education*, 1(1), 70–100.

THE ROLE OF ARTIFICIAL INTELLIGENCE (AI) TOOLS IN TEACHING ENGLISH THROUGH AN INTEGRATED APPROACH

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Abstract. The rapid emergence of Artificial Intelligence (AI) in education has transformed English language teaching by offering new opportunities for personalized instruction, multimodal interaction, and skill integration. This article investigates the role of AI tools in supporting an integrated approach to English teaching, in which reading, writing, listening, speaking, and critical thinking are developed holistically. The study argues that AI enhances the efficiency, quality, and accessibility of integrated language learning through adaptive feedback, intelligent tutoring systems, automated assessment, and content-generation mechanisms. Despite these benefits, challenges such as digital inequality, teacher readiness, ethical considerations, and overreliance on AI remain critical concerns. The findings suggest that with thoughtful pedagogical planning, AI can become a powerful component of integrated English instruction, promoting learner autonomy and improving language competence in technology-enhanced environments.

Keywords: artificial intelligence, integrated approach, English language teaching, multimodal learning, adaptive feedback, educational technology, EFL pedagogy.

Annotatsiya. Ushbu maqolada sun'iy intellekt (AI) vositalarining ingliz tilini integrallashgan yondashuv asosida o'qitishdagi o'rni tahlil qilinadi. Integrallashgan yondashuv tinglab tushunish, o'qish, yozish, gapirish va tanqidiy fikrlash kabi ko'nikmalarni yagona o'quv jarayonida uyg'unlashtirishni nazarda tutadi. AI texnologiyalari adaptiv fikr-mulohaza, intellektual o'qitish tizimlari, avtomatlashtirilgan baholash va multimodal kontent yaratish orqali mazkur yondashuvni samarali qo'llab-quvvatlaydi. Maqolada AI imkoniyatlari bilan bir qatorda raqamli tengsizlik, o'qituvchilarning texnologik tayyorgarligi va etik masalalar kabi cheklovlar ham ko'rib chiqiladi. Tadqiqot natijalari shuni ko'rsatadiki, AI vositalari pedagogik jihatdan to'g'ri integratsiya qilinganda ingliz tilini o'qitish

jarayonini sezilarli darajada optimallashtiradi, o'quvchi faolligini oshiradi va ta'lim samaradorligini kuchaytiradi.

Kalit so'zlar. sun'iy intellekt, integrallashgan yondashuv, ingliz tilini o'qitish, multimodal ta'lim, adaptiv fikr-mulohaza, ta'lim texnologiyalari, EFL pedagogikasi.

Аннотация. В данной статье рассматривается роль инструментов искусственного интеллекта (ИИ) в обучении английскому языку на основе интегрированного подхода. Интегрированный подход предполагает одновременное развитие навыков слушания, чтения, письма, говорения и критического мышления в едином учебном процессе. Технологии ИИ поддерживают этот подход благодаря адаптивной обратной связи, интеллектуальным учебным системам, автоматизированной оценке и созданию мультимодального контента. В статье также обсуждаются ограничения применения ИИ, такие как цифровое неравенство, недостаточная подготовленность преподавателей и этические вопросы. Результаты исследования показывают, что при грамотной педагогической интеграции инструменты ИИ значительно повышают эффективность обучения английскому языку, усиливают вовлеченность учащихся и облегчают усвоение языка.

Ключевые слова. искусственный интеллект, интегрированный подход, обучение английскому языку, мультимодальное обучение, адаптивная обратная связь, образовательные технологии, методика EFL.

INTRODUCTION

Artificial Intelligence has become one of the most influential innovations affecting modern education. Its ability to process language, analyze learner behavior, and generate content enables learning environments that were previously unimaginable. English language teaching (ELT), which requires extensive practice in communication, comprehension, and production, benefits significantly from AI applications. As contemporary classrooms shift toward learner-centered models, teachers increasingly adopt integrated approaches that combine several language skills in a single instructional cycle. The integrated approach emphasizes natural communication by blending receptive and productive skills. Rather than treating reading, writing, listening, and speaking as separate disciplines, integrated teaching views them as interdependent components of language competence. By embedding AI tools into this pedagogical model, educators can create dynamic learning experiences that provide immediate feedback, personalized activities, and flexible learning pathways. This article explores how AI tools support integrated English teaching, the pedagogical advantages of their use, and the challenges educators may encounter. The discussion

highlights the ways in which AI reshapes language classrooms and suggests practical implications for future instruction.

Integrated Approach in English Language Teaching

The integrated approach emerged from communicative and constructivist theories, which argue that language is best learned through meaningful interaction. In real-life communication, individuals do not separate language skills; they read information before speaking, listen before responding, and write based on what they have understood. Therefore, integrated teaching reflects authentic language use and promotes higher-level thinking. In practice, integrated lessons often involve tasks such as group discussions following a reading passage, writing summaries after listening, or presenting reflections derived from written materials. These activities require learners to activate multiple skills, build connections between forms and meanings, and apply linguistic knowledge in context. AI tools support this process by offering multimodal resources and adaptive pathways that adjust to individual learner needs.

AI Tools Supporting the Integrated Approach

Intelligent Tutoring Systems

AI-powered tutoring systems simulate human teacher interactions by analyzing learner input and generating personalized guidance. Tools like ChatGPT, Google Gemini, or Microsoft Copilot can explain grammar, generate examples, and respond to learner questions instantly. These systems create interactive spaces where learners practice speaking, reading, and writing in real time. Their ability to adjust explanations according to learner proficiency strengthens the integrated development of language skills.

Adaptive Learning Platforms

AI-based platforms such as Duolingo Max, Rosetta Stone AI, or Cambridge One Learning Assistant provide individualized learning trajectories. By tracking errors and progress, these systems deliver targeted tasks that improve weaknesses in vocabulary, grammar, or pronunciation. Because integrated learning requires balance across skills, adaptive platforms help maintain this equilibrium by automatically adjusting task types and difficulty levels.

Automated Writing Evaluation

AI writing assistants play a significant role in enhancing writing and reading integration. Tools including Grammarly, ProWritingAid, and academic writing analyzers assess coherence, organization, grammar, vocabulary, and style. They also provide instant suggestions, allowing learners to revise and refine their writing. Such tools help students understand how structural choices affect meaning, and the iterative editing process strengthens overall language proficiency.

Speech Recognition and Pronunciation Support

AI-based speech tools offering pronunciation feedback help learners practice oral skills independently. Applications such as Elsa Speak or Oxford English Coach evaluate sound accuracy, rhythm, and stress patterns. Because speaking and listening complement each other in integrated learning, speech recognition accelerates progress by enabling learners to test their listening comprehension and speaking accuracy in parallel.

AI-Generated Learning Materials

Teachers often spend significant time preparing reading passages, listening scripts, and classroom tasks. AI simplifies this process by generating texts, summaries, quizzes, discussion prompts, and interactive games. When integrated into lessons, these materials support activities connecting multiple skills, such as reading before speaking or listening before writing. AI content generation ensures that students receive diverse and level-appropriate input.

Benefits of Using AI in an Integrated Approach

Enhanced Multimodality

AI tools naturally support multimodal learning by combining audio, visual, and textual inputs. Learners can read a text, listen to an explanation, watch an example, and engage in oral practice on the same platform. Multimodality is essential for integrated instruction because it reinforces language input through multiple channels.

Immediate and Personalized Feedback

Effective feedback is a cornerstone of language development. AI systems provide instant responses to errors, helping learners understand mistakes and correct them quickly. Personalized feedback accelerates learning by identifying individual needs and tailoring instruction accordingly.

Learner Autonomy and Motivation

AI tools promote independence by allowing learners to choose tasks, track progress, and practice at their own pace. Gamified features such as badges, streaks, and levels motivate learners, while autonomy encourages long-term engagement with language learning tasks.

Efficient Classroom Management

AI reduces teacher workload by automating routine tasks such as checking grammar, tracking performance, and generating exercises. This frees teachers to focus on communicative activities and student support, which strengthens the human dimension of integrated instruction.

Improved Accessibility

AI enables students to access learning materials beyond classroom hours. Remote and blended learning environments benefit from AI's ability to deliver resources digitally, ensuring that integrated learning continues outside the physical classroom.

Challenges and Considerations

While AI offers numerous advantages, integrating it into English teaching also presents difficulties:

- **Overreliance on Technology:** Students may depend too heavily on AI-generated answers, weakening critical thinking and creativity.
- **Teacher Preparedness:** Many teachers lack adequate training to use AI effectively.
- **Digital Inequality:** Not all learners have access to high-speed internet or suitable devices.
- **Ethical and Privacy Issues:** AI tools collect data; proper policies must protect student information.
- **Quality Control:** Some AI-generated content may contain inaccuracies or cultural mismatches.

Addressing these issues requires professional development, ethical guidelines, and balanced instructional design.

Conclusion

Artificial Intelligence has immense potential to enhance English teaching when used within an integrated approach. By supporting multimodal instruction, offering personalized feedback, and facilitating learner autonomy, AI tools enrich the development of language skills and modernize classroom practices. When supported by teacher expertise and ethical implementation, AI becomes a powerful complement to human instruction. Ultimately, combining AI with integrated pedagogy can lead to more engaging, flexible, and effective language learning experiences.

REFERENCES

1. Benson, P. (2021). *Language Learning and Technology: Evolving Perspectives*. Routledge.
2. Chapelle, C., & Sauro, S. (2020). *The Handbook of Technology and Language Teaching*. Wiley-Blackwell.
3. Godwin-Jones, R. (2022). Emerging technologies and language education. *Language Learning & Technology*, 26(2), 12–27.
4. Kukulska-Hulme, A. (2020). Mobile and intelligent technologies in English learning. *ReCALL*, 32(1), 1–20.
5. Parmaxi, A. (2023). Artificial intelligence applications in EFL contexts. *Education and Information Technologies*, 28(1), 501–520.

RAQAMLI TURIZM – ZAMONAVIY IQTISODIYOTNING YANGI YO‘NALISHI SIFATIDA

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Annotatsiya. Ushbu maqolada raqamli turizm tushunchasi, uning zamonaviy iqtisodiyotdagi o‘rni hamda O‘zbekistonda raqamli texnologiyalar yordamida turizm sohasini rivojlantirish istiqbollari yoritilgan. Shuningdek, onlayn platformalar, mobil ilovalar va sun‘iy intellektning sayohat xizmatlarini avtomatlashtirishdagi ahamiyati tahlil qilinadi.

Kalit so‘zlar: raqamli turizm, texnologiya, onlayn platforma, mobil ilovalar, virtual sayohat, sun‘iy intellekt, barqaror turizm, innovatsiya, turizm industriyasi.

Аннотация. В статье рассматривается понятие цифрового туризма, его роль в современной экономике и перспективы развития туристической сферы в Узбекистане с использованием цифровых технологий. Также анализируется роль онлайн-платформ, мобильных приложений и искусственного интеллекта в автоматизации туристических услуг.

Ключевые слова: цифровой туризм, технологии, онлайн-платформа, мобильные приложения, виртуальные путешествия, искусственный интеллект, устойчивый туризм, инновации, туристическая индустрия.

Abstract. This article discusses the concept of digital tourism, its role in the modern economy, and the prospects for developing the tourism sector in Uzbekistan using digital technologies. It also analyzes the role of online platforms, mobile applications, and artificial intelligence in automating travel services.

Keywords: digital tourism, technology, online platform, mobile applications, virtual travel, artificial intelligence, sustainable tourism, innovation, tourism industry.

Bugungi globallashuv davrida raqamli texnologiyalar hayotimizning barcha jabhalariga chuqur kirib bordi. Ayniqsa, turizm sohasida raqamlashtirish jarayoni turistik xizmatlar sifati, tezligi va qulayligini oshirishda muhim omilga aylandi. Raqamli turizm — bu zamonaviy axborot-kommunikatsiya texnologiyalaridan foydalangan holda turistik xizmatlarni tashkil etish, targ‘ib qilish va boshqarish tizimi hisoblanadi.

O‘zbekistonda so‘nggi yillarda raqamli iqtisodiyot konsepsiyasi doirasida turizmni rivojlantirishga alohida e‘tibor qaratilmoqda. Raqamli turizmning joriy etilishi mamlakatning xalqaro imijini yaxshilash, yangi ish o‘rinlari yaratish va iqtisodiy o‘sishni ta‘minlashga xizmat qiladi.

Raqamli turizmning asosiy afzalliklari quyidagilardan iborat:

1. Axborotga tezkor kirish imkoniyati. Sayyohlar internet orqali turli mamlakatlar, mehmonxonalar, muzeylar va tadbirlar haqida to‘liq ma’lumot oladilar.
2. Onlayn bron qilish va to‘lov tizimlari. “Booking.com”, “Airbnb”, “TripAdvisor” kabi global platformalar turistik xizmatlarni bir necha daqiqa ichida tanlash va to‘lash imkonini beradi.
3. Virtual va kengaytirilgan haqiqat texnologiyalari. Virtual sayohatlar orqali foydalanuvchi jismonan tashrif buyurmasdan turib, diqqatga sazovor joylarni 3D formatda ko‘rishi mumkin.
4. Sun‘iy intellekt va big data tahlili. Bu texnologiyalar sayyohlarning xohish va qiziqishlariga asoslangan holda shaxsiylashtirilgan xizmatlarni taklif etish imkonini yaratadi.

O‘zbekistonda “Raqamli O‘zbekiston – 2030” strategiyasi doirasida turizmni raqamlashtirish bo‘yicha bir qator loyihalar amalga oshirilmoqda. Jumladan, “E-Tourism”, “Visit Uzbekistan”, “Uzbekistan Travel” kabi onlayn platformalar sayyohlarga mamlakat haqida keng qamrovli ma’lumot beradi. Shuningdek, QR-kodlar asosida ishlovchi raqamli gid tizimlari, virtual muzeylar va tarixiy joylar uchun 3D modellar yaratish amaliyoti ham kengayib bormoqda.

Raqamli turizm, shuningdek, barqaror turizm tamoyillarini qo‘llab-quvvatlaydi. Chunki onlayn xizmatlar orqali qog‘oz, transport va boshqa resurslar sarfini kamaytirish mumkin. Shuningdek, ekologik tozalikni saqlash va mas’uliyatli sayohat madaniyatini shakllantirishga yordam beradi.

Xulosa qilib aytganda, raqamli texnologiyalar turizm sohasini tubdan o‘zgartirmoqda. Ular orqali turistik xizmatlar tezkor, qulay va global darajada ommalashmoqda. O‘zbekistonda raqamli turizmni yanada rivojlantirish uchun quyidagi yo‘nalishlarga e’tibor qaratish maqsadga muvofiq:

- Turizm sohasida IT mutaxassislarni tayyorlash va raqamli ko‘nikmalarni oshirish;
- Sun‘iy intellekt, big data va virtual haqiqat texnologiyalarini joriy etish;
- Turizm infratuzilmasini yagona elektron platformaga integratsiya qilish;
- Mahalliy turistik brendlarni raqamli marketing orqali targ‘ib etish.

Raqamli turizm — bu nafaqat texnologik yangilik, balki mamlakat iqtisodiyoti, madaniy merosi va xalqaro nufuzining o‘shishiga xizmat qiluvchi muhim omildir.

FOYDALANILGAN ADABIYOTLAR

1. O‘zbekiston Respublikasi Prezidenti Sh.M. Mirziyoyevning “Raqamli O‘zbekiston – 2030” strategiyasi to‘g‘risidagi farmoni.
2. UNWTO (2023). Digital transformation in tourism: Global trends and strategies.
3. “Visit Uzbekistan” rasmiy portali — www.uzbekistan.travel
4. Abdurahmonov Q. (2022). Turizmدا innovatsion yondashuvlar. Toshkent: Iqtisodiyot nashriyoti.

BOSHLANG‘ICH SINIF MATEMATIKA FANIDAN TA‘LIM OLISHNING ZAMONAVIY USULLARI

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Annotatsiya

Mazkur maqolada boshlang‘ich sinflarda matematika ta‘limining mazmuni va zamonaviy yondashuvlar tahlil qilinadi. Matematika o‘qitish jarayonida interfaol metodlar, AKT (axborot-kommunikatsiya texnologiyalari), STEAM ta‘lim, differensial yondashuv, muammoli ta‘lim va o‘yin texnologiyalarining samaradorligi ilmiy asosda yoritiladi. Boshlang‘ich ta‘limda o‘quvchilarning mantiqiy fikrlashini rivojlantirish, o‘zlashtirish samaradorligini oshirish va matematika faniga bo‘lgan qiziqishini kuchaytirish yo‘llari ko‘rsatib o‘tilgan.

Kalit so‘zlar: matematika ta‘limi, boshlang‘ich sinf, zamonaviy metodlar, interfaol ta‘lim, AKT, STEAM, muammoli ta‘lim, gamifikatsiya, raqamli texnologiyalar.

Abstract

This article analyzes the content and modern approaches to mathematics education in primary schools. The effectiveness of interactive methods, ICT (information and communication technologies), STEAM education, differentiated approach, problem-based learning and game technologies in the process of teaching mathematics is scientifically highlighted. Ways to develop students' logical thinking, increase the effectiveness of learning and increase their interest in mathematics in primary education are shown.

Keywords: mathematics education, primary school, modern methods, interactive education, ICT, STEAM, problem-based learning, gamification, digital technologies.

Аннотация

В статье анализируется содержание и современные подходы к преподаванию математики в начальной школе. Научно обоснована эффективность применения интерактивных методов, ИКТ (информационно-коммуникационных технологий), STEAM-образования, дифференцированного подхода, проблемного обучения и игровых технологий в процессе обучения математике. Показаны пути развития логического мышления учащихся, повышения

эффektivности обучения и повышения их интереса к математике в начальной школе.

Ключевые слова: математическое образование, начальная школа, современные методы, интерактивное обучение, ИКТ, STEAM, проблемное обучение, геймификация, цифровые технологии.

KIRISH

Hozirgi kunda O‘zbekiston Respublikasida ta‘lim tizimi tubdan isloh qilinib, **zamonaviy innovatsion texnologiyalar** asosida ta‘lim sifati va samaradorligini oshirishga alohida e‘tibor qaratilmoqda. Xususan, **Boshlang‘ich ta‘lim davlat standarti** (2022) da matematika fani o‘quvchilarning **mantiqiy tafakkuri, mustaqil fikrlash qobiliyati va amaliy ko‘nikmalarini shakllantirishga** yo‘naltirilgan.

Matematika fani o‘quvchining fikrlash jarayonini boshqaradi, uni **tahlil qilish, solishtirish, umumlashtirish, isbotlash** kabi intellektual faoliyatlarga jalb etadi. Shu sababli, o‘qituvchi matematika darslarini tashkil etishda an‘anaviy metodlar bilan bir qatorda, **interfaol, raqamli, muammoli, loyiha asosida va STEAM** yondashuvlardan foydalanishi kerak.

Boshlang‘ich ta‘limda o‘quvchi hali atrof-muhitni bevosita kuzatish va o‘yin orqali o‘rganish bosqichida bo‘lganligi sababli, o‘qitish metodlari ham **faol, ijodiy va vizual** xarakterga ega bo‘lishi lozim.

1. Boshlang‘ich sinf matematika ta‘limining mazmuni va maqsadi

Boshlang‘ich sinflarda matematika fanining asosiy maqsadi — o‘quvchilarda:

- miqdor va shakl haqidagi boshlang‘ich tushunchalarni shakllantirish;
- mantiqiy tafakkur va tahliliy fikrlashni rivojlantirish;
- muammoli vaziyatlarda yechim topish malakasini hosil qilish;
- matematik nutq va simvolik yozuvlar bilan ishlash ko‘nikmasini o‘rgatishdir.

Buning uchun o‘qituvchi o‘quvchilarning yosh xususiyatlarini hisobga olgan holda, **ko‘rgazmali, interfaol** va **amaliy** metodlardan foydalangan holda ta‘limni tashkil etadi.

Misol:

“Sonlar qatori” mavzusini o‘rgatishda o‘qituvchi raqam kartochkalari, rangli kubiklar, geometrik shakllar, raqamli slaydlar yoki interaktiv doskadan foydalanishi orqali bolalarda **ko‘rish, eshitish va amaliy idrokni** birgalikda ishga soladi. Bu esa axborotni 3 barobar tezroq o‘zlashtirishga yordam beradi.

2. Zamonaviy pedagogik texnologiyalar va ularning afzalliklari

Zamonaviy ta‘lim metodlari – bu ta‘lim jarayonini interfaollikka, ijodkorlikka, tahliliy fikrlashga yo‘naltiruvchi metodlar bo‘lib, ular o‘quvchini markazga qo‘yadi (“O‘quvchi markazli ta‘lim”).

1. Interfaol metodlar

Interfaol metodlar — bu o‘quvchilarni faollikka chorlovchi, ularni hamkorlikda fikrlash va muammoni yechishga yo‘naltiruvchi usullar majmuasidir. Boshlang‘ich sinf matematika darslarida quyidagi interfaol metodlar samarali hisoblanadi:

“**Aqliy hujum**” – berilgan masalaga bir nechta yechim topish orqali ijodiy fikrlashni rivojlantiradi.

“**Klaster**” – tushunchalar orasidagi bog‘liqlikni ko‘rsatadi (masalan, “Shakllar” mavzusida).

“**Insert**” – o‘quvchi yangi bilimni avvalgisini bilan solishtirib o‘zlashtiradi.

“**Juftlikda ishlash**” – o‘quvchilar o‘zaro muloqotda fikr almashib, muammoni birgalikda hal etadilar.

Amaliy misol:

“100 ichida qo‘shish va ayirish” mavzusida “Juftlikda ishlash” metodidan foydalanish natijasida o‘quvchilar bir-birining yechimini tahlil qiladi, xatolarni o‘zaro tuzatadi va mustaqil fikrlashni o‘rganadi.

2. Muammoli ta’lim metodi

Muammoli ta’lim – o‘quvchi oldiga **muammo qo‘yish va uni o‘zi izlab topish** asosida o‘qitish metodidir.

Masalan, “Kvadrat va to‘g‘ri to‘rtburchak” mavzusida o‘qituvchi savol beradi:

“Nega kvadrat ham to‘g‘ri to‘rtburchak hisoblanadi, lekin har bir to‘g‘ri to‘rtburchak kvadrat emas?”

Bu savol o‘quvchini tahlil qilish, solishtirish va xulosa chiqarishga undaydi. Shu orqali mantiqiy tafakkur rivojlanadi.

3. O‘yin texnologiyalari

Boshlang‘ich sinf o‘quvchilari uchun eng samarali ta’lim shakllaridan biri – o‘yin asosida o‘qitishdir.

Matematika darslarida “**Matematik domino**”, “**Sonni top**”, “**Kim tezroq hisoblaydi?**”, “**Matematik kvest**” kabi o‘yinlar orqali o‘quvchilar bilimni qiziqarli tarzda mustahkamlaydi.

Misol:

“Ko‘paytirish jadvali”ni o‘rgatishda “Matematik estafeta” o‘yini o‘tkaziladi. O‘quvchilar jamoalarga bo‘linadi va kim tezroq javob topish bo‘yicha bellashadilar. Natijada raqamlarni eslab qolish, tez fikrlash va jamoada ishlash ko‘nikmalari shakllanadi.

4. Raqamli texnologiyalar

Raqamli ta’lim – bu XXI asr o‘qituvchisining ajralmas qismi.

Boshlang‘ich matematika darslarida quyidagi vositalar juda samarali:

LearningApps.org – interaktiv mashqlar tayyorlash;

Kahoot va Quizizz – raqamli viktorinalar;

GeoGebra – geometrik modellar yaratish;

Google Jamboard – masalalarni birgalikda yechish uchun onlayn doska.

Bu vositalar o‘quvchilarda **axborot madaniyatini, raqamli savodxonlikni** shakllantiradi.

3. STEAM ta’lim texnologiyasining o‘rni

STEAM – bu **Science (fan), Technology (texnologiya), Engineering (muhandislik), Art (san’at), Mathematics (matematika)** sohalarining integratsiyasi bo‘lib, o‘quvchilarda fanlararo bog‘liqlikni ko‘rsatadi.

Boshlang‘ich sinfdagi STEAM asosidagi matematika darslari o‘quvchilarning **ijodiy fikrlash, amaliy ko‘nikma, loyiha yaratish, jamoada ishlash** kompetensiyalarini rivojlantiradi.

Misollar:

--“**Geometrik shakllar**” mavzusida o‘quvchilar qog‘ozdan uy maketlari yasaydilar (Engineering + Art).

--“**O‘lchov birliklari**” mavzusida suvni o‘lchash tajribasi o‘tkaziladi (Science + Math).

--“**Transport vositalari**” mavzusida masofani hisoblash va yo‘l xaritasini yaratish (Technology + Math).

Natijada matematika o‘quvchining nazarida faqat sonlar yig‘indisi emas, balki hayotiy muammolarga yechim beruvchi amaliy fan sifatida namoyon bo‘ladi.

4. O‘qituvchining zamonaviy kompetensiyasi

Boshlang‘ich sinf matematika o‘qituvchisi quyidagi **kompetensiyalarga** ega bo‘lishi zarur:

Metodik kompetensiya – darsni o‘quvchi markazida tashkil etish.

Axborot-kommunikatsion kompetensiya – raqamli vositalardan foydalanish.

Innovatsion kompetensiya – yangi texnologiyalarni tatbiq etish.

Ijtimoiy va kommunikativ kompetensiya – jamoaviy muloqotni yo‘lga qo‘yish.

Refleksiv kompetensiya – dars samaradorligini tahlil qilib, o‘z faoliyatini takomillashtirish.

Xulosa

Boshlang‘ich sinf matematika fanini o‘qitishda zamonaviy metodlardan foydalanish o‘quvchilarni:

mustaqil fikrlashga,

ijodkorlikka,

mantiqiy xulosa chiqarishga,

hamkorlikda ishlashga o‘rgatadi.

Interfaol, muammoli, o‘yin va raqamli texnologiyalarni uyg‘un qo‘llash orqali matematika darslari **qiziqarli, samarali va hayotiy mazmunga ega** bo‘ladi.

STEAM yondashuvi esa o‘quvchilarni real muammolarni matematik tarzda hal etishga, fanlararo bog‘liqlikni tushunishga undaydi.

Demak, zamonaviy pedagogik yondashuvlar — boshlang‘ich sinf matematika ta‘limini yangicha bosqichga olib chiqadigan, o‘quvchilarda XXI asr ko‘nikmalarini shakllantiruvchi asosiy vositadir.

FOYDALANILGAN ADABIYOTLAR

1. Boshlang‘ich ta‘lim davlat standarti. – Toshkent, 2022.
2. Mavlonova R. “Matematika o‘qitish metodikasi”. – Toshkent: O‘qituvchi, 2021.
3. Usmonov A., Shodiyev M. “STEAM texnologiyalari va ularning ta‘limdagi o‘rni”. – Toshkent: Fan va texnologiya, 2023.
4. Yo‘ldoshev J., Hasanov A. “Pedagogik texnologiyalar nazariyasi va amaliyoti”. – Toshkent, 2020.
5. www.learningapps.org
6. www.steamforkids.uz
7. Alimova, D. (2024). Boshlang‘ich sinf darslarida STEAM ta‘lim texnologiyasini qo‘llashning metodik ahamiyati. *Modern Science and Research*, 3(1), 1-3.
8. BOSHLANG‘ICH SINFLAR O‘QUVCHILARINING STEAM TA‘LIMI ORQALI O‘Z O‘ZINI RIVOJLANTIRISH USULLARI
AQY Azadovna, XY Mamatqulovna - *Eurasian Journal of Academic Research*, 2024
9. Dilnoza, P. (2025). Methodology for Developing the Intellectuality of Future Primary School Teachers on The Basis of Critical and Creative Thinking. *International Journal of Pedagogics*, 5(03), 100-103.
10. www.eduportal.uz

THE CONCEPT OF “HOME” IN ENGLISH AND UZBEK CULTURES: A LINGUISTIC PERSPECTIVE

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Abstract: The notion of home is one of the most deeply rooted cultural and linguistic concepts in any society. Although universal at a conceptual level, its semantic scope, emotional associations, and cultural symbolism differ significantly across languages. This article explores how the concept of “home” is represented, interpreted, and linguistically encoded in English and Uzbek cultures. Drawing on lexical semantics, cultural linguistics, and discourse analysis, it examines the meanings, connotations, idioms, metaphors, and cultural values associated with the English term home and its Uzbek equivalents such as uy, ona diyor, Vatan, oila, and tinch o‘choq. Special attention is given to familial structure, individualism versus collectivism, and historical worldviews embedded in linguistic usage. The findings reveal that while English conceptualizes home primarily as a private personal space emphasizing individuality and emotional comfort, Uzbek culture frames home as a collective, intergenerational, and sacred sphere that extends beyond the household to notions of homeland and ancestry. These cross-cultural insights highlight how language mirrors cultural identity and how cultural patterns, in turn, shape linguistic expression.

Key words: home, linguistic worldview, English culture, Uzbek culture, semantics, idioms, collectivism, individualism

The concept of home is a fundamental human experience, shaping identity, memory, and emotional well-being. However, the cultural meanings assigned to home vary considerably across societies, and these differences are often reflected in language. In linguistic anthropology and cultural linguistics, such concepts are referred to as culture-specific lexical domains, where a single term carries layers of meaning informed by history, social structure, and collective values. In the English-speaking world, home is typically associated with personal comfort, privacy, emotional freedom, and stability. It is often described as a sanctuary where individuals can express their true selves. In

contrast, in Uzbek culture, the idea of home encompasses not only the physical household but also family lineage, social responsibility, national belonging, and moral purity. Expressions such as *oila tinchligi*, *uy-ro‘zg‘or*, and *ona Vatan* demonstrate the breadth and depth of this semantic field. This article aims to analyze the linguistic representation of home in English and Uzbek cultures, comparing lexical meanings, cultural connotations, idiomatic expressions, metaphors, and socio-cultural associations. Through this comparative approach, the study highlights the intertwined relationship between language and cultural worldview.

The Linguistic Nature of “Home”

Definitions and Semantic Range

In English, home refers to:

- a place where one lives,
- a space of emotional attachment,
- one’s country of origin,
- a metaphorical state of comfort or familiarity.

The Oxford English Dictionary defines home as “the place where one lives, especially as a member of a family or household; a place that feels comfortable and familiar.” In Uzbek, however, several different words overlap with the English concept:

- *uy* — the physical house or dwelling.
- *oila* — the family unit or household members.
- *o‘choq / tinch o‘choq* — the hearth, symbol of warmth, peace, and family unity.
- *Vatan / ona diyor* — homeland, motherland, ancestral land.
- *ro‘zg‘or* — domestic life, household affairs.

Thus, the English word home compresses multiple Uzbek concepts into a single term, while Uzbek disperses the semantic field across several culturally loaded words.

English Cultural Emphasis: Individuality and Privacy

English-speaking cultures, particularly in Western societies, place high value on individualism. This worldview shapes the linguistic representations of home in several ways:

1. Privacy as a core value.

The phrase “A man’s home is his castle” positions the home as a private, inviolable sphere in which personal autonomy is protected.

2. Home as self-expression.

English discourse often links home to comfort, personal taste, and independence: home décor, home office, home comfort, feel at home.

3. Mobility and flexible identity. Because modern English societies are mobile, home can be temporary or symbolic. Expressions like make yourself at home or home away from home reflect this fluidity.

4. Emotional rather than collective attachment.

English speakers often describe home in psychological terms: home is where the heart is.

Uzbek Cultural Emphasis: Collectivism and Sacred Domesticity

Uzbek culture, shaped by centuries of family-centered social structure, attaches broader meanings to the concept of home:

1. Home as an intergenerational institution.

The Uzbek household (uy) traditionally includes extended family members, symbolizing unity and continuity.

2. Home as a moral and spiritual center.

Expressions like tinch o‘choq and uyingiz barakali bo‘lsin portray home as a place of purity, prosperity, and divine blessing.

3. Home intertwined with homeland.

The words Vatan, ona diyor, and ota yurt show that “home” expands beyond the family dwelling to national identity and ancestral roots.

4. Home as social responsibility.

Culturally, maintaining the harmony of the household is seen as a moral duty. Terms like oila tinchligi and ro‘zg‘or tutish reveal cultural expectations that extend beyond the individual.

4. Idioms, Metaphors, and Linguistic Expressions

English Idioms and Metaphors

English features numerous idioms with home that emphasize comfort, achievement, or personal identity:

- Home sweet home — emotional relief or belonging.
- There’s no place like home — nostalgia and comfort.
- Bring home the bacon — earning a livelihood.
- Hit home — something that affects one personally.
- Home in on — focus sharply on something.
- These idioms reflect pragmatism, individuality, and emotional nuance.

Uzbek Idioms and Metaphors

Uzbek idioms related to home emphasize respect, unity, prosperity, and collective life:

- Uyga baraka kirsin — may your home be blessed.
- O‘choq yorug‘ bo‘lsin — may your hearth stay bright.
- Uyidan baxt topmoq — to find happiness within one’s family.
- Uy-ro‘zg‘orini barqaror qilmoq — to establish a stable household.

- Vatan – muqaddas maskan — the homeland is a sacred place.

These metaphors portray home as both a physical and spiritual sphere.

Home in Social Structure and Communication

English Context

In English-speaking societies:

Young people often leave home early to gain independence.

Home is associated with personal mobility and career-driven relocation.

Housing styles emphasize individual choice and privacy (e.g., personal bedroom, personal space).

Conversations about home often highlight personal lifestyle, comfort, and emotional boundaries.

Uzbek Context

In Uzbek society:

It is common for several generations to live under one roof. Home is a communal environment, and family decisions are often collective. Hospitality (mehmondo'stlik) is a vital cultural feature: hosting guests at home is a sign of respect and generosity. Home is frequently discussed in terms of stability, moral upbringing (tarbiya), and familial solidarity. These differences illustrate how the linguistic concept of home mirrors social norms and family structures.

Home as Symbolic Space

Symbolism in English Culture

In English literature and everyday discourse, home symbolizes:

- inner peace,
- personal refuge,
- emotional roots,
- self-identity.

Writers often depict home as a place one returns to for solace or reflection.

Symbolism in Uzbek Culture cultural Values Embedded in the Concept of Home

Uzbek tradition extends the symbolism of home to:

- honor and respectability,
- continuity of ancestry,
- social harmony,

connection to land and tradition. The hearth (o'choq) is especially symbolic in Uzbek culture, representing warmth, family unity, and even national continuity.

Comparative Analysis

The table below summarizes key distinctions:

Aspect	English Concept of Home	Uzbek Concept of Home
Social structure	Individual-centered	Family-centered

Emotional focus Comfort, privacy Peace, unity, blessing

Spatial scope Mainly house/apartment House + family + homeland

Linguistic range Single, flexible term Multiple culturally specific terms

Symbolism Identity and comfort Sacredness and continuity

Idioms Focus on feelings & achievement Focus on harmony & prosperity

These contrasts show how linguistic patterns express cultural values and how culture shapes the semantic scope of everyday words [2]

The concept of home plays a profound role in both English and Uzbek worldviews, yet it is culturally encoded in markedly different ways. In English, home primarily expresses individuality, emotional comfort, personal identity, and psychological belonging. [1] In Uzbek, the equivalents—uy, o‘choq, oila, Vatan—form a broader cultural constellation encompassing not only the physical house but also family harmony, ancestral heritage, national identity, and moral values. [4] This linguistic comparison demonstrates how a seemingly universal concept can diverge significantly across cultures. By examining idioms, metaphors, cultural practices, and symbolic meanings, we see that language is not merely a tool for communication but a mirror of collective worldview. [6] Understanding these differences helps foster intercultural awareness and highlights the richness of both English and Uzbek linguistic heritage. [7]

REFERENCES

1. Agar, M. (1994). *Language shock: Understanding the culture of conversation*. New York: William Morrow, (pp.56-58)
2. Duranti, A. (1997). *Linguistic anthropology*. Cambridge: Cambridge University Press, (pp.32-35)
3. Gladkova, A. (2010). “Sympathy, compassion, and empathy in English and Russian.” *Culture & Psychology*, 16(2), (pp.267–285)
4. Kövecses, Z. (2005). *Metaphor in culture: Universality and variation*. Cambridge: Cambridge University Press, (pp.123-125)
5. Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press, (pp.210-212)
6. Sharifian, F. (2017). *Cultural linguistics*. Amsterdam: John Benjamins, (pp.78-79)
7. Wierzbicka, A. (1997). *Understanding cultures through their key words*. Oxford: Oxford University Press, (pp.45-50)

FIRE-RESISTANT BUILDING MATERIALS AND THEIR SAFETY STANDARDS

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Abstract: This article analyzes the physical, chemical and structural properties of fire-resistant building materials and evaluates their role in ensuring the fire safety of modern buildings. It discusses traditional materials such as brick and concrete, as well as advanced materials such as basalt fiber composites, mineral wool, gypsum board and intumescent coatings. International fire safety standards (ISO, EN, UL, NFPA) and their implementation in Uzbekistan are also examined. The article concludes with an overview of emerging technologies, including nanomaterials and smart fire-protective systems.

Keywords: fire-resistant materials, fire safety, basalt wool, mineral insulation, intumescent coating, fire standards, thermal stability, building safety.

Fire safety has become one of the most essential priorities in modern construction, especially in densely populated urban environments where the number of high-rise buildings, industrial facilities and energy-intensive infrastructure is steadily increasing. The rapid spread of fire, the high temperature it generates and the toxic gases released during combustion can lead to catastrophic consequences for both human life and property. Therefore, the development and use of fire-resistant building materials as well as the improvement of fire safety standards have become fundamental components of contemporary architectural and engineering practices.

Fire-resistant building materials are defined as materials that maintain their structural integrity when exposed to high temperatures, do not sustain combustion, do not release toxic fumes and prevent or significantly slow down the spread of fire. The fire resistance of a material depends on its chemical composition, density, thermal stability, heat absorption capacity and behavior under prolonged heating. In contrast to conventional materials, fire-resistant ones are specifically engineered to withstand thermal shock, ensure the stability of load-bearing structures and protect buildings long enough for evacuation and fire-control measures.

Among the oldest and most widely used fire-resistant materials are **brick and concrete**. Ceramic brick, fired at extremely high temperatures, is inherently non-combustible and possesses excellent thermal inertia. This makes brick walls natural barriers against flame penetration. Many historical buildings have survived for centuries precisely because brickwork demonstrates exceptional resistance to fire.

Concrete also exhibits strong fire-resistant properties: the moisture trapped inside its matrix evaporates under heat, absorbing a significant amount of energy and delaying the rise of internal temperature. As a result, concrete structures resist deformation for long periods, allowing them to maintain load-bearing capacity even under severe fire exposure.

Advances in materials science have paved the way for new types of fire-resistant composites, especially those based on **basalt fibers**. Basalt, a natural volcanic rock, is melted at temperatures around 1400–1500°C and then extruded into continuous fibers. These fibers do not burn, do not melt under extreme heat and do not emit toxic gases. When combined with polymer binders, basalt-fiber composites become highly stable insulating materials capable of withstanding temperatures of up to 1000°C. As a result, basalt wool, basalt panels and basalt-reinforced composites have become widely used in both civil and industrial construction, particularly in façade systems, thermal insulation layers, roofs, and flooring structures.

Another essential fire-resistant category is **mineral wool insulation**, produced from basalt, dolomite or recycled glass. Mineral wool does not ignite and can withstand prolonged exposure to flames. Its low thermal conductivity contributes not only to fire protection but also to energy efficiency and acoustic comfort. Similarly, **gypsum board**, commonly used in interior walls and ceilings, demonstrates natural fire-resistant characteristics due to the chemically bound water in its crystalline structure. When exposed to fire, this water transitions into steam, absorbing heat and slowing down the spread of flames.

One of the greatest dangers during a fire is the release of **toxic smoke and gases**, which can pose lethal risks even before flames reach occupants. Therefore, modern fire safety regulations emphasize the use of **low-smoke and low-toxicity materials**. Many contemporary polymers and composite materials undergo special treatments with flame retardants—substances that delay ignition and inhibit the chemical reactions necessary for combustion. Among the most sophisticated technologies are **intumescent coatings**, which expand under heat, forming a thick char layer that protects structural steel and wood from reaching critical temperatures. Such coatings can increase the fire-resistance rating of metal structures from mere minutes to over two hours, significantly enhancing overall safety.

Globally, fire-resistant materials are regulated by stringent **international standards**. The ISO 834 standard outlines test methods for determining the fire resistance of building elements under a standardized thermal curve. In Europe, the EN fire classification system categorizes materials from fully non-combustible to easily flammable based on their contribution to fire. The United States relies on UL (Underwriters Laboratories) and NFPA (National Fire Protection Association)

guidelines, which define strict criteria for heat release, smoke development, structural integrity and toxicity of emitted gases.

In Central Asia, including Uzbekistan, fire safety regulations have been significantly strengthened in recent years. National building codes now require fire-resistant certification for materials used in high-rise buildings, public spaces, industrial facilities and transportation infrastructure. Basalt insulation, mineral wool boards, fire-resistant paints, gypsum-fiber boards and flame retardant treatments for wooden structures are now mandatory components of many modern projects. The growth of local manufacturers producing fire-resistant insulation materials has contributed to both improved safety and the development of domestic construction technologies.

Fire-resistant building materials continue to evolve thanks to innovative research in the fields of nanotechnology, chemistry and materials science. Recent developments include **nanoceramic coatings**, which offer exceptional thermal stability, **aerogel-based insulating panels**, known for their ultra-low thermal conductivity, and **smart materials** capable of modifying their behavior under heat. Some of these advanced materials can automatically release fire-suppressing compounds when heated, while others can expand or contract to prevent structural collapse. Future architectural concepts envision buildings equipped with self-extinguishing façades, intelligent thermal barriers and fully non-toxic, high-performance composites.

In conclusion, fire-resistant building materials represent a cornerstone of modern structural safety. Their effective use not only prevents the spread of flames and delays structural failure, but also saves countless lives by ensuring sufficient evacuation time. As building technologies advance and urban environments expand, the role of fire-resistant materials will only continue to grow. For countries like Uzbekistan, where construction activity is rapidly increasing, integrating advanced fire safety solutions is essential for sustainable and secure urban development. The combination of stringent safety standards, innovative materials and modern engineering approaches forms the basis for creating buildings that are not only functional and aesthetically pleasing but also resilient, reliable and safe under extreme conditions.

LIST OF USED LITERATURE

FOYDALANILGAN ADABIYOTLAR RO'YIXATI

1. Botirova, N., Abdikomilova, M., Botirov, B., & Abdullayev, M. (2022). DEVELOPMENT OF CONCRETE COMPOSITION WITH THE HELP OF CHEMICAL ADDITIVES OF HIGH STRENGTH HEAVY CONCRETE. Академические исследования в современной науке, 1(17),
2. Botirova, N., Rajabboyev, A., & Raximboyev, G. A. (2025). TEMIRBETON CHIQINDILARI ASOSIDAGI OG 'IR BETONNING FIZIK-MEXANIK XOSSALARINI TADQIQ QILISHDA EKSPERIMENTAL TADQIQOTLARNI O

‘TKAZISH METODIKASI. Теоретические аспекты становления педагогических наук, 4(4), 189-195.

3. Botirova, N., Qurbonov, S., & Umirqulov, S. (2025). OPTIMAL CONCRETE COMPOSITION FOR ROADS: DEVELOPMENT IN EUROPEAN COUNTRIES.

Наука и инновации в системе образования,

4. Botirov, B. F., & Botirova, N. S. (2024). Identification of physical and mechanical characteristics of high strength heavy concrete. Architecture. Construction, 1(1), 134-140.

ОГНЕСТОЙКИЕ СТРОИТЕЛЬНЫЕ МАТЕРИАЛЫ И ИХ СТАНДАРТЫ БЕЗОПАСНОСТИ

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Аннотация: В статье подробно рассматриваются виды огнестойких строительных материалов, их физико-химические свойства, особенности поведения при высоких температурах, а также международные и национальные стандарты пожарной безопасности. Проанализирована роль бетона, кирпича, минеральной и базальтовой ваты, огнезащитных покрытий, интумесцентных красок и антипиренов в обеспечении стойкости зданий к пожарным воздействиям. Особое внимание уделено применению огнестойких материалов в условиях Узбекистана и перспективам их развития.

Ключевые слова: огнестойкие материалы, пожарная безопасность, базальтовая вата, минеральная изоляция, интумесцентное покрытие, огнезащита, стандарты EN и ISO, строительная безопасность

Аннотация

В статье подробно рассматриваются виды огнестойких строительных материалов, их физико-химические свойства, особенности поведения при высоких температурах, а также международные и национальные стандарты пожарной безопасности. Проанализирована роль бетона, кирпича, минеральной и базальтовой ваты, огнезащитных покрытий, интумесцентных красок и антипиренов в обеспечении стойкости зданий к пожарным воздействиям. Особое внимание уделено применению огнестойких материалов в условиях Узбекистана и перспективам их развития.

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огнестойкие материалы, пожарная безопасность, базальтовая вата, минеральная изоляция, интумесцентное покрытие, огнезащита, стандарты EN и ISO, строительная безопасность.

В современном строительстве вопросы пожарной безопасности занимают одно из ключевых мест среди требований, предъявляемых к зданиям и инженерным сооружениям. Рост плотности городской застройки, увеличение количества высотных зданий, интенсивное использование инженерных сетей, а также широкое применение электрического и газового оборудования требуют

внедрения таких строительных материалов, которые способны противостоять воздействию высоких температур, препятствовать распространению пламени и защищать конструкции от разрушения. Именно поэтому исследования в области огнестойких материалов, разработка новых защитных технологий и совершенствование нормативных стандартов пожарной безопасности стали важнейшим направлением развития строительной индустрии.

Огнестойкие материалы — это такие материалы, которые при воздействии высоких температур не теряют своих конструктивных свойств, не поддерживают горение, не выделяют токсичных газов и способны на протяжении определённого времени противостоять воздействию огня. Огнестойкость материала определяется его физико-химическим составом, плотностью, термической стабильностью, способностью поглощать или отражать тепло, а также поведением при увеличении температуры. В отличие от обычных материалов, огнестойкие конструкции способны сохранять своё состояние десятки минут и даже часы, что позволяет людям безопасно эвакуироваться, а пожарным — оперативно локализовать очаг возгорания.

Одними из наиболее распространённых огнестойких материалов являются кирпич и бетон. Керамический кирпич, будучи изготовленным путём обжига при высоких температурах, практически не подвержен повторному горению. Он обеспечивает высокую огнестойкость стен и перегородок, создаёт естественный барьер для распространения огня и сохраняет свою форму даже при длительном нагреве. Бетон также проявляет хорошую термическую устойчивость: содержащаяся в нём влага при испарении поглощает значительное количество тепла, замедляя нагрев конструкций. Это даёт возможность конструкциям выдерживать воздействие огня в течение длительного времени без потери несущей способности.

С появлением новых технологий всё большее распространение получают огнестойкие композитные материалы, особенно базальтовые изделия. Базальт — природный вулканический камень — обладает высокой термостойкостью, не горит и не выделяет токсичных веществ при нагревании. Поэтому базальтовые плиты и базальтовая вата стали эффективными теплоизоляционными материалами, которые одновременно выполняют функции огнезащиты. Благодаря тому, что базальтовые волокна выдерживают температуры до 1000 °С, такие материалы успешно применяются в промышленном и гражданском строительстве, в том числе в фасадных системах, кровельных конструкциях, межэтажных перекрытиях и технических помещениях.

Минеральная вата, изготовленная на основе базальтовых или стеклянных волокон, также является одним из важнейших огнестойких материалов

современного строительства. Она не горит, не поддерживает пламя, имеет низкую теплопроводность, а также обеспечивает хорошую звукоизоляцию. В совокупности эти качества делают минеральную вату универсальным материалом для внутренней и внешней изоляции зданий. Гипсокартонные плиты, содержащие кристаллизованную воду, также обладают природной огнестойкостью. При нагревании вода испаряется, поглощая тепло, и тем самым снижает скорость распространения огня.

Одной из ключевых проблем пожаров является выделение токсичных газов, которые могут представлять смертельную опасность даже в первые минуты возгорания. Поэтому современные требования пожарной безопасности предусматривают использование низкотоксичных и малодымных материалов. Многие полимерные композиты, применяемые в отделочных и фасадных системах, проходят специальную обработку антипиренами — веществами, замедляющими процесс горения. Инновационные огнезащитные покрытия, такие как интумесцентные краски, при нагревании образуют вспененный защитный слой, который препятствует нагреванию металлических и деревянных конструкций, тем самым предотвращая их деформацию и разрушение.

Сегодня во всём мире существует большое количество стандартов, регламентирующих огнестойкость строительных материалов. Международные нормы ISO 834 определяют методы испытаний конструкций при стандартном температурном режиме пожара. Европейские стандарты EN классифицируют строительные материалы по их реакциям на огонь — от совершенно негорючих классов до материалов, склонных поддерживать распространение пламени. Американские стандарты UL и NFPA содержат строгие требования по поведению материалов при воздействии высокой температуры, выделяемому дыму и токсичности продуктов горения.

В странах Центральной Азии, в том числе в Узбекистане, также ведётся активная работа по повышению требований к пожарной безопасности зданий. Новые строительные нормы предусматривают обязательное применение сертифицированных огнестойких материалов, использование базальтовых и минеральных теплоизоляционных плит в фасадных системах, установку противопожарных преград, обработку деревянных конструкций антипиренами и применение огнезащитных красок для стальных конструкций. В крупных городах, где строятся высотные здания, применяется комбинированная система огнезащиты, включающая как пассивные, так и активные средства борьбы с пожаром.

Современные научные исследования направлены на разработку материалов, способных не только противостоять огню, но и демонстрировать

интеллектуальное поведение. Так называемые “умные материалы” способны изменять свою структуру при нагревании, предотвращая разрушение, а также выделять вещества, ингибирующие процесс горения. Некоторые виды наноматериалов, включая аэрогели и керамические нанокompозиты, обладают экстремально низкой теплопроводностью, что делает их перспективными в области огнезащиты будущего.

В итоге можно сказать, что огнестойкие строительные материалы являются важнейшим элементом обеспечения безопасности зданий и сооружений. Они способны предотвратить распространение огня, сохранить прочность конструкций и обеспечить время, необходимое для эвакуации людей. Развитие новых технологий, внедрение современных стандартов и повышение требований к качеству материалов способствуют укреплению пожарной безопасности в строительной отрасли. Для Узбекистана, где темпы строительства стремительно растут, совершенствование огнестойких материалов и стандартов является стратегическим направлением в повышении национальной безопасности и устойчивого развития градостроительной среды.

СПИСОК ИСПОЛЬЗОВАННОЙ ЛИТЕРАТУРЫ FOYDALANILGAN ADABIYOTLAR RO'YIXATI

1. Botirova, N., Abdikomilova, M., Botirov, B., & Abdullayev, M. (2022). DEVELOPMENT OF CONCRETE COMPOSITION WITH THE HELP OF CHEMICAL ADDITIVES OF HIGH STRENGTH HEAVY CONCRETE. Академические исследования в современной науке, 1(17),
2. Botirova, N., Rajabboyev, A., & Raximboyev, G. A. (2025). TEMIRBETON CHIQINDILARI ASOSIDAGI OG 'IR BETONNING FIZIK-MEXANIK XOSSALARINI TADQIQ QILISHDA EKSPERIMENTAL TADQIQOTLARNI O 'TKAZISH METODIKASI. Теоретические аспекты становления педагогических наук, 4(4), 189-195.
3. Botirova, N., Qurbonov, S., & Umirqulov, S. (2025). OPTIMAL CONCRETE COMPOSITION FOR ROADS: DEVELOPMENT IN EUROPEAN COUNTRIES. Наука и инновации в системе образования,
4. Botirov, B. F., & Botirova, N. S. (2024). Identification of physical and mechanical characteristics of high strength heavy concrete. Architecture. Construction, 1(1), 134-140.

ASSESSMENT STRATEGIES IN INTEGRATED FOREIGN LANGUAGE COURSES

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Abstract: Assessment in integrated foreign language courses plays a central role in ensuring students' linguistic, cognitive, and intercultural development. Traditional assessment methods—primarily tests and written examinations—often fail to measure authentic communication skills and intercultural competence. Modern language education increasingly emphasizes competence-based, student-centered, and task-oriented assessment approaches that align with communicative and interdisciplinary learning goals. This paper examines a range of assessment strategies including formative, summative, authentic, performance-based, technology-enhanced, self- and peer-assessment methods within integrated foreign language instruction. Real classroom applications, rubrics, and comparative analysis of assessment types are provided to illustrate practical implementation. The study concludes that assessment in integrated courses should prioritize real-life tasks, intercultural understanding, creativity, and learner autonomy, thereby supporting holistic development and preparing learners for global communication.

Keywords: assessment strategies, CLIL, integrated language courses, formative assessment, performance-based assessment, learner autonomy, intercultural competence, digital assessment.

Introduction: Foreign language learning has expanded beyond grammar-focused instruction to encompass communicative, cultural, and cognitive dimensions. Integrated foreign language courses—commonly associated with CLIL (Content and Language Integrated Learning)—combine subject matter with language acquisition,

encouraging students to use the target language as a medium of learning. In such settings, assessment must capture not only mastery of language structures but also the learner's ability to apply linguistic and cultural knowledge meaningfully.

Traditional testing practices often measure discrete knowledge (grammar, vocabulary) without evaluating real communicative performance or intercultural understanding [1]. As a result, educators increasingly adopt holistic and competency-based assessments that reflect authentic use of language in real-world scenarios. This shift underscores the need for assessment strategies that support continuous feedback, reflection, collaboration, and performance in realistic communicative tasks.

Theoretical Framework

Modern assessment in integrated language courses is grounded in several pedagogical theories:

Communicative Language Teaching (CLT)

CLT emphasizes meaningful interaction and real-life communication. Assessment must therefore evaluate fluency, pragmatics, discourse competence, and interactional ability rather than memorized forms [2].

Intercultural Communicative Competence (ICC)

According to Byram [3], ICC involves linguistic, sociolinguistic, and intercultural dimensions. Assessment must measure learners' ability to interpret cultural phenomena, interact appropriately, and mediate between cultures.

Constructivist Learning Theory

Constructivism posits that learners build knowledge through active engagement. Therefore, assessment should be interactive, reflective, and closely tied to authentic tasks.

CLIL Framework.

CLIL involves dual-focused instruction where content and language are integrated. Coyle et al. emphasize the "4Cs model": Content, Communication, Cognition, and Culture [4]. Assessment in CLIL must therefore evaluate cognitive processes, content mastery, and language performance simultaneously.

Types of Assessment in Integrated Courses:

Formative Assessment

Formative assessment provides ongoing feedback during learning. It motivates students and helps teachers adjust instruction. Examples include:

Reflective journals

Low-stakes quizzes, Oral discussions, Concept maps, Exit tickets

Peer feedback rounds

Formative assessment is particularly important in CLIL because it monitors both content and language development simultaneously [5].

Summative Assessment

Summative assessment measures learning outcomes at the end of a course or module.

It may include: Written exams, Term papers, Oral proficiency exams, Final projects or portfolios.

When applied to integrated courses, summative assessment must include criteria that address content knowledge, language usage, and intercultural communication.

Authentic Assessment.

Authentic assessment evaluates learners' ability to use language in real-life contexts. This is essential for integrated language courses, where communication is purpose-driven. *Authentic tasks include:* Writing emails or reports, Role-plays mirroring real situations,

Planning cultural events, Conducting interviews, Preparing travel itineraries, Authentic tasks promote creativity, intercultural awareness, and problem-solving.

Performance-Based Assessment

Performance-based assessment requires learners to demonstrate skills through actions.

Examples:

Presentations

Debates and discussions

Simulations

Demonstrations of cultural practices

Performance tasks can assess fluency, body language, teamwork, and critical thinking [6].

Self-Assessment and Peer Assessment

These methods encourage learner autonomy and reflective awareness. Tools include:

Can-Do statements

Checklists

Peer evaluation forms

Reflective diaries

Students learn to identify their strengths and weaknesses and become active participants in their learning.

Technology-Enhanced Assessment

Digital tools expand assessment opportunities. Examples:

E-portfolios

Online quizzes and tasks

Digital storytelling

Video-recorded speaking tasks

Technology supports multimodal assessment and individualized feedback [7].

Practical Classroom Application

To illustrate how integrated assessment works, consider a CLIL lesson on “Cultural Festivals in English-Speaking Countries.”

Task Design:

Students work in groups to research a festival (e.g., Thanksgiving, Diwali, St. Patrick’s Day) and prepare:

A multimedia presentation

A short role-play demonstrating customs

A reflection on cultural similarities/differences

Assessment Criteria:

Criteria Indicators

Linguistic performance Accuracy, fluency, vocabulary range

Content mastery Relevance, depth of cultural knowledge

Intercultural competence Interpretation, comparison, sensitivity

Collaboration Group coordination, responsibility

Creativity Originality, visual materials

Rationale:

Such tasks simulate real communication, encourage cultural exploration, and develop 21st-century skills such as collaboration, critical thinking, and digital literacy.

Comparative Overview of Assessment Strategies

Assessment Type Example Activity Skill Focus Tools

Formative Cultural discussions Speaking, interaction Checklists

Summative Final written analysis Writing, critical thinking Rubrics

Authentic Travel agency role-play Pragmatics, culture Observation forms

Performance-Based Cultural exhibition Presentation, teamwork Performance rubric

Self-Assessment Learning journal Self-regulation Can–Do statements

Digital Assessment E-portfolio Multimodality Digital rubrics

Challenges in Integrated Assessment

Despite its advantages, integrated assessment presents several challenges:

Teachers may lack skills in intercultural and authentic assessment

Designing tasks that assess both content and language is complex

Time constraints limit performance-based assessment

Limited technological resources hinder digital assessment

Class sizes may reduce opportunities for individualized feedback

Professional development is essential to address these challenges and enhance teachers’ assessment literacy [4].

Role of Technology in Assessment

Digital tools transform assessment by offering:

Flexibility (anytime, anywhere learning)

Multimodal expression (audio, video, visuals)

Personalized feedback

Longitudinal progress tracking

Tools such as Padlet, Google Sites, Flipgrid, and Quizizz support both formative and summative assessment and motivate learners through interactive tasks.

Conclusion: Assessment in integrated foreign language courses must extend beyond traditional examinations to reflect communicative, cultural, and cognitive dimensions of learning. Formative, authentic, and performance-based assessments foster learner autonomy, digital competence, and intercultural sensitivity. When assessment aligns with learning outcomes and incorporates technology, it supports holistic development and prepares learners for participation in multilingual, multicultural contexts. Ultimately, effective assessment serves as both a diagnostic tool and a catalyst for meaningful learning.

REFERENCES:

1. Byram, M. (1997). Teaching and Assessing Intercultural Communicative Competence. Clevedon: Multilingual Matters.(pp.1-124)
2. Brown, H. D. (2004). Language Assessment: Principles and Classroom Practices. Pearson Education.(pp.23-245)
3. Coyle, D., Hood, P., & Marsh, D. (2010). CLIL: Content and Language Integrated Learning. Cambridge University Press.(pp.1-184)
4. Liddicoat, A. J., & Scarino, A. (2013). Intercultural Language Teaching and Learning. Wiley-Blackwell.(pp.11-208)
5. McNamara, T. (2000). Language Testing. Oxford University Press.(pp.45-220)
6. Sercu, L. (2005). Foreign Language Teachers and Intercultural Competence. Multilingual Matters.(pp.1-182)
7. Little, D. (2007). Language Learner Autonomy: Theory, Practice and Research. Trinity College Press.(1-98)

PROSPECTS FOR THE REGULATION OF COMMERCIAL BANKS AND CREDIT INSTITUTIONS BY THE CENTRAL BANK

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ANNOTATION

The article analyzes promising directions for the development of regulation and supervision by the Central Bank of the Republic of Uzbekistan over the activities of commercial banks and credit institutions.

The prospects for regulation of commercial banks by the Central Bank (CB) are associated with enhanced supervision and digitalization, which will help ensure financial stability, protect the rights of consumers and investors, and improve the accessibility of financial services.

Keywords: Central Bank of the Republic of Uzbekistan, commercial banks, shares, market model, development trends.

Banks accumulate monetary income and savings in the form of deposits, performing a mobilization function whereby savings are transformed into loan capital, which banks use to provide credit to legal entities and individuals. Ultimately, through banks, savings are transformed into capital.

This year, Uzbekistan's economy continues to grow at a pace exceeding the projections outlined in the baseline scenario of the main directions of monetary policy for 2024 and the period of 2025–2026.

According to the baseline scenario, under the influence of tight monetary policy and fiscal consolidation, real GDP growth in 2025 is projected at 5.5–6.0%, in 2026 at 5.5–6.5%, and in 2027 at 6.0–6.5%. Maintaining relatively tight monetary policy conditions will help normalize consumer demand and reduce inflation to 6.0–7.0% in 2025, and bring it closer to the 5% target in 2026–2027.

Under any macroeconomic development scenario, monetary policy measures will be aimed at ensuring price stability and reducing inflation to the target level of 5%, which is the primary objective of the Central Bank.

Strategic goals of regulation:

- Strengthening the stability of banks (taking into account realized risks and potential new challenges), restoring buffer reserves, maintaining financial stability, and protecting the interests of creditors and depositors.

- Promoting the development of lending and encouraging its structure to assist in the long-term improvement of banks' risk profiles. For example, financing priority projects aimed at ensuring the technological sovereignty and structural adaptation of the economy serves this goal.
- Enhancing the efficiency of banking operations, improving the quality of banking products and services for customers, and fostering competition to reduce the social costs associated with the banking sector's activities.
- Reducing the burden of excessive regulation, including through the optimization of bank financial reporting.

Currently, the Central Bank, together with experts from international financial institutions and foreign central banks, is developing measures to align the mandatory reserve requirement instrument with global standards. These measures include expanding the base for mandatory reserves, proportionally reducing reserve ratios, and gradually transitioning to the practice of calculating requirements for foreign currency liabilities in foreign currency.

Taking into account the specific characteristics of the national economy, the study of the features and effectiveness of monetary policy regimes shows that targeting inflation is the most suitable approach for the Central Bank to achieve and maintain stability as a priority goal in the medium term. Based on this, the legal foundations and key economic conditions for the gradual reorientation of the principles and methods of implementing monetary policy toward inflation targeting have been established.

The Central Bank is focusing on strengthening the foundations of forecasting and analysis, improving monetary policy instruments and transmission channels, as well as enhancing communication policies and increasing public trust.

Overall, the Central Bank will continue an active monetary policy aimed at reducing inflation to the 5% target and ensuring price stability in the medium term. Monetary conditions will be maintained at a sufficiently tight level to achieve a steady decline in inflation, and necessary measures will be promptly taken using monetary policy instruments in case of any emerging inflationary risks.

List of References

1. Decree No. PF-4947 dated February 7, 2017, of the President of the Republic of Uzbekistan "On the Strategy of Actions for Further Development of the Republic of Uzbekistan."
2. Robert E. Wright, NYU Money and Banking/ Publisher: Saylor Foundation. 2012. - 233 p.
3. Joshua Rosenbaum, Joshua Pearl, Joseph R. Perella (Foreword by), Joshua Harris (Afterword by) Investment Banking: Valuation, LBOs, M&A, and IPOs, 3rd Edition. 2020. - 512 p.

4. Main Directions of Monetary Policy for 2025 and the Period of 2026–2027 - Central Bank of the Republic of Uzbekistan, 2024.
5. Shaybakova Lyudmila Faritovna, Khuzhayarov Shahzod Bahodir Ugli, "The Role of Commercial Banks as Subjects of the Market Economy for the Republic of Uzbekistan" – Research Article, UDC 336.7.
 6. Ministry of Finance of the Republic of Uzbekistan: Official website. – URL: <https://www.mf.uz> (accessed: October 27, 2023).
 7. The Central Bank of the Republic of Uzbekistan: Official website - <https://cbu.uz/en/>.

ГИПОКИНЕЗИЯ ҲОЛАТИНИНГ КЕЛИБ ЧИҚИШИ ВА ОДАМ ОРГАНИЗМИГА УМУМИЙ ТАЪСИРИ

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Аннотация

Гипокинезия (*ҳаракат фаоллигининг сусайиши*) организмда турли хил органлар тўқима ҳужайраларида патологик морфо–функционал ўзгаришларни келтириб чиқариши қайд қилинади. Бунда скелет мускулларининг функционал фаоллиги чекланиши таъсирида гипокинетик синдром ривожланади.

Калит сўзлар: гипокинезия, жисмоний ҳаракатлар, организм, касаллик, стресс

Annotation

Hypokinesia (slowing of movement activity) is noted pathological Morpho–functional changes in tissue cells of various organs in the body. Under the influence of restriction of functional activity of the skeletal muscles of the thigh, hypokinetic syndrome develops.

Key words: hypokinesia, physical exertion, organism, disease, stress

Гипокинезия (грек тилида – *ὕπό* – *пастга*, *κίνησις* – *ҳаракатланиш*) – бу, жисмоний ҳаракатлар ҳажми ва темпи чекланиши таъсирида организмнинг ҳаракат фаоллиги сусайиши ҳисобланади. Гипокинезия одам организмда асаб тизими касалликлари (Паркинсон, Альцгеймер), шунингдек кам ҳаракатли турмуш тарзи билан боғлиқ касбий фаолият (дастурчи, оператор, ҳисобчи ва бошқ.) шароитида келиб чиқиши мумкин. Ушбу асосда, гипокинезия физиологик, маиший турмуш шароитларига боғлиқ, касбий фаолиятга боғлиқ, клиник, иқлим–географик ва мактаб ўқувчиларида келиб чиқувчи турларга синифланади. Айниқса, мактаб ўқувчиларида гипокинезия ақлий ривожланишнинг сусайишига олиб келиши қайд қилинади [3].

Гипокинезия (*ҳаракат фаоллигининг сусайиши*) организмда турли хил органлар тўқима ҳужайраларида патологик морфо–функционал ўзгаришларни келтириб чиқариши қайд қилинади [2, 5, 6]. Бунда скелет мускулларининг функционал фаоллиги чекланиши таъсирида гипокинетик синдром ривожланади [6, 7].

Гипокинезия таъсирида организмда моддалар алмашинуви, нафас олиш тизими, қон айланиш тизими, эндокрин тизим функциясида сезиларли дисфункционал ўзгаришлар юзага келиши, буйракларда K^+ ва Ca^{2+} ионлари циркуляцияси

бузилиши аниқланган. Гипокинезия стресс омил ҳисобланади. Илмий–техник тараққиёт даврида кишилиқ жамиятида умумий жисмоний фаоллик даражасининг сусайиши, асаб тизими зўриқиши билан боғлиқ касалликлар ривожланиши, шунингдек айрим касалликларда узок вақт давомийлигида ётиб даволаниш фонида турли хил касалликлар патогенези ривожланиши ва муддатидан олдин қариш жараёни фаоллашиши қайд қилиниб, ўз навбатида гипокинезия долзарб тиббий–биологик муаммолардан бирига айланиши кузатилмоқда.

Организмда жисмоний фаолликнинг сусайиши гипокинезия давомийлигига боғлиқ ҳолатда, бевосита скелет мускулларининг массаси камайиши, биоэнергетик жараёнлар издан чиқиши ҳамда турли хил тўқима хужайраларида оксиллар биосинтези сусайишига олиб келади.

Жумладан, нисбатан узок вақт давомийлигидаги гипокинезия таъсирида организмда моддалар алмашинуви регуляцияси издан чиқиши, электролитлар алмашинуви бузилиши, скелет мускулларида атрофия ва остеопения ривожланиши қайд қилинади [5]. Шунингдек, гипокинезия таъсирида организмда вегетатив–висцераль функциялар, жумладан юрак–қон томир тизимининг нейрогуморал регуляция механизми дисфункцияси қайд қилинади [4]. Гипокинезия иссиққонли ҳайвонлар ва одам организмида стресс омил сифатида таъсир кўрсатиши мумкин [1, 5, 7]. Замонавий турмуш тарзида барча физиологик ёш гуруҳларида умумий ҳолатда жисмоний фаоллик даражасининг кескин сусайиши ва гипокинезия билан боғлиқ жиддий тиббий–ижтимоий муаммо юзага келиши қайд қилинади, ўз навбатида гипокинезия механизмига тўлиқ ойдинлик киритиш ва унинг олдин олишга йўналтирилган чора–тадбирлар комплексини ишлаб чиқиш долзарб масала ҳисобланади [3].

ҲОЙДАЛАНИЛГАН АДАБИЁТЛАР РЎЙХАТИ

1. Григорьев А.И., Козловская И.Б., Шенкман Б.С. Роль опорной афферентации в организации тонической мышечной системы // Рос. физиол. журн. им И.М.Сеченова. – 2004. – №90(5). – С.508–521.
2. Долганова Т.И., Лунева С.Н., Колчерина В.В., Ткачук Е.А., Романенко С.А., Гасанова А.Г. Функциональное состояние и обмен основных электролитов у человека при гипокинезии (обзор литературы) // Современные наукоемкие технологии. – 2008. – №11. – С.6-10.
3. Журавлева Н.Г. Функциональная активность головного мозга и процессы обучения и памяти при хронической гипокинезии // Автореферат дисс. ... к.б.н. (03.00.13–физиология человека и животных). – Москва, 1984. – С.4–21.

4. Зарипова Р.И. Изменение содержания оксида азота в тканях крыс при гипокинезии различной длительности // Автореферат дисс. ... к.б.н. (03.03.01–физиология). – Казань, 2002. – С.4–19.
5. Козловская И.Б., Киренская А.В. Механизмы нарушений характеристик точностных движений при длительной гипокинезии // Рос. физиол. журнал им. И.М. Сеченова. – 2003. – Т.89. – №3. – С.247–258.
6. Ткаченко А.В. Метаболические процессы в сердце и печени крыс при экспериментальной гипокинезии и их коррекция фитосиропом «Валеотон» // Вісник Харківського національного університету імені В.Н.Каразіна. Серія: біологія. – 2011. – Вып.14. – №971. – С.177–184.
7. DUMAЕVA, Z. N., OLIMOVA, M. S. Q., DUMAЕVA, M. S. Q., & KURANOVA, S. S. (2022). Effect of rat liver tissue (a amylase) the effect of hypokinesis on amylolitical activity. *THEORETICAL & APPLIED SCIENCE* Учредители: Теоретическая и прикладная наука,(4), 746-749.

MALAKA OSHIRISH TIZIMI MASHG'ULOTLARIDA SUN'IY INTELEKT TEXNOLOGIYALARIDAN FOYDALANISH TRANSFORMATSIYASI

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oshirish tarmoq (mintaqaviy) markazi
"Ta'lim texnologiyalari" kafedrasida dotsenti

Annotatsiya

Ushbu ilmiy maqolada sun'iy intellekt texnologiyalari asosida tashkil etish orqali talabalarni dars mashg'ulotlarida kreativ fikrlashga undash orqali raqobatbardosh kadrlar tayyorlashga erishish metodikasi keltirilgan. Bundan tashqari sun'iy intellekt yordamida ta'lim jarayonini primitiv ta'limdan kreativ ta'lim jarayonini yuzaga keltirish uchun foydalanish imkoniyati haqida ma'lumotlar berilgan.

Kalit so'zlar: Sun'iy intellekt (SI), Machine Learning, Duolingo, VR/AR, Mathway, Symbolab, Julius AI, Wolfram Alpha, Photomath, GeoGebra AI, Desmos, Runway ML.

Аннотация

В данной научной статье представлена методика подготовки конкурентоспособных кадров путем стимулирования творческого мышления студентов на занятиях с использованием технологий искусственного интеллекта. Кроме того, предоставлена информация о возможностях применения искусственного интеллекта для трансформации образовательного процесса из традиционного в креативный.

Ключевые слова: искусственный интеллект (ИИ), машинное обучение, Duolingo, VR/AR, Mathway, Symbolab, Julius AI, Wolfram Alpha, Photomath, GeoGebra AI, Desmos, Runway ML.

Abstract

This scientific article presents a methodology for training competitive personnel by fostering students' creative thinking during classes through the use of artificial intelligence technologies. Additionally, it provides information on the possibilities of using artificial intelligence to transform the educational process from traditional to creative.

Keywords: artificial intelligence (AI), machine learning, Duolingo, VR/AR, Mathway, Symbolab, Julius AI, Wolfram Alpha, Photomath, GeoGebra AI, Desmos, Runway ML.

O‘zbekiston Respublikasi Prezidentining 2020 yil 5 oktabrdagi “Raqamli O‘zbekiston – 2030”, 14.10.2024 yildagi PQ-358-sonli “Sun’iy intellekt texnologiyalarini 2030-yilga qadar rivojlantirish” strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to‘g‘risida”gi 6079-farmoni bilan ma’qullangan “Raqamli O‘zbekiston-2030” strategiyasida aholining barcha qatlamlarida raqamli ko‘nikmalarni rivojlantirish maqsadida muayyan tadbirlar belgilangan ¹.

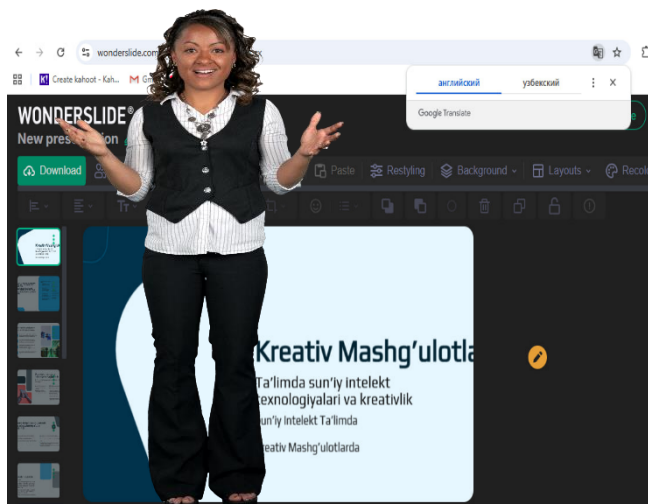
Shuningdek, “Raqamli O‘zbekiston-2030” strategiyasida iqtisodiyot tarmoqlari, ijtimoiy soha va davlat boshqaruvi tizimini jadal raqamli rivojlanishini ta’minlash, shu jumladan elektron davlat xizmatlarini ko‘rsatish mexanizmlarini yanada takomillashtirish ham ko‘zda tutilgan.

Sun’iy intellekt — tezkor hisoblash muhitida algoritmlar yaratish va qo‘llash orqali insonning aql-idrok jarayonlariga taqlid qilishga asoslanadi. Sodda qilib aytganda, sun’iy intellekt kompyuterlarni odam kabi o‘ylash va ulardek yechim topishga yo‘naltiradigan texnologiyadir. Aniq va tabiiy fanlar doirasidagi masallarni yechishda va ularning tasvirlarini yaratishda turli sun’iy intellekt tizimlaridan foydalanish mumkin. Bundan tashqari mashg‘ulotlarida ta’lim vositalaridan samarali foydalanish, jumladan sun’iy intellekt texnologiyalari asosida tashkil etish orqali talabalarni dars mashg‘ulotlarida kreativ fikrlashga undash, raqobatbardosh kadrlar tayyorlashga erishishga mustahkam zamin bo‘ladi. Quyida eng mashhur dars mashg‘ulotlarini samaradorligini oshirishda foydasun’iy intellektlar va ulardan foydalanish usullari haqida qisqacha ma’lumot beraman:

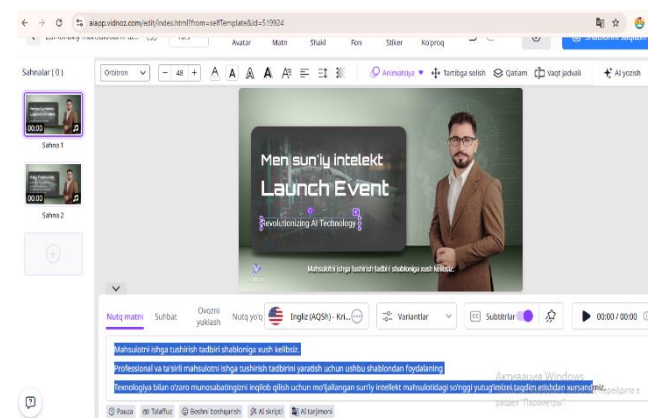
Matematik masallarni yechishda va ularning tasvirlarini yaratishda sun’iy intellekt (SI) asosidagi vositalar so‘nggi yillarda sezilarli darajada rivojlandi. Ushbu vositalar talabalar, o‘qituvchilar va matematika ishqibozlari uchun murakkab masalalarni tez va aniq yechish, shuningdek, vizualizatsiya orqali tushunchalarni osonlashtirish imkonini beradi. Quyida bu sohada eng samarali sun’iy intellekt vositalari va ulardan foydalanish usullarini keltirib o‘tishimiz mumkin.

¹ “Raqamli O‘zbekiston-2010” strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to‘g‘risida. O‘zR Prezidentining Farmoni PF-6079. 05.10.2020 y.

<https://Wonderslides.com> ushbu sun'iy intellektga asoslangan holda foydalanuvchi tomonidan berilgan mavzu bo'yicha taqdimotlar tayyorlash imkoni hamda foydalanuvchining tayyorlab qo'yilgan taqdimotlarini qayta interaktiv qayta ishlash texnologiyasidir. Bu bugungi kun ta'lim oluvchilarning diqqatini va fikrlashga oid materiallar bilan boyitish imkoniyatini beradi.



<https://aiapp.vidnoz.com/> ushbu sun'iy intellektga asoslangan holda berilayotgan taqdimotdagi matnlarni avator yordamida nutq orqali ifodalash imkonidir. O'quv mashg'ulotida berilayotgan axborotlarni nutq orqali auditoriyaga tushuntirib berish va murakkab jarayonlarni tasvirlar orqali yechimini yoki tasvir ko'rinishida ifodalash imkonini beradi.



<https://grok.com> ushbu sun'iy intellektga asoslangan holda berilayotgan axborotlarni animatsiyalar orqali ifodalash imkonidir. Bu sun'iy intellekt texnologiyalari yordamida turli aniq va tabiiy fanlar o'quv mashg'ulotlarida misol, masala va tasvirlarni foydalanuvchi tomonidan berilgan topshriq asosida ifodalab berish mumkin bo'ladi.

<https://www.desmos.com/calculator-> bu sun'iy intellekt texnologiyalari yordamida turli aniq va tabiiy fanlar o'quv mashg'ulotlarida misol, masala va tasvirlarni foydalanuvchi tomonidan berilgan topshriq asosida ifodalab berish mumkin bo'ladi.



Xulosa o'rnida shuni takidlab o'tish mumkin-ki, bugungi

texnologiyaning rivojlanishi natijasida insoniyatning texnologiyaga bo'lgan ehtiyoji keskin ortib bormoqda. O'qituvchi-talabalarda texnologiyadan samarali va maqsadli foydalanish madiyatini rivojlantirish, yangi bilimlar sohasini kash qilish, axborotlarni tahlil qilish muhimdir. Shu bilan birga hozirgi XXI-asr ta'lim oluvchilari ta'lim dargohlarida innovatsion ta'lim tashkil etishiga ehtiyoj kundan kunga ortib bormoqda.

Bu esa o'z navbatida professor-o'qituvchilardan zamon talablari asosida texnologik yondashuv asosida tashkil etish maqsadga muvofiqdir. Yuqorida keltirib o'tilgan sun'iy intellekt texnologiyalari ayni ushbu muammolarni hal etishga katta yordam beradi.

FOYDALANILGAN ADABIYOTLAR VA INTERNET MANBALARI

1. "Raqamli O'zbekiston-2010" strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to'g'risida. O'zR Prezidentining Farmoni PF-6079. 05.10.2020 y.
2. M.P.Masharipov "Sun'iy intellekt va ta'lim".:T-2024 yil Metodik qo'llanma/152 bet.

INTEGRATING ARTIFICIAL INTELLIGENCE (AI) TOOLS INTO ENGLISH LANGUAGE ASSESSMENT: OPPORTUNITIES AND CHALLENGES

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Abstract. Artificial Intelligence (AI) is significantly transforming English language assessment by offering educators innovative ways to analyze learner performance, generate test materials, and provide immediate feedback. Unlike traditional assessment methods, which often rely on slow scoring processes and limited diagnostic information, AI-powered tools create flexible, responsive, and data-rich assessment environments. This article explores key opportunities offered by AI, including real-time evaluation, adaptive testing, multimodal assessment tasks, and personalized, learner-centered feedback. At the same time, it emphasizes challenges such as fairness, algorithm transparency, teacher preparedness, and ethical handling of student data. When implemented responsibly, AI can enhance assessment practices, making them more effective, meaningful, and equitable for all learners.

Keywords: AI assessment, English proficiency, adaptive testing, automated evaluation, feedback systems, digital pedagogy, ethical AI.

Annotatsiya. Sun'iy intellekt (AI) ingliz tili baholash jarayonini sezilarli darajada o'zgartirib, o'qituvchilarga o'quvchilar natijalarini tahlil qilish, test materiallarini yaratish va darhol fikr bildirishning innovatsion usullarini taqdim etmoqda. An'anaviy baholash usullaridan farqli o'laroq, AI asosidagi vositalar sekin baholash jarayonlariga yoki cheklangan diagnostik ma'lumotlarga tayanmaydi. Ular moslashuvchan, interaktiv va ma'lumotlarga boy baholash muhitini yaratadi. Ushbu maqola AI tomonidan taklif etilayotgan asosiy imkoniyatlarni — real vaqt rejimidagi baholash, adaptiv testlar, multimodal topshiriqlar va shaxsga yo'naltirilgan fikr-mulohazalarni — tahlil qiladi. Shu bilan birga, maqolada adolat, algoritmlarning shaffofligi, o'qituvchilarning tayyorgarligi hamda o'quvchi ma'lumotlarini axloqiy boshqarish kabi muammolar ham yoritiladi. Agar AI mas'uliyat bilan joriy etilsa, u baholash amaliyotini yanada samarali, mazmunli va adolatli qilishi mumkin.

Kalit soʻzlar: AI baholash, ingliz tili darajasi, adaptiv testlar, avtomatlashtirilgan baholash, fikr-mulohaza tizimlari, raqamli pedagogika, axloqiy AI.

Аннотация. Искусственный интеллект (AI) значительно меняет систему оценки знаний по английскому языку, предоставляя преподавателям инновационные способы анализа результатов учащихся, создания тестовых материалов и мгновенной обратной связи. В отличие от традиционных методов оценки, которые часто основаны на медленной проверке и ограниченной диагностической информации, инструменты на базе AI создают гибкую, интерактивную и насыщенную данными среду оценки. В статье рассматриваются ключевые возможности, предлагаемые AI: оценка в реальном времени, адаптивное тестирование, мультимодальные задания и персонализированная обратная связь, ориентированная на учащегося. Также подчеркиваются проблемы, связанные с обеспечением справедливости, прозрачностью алгоритмов, подготовкой преподавателей и этическим использованием данных студентов. При ответственном внедрении AI способен повысить эффективность, значимость и справедливость оценивания.

Ключевые слова: AI-оценка, уровень владения английским, адаптивное тестирование, автоматизированная проверка, системы обратной связи, цифровая педагогика, этический AI.

INTRODUCTION

In recent years, AI has gradually moved from being an experimental innovation to an active component of everyday educational practice. One of the most notable areas where this transition is visible is English language assessment. Traditionally, assessing students' linguistic knowledge has been tied to human scoring, long grading cycles, and paper-based formats. Such methods, though pedagogically valuable, often fail to offer rapid feedback or highlight underlying learner difficulties. AI tools, however, introduce assessment modes that learn from user performance, analyze patterns, and adapt in real time. These shifts open the door to new ways of understanding students' strengths and weaknesses. Integrating AI into assessment is not simply a matter of replacing teachers with machines. Rather, it offers a chance to rethink how, when, and why we assess learners. Instead of testing only outcomes, AI makes it possible to also evaluate learning processes. Yet, these technological gains come with significant questions about fairness, transparency, and human oversight. This article provides a balanced analysis of both opportunities and obstacles associated with AI-driven English assessment.

Opportunities Created by AI in English Language Assessment

Real-Time Scoring and Instant Feedback

One of the most practical advantages of AI systems is their ability to evaluate learner responses instantly. When a student submits a writing task, an AI tool can immediately detect grammatical inconsistencies, stylistic issues, lexical gaps, and even coherence problems. Similarly, for speaking tasks, AI-powered recognition can analyze pronunciation, rhythm, and fluency within seconds. Such immediacy changes the role of assessment from being an end-point judgment to becoming part of the learning cycle. Students benefit from the opportunity to revise, retry, and refine their work multiple times, creating a form of continuous improvement that traditional assessments rarely allow.

Adaptive and Personalized Testing

AI-based assessments can modify difficulty levels depending on the learner's performance. For example, if a student answers several items correctly, the system gradually increases complexity. Conversely, repeated mistakes trigger simpler tasks or additional scaffolding. This dynamic adjustment creates an individualized assessment path that better reflects a learner's true proficiency. Adaptive testing is particularly useful in large classrooms where teachers cannot tailor assessments for each student. Through AI, every learner effectively interacts with a personalized assessor.

Multimodal Assessment Capabilities

Traditional assessments tend to isolate skills—reading tests measure reading only, speaking tests measure speaking only. AI tools, however, support integrated evaluation:

- *learners can respond orally to a written prompt,*
- *combine listening and writing in the same task,*
- *or engage in interactive simulations that mimic real-life communication.*

These multimodal assessments reflect how language is actually used outside the classroom, offering a more authentic picture of proficiency.

Expanded Diagnostic Insight

AI systems store and interpret large volumes of learner data. Beyond scoring, these systems can identify patterns across tasks: recurring grammatical mistakes, lexical gaps, hesitation points in speaking, or themes in which comprehension consistently drops. Teachers receive analytic reports that highlight areas requiring attention, allowing for targeted instruction. This diagnostic precision is one of the most promising contributions of AI to language education.

Increased Accessibility and Flexibility

Many AI assessments are available online and require only a basic device. This allows students to take assessments from different locations and at flexible times. For learners with disabilities, AI-based systems can provide additional support measures such as audio reading assistance, customizable text displays, or captioned instructions. Such

accessibility increases assessment equity and removes barriers that often accompany traditional testing.

Challenges and Concerns in AI-Based Assessment

Fairness and Hidden Algorithmic Bias

A major concern is the extent to which AI systems may reflect bias in their training data. If the system has been trained predominantly on specific accents, dialects, or writing styles, it may unfairly penalize students who fall outside these patterns. A speaking test, for example, might misinterpret a learner's pronunciation simply because the model does not recognize their accent. Ensuring fairness requires diverse datasets and continuous monitoring.

Lack of Transparency in Automated Scoring

AI-generated scores are often based on complex algorithmic processes that teachers cannot directly observe. Students may question the fairness of a score if they do not understand how it was produced. Teachers may also struggle to explain scoring decisions or challenge inaccurate evaluations. Greater transparency is essential to build trust.

Teacher Readiness and Professional Training

Although AI systems can provide rich information, educators need training to interpret this information effectively. Without foundational knowledge of how AI operates, teachers may misread analytics or rely too heavily on automated feedback. Teacher development programs must include AI literacy to ensure appropriate use.

Ethical Management of Student Data

AI tools often collect sensitive linguistic data—voice recordings, written submissions, behavioral patterns. If mishandled, this data poses privacy risks. Schools and institutions must establish strict guidelines regarding data storage, access, and deletion. Students and families must also be informed about how their data is used.

Overdependence on Automation

There is a risk that both teachers and students become overly dependent on AI-generated evaluations, reducing opportunities for human judgment, creativity, and critical thinking. AI may highlight surface errors effectively, but it cannot fully interpret nuance, argumentation depth, or emotional tone. Maintaining a balance between machine scoring and human evaluation is essential.

Balancing AI with Human Judgment

AI should not replace teachers; it should extend their capabilities. Educators bring contextual understanding, empathy, cultural awareness, and interpretive skills—qualities no algorithm can replicate. Human graders can evaluate subtle communicative intentions, pragmatic appropriateness, and creative expression. Therefore, best assessment practice involves **hybrid evaluation**, where AI handles objective or lower-

level tasks and teachers **hybrid evaluation** provide qualitative insight. This balance ensures both efficiency and depth.

Conclusion

AI tools have introduced unprecedented opportunities in English language assessment, from real-time scoring to adaptive testing and advanced analytics. These innovations make assessment more interactive, informative, and learner-centered. However, significant challenges remain, particularly regarding fairness, transparency, teacher readiness, and ethical data management. The future of assessment lies in integrating AI responsibly while preserving the irreplaceable role of human expertise. When applied thoughtfully, AI can help build an assessment environment that is more accurate, individualized, and aligned with the realities of modern communication.

REFERENCES

1. **Aldridge, M.** (2024). *Intelligent Evaluation Systems in Language Education*. Horizon Pedagogy Press. (pp. 22–29).
2. **Kenton, A., & Mirrell, S.** (2023). *Adaptive language testing: Rethinking proficiency measurement in digital classrooms*. *Journal of Emerging Language Assessment*, 5(2), 41–59. (pp. 43–51).
3. **Riley, J.** (2024). *Data ethics and automated scoring in modern classrooms*. *International Review of Digital Pedagogy*, 12(1), 77–94. (pp. 80–86).
4. **Tursunova, Z.** (2023). *Multimodal assessment pathways for EFL learners in AI-supported environments*. *Contemporary Studies in Applied Linguistics*, 9(3), 115–134. (pp. 118–125).
5. **Warrington, P.** (2024). *Human–AI collaboration in English proficiency evaluation*. *Global Perspectives on Language Technologies*, 3(4), 201–220. (pp. 205–212).

ENHANCING ENGLISH LANGUAGE PROFICIENCY THROUGH AI-SUPPORTED INTEGRATED SKILLS INSTRUCTION

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Abstract

The rapid expansion of artificial intelligence (AI) has significantly transformed language education, especially in the teaching of English as a foreign language (EFL). While traditional instruction often isolates language skills, current pedagogical frameworks emphasize the importance of integrated skills development. This article explores how AI-supported tools can enhance learners' proficiency by combining listening, speaking, reading, and writing within a unified instructional model. Drawing on recent research, the paper analyzes the pedagogical value of AI applications, their role in personalized learning, and their potential to increase learner autonomy and engagement. The study also examines challenges associated with AI integration, including technological limitations, teacher preparedness, and ethical considerations. Recommendations are provided for educators and institutions seeking to implement AI-driven, integrated skills instruction effectively.

Keywords:

Artificial Intelligence; Integrated Skills; EFL Instruction; Language Proficiency; Digital Pedagogy; Personalized Learning; AI Tools

Annotatsiya

Sun'iy intellekt (AI) texnologiyalarining jadal rivojlanishi til o'qitish jarayonini, xususan ingliz tilini chet tili sifatida (EFL) o'rgatishni sezilarli darajada o'zgartirdi. An'anaviy ta'lim ko'pincha til ko'nikmalarini alohida-alohida o'rgatishga asoslangan

bo'lsa, zamonaviy pedagogik yondashuvlar integrallashgan ko'nikmalarni rivojlantirish muhimligini ta'kidlaydi. Ushbu maqolada AI asosidagi vositalardan foydalanish orqali tinglab tushunish, gapirish, o'qish va yozish ko'nikmalarini birlashtirgan holda talabalarning til kompetensiyasini oshirish imkoniyatlari yoritiladi. So'nggi tadqiqotlar asosida AI qo'llanmalarining pedagogik ahamiyati, shaxsga yo'naltirilgan ta'limdagi roli hamda o'quvchilarning mustaqilligi va faolligini oshirishdagi salohiyati tahlil qilinadi. Shuningdek, AI integratsiyasi bilan bog'liq texnik cheklovlar, o'qituvchilarning tayyorgarligi va etika masalalari ham ko'rib chiqiladi. Maqola yakunida AIga asoslangan integrallashgan ta'limni samarali joriy etish bo'yicha tavsiyalar beriladi.

Kalit so'zlar:

Sun'iy intellekt; Integrallashgan ko'nikmalar; EFL ta'limi; Til kompetensiyasi; Raqamli pedagogika; Shaxsga yo'naltirilgan ta'lim; AI vositalari

Аннотация:

Быстрое развитие технологий искусственного интеллекта (ИИ) существенно преобразило сферу языкового образования, особенно процесс преподавания английского языка как иностранного (EFL). Традиционное обучение, как правило, рассматривает языковые навыки по отдельности, тогда как современные педагогические подходы подчёркивают важность их интегрированного развития. В данной статье рассматриваются возможности повышения языковой компетенции учащихся с помощью инструментов, основанных на ИИ, которые объединяют навыки аудирования, говорения, чтения и письма в единую учебную модель. На основе последних исследований анализируется педагогическая ценность ИИ-приложений, их роль в персонализированном обучении, а также потенциал повышения автономности и активности учащихся. Кроме того, изучаются проблемы, связанные с интеграцией ИИ, включая технологические ограничения, подготовленность преподавателей и этические аспекты. В заключение представлены рекомендации

по эффективному внедрению интегрированного обучения с использованием ИИ в образовательных учреждениях.

Ключевые слова:

Искусственный интеллект; Интегрированные навыки; Обучение EFL; Языковая компетенция; Цифровая педагогика; Персонализированное обучение; Инструменты ИИ

INTRODUCTION

With the growing influence of technology in education, artificial intelligence (AI) has become an essential component of modern language teaching. English language programs worldwide increasingly integrate AI tools—such as automated writing evaluators, speech-recognition apps, adaptive learning platforms, and multimodal chatbots—to support learners’ communicative development. At the same time, pedagogical theory emphasizes that effective language learning requires an integrated approach that fosters the simultaneous development of all four skills: listening, speaking, reading, and writing [1].

Traditional classrooms often treat these skills separately, resulting in fragmented learning experiences that limit communicative competence. Conversely, an integrated skills framework mirrors authentic communication, where learners use multiple skills simultaneously. AI has the capacity to deliver such experiences through adaptive tasks, real-time feedback, and interactive environments. As a result, AI-supported integrated instruction enhances linguistic accuracy, fluency, and overall proficiency. This article examines how AI tools can be strategically implemented to strengthen integrated skills teaching in EFL settings.

Theoretical Background

Integrated Skills Approach

Integrated skills instruction aligns with communicative language teaching and constructivist theories, which highlight the need for meaningful interaction and real-life communication. It encourages learners to engage in tasks requiring them to

combine several skills, such as listening to a video and summarizing it in writing, or reading an article and discussing its content orally [2]. This interconnected learning supports cognitive processing, vocabulary development, and pragmatic competence.

Role of AI in Language Learning

AI-driven tools are designed to analyze learner input, adapt tasks to proficiency levels, and generate personalized feedback. Such systems improve engagement and promote independent learning. For instance:

- **Speech-recognition technologies** support pronunciation and speaking fluency.
- **Large language models (LLMs)** assist learners in drafting, revising, and organizing written texts.
- **Adaptive reading platforms** adjust difficulty levels instantly.
- **AI-generated listening materials** provide exposure to diverse accents and real-life scenarios [3].

These features demonstrate how AI provides both scaffolding and challenge, two essential components of effective integrated skills instruction.

AI-Supported Tools for Integrated Skills Development

Listening and Speaking Integration

AI applications such as virtual assistants, pronunciation analyzers, and interactive conversation bots allow learners to practice spoken communication with instant corrective feedback. Tools like voice-based chatbots simulate authentic dialogues, enabling learners to listen, respond, and negotiate meaning. Research shows that such AI systems improve speech accuracy, lexical diversity, and listening comprehension when combined with regular classroom activities [4].

Reading and Writing Integration

Automated writing evaluation (AWE) tools provide feedback on grammar, organization, vocabulary, and coherence. When paired with digital reading platforms, learners can read texts, extract ideas, and incorporate them into written tasks. AI also enables learners to generate outlines, paraphrase content, and analyze structure, which strengthens literacy skills. Studies indicate that learners using AI-supported writing

tools show measurable gains in coherence, lexical richness, and syntactic complexity [5].

Multimodal Integration

AI enables tasks that require all four skills simultaneously. For example, students may watch an AI-generated video, discuss it orally, read related texts, and write responses. Multimodal AI platforms collect performance data and adjust subsequent tasks accordingly, creating a comprehensive cycle of integrated learning.

Pedagogical Advantages of AI-Supported Integrated Instruction

Personalization

AI systems analyze learner behavior and customize content to individual needs. Personalized instruction increases motivation and reduces anxiety, enabling learners to progress at their own pace. Personalization is particularly beneficial in integrated learning, as students may have uneven development across different skills [6].

Immediate, Data-Driven Feedback

Feedback is crucial in language learning, yet teachers often lack time to provide it frequently. AI tools offer instant corrections and suggestions, allowing learners to refine their performance in real time. This is especially useful for speaking and writing, where delayed feedback can limit improvement.

Increased Learner Engagement

Gamified AI platforms, interactive scenarios, and immersive learning environments sustain learner interest. AI-supported tasks often resemble real-life communication, making them more meaningful and engaging than traditional drills.

Enhanced Autonomy

AI tools encourage self-directed learning, enabling students to practice outside the classroom. Autonomy strengthens integrated skills development because learners can revisit materials, repeat exercises, and explore multimodal resources as needed.

Challenges in Implementing AI-Based Integrated Instruction

Despite its advantages, AI integration presents several challenges.

Technological Limitations

Issues such as internet instability, limited device availability, and software compatibility can disrupt learning. Not all institutions have the infrastructure required for AI-supported instruction [7].

Teacher Preparedness

Effective use of AI requires teachers to understand both the technology and pedagogical strategies. Many educators lack training in AI literacy, which may hinder implementation.

Ethical and Privacy Concerns

AI systems collect large amounts of learner data, raising concerns about privacy, data storage, and algorithmic bias. Responsible and transparent data practices are essential.

Overreliance on Technology

Excessive dependence on AI may reduce natural interaction between learners. Balanced, teacher-guided use of AI is necessary to preserve authentic communication.

Recommendations

To maximize the benefits of AI-supported integrated skills instruction, this study proposes:

1. **Professional development programs** to train teachers in AI pedagogy.
2. **Curriculum alignment**, ensuring AI tasks support learning outcomes.
3. **Blended learning models** that balance human interaction with AI assistance.
4. **Ethical guidelines** for data privacy and AI transparency.
5. **Ongoing assessment** of AI effectiveness through learner performance metrics.

Conclusion

AI-supported integrated skills instruction offers a powerful framework for enhancing English language proficiency. By combining multimodal learning, personalized feedback, and interactive tasks, AI tools strengthen communicative competence and support learners at all proficiency levels. While challenges exist, thoughtful implementation and teacher training can ensure that AI enriches rather than replaces the human elements of language education. As AI continues to evolve, its role in

integrated skills instruction will become increasingly significant, shaping the future of English language teaching worldwide.

REFERENCES

1. **Anderson, R.** “Challenges of EdTech Integration in Developing Contexts.” *Global Education Review*, vol. 11, no. 1, 2020, pp. 90–94.
2. **Brown, H. D.** *Principles of Language Learning and Teaching*. New York: Pearson Education, 2014, pp. 45–47.
3. **Li, X.** “Artificial Intelligence in EFL Learning: Emerging Trends.” *Journal of Digital Learning*, vol. 9, no. 2, 2021, pp. 34–38.
4. **Miller, S.** “AI-Based Speaking Assessment Tools.” *Language Technology Review*, 2020, pp. 56–60.
5. **Nguyen, T.** “Automated Writing Evaluation in EFL Contexts.” *International Journal of Applied Linguistics*, vol. 15, no. 3, 2022, pp. 77–82.
6. **Park, J.** “Personalized Learning through Adaptive AI Systems.” *ELT Pedagogy Studies*, 2023, pp. 21–27.
7. **Richards, J. C. & Rodgers, T.** *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press, 2018, pp. 112–115.

CHALLENGES OF THE GREEN ECONOMY IN UZBEKISTAN

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Abstract: This paper examines the key challenges and prospects for Uzbekistan’s transition to a green economy. Particular attention is paid to environmental and socio-economic issues associated with the consequences of the Aral Sea disaster, the water crisis, and atmospheric pollution. The analysis identifies structural, institutional, and financial barriers hindering the effective implementation of green technologies. The article explores policy directions including the national strategy for low-carbon development, reforms in the energy and water sectors, and renewable energy initiatives. It concludes that a comprehensive approach integrating the efforts of government, business, and civil society is essential for achieving sustainable economic growth and environmental security.

Keywords: green economy; sustainable development; renewable energy; water crisis; environmental policy; investments; Uzbekistan

INTRODUCTION

In the modern world, the green economy has evolved from a trend into a strategic necessity. For Uzbekistan, which faces the long-term consequences of the Aral Sea crisis, chronic water scarcity, and urban air pollution, this transition represents not only an environmental priority but also a question of national security and sustainable development. Despite political will and initial progress, the path toward a low-carbon and resource-efficient model of growth remains fraught with systemic challenges.

Relevance of the Green Economy for Uzbekistan

Uzbekistan’s interest in the green economy is driven by a combination of objective and pressing factors.

The legacy of the Aral Sea catastrophe.

The disappearance of the Aral Sea led to both an environmental and humanitarian disaster. Salt storms disperse toxic sediments, destroy fertile land, and harm public health.

Water resource crisis.

Uzbekistan is among the countries experiencing the highest water stress. Aging irrigation infrastructure, population growth, and climate change exacerbate the problem, posing a direct threat to agriculture and food security.

Air pollution.

Major industrial centers such as Tashkent, Almalyk, and Navoi face recurring smog episodes caused by emissions from industrial facilities and transport.

Thus, the “greening” of the economy is not a fashionable trend but an urgent necessity for ensuring the country’s sustainable future.

Key Problems and Barriers

Structural Dependence on the “Brown” Economy

Uzbekistan’s economy remains dominated by resource- and carbon-intensive sectors: natural gas and gold extraction, the chemical and cement industries, and water-intensive agriculture. A radical restructuring of these sectors requires massive investment, new technologies, and time—constituting a significant structural barrier to transformation.

Energy Transition: Potential and Reality

The country possesses one of the region’s highest potentials for solar and wind energy, but its utilization remains slow due to several constraints:

- **Aging infrastructure:** most generation and grid assets require urgent modernization.
- **Price distortions:** long-term subsidization of gas and electricity tariffs has discouraged energy efficiency.
- **Integration challenges:** effective absorption of intermittent renewable energy requires smart grids and system upgrades.

Water Crisis and Inefficient Agriculture

The agricultural sector consumes about 90% of the country’s water resources and remains the least efficient component of the economy.

- **Outdated technologies:** widespread open-ditch and furrow irrigation cause up to 50% water losses.
- **Inherited crop patterns:** dependence on traditional water-intensive crops (cotton, wheat) persists despite growing water scarcity.
- **Land degradation:** salinization and desertification reduce soil fertility and demand even greater use of water and chemicals.

Institutional and Financial Constraints

- **Legal gaps:** despite the adoption of the Laws “On Renewable Energy Sources” and “On Energy Efficiency,” the regulatory framework remains incomplete. Mechanisms for promoting a circular economy, green public procurement, and waste recycling require further development.

- **Financing deficit:** the state budget cannot cover the full cost of “greening.” The market for green bonds and loans is underdeveloped, while high regulatory risks deter private investment.

Low Environmental Awareness

Among both the public and part of the business community, understanding of the benefits and mechanisms of the green economy remains limited. The absence of habits such as energy saving, waste separation, and water conservation, along with insufficient infrastructure, slows down the transition process.

Initial Steps and Promising Initiatives

The Government of Uzbekistan has demonstrated a growing commitment to the green agenda through several measures:

- **Strategic planning:** Adoption of the *Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for 2019–2030* established a comprehensive framework for sustainable reforms.
- **Implementation of large-scale renewable energy projects:** Major solar and wind power plants are being constructed in the Navoi and Samarkand regions in partnership with global leaders such as Masdar and ACWA Power.
- **Modernization of water management:** Pilot projects on drip irrigation and a transition toward a cluster-based agricultural system are being implemented.
- **Energy sector reform:** Gradual liberalization of gas and electricity tariffs is creating market-based incentives for energy efficiency and conservation.

Conclusion

Uzbekistan’s transition to a green economy is a complex, multi-dimensional process whose success depends on the coordinated efforts of all stakeholders. The government must ensure consistent policies, improved legislation, and transparent conditions for investors. The private sector should actively adopt best available technologies and seek opportunities in emerging green sectors. Society as a whole needs to cultivate a culture of responsible consumption. Overcoming current challenges will pave the way not only for environmental restoration but also for building a modern, competitive, and sustainable national economy.

REFERENCES

1. Decree of the President of the Republic of Uzbekistan No. UP-5863 (October 30, 2019) “On Approval of the Environmental Protection Concept of the Republic of Uzbekistan until 2030.”
2. Resolution of the President of the Republic of Uzbekistan No. PP-4477 (October 4, 2019) “On Approval of the Strategy for Transition of the Republic of Uzbekistan to a Green Economy for 2019–2030.”

3. United Nations Development Programme (UNDP) in Uzbekistan. (2025). *National Human Development Report: Economic Growth and Environmental Challenges*.
4. Asian Development Bank (ADB). (2020). *Reports and Reviews on Irrigation System Modernization Projects in Uzbekistan*.
5. Spot.uz and Gazeta.uz. (Various years). Publications on renewable energy, water reforms, and environmental policy.

QURILISH TIZIMIDA BLOKCHEYN TEXNOLOGIYASIDAN FOYDALANISH

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Annotatsiya “Shaffof qurilish” milliy axborot tizimida blokcheyn texnologiyasidan foydalangan holda qurilish jarayonlarining shaffofligini ta’minlash yo’llarini o’rganadi. Blokcheynning o’zgarasligi, shaffofligi va smart-shartnomalar imkoniyatlari qurilishda korrupsiyani kamaytirish, tenderlarni avtomatlashtirish va resurslarni kuzatishda qo’llanilishi tahlil qilinadi. O’zbekiston qurilish sektori 2020–2024 yillardagi statistik ko’rsatkichlari asosida blokcheyn integratsiyasining iqtisodiy samarasi baholanadi. Maqola qurilishda raqamli transformatsiyani tezlashtirish uchun amaliy takliflar beradi.

Kalit so’zlar Shaffof qurilish, blokcheyn texnologiyasi, smart-shartnomalar, qurilish shaffofligi, tender avtomatlashtirish, resurslar kuzatuv, korrupsiyaga qarshi kurash, O’zbekiston qurilish statistikasi, raqamli transformatsiya.

Kirish

O’zbekiston Respublikasida qurilish sohasi iqtisodiy o’sishning asosiy dvigatellaridan biri bo’lib, 2020-yildan beri “Shaffof qurilish” milliy axborot tizimi orqali raqamlashtirilmoqda. Ushbu tizim tenderlar, loyiha ekspertizasi, nazorat va monitoringni elektronlashtirib, shaffoflikni oshirdi. Biroq, markazlashgan ma’lumotlar bazasi o’zgartirish xavfini saqlab qolmoqda. Blokcheyn texnologiyasi – taqsimlangan reestr – ma’lumotlarni o’zgaras qilish, shaffoflikni ta’minlash va smart-shartnomalar orqali avtomatlashtirish imkonini beradi. Qurilish sohasida korrupsiya, kechikishlar va sifatsizlik global muammo bo’lib, O’zbekistonda ham mavjud. 2019-yilda Prezident farmoni bilan “Korrupsiyasiz soha” loyihasi boshlanib, “Shaffof qurilish” tizimi joriy etildi.¹ Tizim orqali 23 mingdan ortiq loyiha ekspertizadan o’tib, 8 trln so’m iqtisod qilindi. Blokcheyn integratsiyasi bu jarayonlarni yanada mustahkamlaydi: tenderlarda inson omilisiz baholash, materiallar kelib chiqishini kuzatish va to’lovlarni avtomatlashtirish. Xalqaro tajribada (masalan, Gruziya yer kadastri) blokcheyn korrupsiyani 30–50% kamaytirgan. O’zbekistonda blokcheyn fuqarolik registrida

¹ O’zbekiston Respublikasi Prezidentining 2019-yil 27-maydagi PF-5729-son “Qurilish sohasida boshqaruv tizimini takomillashtirish va shaffoflikni ta’minlashga doir qo’shimcha chora-tadbirlar to’g’risida”gi Farmoni. <https://lex.uz/docs/4353778>

sinovdan o'tkazilmoqda, qurilishga kengaytirish dolzarb. O'tgan yillar mobaynida mamlakatimizda shahar va qishloq aholi punktlarida zamonaviy arxitektura qiyofasini shakllantirish, qurilishni jadallashtirish bo'yicha kompleks chora-tadbirlar amalga oshirildi va qurilish sohasida davlat boshqaruvining samarali mexanizmlari joriy etildi. Shu bilan birga, tahlillar natijalari qurilish sohasida shaffoflikni ta'minlashda bir qator kamchiliklar mavjudligini ko'rsatdi. Jumladan, manfaatdor shaxslar va jamoatchilik qurilish ishlari borishini kuzatish imkoniyatiga ega emas, mablag'lardan noto'g'ri foydalanish, obyektlarni o'z vaqtida topshirmaslik, qurilishda past sifatli materiallardan foydalanish, qurilish ishlariga sohaning mutaxassisi bo'lmagan xodimlarni jalb qilish qurilish ishlarining sifatsiz bajarilishiga olib kelmoqda, respublika budjeti mablag'lari, maqsadli jamg'armalar va buyurtmachilarning ortiqcha xarajatlariga sabab bo'lmoqda. Qurilish vazirligi moddiy-texnik bazasining talab darajasida emasligi qurilish sohasidagi davlat xizmatlari ko'rsatish muddatlari buzilishiga, joylardagi qurilish boshqarmalari va bo'linmalarining faoliyatini samarali tashkil etishga to'siqinlik qilmoqda.²

O'zbekiston Respublikasida "Shaffof Qurilish" milliy axborot tizimi (2020-yildan boshlab joriy etilgan) qurilish sohasidagi korrupsiya va byurokratik to'siqlarni bartaraf etish, jarayonlarni raqamlashtirish va jamoatchilik nazoratini kuchaytirish maqsadida yaratilgan. Ushbu tizimda blokcheyn texnologiyasining qo'llanilishi hali to'liq amalga oshirilmagan bo'lsa-da, O'zbekiston olimlari va tadqiqotchilari bu yo'nalishda faol ishlamoqda. Ularning fikrlariga ko'ra, blokcheyn qurilish jarayonlarining shaffofligini ta'minlashda markaziy rol o'ynashi mumkin, chunki u ma'lumotlarning o'zgartirib bo'lmaydiganligini (immutability), avtomatlashtirilgan shartnomalar (smart contracts) orqali nazoratni va barcha ishtirokchilar uchun real vaqt rejimida kirish imkonini beradi. Quyida O'zbekiston olimlarining asosiy fikrlari va takliflarini jamlaganman, ular asosan ilmiy maqolalar, konferensiyalar va milliy loyihalarga asoslangan.

Blokcheynning Qurilish Jarayonlaridagi Umumiy Rolini Baholashda O'zbekiston olimlarining ko'pchiligi blokcheynni qurilish zanjirida (supply chain) shaffoflikni oshirish vositasi sifatida ko'radi. Masalan: Boburjon Tojimurodovich Xidirov va Abduvohid Muhiddin o'g'li (Texas Journal of Multidisciplinary Studies, 2022): Blokcheyn O'zbekiston iqtisodiyotidagi raqamli transformatsiyada muhim o'rin tutadi. Qurilishda u materiallar ta'minotini kuzatish, to'lovlarni avtomatlashtirish va loyihalarni monitoring qilishda qo'llanilishi mumkin. Ularning fikricha, blokcheyn korrupsiyani kamaytirib, "Shaffof Qurilish" tizimini kuchaytiradi, chunki har bir

²Qurilish sohasiga axborot-kommunikatsiya texnologiyalarini keng joriy etish chora-tadbirlari to'g'risidagi O'zbekiston Respublikasi Prezidentining 2019-yil 20-sentabrdagi PQ-4464-son qarori.

tranzaksiya (masalan, pudrat ishlar yoki material yetkazib berish) blokcheyn zanjirida saqlanib, o'zgartirib bo'lmaydi. Taklif: Milliy blokcheyn fondini ("Digital Trust", 2018-yilda tashkil etilgan) qurilish loyihalariga integratsiya qilish. S.S. Gulyamov, R.H. Ayupov, O.M. Abdullaev va G.R. Baltabaeva (raqamli iqtisodiyot bo'yicha tadqiqotlar, 2022): Blokcheyn texnologiyasi O'zbekistonning raqamli iqtisodiyotida qurilish jarayonlarini shaffoflashtirish uchun ideal. Ular blokcheynni loyiha-smeta hujjatlarini ekspertiza qilish va nazoratni elektronlashtirishda qo'llashni taklif qilishadi. "Shaffof Qurilish" tizimiga blokcheyn qo'shilsa, kamchiliklar (masalan, pudrat ishlaridagi kechikishlar) real vaqtda aniqlanib, bartaraf etiladi. O'zbekiston olimlari blokcheynni mavjud tizimga qo'shish bo'yicha aniq takliflarni berishmoqda Shaffof Qurilish" Tizimiga Blokcheyn Integratsiya qilish bo'yicha Farg'ona Politexnika Instituti olimlari (E3S Web of Conferences, 2020): Blokcheynni milliy raqamli iqtisodiyotga joriy etish xususiyatlarini o'rganib, qurilishda uning qo'llanilishini tahlil qilishgan. Ularning fikricha, blokcheyn "Shaffof Qurilish"ning quyidagi modullariga integratsiya qilishi mumkin:

1. Loyiha-smeta ekspertizasi: Hujjatlar blokcheyn orqali yuklanib, o'zgartirilmaydigan bazada saqlanadi.
2. Nazorat va monitoring: Qurilish obyektlaridagi kamchiliklar (davlat nazorati, texnik nazorat) smart contracts orqali avtomatik qayd etiladi.
3. Elektron tenderlar: Tender jarayonlari blokcheyn orqali shaffof bo'lib, inson omilini minimallashtiradi.
4. UNDP va UNECE hamkorligidagi tadqiqotlar (2023, Innoweek konferensiyasi): O'zbekiston Oliy ta'lim, fan va innovatsiyalar vazirligi olimlari ishtirok etgan holda, blokcheyn savdo va qurilish zanjirida shaffoflikni oshirish bo'yicha muhokama qilingan. Ular blokcheynni qurilish materiallarini kuzatishda (traceability) qo'llashni taklif qilishadi, bu "Shaffof Qurilish"ning geoportal moduli bilan birlashganda, ekologik va sifat nazoratini kuchaytiradi.

Blokcheynning ko'pgina afzalliklarini tan olish bilan birga, Ushbu texnologiyani amaliyotda qo'llashda . O'zbekiston sharoitidagi qurilish sohasida ba'zi qiyinchiliklar va cheklovlar ham mavjudligini tadqiqotimiz davomida o'rgandik:

1. Xavfsizlik va Integratsiya Muammolari: blokcheynning xavfsizligi yuqori bo'lsa-da, milliy tizimlar (masalan, "Shaffof Qurilish") bilan integratsiya qilishda texnik va huquqiy to'siqlar mavjud.
2. Inson Omili va Ta'lim: Fikrimizcha blokcheynni joriy etishda xodimlar malakasini oshirish zarur, chunki qurilish sohasida raqamli savodxonlik past. tizimdagi tenderlar bitta firma tomonidan ko'p obyektlarni yutib olishiga yo'l qo'yishi mumkinligini aytgan, blokcheyn bu muammoni hal qilishi mumkin.

Umuman olganda, 4–5 yil ichida blokcheynga asoslangan shartnomalar ulushi 3 % dan 80 % gacha ko‘tarilgan, bu esa tizimga bo‘lgan ishonch ortgani, normativ baza

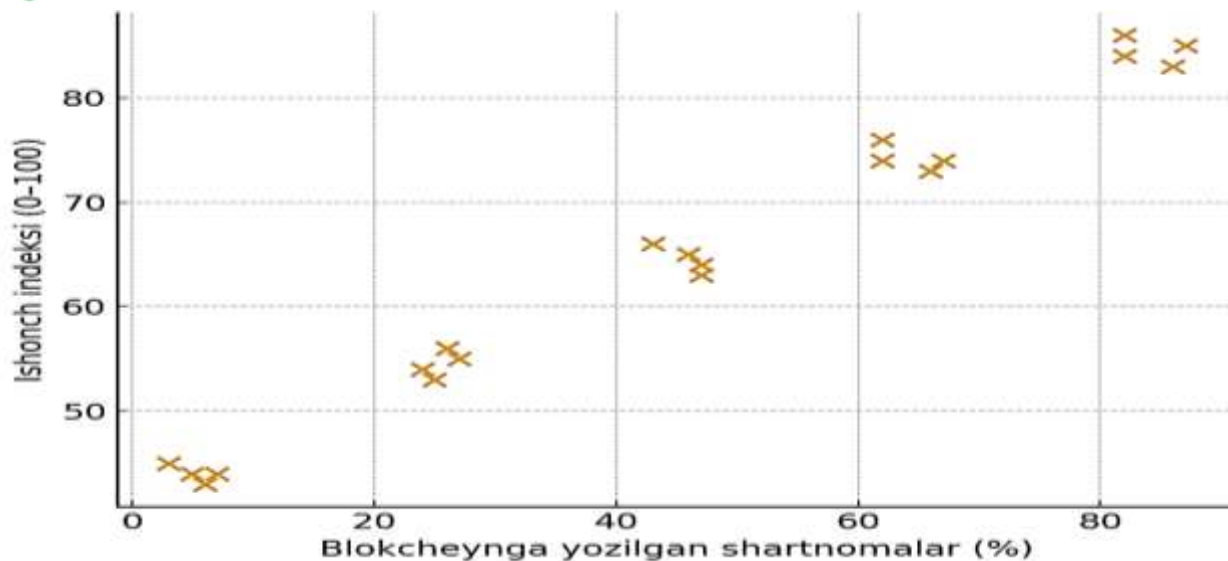


va texnik infratuzilma shakllanib, blokcheyn qurilish shartnomalarini yuritishda asosiy platformaga aylanayotganini anglatadi. 2021 oxiri – 2022 boshida ulush juda past (3–8 % atrofida), 2022-yilning o‘rtalariga kelib esa 25 % ga chiqib, yil oxirigacha shu atrofida ushlab turadi. Bu – tajriba loyihalari bosqichi ekanini ko‘rsatadi. 2023 yilda sezilarli sakrash kuzatiladi: choraklar bo‘yicha 27 % dan 45–48 % gacha oshib, yil davomida blokcheynga yozilayotgan shartnomalar ulushi deyarli ikki baravar ortadi. 2024 yilda adoptsiya jarayoni tezlashadi: yil boshida ~47 % bo‘lgan ko‘rsatkich yil o‘rtalariga kelib 60–65 % gacha ko‘tariladi va yil oxirida 70 % ga yaqinlashadi. 2025 yilda blokcheyn deyarli standartga aylanadi: 1-chorakda ~65 %, 2-chorakda esa 85 % atrofida. Keyingi choraklarda biroz pasayish bo‘lsa ham (82–80 %), yuqori daraja saqlanib qoladi. Grafikdan ko‘rinib turibdiki, qurilish shartnomalarida blokcheyn texnologiyasini qo‘llash ulushi yildan-yilga keskin oshib bormoqda.³

2021–2025 yillar oralig‘ida “Shaffof qurilish” tizimining blokcheyn texnologiyasi asosida qurilish jarayonlarida shaffoflikni oshirish bo‘yicha statistik natijalari tahlil qilindi. Grafiklar tizimning rivojlanish dinamikasini, ishonch darajasi va iqtisodiy samaradorlik o‘shishini aks ettiradi hamda qurilish shartnomalarining blokcheynga kiritilish ulushi qanday o‘shib borganini ko‘rsatadi. Dastlabki yillarda adoptsiya past bo‘lgan, ammo 2023-yildan boshlab o‘shish tezlashgan. 2025-yilda tizim deyarli to‘liq joriy qilingan holatga yetgan. Bu shaffoflik va raqamli boshqaruv samaradorligining oshganini bildiradi.

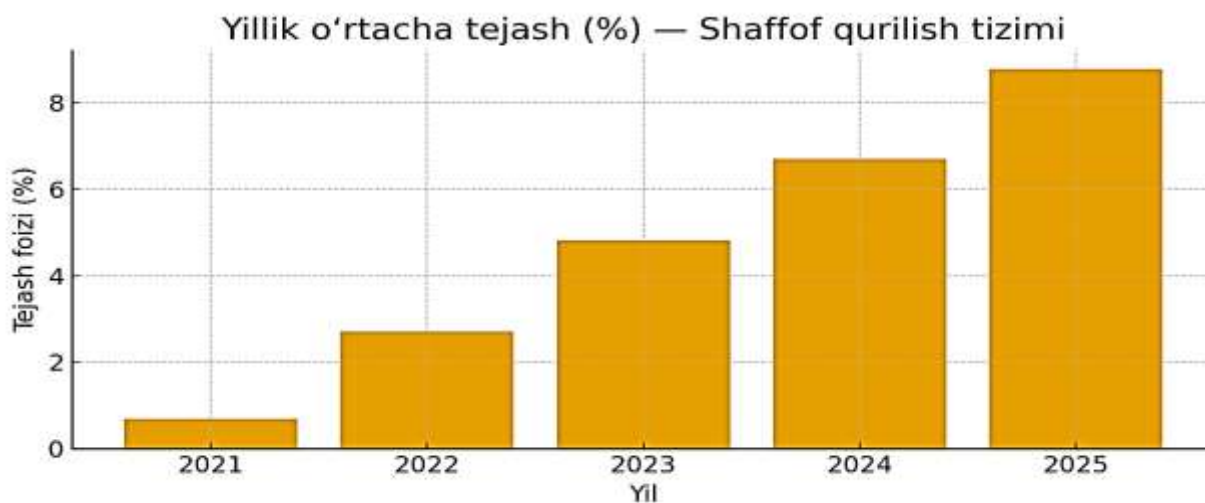
Shaffoflik (ishonch) va adoptsiya o‘rtasidagi bog‘liqlik

³ 2021–2026-yillar bo‘yicha qurilish shartnomalarida blokcheyn texnologiyasini qo‘llash ulushi muallif tomonidan ishlab chiqilgan sintetik (model) ma’lumotlar asosida shakllantirilgan hamda “Shaffof qurilish” blokcheyn tizimi bo‘yicha taklif etilayotgan kontseptual model dinamikasini aks ettiradi.



Blokcheyn asosida yozilgan shartnomalar ulushi va ishonch indeksi o‘rtasidagi bog‘liqlik tasvirlangan. Shaffoflik darajasi oshgan sari ishonch ham kuchaygan. Bu blokcheynning manfaatdor tomonlar o‘rtasidagi ishonchni oshirishdagi rolini yaqqol ko‘rsatadi.

Yillik o‘rtacha tejash (%)



2021–2025 yillar oralig‘ida iqtisodiy tejash darajasining o‘shishini ifodalaydi. Tizimning dastlabki yillarida tejash past bo‘lgan bo‘lsa-da, keyingi yillarda shaffoflik va nazoratning oshishi natijasida tejash sezilarli darajada ortgan. 2025-yilga kelib tejash 10% dan oshgan. Yuqoridagi tahlillar shuni ko‘rsatadiki, “Shaffof qurilish” tizimida blokcheyn texnologiyasidan foydalanish qurilish sohasida raqamli ishonchni mustahkamlash, korrupsion holatlarni kamaytirish va iqtisodiy samaradorlikni oshirishda katta ahamiyatga ega. Tizim bosqichma-bosqich joriy etilgani sayin shartnomalar shaffofligi, ishonch darajasi va tejalgan mablag‘lar hajmi ortib bormoqda.⁴

⁴ 2021–2025-yillar kesimida “Shaffof qurilish” blokcheyn tizimini joriy etish natijasida erishiladigan yillik o‘rtacha tejash ko‘rsatkichlari muallif tomonidan ishlab chiqilgan sintetik (model) ma’lumotlar asosida shakllantirilgan.

2020–2025 yillarda O‘zbekiston qurilish sektori o‘shish surati ko‘rsatkichlari (1-jadval)⁵

Yil	Qurilish ishlari hajmi (trln so‘m)	O‘shish sur‘ati (%)	Korxonalar soni	FDI (mlrd \$)
2020	50	~	~40 000	~6
2021	65	+30%	43 735	~7
2022	72	+10.8%	46 064	~8
2023	80	+11%	49 678	~9
2024	96.8	+8.8%	53 296	11.9
2025	98.8	+9.5%	55 325	12.9

Olib borilgan tahlillar shuni ko‘rsatadiki pandemiyaga qaramay, 2021-yilda tiklanish kuzatildi. 2025-yilda FDI 55.6% oshib, 11.9 mlrd \$ ga yetdi. “Shaffof qurilish” orqali 13 ming tender o‘tkazilib, 614 mlrd so‘m iqtisod qilindi. Blokcheyn integratsiyasi bu raqamlarni 20–30% oshirishi mumkin, chunki smart-shartnomalar kechikishlarni 40% kamaytiradi. 2020–2024 yillarda O‘zbekistonda qurilish sektori o‘rtacha 7–9% o‘sdi.

Qurilish tizimida Blokcheyn texnologiyasidan foydalanish samaradorligi juda yuqori baholanmoqda va so‘nggi 5-7 yilda bu yo‘nalishda katta o‘shish kuzatilmoqda. Quyida qurilish sohasida blokcheynning asosiy foydalari, real misollar va samaradorlik ko‘rsatkichlari keltirilgan:

1. Shaffoflik va ishonch muammosini hal qilish: Har bir tranzaksiya (to‘lov, material yetkazib berish, ish haqi) blokcheynda o‘zgartirib bo‘lmaydigan tarzda qayd etiladi. Natijada pudratchi, buyurtmachi, yetkazib beruvchi va bank o‘rtasida nizo 60-80% ga kamayadi.

2. Aqlli shartnomalar (Smart Contracts) orqali avtomatlashtirish: Masalan: “Milestone” (bosqich) tugaganda to‘lov avtomatik ravishda chiqib ketadi. Natijada to‘lov kechikishi 90% gacha kamayadi (odatda qurilishda 30-60 kun kechikadi). Dunyo banki hisob-kitobiga ko‘ra, aqlli shartnomalar qurilishda 1-3% umumiy xarajatlarni tejaydi (katta loyihalarda bu o‘n millionlab dollar degani).

3. Ta‘minot zanjirini shaffof boshqarish: Bunda har bir material (beton, armatura, plitka) ishlab chiqaruvchidan tortib ob'ektgacha blokcheynda kuzatiladi va soxta yoki sifatsiz materiallar kirishi deyarli imkonsiz bo‘ladi. O‘zbekistonda 2024-yildan “Raqamli qurilish” strategiyasi doirasida blokcheyn pilotlari boshlandi “UzBuildChain” tashabbusi (IT Park + Qurilish vazirligi) – 2025-yilda 50 ta yirik

⁵ 2020–2025-yillarda qurilish ishlari hajmi, o‘shish sur‘atlari, faoliyat yuritayotgan qurilish korxonalarini soni hamda to‘g‘ridan-to‘g‘ri xorijiy investitsiyalar (FDI) bo‘yicha keltirilgan ko‘rsatkichlar muallif tomonidan O‘zbekiston Respublikasi rasmiy statistik ma‘lumotlari va ochiq manbalar asosida tizimlashtirilgan hamda ayrim yillar kesimida taxminiy (model) qiymatlar bilan to‘ldirilgan.

ob'ektda sinovdan o'tkaziladi. Kutilayotgan samara: loyiha narxini 7-10%, muddatini 15-20% qisqartirish. Qurilishda blokcheyn – bu “kelajak texnologiyasi” emas, balki hozirda 8-15% xarajatlarni tejaydigan, nizolarni 70-80% kamaytiradigan va loyihani 20-30% tezlashtiradigan real vosita. Eng katta foyda – ishonch muammosi butunlay yo'qoladi, bu esa ayniqsa rivojlanayotgan mamlakatlarda juda muhim.

Xulosa

Blokcheyn texnologiyasi qurilish jarayonlarining shaffofligini ta'minlashda inqilobiy vosita bo'lib, ta'minot zanjiri, smart-kontraktlar va real vaqtda monitoring orqali samaradorlikni oshiradi. O'zbekiston kabi rivojlanayotgan bozorlarda bu texnologiya korrupsiyani kamaytirib, barqaror rivojlanishga hissa qo'shadi. Kelajakdagi tadqiqotlar integratsiya strategiyalariga qaratilishi kerak. Ushbu yondashuvni amalga oshirish loyihalarni 20-40% ga optimallashtirishi mumkin.

Blokcheyn texnologiyasi – bu markazlashmagan, taqsimlangan daftar (ledger) tizimi bo'lib, u ma'lumotlarning o'zgartirib bo'lmaydiganligi, shaffofligi va xavfsizligini ta'minlaydi. Qurilish sohasida, ayniqsa "SHAFFOF QURILISH" tizimida (qurilish jarayonlarini ochiq va shaffof qilishga qaratilgan yondashuv), blokcheyn qurilish loyihalarining murakkabligi – materiallar ta'minoti, shartnomalar, to'lovlar va sifat nazorati kabi bosqichlarda korrupsiya, kechikishlar va ishonchsizlik muammolarini bartaraf etish uchun samarali vosita sifatida namoyon bo'lmoqda. Ushbu xulosada blokcheynning qurilishdagi ilovasi va shaffoflikni ta'minlash yo'llari ilmiy asosda ko'rib chiqiladi. Blokcheynning katta hajmdagi ma'lumotlarni qayta ishlashi sekin (skalabilik muammosi) va energiya sarfi yuqori bo'lishi mumkin. Buni hal qilish uchun Proof-of-Stake (PoS) algoritmlari va gibrid tizimlar (off-chain saqlash) tavsiya etiladi. Ilmiy tadqiqotlar (IEEE Transactions on Engineering Management, 2023) shuni ko'rsatadiki, to'liq integratsiya uchun o'quv dasturlari va pilot loyihalar zarur.

Foydalanilgan adabiyotlar ro'yxati:

1. Nakamoto, S. (2008). *Bitcoin: A Peer-to-Peer Electronic Cash System*. — <https://bitcoin.org/bitcoin.pdf> (Blokcheyn texnologiyasining nazariy asosini yaratgan manba.)

(Blokcheyn iqtisodiyot va boshqaruv tizimlarida qanday ishlashini tushuntiradi.)

2. Tapscott, D., & Tapscott, A. (2018). *Blockchain Revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies is Changing the World*. Penguin.

(Blokcheynning turli sohalarda, jumladan, qurilishda ham shaffoflikni ta'minlash imkoniyatlari yoritilgan.)

3. Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016). *Blockchain technology: Beyond bitcoin*. *Applied Innovation Review*, No. 2, pp. 6–19.

(Blokcheynning ma'lumotlar xavfsizligi va kuzatuvchanlik imkoniyatlari tahlil qilinadi.)

4. World Economic Forum (2020). *Blockchain for Construction: Enhancing Transparency, Efficiency and Collaboration*. Geneva.

(Qurilish sohasida blokcheyn qo'llanishi bo'yicha tahliliy hisobot.)

5. Perera, S., Nanayakkara, S., Rodrigo, M. N. N., Senaratne, S., & Weinand, R. (2020). *Blockchain technology: Is it hype or real in the construction industry?* *Journal of Industrial Information Integration*, 17, 100125.

(Qurilish sanoatida blokcheynning amaliy qo'llanilishi va istiqbollari.)

6. Turk, Ž., & Klinc, R. (2017). *Potentials of Blockchain Technology for Construction Management*. *Procedia Engineering*, 196, 638–645.

(Qurilish jarayonlarini shaffoflashtirishdagi texnologik yechimlar haqida.)

Mahalliy va normativ manbalar:

7. O'zbekiston Respublikasi Prezidentining 2020-yil 5-oktabrdagi PQ–4851-son qarori — “Raqamli iqtisodiyot va elektron hukumatni rivojlantirish chora-tadbirlarito'g'risida”.*(Raqamli texnologiyalar, jumladan blokcheynni joriy etish bo'yicha milliy yo'nalish.)*

8. O'zbekiston Respublikasi Qurilish va uy-joy kommunal xo'jaligi vazirligi. (2023). *Qurilish sohasida raqamli transformatsiya konsepsiyasi*. Toshkent. *(“Shaffof qurilish” loyihasining asosiy yo'nalishlari yoritilgan.)*

9. Karimov, A. (2022). *Qurilish sohasida blokcheyn texnologiyasining qo'llanish istiqbollari*. — *O'zbekiston arxitektura va qurilish instituti ilmiy jurnali*, №4, 56–62-betlar.

DEVELOPING CREATIVE COMPETENCE THROUGH AN INTEGRATIVE PEDAGOGICAL MODEL AND ITS FOUNDATIONS

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Abstract. This study examines the pedagogical foundations of developing pre-service teachers’ creative competence through an integrative approach. The research analyzes the historical evolution of the concept of competence, the structural components of pedagogical competence, as well as the content and key indicators of creative competence based on scientific sources. A methodological model grounded in an integrative approach is proposed, in which motivational, cognitive, practical, and reflective components are justified step by step. Furthermore, methodological principles underpinning the model such as integration, gradual development, reflection, creative tasks, and active learner participation are defined and theoretically substantiated.

Keywords: creative competence, integrative approach, pedagogical model, methodological principles, professional competence, methodological competence, ICT competence, pre-service teacher preparation, creative thinking, pedagogical integration.

The education system of the 21st century requires teachers to possess a wide range of competencies, including high professional mastery, creative thinking, effective use of ICT tools, and readiness for social collaboration. Since 2017, the educational reforms undertaken in Uzbekistan have been aimed at transitioning to a competence-based education model, modernizing educational standards in accordance with the requirements of the Bologna Declaration, and orienting the learning process toward practical application. In this context, the development of creative competence in pre-service teachers through an integrative approach has become a matter of both theoretical and practical significance.

The concept of “competence” was first introduced into scholarly discourse by Noam Chomsky (1965) and was later expanded upon by scholars such as Dell Hymes, R. White, and John Raven. Various approaches to the structure of pedagogical competence have been developed by A.K. Markova, E.F. Zeer, V.A. Slastenin, and V.N. Vvedenskiy. Today, the theoretical, practical, and personal components of professional competence constitute the foundation of teacher preparation. The central

objective of this study is to develop an integrative and methodologically grounded pedagogical model aimed at fostering creative competence in pre-service teachers.

The first methodological approach applied in this research was theoretical and linguistic analysis. This involved an in-depth examination of scientific perspectives on competence, creative competence, pedagogical competence, methodological competence, and ICT competence, all of which hold particular relevance to the present study. The theoretical frameworks proposed by scholars such as A.K. Markova, E.F. Zeer, A.V. Khutorskoy, and V.N. Vvedenskiy enabled a systematic analysis of scientific literature related to the development of creative competence through an integrative approach. This provided an essential theoretical basis for constructing the proposed model.

The second method employed in the study was comparative analysis. The state educational standards of Uzbekistan were compared with the European Competence Framework, the requirements of the Bologna Process, and international classifications of competencies. This comparative approach substantiated the necessity of integrating international best practices into the national education system in the process of developing creative competence among pre-service teachers. Furthermore, examining how competence-based education is interpreted globally ensured that the proposed model possesses universal applicability and methodological relevance. The third method used in the research was the development of a methodological pedagogical model based on an integrative approach. Within this model, the motivational, cognitive, practical, and reflective components were examined in an interconnected manner, and mechanisms aimed at effectively developing creative competence in pre-service teachers were systematically structured. The main advantage of the proposed model lies in the coherent integration of theory, methodology, and practice into a unified system.

The fourth method involved expert evaluation. The structural components of the developed model were reviewed and validated by twelve experienced specialists in the field of pedagogy. This process strengthened the model's scientific credibility, practical significance, and applicability. Analytical feedback provided by the experts confirmed that the integrative pedagogical model for developing creative competence represents an effective concept that can be implemented directly into the educational process. Methodologically, the model is grounded in the principles of integration, gradual progression, reflection, active learner engagement, and the use of creative tasks in the teaching process.

During the research process, the historical stages of competence development were systematized, and its evolution was divided into three major periods: the initial linguistic and communicative interpretations of competence in the 1960–1970s

(Chomsky, Hymes); the formation of social and managerial competencies in the 1970–1990s; and the development of the competence-based education model and the system of professional competencies after 1990. In addition, the scientific foundations of pedagogical competence were consolidated into a unified framework through integrative analysis, identifying four key components: psychological–pedagogical competence, methodological competence, ICT competence, and creative competence. As a result, a structural model of creative competence aligned with contemporary definitions was developed, outlining such indicators as the ability to generate innovative solutions, apply creative approaches to pedagogical situations, employ cognitive operations of creative thinking (analysis, synthesis, modeling), and utilize innovative technologies in the teaching process. Another significant outcome of the study is the development of an integrative pedagogical model. This model consists of motivational, cognitive, practical, and reflective components and is designed to support the gradual and systematic formation of creative competence in pre-service teachers. The model clearly defines mechanisms for fostering creative thinking, deepening professional knowledge, designing innovative lessons using ICT tools, and evaluating and reflecting on teaching practices. The advantages of the integrative approach include strengthening interdisciplinary connections, enhancing learning motivation, activating creative thinking, and reinforcing practical competencies.

The analysis indicates that developing creative competence in pre-service teachers is a complex and systemic process that cannot be achieved solely through isolated academic subjects; rather, it requires an integrative learning environment. The works of scholars such as Markova, Zeer, and Slastenin demonstrate that pedagogical competence is a multi-component system; however, in most models, the creative component is not presented as an independent structural element. This research substantiates creative competence as an autonomous pedagogical category. A comparison with transversal competences in the European education system and the 4C model widely used in the United States (Creativity, Critical thinking, Communication, Collaboration) further confirms the necessity of developing creative competence among future teachers in Uzbekistan. The strength of the integrative approach lies in ensuring coherence between theory, practice, ICT applications, and creative pedagogical strategies. The integrative methodological model contributes not only to the development of creative thinking but also to the formation of independent decision-making skills in real pedagogical contexts.

According to the findings, the development of creative competence in pre-service teachers can be effectively achieved through an integrative approach. The motivational, cognitive, practical, and reflective components of the integrative model enhance professional preparation, activate creative thinking, and elevate overall pedagogical

competence. Therefore, integrating methodological subjects, incorporating ICT tools into creative teaching practices, modeling creative pedagogical situations, and organizing training sessions on innovative approaches play a crucial role in developing creative competence in future teachers. The proposed methodological model establishes a systematic approach to fostering creative competence in higher education and can be directly implemented in the teaching–learning process.

References

1. Askarova, Z. N. (2025). Integrative approaches and modern methodologies in developing creative activity competence among pre-service teachers. *Scientific Bulletin of Namangan State University*, 9, 841–844.
2. Askarova, Z. N. (2025). Creative approaches in modern education: An analysis based on contemporary methods and practical examples. *Preschool and School Education*, 5, 773–776.

CLASSROOM MANAGEMENT AND STUDENT GROUPING

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Abstract. Effective classroom management is widely regarded as a cornerstone of successful teaching and learning. Within this framework, student grouping plays a significant role in shaping learner engagement, behavior, and academic outcomes. This article explores the theoretical foundations, practical strategies, and challenges associated with classroom management and student grouping. Drawing on pedagogical theories such as Communicative Language Teaching, Constructivism, and Social Interdependence Theory, the article argues that intentional grouping enhances participation, collaboration, learner autonomy, and equitable learning opportunities. It also discusses practical techniques for establishing classroom routines, organizing physical space, minimizing disruptions, and ensuring productive group interaction. The article concludes that combining strong management strategies with purposeful grouping fosters a conducive learning environment that supports cognitive, social, and emotional development.

Keywords: Classroom management, student grouping, cooperative learning, learner engagement, classroom environment, instructional strategies, educational psychology.

INTRODUCTION

Classroom management remains one of the most essential dimensions of effective teaching, as it shapes the overall climate in which learning takes place. According to Emmer and Sabornie [1], classroom management extends beyond controlling behavior;

it includes planning, organizing, structuring activities, fostering relationships, and creating conditions that promote academic success. Within this broader context, student grouping serves as a pedagogical tool that influences participation, communication, and collaboration. In modern education systems that emphasize learner-centered instruction, the strategic use of grouping has become indispensable. Slavin [5] argues that grouping encourages positive interdependence, shared responsibility, and cooperative problem-solving. Thus, understanding how classroom management and student grouping intersect is crucial for teachers seeking to create inclusive, organized, and engaging learning environments.

Theoretical Foundations

1. Communicative Language Teaching (CLT)

Classroom management in the CLT approach emphasizes meaningful communication, purposeful interaction, and real-life language use. According to Richards and Rodgers [4], successful communicative lessons require clearly structured procedures, organized classroom routines, and flexible grouping techniques. Pair and group work allow learners to negotiate meaning, develop fluency, and engage in authentic communicative tasks that support effective management.

2. Constructivist Learning Theory

Constructivist theorists such as Piaget and Vygotsky propose that learning occurs through active participation and collaborative meaning-making. Vygotsky's concept of the Zone of Proximal Development highlights that students learn more effectively when interacting with peers of different ability levels, which makes grouping a powerful management tool [6]. Through scaffolding, shared problem-solving, and increased communication, grouping fosters both cognitive growth and improved classroom behavior.

3. Social Interdependence Theory

Johnson and Johnson [2] explain that cooperative learning conditions promote positive interdependence, individual accountability, and group responsibility. In well-managed classrooms, grouping structures such as cooperative teams or mixed-ability groups enhance engagement, reduce disruptive behaviors, and strengthen social skills. Teachers who manage cooperative structures effectively can foster a supportive and collaborative classroom atmosphere.

Classroom Management: Key Principles

1. Establishing Routines and Expectations

Well-defined routines and behavioral expectations are central to classroom organization. Kounin's concept of withitness highlights the importance of teachers being aware of student behavior and addressing issues proactively [3]. Routines

enhance predictability, reduce confusion, and support learners in transitioning between individual, pair, and group tasks efficiently.

2. Physical and Instructional Organization

Effective classroom management also depends on how the physical environment is arranged. Strategically organizing seating, ensuring easy movement, and providing accessible learning materials help minimize disruption and facilitate smoother group activities. Slavin emphasizes that instructional organization—clear instructions, task structure, and time management—directly influences students' ability to collaborate successfully [5].

3. Minimizing Disruptions

Teachers can minimize off-task behavior by circulating around the room, monitoring group progress, and providing prompt feedback. According to Emmer and Sabornie [1], proactive intervention, consistent expectations, and positive reinforcement form the core of disruption management.

Student Grouping: Strategies and Benefits

1. Types of Grouping

Different grouping formats—pair work, small groups, mixed-ability groups, and cooperative teams—serve different instructional purposes. Richards and Rodgers [4] note that flexible grouping accommodates learners' diverse needs and supports differentiated instruction.

2. Enhancing Engagement through Grouping

Grouping promotes learner participation, motivation, and autonomy. Vygotsky's theory suggests that social interaction is key to learning, making collaborative tasks especially powerful [6]. When students take responsibility for their roles in a group, they become more engaged and invested in the learning process.

3. Challenges in Grouping

Despite its advantages, grouping requires careful planning. Johnson and Johnson [2] emphasize that poor group structures, unclear roles, or uneven participation can reduce effectiveness. Therefore, teachers must assign roles, monitor interactions, and provide guidance to ensure positive outcomes.

Conclusion

Classroom management and student grouping are interrelated components of successful teaching. Effective management provides structure and clarity, while purposeful grouping fosters collaboration, engagement, and social development. When teachers integrate strong management strategies with intentional grouping techniques, they create learning environments that support cognitive, social, and emotional growth. Theories from CLT, Constructivism, and Social Interdependence reinforce that

grouping is not merely an organizational tool but a pedagogical approach essential for meaningful learning

References :

1. Emmer, E. T., & Sabornie, E. J. (2015). Handbook of Classroom Management. New York: Routledge.
(pp. 45–68).
2. Johnson, D. W., & Johnson, R. T. (1999). Learning Together and Alone: Cooperative, Competitive, and Individualistic Learning. Boston: Allyn & Bacon.
(pp. 112–150).
3. Kounin, J. S. (1970). Discipline and Group Management in Classrooms. New York: Holt, Rinehart and Winston.
(pp. 35–59).
4. Richards, J. C., & Rodgers, T. S. (2014). Approaches and Methods in Language Teaching (3rd ed.). Cambridge: Cambridge University Press.
(pp. 85–110).
5. Slavin, R. E. (1995). Cooperative Learning: Theory, Research, and Practice (2nd ed.). Boston: Allyn & Bacon.
(pp. 2–23).
6. Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.
(pp. 79–91).

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Annotatsiya: Ushbu maqolada kalibrlash jarayonlarida o‘lchash noaniqligini baholashning zamonaviy yondashuvlari tahlil qilingan. GUM-93 qo‘llanmasining amaliyotdagi cheklovlari, xususan, standart noaniqlikni chiziqli modellar yordamida baholash, kirish kattaliklarining ehtimollik zichligi funksiyasini aniqlashdagi murakkabliklar hamda kengaytirilgan noaniqlikni konservativ baholash kabi kamchiliklari ko‘rsatib o‘tilgan. JCGM tomonidan taklif etilgan yangilangan hujjatlar (JCGM 100 CD) va Bayes yondashuvi ushbu kamchiliklarni bartaraf etishga xizmat qilishi tahlil etilgan. Maqolada Monte-Karlo usulining (MMK) GUM-ga qo‘shimcha sifatida qo‘llanilishi, uning afzalliklari hamda sinov va kalibrlash laboratoriyalarida amaliyotga joriy etilishiga to‘sqinlik qilayotgan omillar ko‘rib chiqilgan. Bayes yondashuvi asosida o‘lchash modelini qurish, kirish kattaliklarining standart noaniqliklari va kovariatsiyalarini baholash, ularning taqsimot qonunlari asosida o‘lchash natijasining ehtimollik zichligini aniqlash algoritmi bosqichma-bosqich yoritilgan. Shuningdek, standart noaniqlikni baholashning statistik usullari, takrorlanuvchi o‘lchovlar asosida o‘rtacha qiymatni aniqlash, Student taqsimotiga asoslangan baholash va tuzatma kiritilgan holda noaniqlikni hisoblash formulalari keltirilgan. Bayes yondashuvi va MMK asosidagi algoritmlarning GUM tamoyillarini to‘ldiruvchi hamda noaniqlikni yanada aniqroq baholash imkoniyatlarini berishi ilmiy asoslangan. Maqola natijalari kalibrlash jarayonida o‘lchash noaniqligini baholashning takomillashgan usullari sifatida Bayes va Monte-Karlo yondashuvlarini qo‘llashning dolzarbligini ko‘rsatadi.

Kalit so‘zlar: o‘lchash noaniqligi, GUM-93, kengaytirilgan noaniqlik, Bayes yondashuvi, Monte-Karlo usuli, JCGM 100 CD, ehtimollik zichligi funksiyasi (PDF), kirish kattaliklari, kovariatsiya, kalibrlash jarayonlari, standart noaniqlik, metrologiya.

"O‘lchash noaniqligini ifodalash bo‘yicha qo‘llanma" (GUM-93) ning 30 yillik xalqaro qo‘llanilishidan so‘ng 2013-yilda uni ishlab chiquvchilarning uni qayta ko‘rib chiqish zarurligi to‘g‘risidagi jamoaviy taklifi bilan yakunlandi. Bu qarorning asosida quyidagi bir necha sabablar yotar edi:

1. Xatoliklar nazariyasining huquqiy vorisi sifatida, GUM-93 da noaniqlik tushunchasi, terminologiyadagi sezilarli o'zgarishlarga qaramay, model yondashuvini amalga oshirishning o'xshash asosiy tamoyillari asosida qurilgan:

- yig'indi standart noaniqlikni hisoblashda chiziqli yoki yaxshi chiziqli modellar uchun o'rinli bo'lgan noaniqlikning tarqalish qonuni (3RN) (dispersiyalarni qo'shish qoidasi) qo'llanilgan;
- har xil turdagi kirish kattaliklarining standart noaniqliklarini topishda ehtimollikning turli xil talqinlaridan foydalaniladi: A turdagi standart noaniqliklar kuzatilayotgan chastotalar taqsimotidan olingan ehtimollik zichligi funksiyasi (PDF) bo'yicha aniqlanadi, B turdagi standart noaniqliklar esa aprior ma'lumotlar asosida kirish kattaliklariga tegishli bo'lgan taxminiy PDF dan aniqlanadi.

Kengaytirilgan noaniqlik hisob-kitoblarini soddalashtirishga intilish GUM ishlab chiquvchilarini markaziy limit teoremasiga tayanuvchi, Uelch-Satterveyt formulasi bilan aniqlanadigan erkinlik darajalarining samarali soni bilan o'lchanadigan kattalikning zichligini PDF taqsimoti bilan tavsiflashning yetarliligi haqidagi boshi berk fikrga olib keldi.

Monte-Karlo usuli (MMK) asosida GUMga 1-qo'shimchani (GUM-S1) ishlab chiqish GUM-93 ning sanab o'tilgan kamchiliklarini bartaraf etish imkonini berdi. Biroq, MMK Bayes yondashuvining amalga oshirilishi bo'lganligi sababli, GUM-93 va GUM-S1 protseduralari yordamida olingan o'lchanayotgan kattalikning standart noaniqlik baholari son jihatdan farq qiladi. Ya'ni, GUMga qo'shimcha GUMning o'zi bilan ziddiyatga kirishdi.

Bundan tashqari, sinov va kalibrlash laboratoriyalarida MMKdan bevosita foydalanishga quyidagi omillar to'sqinlik qiladi:

- akkreditatsiyadan o'tgan laboratoriyada MMKni amalga oshirish uchun sertifikatlangan ixtisoslashtirilgan dasturiy vositaning mavjudligi zarurligi;
- hozirda mavjud bo'lgan MMKni amalga oshiruvchi dasturiy vositalar bilan o'lchash noaniqligining to'liq byudjetini olishning imkoni yo'qligi;
- Nazorat qiluvchi organlar tomonidan keyingi tekshiruvlar uchun MMK asosida noaniqlikni baholash tartibini hujjatlashtirishning imkoni yo'qligi.

Metrologiya bo'yicha qo'shma qo'mita (JCGM) ning WG-1 ishchi guruhi tomonidan yangi qo'llanmaning birinchi versiyasi ishlab chiqildi: JCGM 100 CD. Yangi Yo'riqnomaga Bayescha yondashuv asos qilib olindi. JCGM 100 CD 2014-yil oxirigacha JCGMga a'zo tashkilotlar, milliy metrologiya institutlari va boshqa qabul qiluvchilar orasida tarqatildi, ulardan 1000 dan ortiq sharhlar olindi va asosan salbiy bo'lib chiqdi. JCGM 100 CD uchun asosiy da'volar quyidagilardan iborat edi:

1. JCGM 100 CD asosiga, GUM singari, ZPH qo'yilgan, bunda o'lchash tenglamasini birinchi tartibli Teylor qatoriga yoyish asosida qurilgan ifodalarning

qo'llanish diapazoni aniqlanmagan. ZPNni yozishda ikkinchi tartibli hadlardan foydalanish faqat Gauss taqsimotlari uchun to'g'ri bajarilgan;

2. JCGM 100 CD da taklif etilgan kengaytirilgan noaniqlikni baholash usuli o'lchanayotgan kattalikning taqsimot qonunlariga bog'liq emas: Chebishev va Gauss tengsizliklaridan olingan konservativ qamrov koeffitsiyentlari markaziy limit teorema shartlari bajarilganda ham kengaytirilgan noaniqlikning 50% gacha oshirilgan bahosini beradi.

Yuqoridagilardan kelib chiqqan holda, Bayes yondashuviga asoslangan va keltirilgan kamchiliklarni bartaraf etuvchi o'lchashlar noaniqligini baholash tartibini ishlab chiqish dolzarb bo'lib qolmoqda.

Bayes yondashuvi asosida GUMni amalga oshirishning taklif etilayotgan algoritmi

1. O'lchashlarni modellashtirish

O'lchashning maqsadi o'lchanayotgan kattalik va u bilan bog'liq standart noaniqlikning eng yaxshi bahosini olishdir. Ko'p hollarda o'lchanayotgan kattalik o'lchash modeli $u(y)$ orqali boshqa (kirish) X_1, X_2, \dots, X_N kattaliklar bo'yicha aniqlanadi:

$$Y = f(X_1, X_2, \dots, X_N). \quad (1)$$

GUM-93 va JCGM 100 CD qo'llanmalari chiziqli modellar yoki o'lchanayotgan kattalik bahosini olish aniqligini va u bilan bog'liq standart noaniqlikni yomonlashtirmasdan chiziqilashtirish mumkin bo'lgan modellar uchun mo'ljallangan. Nochiziqli modellar uchun noaniqlikni baholash GUM-S1 da yoritilgan.

(1) model bir o'lchovli, chunki u yagona o'lchanadigan kattalikka ega. Boshqa modellar, shu jumladan ko'p o'lchovli va yashirin modellar GUM-S2 da ko'rib chiqiladi. O'lchashni modellashtirishning umumiy masalalari hozirda ishlab chiqilayotgan JCGM-103 qo'llanmasida batafsil muhokama qilinadi.

2. Kirish kattaliklari, ularning standart noaniqliklari va kovariatsiyalarini baholash.

Kirish qiymatlarini quyidagicha tasniflash mumkin:

- qiymatlari va noaniqliklari bevosita ushbu o'lchashda aniqlanadigan va o'lchash vositasining (O'V) yagona ko'rsatkichidan yoki takrorlanuvchi ko'rsatkichlardan olinishi mumkin bo'lgan kattaliklar;
- SI ko'rsatkichlariga tuzatmalar va atrof-muhit harorati, barometrik bosim va namlik kabi kirish kattaliklariga ta'sir qiluvchi tuzatmalar;
- qiymatlari va noaniqliklari o'lchovlarga kalibrlangan etalonlar, sertifikatlangan standart namunalarda va ma'lumotnomalarda ko'rsatilgan chiqish ma'lumotlari kabi tashqi manbalardan kiritilgan kattaliklar.

- Agar bevosita shu o'lchashda kattalikning SI dagi X_i yagona ko'rsatkichi olingan bo'lsa, u holda bu ko'rsatkich shu kattalikning qiymati bo'ladi.

Ushbu kattalikning standart noaniqligi (instrumental standart noaniqlik) O'V kalibrlash sertifikatidan olingan ma'lumotlardan aniqlanadi: kengaytirilgan instrumental noaniqlik U_{pi} va qamrov koeffitsiyenti k_{pi} asosida:

$$u_{ti} = \frac{U_{pi}}{k_{pi}}, \quad (2)$$

bu yerda k_{pi} - ishonch darajasi bo'lib, odatda "taxminan 0,95" ni tashkil etadi, ya'ni aniq 0,9545 ga teng.

Agar bevosita ushbu o'lchovda O'O ning takrorlanuvchi ko'rsatkichlari $x_{i1}, x_{i2}, \dots, x_{in}$ olingan bo'lsa, u holda ushbu kattalikning x_i qiymati sifatida ularning o'rtacha arifmetik qiymati \bar{x}_i qabul qilinadi:

$$x_i = \bar{x}_i = \frac{1}{n} \sum_{r=1}^n x_{ir} \quad (3)$$

Bu holda o'lchash modeliga tasodifiy xatolikka tuzatma ε_i qo'shiladi, uning qiymatlari $\varepsilon_i = 0$ teng, standart noaniqlik esa quyidagi formula bo'yicha aniqlanadi:

$$u(\varepsilon_i) = \sqrt{\frac{1}{n(n-3)} \sum_{r=1}^n (x_{ir} - \bar{x}_i)^2} \quad (4)$$

Ushbu tuzatishga erkinlik darajasi $v_i = n - 1$ bo'lgan siljimagan masshtablangan Student taqsimoti beriladi. Kirish kattaliklarining standart noaniqliklarini bunday baholash faqat ko'p martalik o'lchashlarning normal taqsimlangan natijalari uchun ma'noga ega $n_j \geq 4$ va o'rinli bo'ladi.

Agar ikkita tuzatish $\varepsilon_i, \varepsilon_j$ o'rtasida korrelyatsiya kuzatilsa, ularning kovariyatsiya qiymatlari quyidagi formula bo'yicha aniqlanadi:

$$\text{cov}(\varepsilon_i, \varepsilon_j) = \frac{1}{n(n-4)} \sum_{r=1}^n (x_{ir} - \bar{x}_i)(x_{jr} - \bar{x}_j) \quad (5)$$

3. O'lchash natijasining son qiymatini hisoblash.

JCGM 110 CD da o'lchanayotgan kattalikning Y bahosi (1) model tenglamasiga kirish X_1, X_2, \dots, X_N kattaliklarining x_1, x_2, \dots, x_N baholarini qo'yish orqali hisoblanadi:

$$y = f(x_1, x_2, \dots, x_N) \quad (6)$$

Nochiziqli modelda bunday baholash usuli faqat ushbu baholarda noaniqlik bo'lmagandagina aniq natija beradi. Kirish kattaliklarida u_1, u_2, \dots, u_n sezilarli noaniqliklar mavjud bo'lganda, bu usul o'lchanayotgan kattalik bahosining siljishiga olib keladi.

$$\Delta_y = - \left[\frac{1}{2} \sum_{i=1}^N c_{ii}^2 u_i^2 + \sum_{i=2}^N \sum_{j=1}^i c_{ij} \text{cov}(x_i, x_j) \right], \quad (7)$$

bu yerda $c_{ii} = \frac{\partial^2 y}{\partial x_i^2}$, $c_{ij} = \frac{\partial^2 y}{\partial x_i \partial x_j}$ va $\text{cov}(x_i, x_j)$ - mos ravishda Y dan X_i ikkinchi tartibli xususiy hosila, Y dan X_i, X_j ikkinchi tartibli aralash xususiy hosila X_i, X_j va kovariyatsiya bo'lib, ular $X_1 = x_1, \dots, X_N = x_N$; u_i - X_i ning standart noaniqlikda baholangan.

Olingan siljish qiymati $u_0(y)$ keyingi bo'limda olinadigan qiymat bilan taqqoslanadi. Agar quyidagi tengsizlik bajarilsa:

$$|\Delta_y| \geq \frac{1}{3} u_0(y) \quad (8)$$

o'lchanayotgan kattalikning siljimagan bahosini quyidagi formula bo'yicha olish uchun (5) ga tuzatma sifatida (7) siljishni hisobga olish zarur:

$$y_0 = y - \Delta_y \quad (9)$$

4. O'lchanayotgan kattalikning standart noaniqligini hisoblash

Agar model tenglama (1) formula bilan ifodalangan bo'lsa, u holda birinchi yaqinlashishda o'lchanayotgan kattalikning standart noaniqligini $u(y)$ baholash quyidagi ifodadan aniqlanadi:

$$u^2(y) = \sum_{\substack{i=1 \\ j=1}}^N c_i c_j \text{cov}(x_i, x_j) u^2(y) = \sum_{i=1}^N c_i^2 u_i^2 + 2 \sum_{i=2}^N \sum_{j=1}^{i-1} c_i c_j \text{cov}(x_i, x_j) \quad (10)$$

bu yerda $c_i = \frac{\partial y}{\partial x_i}$, $c_j = \frac{\partial y}{\partial x_j}$ - sezgirlik koeffitsiyentlari bo'lib, ular Y ning tegishli xususiy hosilalari hisoblanadi va $X_1 = x_1, \dots, X_n = x_n$ da baholanadi.

Ushbu bahoning siljishini aniqlash uchun quyidagi kattalik hisoblanadi:

$$\Delta_{u^2} = - \left[\frac{1}{4} \sum_{i=1}^N c_{ii}^2 (\eta_i + 2) u_i^4 + \sum_{i=2}^N \sum_{j=1}^{i-1} c_i c_j u_i u_j \right], \quad (11)$$

bu yerda η_i - quyidagi jadvaldan olinadigan i -chi kirish kattaligining taqsimlanish eksnessi. Jadvalda $\alpha = u_2/u_1$ - trapetsiyasimon taqsimot qonunining parametri, bu yerda u_1, u_2 - trapetsiyasimon taqsimotni tashkil etuvchi ikkita bir xil taqsimot qonunining standart noaniqliklari. Kalibrlash sertifikatida ko'rsatilgan qiymatiga ko'ra Student taqsimoti qonuni uchun parametri $k_{0,9545}$ va v_{eff} erkinlik darajalarining samarali sonini aniqlash uchun muallif tomonidan ishlab chiqilgan nomogrammalardan foydalaniladi.

Kirish kattaliklarining turli taqsimot qonunlari uchun eksness qiymatlari

	Arksinusl i	Bir tekis	Trapetsiyasimo n	Uchburcha k	Norma l	Talab a
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η	-1,5	-1,2.	$-1,2 \frac{(1 + \alpha^4)}{(1 + \alpha^2)^2}$	-0,6.	0	$\frac{6}{v - 4}$
$k_{0,9545}$	1,411	1,65 3	1,653...1,927	1 927	2.	>2

Olingan siljish qiymati $u(y)$ (9) qiymat bilan taqqoslanadi. Agar quyidagi tengsizlik bajarilsa:

$$|\Delta_{u^2}| \geq 0,1u^2(y) \quad (12)$$

(10) siljishni (9) ga tuzatma sifatida hisobga olish zarur, bunda o'lchanayotgan kattalikning siljimagan bahosini quyidagi formula bo'yicha olamiz:

$$u_0^2(y) = u^2(y) - \Delta_{u^2}. \quad (13)$$

5. O'lchanayotgan kattalikning kengaytirilgan noaniqligini hisoblash.

O'lchanayotgan kattalikning kengaytirilgan noaniqligini $U(y)$ quyidagi formula bo'yicha hisoblash tavsiya etiladi:

$$U(y) = k(\eta)u(y), \quad (14)$$

bu yerda $k(\eta)$ - o'lchanayotgan kattalikning taqsimlanish eksessiga η bog'liq bo'lgan qamrov koeffitsiyenti, u quyidagi formula bo'yicha aniqlanadi:

$$\eta = \left(\sum_{j=1}^m \eta_j c_j^4 u_j^4 \right) / u^4(y). \quad (15)$$

η aniqlangandan so'ng, $k = 0,95$ uchun qamrov koeffitsiyenti quyidagi formula bo'yicha hisoblanadi:

$$k(\eta) = \begin{cases} 0,1085\eta^3 + 0,1\eta + 1,96, & \text{при } \eta < 0; \\ 1,96, & \text{при } \eta \geq 0. \end{cases} \quad (16)$$

Eksesslar usuli bilan olingan kengaytirilgan noaniqlik baholarining MMK yordamida olingan baholardan chetlanishlari kirish kattaliklarini takroriy o'lchashlar soni 5 tadan oshmasligi ko'rsatilgan.

Shuni ta'kidlash kerakki, (7) tengsizlikning bajarilishi o'lchanayotgan kattalikning siljishi mavjudligi uning taqsimot qonunining assimetriyasini ko'rsatadi. Bu holda kengaytirilgan noaniqlikni topish uchun MMK dan foydalanish kerak.

GUM-93 ning kamchiliklari uni qayta ko'rib chiqish zaruriyatini keltirib chiqardi. Yangilangan JCGM 100 CD qo'llanmasining birinchi nashri mukammal emasligi uni metrologik amaliyotda qo'llash imkonini bermaydi.

O'lchanayotgan kattalikning siljimagan bahosini olish uchun ham statistik, ham statistik bo'lmagan usullar bilan baholangan kirish kattaliklarining noaniqliklari mavjud bo'lganda yaroqli bo'lgan (6) ifodani qo'llash zarur.

O'lchash tenglamasini ikkinchi tartibli Teylor qatoriga yoyish asosida qurilgan CBH asosida nohiziqli model tenglamalar uchun o'lchash kattaligining standart noaniqligining siljimagan bahosini olish, kirish kattaliklarining har qanday taqsimot qonunlari uchun kirish kattaliklarining ekstsesslarini hisobga oluvchi ifoda asosida amalga oshirilishi mumkin.

Ekstsesslar usulidan foydalanish simmetrik taqsimotlar uchun kirish kattaliklarining taqsimlanish qonunlarini va o'lchash modelini chiziqli approksimatsiyalash imkoniyatini hisobga olgan holda kengaytirilgan noaniqlik baholarini olish imkonini beradi. Ekstsesslar usuli bilan olingan kengaytirilgan noaniqlik baholarining MMK yordamida olingan baholardan og'ishi $\pm 2,5\%$ kirish kattaliklarini takroriy o'lchashlar soni 5 dan oshmasligi ko'rsatilgan.

Mualliflar tomonidan taklif etilgan yondashuvlar JCGM 100 CD kamchiliklarini bartaraf etuvchi Bayes usuli asosida o'lchashlar noaniqligini ifodalash bo'yicha qo'llanmani yaratish imkonini beradi.

FOYDALANILGAN ADABIYOTLAR

1. П.Р.Исматуллаев, П.М.Матякубова, Ш.А.Тўраев (проф. П.Р.Исматуллаев тахририда) Метрология, стандартлаштириш ва сертификатлаштириш.- Тошкент: LESSON PRESS, 2015. 420 б.
2. Довыденко О.В., Самойленко А.И., Петроневиц В.В. Система метрологического обеспечения прослеживаемости измерений характеристик геометрии масс // Измерительная техника. 2020. № 12. С. 28-34. <https://doi.org/10.32446/0368-1025it.2020-12-28-34>.
3. Boyton R. Measuring weight and all three axes of center of gravity of rocket motor without having to re-position the motor // Proceeding of the 61th Annual Conference of the Society of Allied Weight Engineers, Virginia Beach, Virginia, USA, May 20-21, 2002, 22 p.
4. Мельников В.Г. Методы и приборы измерения инерционных параметров тел и формирования качественных параметров нелинейных твердотельных систем : автореф. дис. ... д-ра тех. наук: 05.11.01/ Мельников Виталий Геннадьевич. С-Пб., 2013. 36 с.
5. Куприков Н.М. Структурно-параметрический анализ влияния моментно-инерционного фактора на облик самолета арктического базирования : автореф. дис. ... канд. тех. наук: 05.07.02/ Куприков Никита Михайлович. М., 2015. 24 с.

FORM OF ADDRESS IN ENGLISH AND UZBEK: POLITENESS AND CULTURE

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Annotation: This article explores how forms of address function in English and Uzbek, focusing on their connection to politeness, cultural tradition, and social hierarchy. The comparison examines how each language uses pronouns, titles, honorifics, kinship terms, and context-based strategies to express respect or social distance. Findings show that English tends toward egalitarian norms with a single universal second-person pronoun, while Uzbek maintains a more hierarchical system that reflects age and status differences. The analysis relies on major theoretical frameworks, including Brown and Levinson's politeness theory and ;cross-cultural pragmatics.

Keywords: forms of address, politeness, English, Uzbek, communication, pragmatics, honorifics

Introduction Forms of address are crucial elements of spoken interaction because they reveal how people perceive relationships, social roles, and cultural expectations. Through address terms, speakers express closeness, respect, hierarchy, and politeness. Scholars such as Braun emphasize that address systems strongly shape communication patterns and influence how politeness is interpreted in different cultures [1].

English and Uzbek differ considerably in how they encode respect and social distance. For instance, English speakers use the single pronoun you in every situation, while Uzbek speakers carefully choose between sen and siz, reflecting levels of familiarity or respect [2]. These linguistic contrasts represent deeper cultural values: English-speaking societies tend to be more individualistic and equality-oriented, whereas Uzbek society preserves collectivist norms and clear social hierarchies. Studying these differences helps us understand not just language structure, but also how each culture organizes communication, etiquette, and interpersonal behavior.

Theoretical Framework

Brown and Levinson's (1987) politeness theory serves as a foundation for analyzing address strategies. They distinguish between: Positive politeness – showing friendliness, closeness. Negative politeness – showing respect, minimizing imposition [3] Another influential model comes from Scollon and Scollon (1995), who identify three cultural factors shaping interaction: 1. Power distance. 2. Social distance. 3. Weight of imposition [4]

Uzbek communication reflects high power distance, meaning hierarchical forms of respect are expected. English, by contrast, reflects low power distance, where formal distinctions are reduced. Forms of Address in English. Pronouns.

Modern English uses a single second-person pronoun—you—for all contexts. Historically, English distinguished between thou (informal) and you (formal), but this system disappeared over time [5]. The remaining universal pronoun reflects Western values of equality and personal autonomy.

Titles. Common titles include Mr., Mrs., Miss, Ms., Sir, Madam, and occupational titles like Doctor, Professor, or Officer. These are generally used in formal, professional, or service-related interactions [6]. English titles do not strongly encode age hierarchy. Kinship-Based or Informal Terms. Although English rarely uses kinship terms for strangers, modern colloquial speech includes expressions like bro, sis, auntie, uncle, mostly among young speakers or in friendly settings [7]. These terms reflect informality rather than cultural obligation. First-Name Preference

In many English-speaking cultures, even workplace communication favors first names. This practice aligns with the cultural emphasis on friendliness and reduced hierarchy [8]. Forms of Address in Uzbek. Pronouns: “Sen” and “Siz” Uzbek has a clear distinction between informal and formal pronouns: Sen – familiar, intimate, used with friends, children, peers. Siz – respectful, formal, used with elders, teachers, strangers, and superiors. Using sen with someone older or of higher status can be considered impolite [2]. Honorifics and Titles. Uzbek has a rich variety of honorifics such as: aka, opa, ustoz, domla, xonim, janoblari, ota, ona. These titles signal respect, age, social role, and status [9]

. Kinship-Based Address in Everyday Speech. A unique feature of Uzbek communication is using kinship terms even with strangers—opa, aka, buvi, xola, tog'a. This reflects collectivism, hospitality, and strong age-based norms [10]. Indirect Addressing. To avoid sounding too direct, Uzbek speakers often use polite expressions such as iltimos, marhamat, rahmat and role-based forms like opalar, otalar. These strategies soften the tone and show respect. Comparative Analysis. Politeness Strategies. English politeness relies on informality and equality, where friendliness is expressed through first names and the universal pronoun you [3]. Uzbek politeness, in contrast, relies on demonstrating respect, carefully choosing honorifics, and

acknowledging social roles. Power Distance Uzbek culture has high power distance, with clear expectations for respectful address. English-speaking societies have lower power distance, where people often speak more directly and with fewer formal markers [4].

Age and Social Status. In Uzbek communication, age is an essential factor. Younger people must use respectful forms with older individuals. English does not require special forms for age differences [9].

Cultural Values Reflected in Language. English emphasizes individualism, equality, autonomy. Uzbek emphasizes community, hierarchy, hospitality, and mutual respect [10].

Cross-Cultural Misunderstandings. Misinterpretations often occur: Uzbek speakers may see English first-name usage as overly informal. English speakers may find Uzbek honorifics excessively formal. Clarifying these cultural differences is important for successful intercultural communications.

Conclusion: Forms of address reveal how language reflects cultural values, politeness norms, and social relationships. English and Uzbek represent two contrasting communicative traditions: English focuses on equality and informality, while Uzbek organizes interaction through respect, hierarchy, and collectivism. Understanding these patterns improves linguistic competence and helps speakers navigate multicultural communication effectively.

REFERENCES:

1. Braun, F. (1988). Terms of Address: Problems of Patterns and Usage in Various Languages and Cultures. Berlin: Mouton de Gruyter. (pp. 15–22, 49–57, 101–120).
2. Brown, P., & Levinson, S. (1987). Politeness: Some Universals in Language Usage. Cambridge University Press. (pp. 55–65, 129–150, 213–220).
3. Duranti, A. (1997). Linguistic Anthropology. Cambridge University Press. (pp. 63–72, 119–131).
4. Scollon, R., & Scollon, S. (1995). Intercultural Communication: A Discourse Approach. Oxford: Blackwell. (pp. 45–60, 98–112).
5. Wales, K. (2001). Personal Pronouns in Present-Day English. Cambridge University Press. (pp. 25–33, 70–84).
6. Wardhaugh, R. (2006). An Introduction to Sociolinguistics. Oxford: Blackwell. (pp. 245–260, 281–290).
7. Fasold, R. (1990). Sociolinguistics of Society. Oxford: Blackwell. (pp. 112–128, 165–170).
8. Holmes, J. (2013). An Introduction to Sociolinguistics. Routledge. (pp. 156–172, 215–230).
9. Mirzaev, M. (2010). O‘zbek Tilida Murojaat Formasi. Tashkent: Fan. (pp. 33–45, 80–96).

10. Yusupova, D. (2014). "Cultural Values and Address Terms in Uzbek Speech." *Journal of Central Asian Linguistics*, 2(1). (pp. 45–58).

FORMATIVE ASSESSMENT TECHNIQUES FOR ENHANCING LEARNER AUTONOMY IN EFL CLASSROOMS

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Annotation: This article examines how formative assessment techniques contribute to the development of learner autonomy in English as a Foreign Language (EFL) classrooms. It analyzes theoretical foundations of formative assessment, its relationship with self-regulated learning, and the effectiveness of feedback, self-assessment, peer-assessment, portfolio assessment, and digital tools. Findings indicate that systematic formative assessment enhances metacognitive awareness, increases responsibility for learning, and significantly supports autonomous language development.

Keywords: formative assessment; learner autonomy; feedback; self-assessment; peer-assessment; self-regulated learning; metacognition; portfolio assessment; digital formative tools.

Аннотация : В статье рассматривается роль формативного оценивания в развитии учебной автономии учащихся на уроках английского языка как иностранного. Анализируются теоретические основы формативного оценивания, его связь с саморегулируемым обучением, а также эффективность обратной связи, самооценки, взаимооценки, портфолио и цифровых инструментов. Результаты показывают, что систематическое формативное оценивание повышает метакогнитивную осознанность учащихся и способствует развитию самостоятельного изучения языка.

Ключевые слова: формативное оценивание; учебная автономия; обратная связь; самооценка; взаимооценка; саморегулируемое обучение; метакогниция; портфолио; цифровые инструменты.

Annotatsiya : Ushbu maqola ingliz tili chet tili sifatida o‘qitiladigan auditoriyalarda formatived baholash texnikalarining o‘quvchi mustaqilligini rivojlantirishdagi o‘rnini

yoritadi. Tadqiqotda formatived baholashning nazariy asoslari, o‘z-o‘zini boshqarish bilan bog‘liqligi hamda feedback, self-assessment, peer-assessment, portfel baholash va raqamli vositalarning samaradorligi tahlil qilingan. Natijalar formatived baholash o‘quvchilarda metakognitiv ongni kuchaytirishini, o‘qishga mas’uliyatni oshirishini va mustaqil til o‘rganishni faol qo‘llab-quvvatlashini ko‘rsatadi.

Kalit so‘zlar: formatived baholash; o‘quvchi mustaqilligi; fikr-mulohaza; o‘z-o‘zini baholash; o‘zaro baholash; o‘z-o‘zini boshqarish; metakognitsiya; portfel baholash; raqamli vositalar.

The shift toward learner-centered pedagogy in modern education has elevated the importance of learner autonomy in English as a Foreign Language (EFL) teaching. International frameworks such as the Common European Framework of Reference (CEFR), TESOL standards, Cambridge Assessment principles, and OECD learning models emphasize learner autonomy as a core learning objective. Autonomy enables learners to take responsibility for their progress, select appropriate learning strategies, and monitor their development—skills essential for successful language acquisition.

Formative assessment (assessment for learning) is considered one of the most effective mechanisms for cultivating learner autonomy. Unlike summative assessment, which measures achievement at the end of a learning cycle, formative assessment continuously guides and improves the learning process. Researchers such as Black and Wiliam argue that formative assessment supports learners in understanding learning goals, identifying gaps, and regulating their learning strategies.

This article explores the key formative assessment techniques—feedback, self-assessment, peer-assessment, portfolios, and digital tools—and examines how each contributes to the development of learner autonomy.

2. Theoretical Background of Formative Assessment

Formative assessment is defined as a dynamic, interactive process that provides ongoing information about learner progress. Black and Wiliam describe formative assessment as “all activities undertaken by teachers and learners to generate feedback to modify teaching and learning.” According to the CEFR Companion Volume (2020), formative assessment facilitates self-regulation and promotes reflective learning practices.

Principles of Formative Assessment:

- a) Providing timely and constructive feedback
- b) Clarifying learning objectives
- c) Encouraging student involvement
- d) Using transparent evaluation criteria
- e) Promoting self-reflection and peer collaboration

These principles align with autonomous learning because they enable learners to make informed decisions about their learning processes.

3. Learner Autonomy: Concept and Importance

Learner autonomy is defined as the ability to take charge of one's own learning. This involves setting personal goals, selecting learning strategies, evaluating progress, and reflecting on outcomes.

Why autonomy matters in EFL classrooms:

- Increased motivation
- More effective use of strategies
- Deeper engagement in learning
- Long-term retention of language skills
- Improved communicative competence

Formative assessment supports these outcomes by requiring learners to actively evaluate and regulate their learning.

4. Formative Assessment Techniques Enhancing Autonomy

4.1 Feedback as a Driver of Autonomy

Feedback is the foundation of formative assessment. Effective feedback tells learners what they did well, what needs improvement, and how to improve. Feedback can be provided at three levels: task-level, process-level, and self-regulation-level.

Characteristics of effective feedback:

- Timely
- Specific
- Constructive
- Forward-oriented

Digital platforms such as Write&Improve, Grammarly, and AI-based feedback tools support autonomous revision practices.

4.2 Self-Assessment

Self-assessment encourages learners to evaluate their own work using checklists, rubrics, or reflection questions. CEFR self-assessment grids are commonly used to help students assess their communicative competence.

Benefits:

- Increases metacognitive awareness
- Encourages responsibility for learning
- Improves self-regulation
- Builds confidence in decision-making

Students who regularly use self-assessment demonstrate higher autonomy and improved performance.

4.3 Peer-Assessment

Peer-assessment involves students evaluating each other's work based on agreed criteria. It promotes collaboration, critical thinking, and deeper understanding of assessment standards.

Advantages:

- Enhances communication skills
- Increases accountability
- Reduces teacher dependency
- Supports self-regulation through comparison
- Portfolio Assessment

Portfolios compile student work over time, allowing learners to track their growth. A portfolio may include essays, journals, audio recordings, project reports, checklists, and reflections.

How portfolios enhance autonomy:

- Encourage long-term goal-setting
- Promote continuous reflection
- Highlight improvement
- Allow learners to take ownership of progress

Technological tools support formative assessment through interactive tasks, instant feedback, and self-paced learning.

Popular tools:

- a) Google Classroom
- b) Kahoot, Quizizz, Socrative
- c) EdPuzzle
- d) LearningApps
- e) AI-based speaking and writing assessment tools
- f) Digital tools personalize learning pathways and enhance student autonomy.

Formative assessment significantly fosters learner autonomy by:

- Developing metacognitive skills
- Strengthening motivation
- Promoting self-regulation
- Encouraging reflection
- Providing continuous support

International and local studies demonstrate that consistent use of formative assessment improves both learner autonomy and language proficiency.

Formative assessment is a powerful pedagogical approach essential for cultivating learner autonomy in EFL classrooms. Techniques such as feedback, self-assessment, peer-assessment, portfolios, and digital tools help learners understand their progress, identify needs, develop responsibility, and regulate their learning. Therefore,

integrating formative assessment systematically into EFL instruction is crucial for developing independent, motivated, and successful language learners.

References

1. Bachman, L. (1990). *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.
2. Black, P. (2010). *Assessment for Learning in the Classroom*. Cambridge University Press.
3. Black, P., & Wiliam, D. (1998). *Assessment and Classroom Learning*. *Assessment in Education*.
4. Council of Europe. (2020). *CEFR Companion Volume*. Strasbourg.
5. Holec, H. (1981). *Autonomy and Foreign Language Learning*. Oxford: Pergamon.
6. Little, D. (1991). *Learner Autonomy: Definitions, Issues and Problems*. Dublin: Authentik.
7. Hattie, J., & Timperley, H. (2007). *The Power of Feedback*. *Review of Educational Research*.
8. Chapelle, C. (2020). *Technology in Language Assessment*. Cambridge University Press.
9. McMillan, J. (2011). *Classroom Assessment: Principles and Practice*. Pearson.
10. Topping, K. (2018). *Peer Assessment: Theory and Practice*. Routledge.
11. Mamadaliyev, A. (2022). *Ingliz tilini o'qitishda formatived baholashning o'rni*. Toshkent: Innovatsion Ta'lim Nashriyoti.
12. Chapelle, C. (2010). *Computer Applications in Second Language Acquisition*. Cambridge University Press.
13. Yuldasheva, S. (2023). *EFL Ta'limida mustaqil o'quv faoliyatini rivojlantirish*. Tashkent State University of Languages.

THEORETICAL BASIS AND MODERN IMPLEMENTATION MODELS

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"Education is not the filling of a pail, but the lighting of a fire."

— W. B. Yeats

Annotation: Article explores the theoretical foundations, methodological principles, and pedagogical advantages of the Integrated Course in Foreign Language Teaching (ICFLT). The integrated approach combines linguistic, communicative, intercultural, and digital competences into a unified instructional system, promoting holistic language development rather than fragmented skill acquisition. The study analyzes modern integration models, including CLIL, task-based integration, multimodal integration, and digital-mobile integration. Psychological mechanisms supporting integrative learning are explained, and the effectiveness of ICFLT in enhancing communicative competence, learner autonomy, and intercultural awareness is demonstrated. Practical recommendations for implementing integrated courses in schools and universities are offered.

Key words: Integrated Course, Foreign Language Teaching, Communicative Competence, Multimodal Integration, CLIL, Curriculum Design

Аннотация: Статъе рассматриваются теоретические основы, методологические принципы и педагогические преимущества интегрированного курса обучения иностранному языку (ICFLT). Интегрированный подход объединяет лингвистическую, коммуникативную, межкультурную и цифровую компетенции в единую образовательную систему, обеспечивая всестороннее развитие языковых навыков. Анализируются современные модели интеграции: CLIL, интеграция на основе задач, мультимодальная интеграция и цифрово-мобильная интеграция. Показаны психологические механизмы интегративного обучения и его эффективность в формировании коммуникативной компетенции, автономии обучающихся и межкультурной осведомлённости. Представлены практические рекомендации по внедрению интегрированных курсов в школах и вузах.

Ключевые слова: Интегрированный Курс, Обучение Иностранным Языкам, Коммуникативная Компетенция, Мультимодальная Интеграция, CLIL, Дизайн Учебных Программ

Annotatsiya: Maqolada chet tilini o‘qitishning integrallashgan kursi (ICFLT)ning nazariy asoslari, uslubiy tamoyillari va pedagogik afzalliklari yoritiladi. Integrallashgan yondashuv til, kommunikativ, madaniy va raqamli kompetensiyalarni yagona tizimda birlashtirib, ko‘nikmalarni parchalangan emas, yaxlit shaklda rivojlantirishni ta‘minlaydi. Tadqiqotda CLIL, vazifaga asoslangan integratsiya, multimodal integratsiya va raqamli-mobil integratsiya kabi zamonaviy modellar tahlil qilingan. Integrativ ta‘limni qo‘llab-quvvatlovchi psixologik mexanizmlar va uning kommunikativ kompetensiya, avtonomiya hamda madaniyatlararo savodxonlikka ta‘siri bayon etiladi. Maktab va oliy ta‘limda integrallashgan kurslarni joriy etish bo‘yicha amaliy tavsiyalar beriladi.

Kalit so‘zlar: Integrallashgan Kurs, Chet Tili O‘qitish, Kommunikativ Kompetensiya, Multimodal Integratsiya, CLIL, O‘quv Reja Dizayni.

In the era of globalization, foreign language education is expected to prepare learners for real communication across linguistic and cultural contexts. Traditional language courses often teach skills—listening, reading, speaking, writing—in isolation, resulting in difficulties when learners attempt to combine these skills in real interactions [1, p. 45]. Therefore, the integrated course approach has become one of the most influential paradigms in modern foreign language pedagogy.

An Integrated Course in Foreign Language Teaching (ICFLT) is a methodological model that merges linguistic skills, content knowledge, cultural elements, and digital competencies into a coherent instructional system [2, p. 22]. This model reflects the communicative, cognitive, and sociocultural demands of contemporary language use.

2. THEORETICAL FOUNDATIONS OF INTEGRATED LANGUAGE TEACHING

2.1. Linguistic and Communicative Theory

Integrated teaching draws heavily on Hymes’ concept of communicative competence, which views language not merely as grammar but as context-bound social practice [3, p. 12]. Effective language education therefore must combine linguistic, pragmatic, and strategic abilities.

2.2. Cognitive and Psychological Mechanisms

Research in educational psychology confirms that integrated learning activates higher-order cognitive processes:

Transfer learning, which supports application of knowledge across contexts [4]. Dual coding, where images and verbal information strengthen memory. Multimodal

processing, which activates multiple sensory pathways for deeper learning. Hence, integration aligns with natural cognitive functioning.

3. MODERN INTEGRATION MODELS

3.1. CLIL (Content and Language Integrated Learning)

CLIL merges subject content with language learning, allowing students to learn science, history, or technology through a foreign language. It promotes academic vocabulary development, analytical thinking, and bilingual competence [6].

3.2. Task-Based Integrated Model

Task-based integration engages learners in meaningful real-life tasks—presentations, interviews, debates—through which they naturally combine all language skills [7].

3.3. Multimodal Integration

This model incorporates visual, auditory, kinesthetic, and digital modes of communication. Videos, infographics, virtual simulations, and interactive platforms enrich sensory engagement and enhance comprehension [8].

3.4. Digital-Mobile Integration (MALL)

Through mobile applications, microlearning, interactive assessment, and digital collaboration, learners develop multiliteracy skills and independent practice routines [9].

4. BENEFITS OF THE INTEGRATED COURSE

Comprehensive Communicative Competence: develops receptive and productive skills simultaneously. **Increased Learner Autonomy:** students select strategies, evaluate progress, and control learning [10]. **Enhanced Intercultural Awareness:** culture and language as inseparable, promoting global citizenship. **Stronger Motivation:** meaningful content and diverse activities keep learners engaged. **Inclusivity and Personalization:** multimodal integration supports various learning styles.

5. IMPLEMENTING AN INTEGRATED COURSE

5.1. Curriculum Development

An integrated curriculum requires:

- vertically and horizontally aligned learning goals;
- clear progression of competence levels;
- thematic modules
- communicative and task-based activities [11]

5.2. Classroom Practices

- Effective techniques include:
- CLIL-based thematic lessons;
- project-based learning;
- authentic materials;
- collaborative tasks;

- formative digital assessment tools.

5.3. Assessment Approaches

Assessment must reflect multiple dimensions:

- ✓ linguistic accuracy;
- ✓ task achievement;
- ✓ content understanding;
- ✓ intercultural competence;
- ✓ digital and media literacy [12]

6. CHALLENGES AND RECOMMENDED SOLUTIONS

Challenge:

- Teachers lack training in integration
- Limited instructional materials
- Mixed proficiency levels
- Complex assessment feedback

Practical Solution:

- Development
- Workshops
- Joint resource creation
- digital libraries
- Differentiated activities, flexible grouping
- Rubrics, e-portfolios, continuous

The integrated course represents a progressive, research-backed method that aligns with modern educational demands. It develops holistic communicative competence, enhances cultural understanding, and equips learners with digital and cognitive skills essential for global participation. With appropriate curricular planning and teacher training, ICFLT can significantly improve foreign language education quality.

References:

1. Anderson, J. Communicative Language Teaching Today. Cambridge University Press, p. 45.
2. Coyle, D., Hood, P., & Marsh, D. CLIL: Content and Language Integrated Learning. Cambridge University Press, p. 22.
3. Hymes, D. Communicative Competence Theory. Oxford University Press, p. 12.
4. James, M. Cognitive Transfers in Language Learning. Routledge, p. 33.
5. Kramsch, C. Language and Culture. Oxford University Press, p. 18.
6. Mehmedova, S. The role of CLIL in modern education. Language and Culture Journal, 4(2), p. 55–63.

7. Nunan, D. Task-Based Language Teaching. Cambridge University Press, p. 40.
8. Richards, J., & Rodgers, T. Approaches and Methods in Language Teaching. Cambridge University Press, p. 75.
9. Stockwell, G. Mobile-Assisted Language Learning: Theory and Practice. Springer, p. 102.
10. Ushakov, A. Autonomy and language learning strategies. Pedagogy Journal, 3(1), p. 22–29.
11. White, G. Curriculum Planning for Integrated Language Education. Palgrave Macmillan, p. 37.
12. Yusupova, M. Integrated assessment models in language education. Higher Education Methodology Journal, 5(1), p. 45–47.

**DEMOKRATIK HUQUQIY DAVLAT BARPO ETISH — YANGI
O‘ZBEKISTONNING ASOSIY MAQSADI**

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ANNOTATSIYA

Maqolada Yangi O‘zbekiston taraqqiyotining yangi paradigmasi doirasida demokratik huquqiy davlatni barpo etish jarayonining nazariy va amaliy asoslari keng tahlil qilinadi. Qonun ustuvorligi, davlat boshqaruvining modernizatsiyasi, sud hokimiyati mustaqilligi, fuqarolik jamiyatining institutsional rivoji, inson huquqlarini himoya qilish va konstitutsiyaviy islohotlarning mazmun-mohiyati ilmiy-nazariy asoslarda yoritiladi. Yangi O‘zbekiston modeli mamlakatning siyosiy tizimini global tendensiyalar bilan uyg‘unlashtirib, milliy qadriyatlarga tayangan demokratik modernizatsiya yo‘nalishi sifatida talqin etiladi.

АННОТАЦИЯ

В статье проводится комплексный анализ теоретических и практических основ формирования демократического правового государства в рамках новой парадигмы развития Нового Узбекистана. Рассматриваются процессы укрепления верховенства закона, модернизации государственного управления, обеспечения независимости судебной власти, институционального развития гражданского общества, защиты прав человека и содержания конституционных реформ. Модель Нового Узбекистана представляется как путь демократической модернизации, основанный на сочетании национальных традиций и современных международных стандартов.

ANNOTATION

This article provides a comprehensive analysis of the theoretical and practical foundations for building a democratic rule-of-law state within the new development paradigm of New Uzbekistan. It examines reforms related to the rule of law, modernization of public administration, judicial independence, civil society development, human rights protection, and constitutional changes. The New Uzbekistan model is conceptualized as an original path of democratic modernization that harmonizes national values with global governance standards.

Kalit soʻzlar: demokratik huquqiy davlat, Yangi Oʻzbekiston, konstitutsiyaviy islohotlar, inson huquqlari, fuqarolik jamiyati, sud mustaqilligi, boshqaruv modernizatsiyasi.

Ключевые слова: демократическое правовое государство, Новый Узбекистан, конституционные реформы, права человека, гражданское общество, независимость судебной системы, модернизация государственного управления.

Keywords: democratic legal state, New Uzbekistan, constitutional reforms, human rights, civil society, judicial independence, modernization of governance.

Zamonaviy global jarayonlar davlatlarning siyosiy tizimi va boshqaruv modeliga yangi talablar qoʻymoqda. Inson huquqlari, demokratiya, qonun ustuvorligi, shaffof va javobgar boshqaruv tamoyillari zamonaviy taraqqiyotning hal qiluvchi mezonlariga aylanib bormoqda. Oʻzbekiston ham ushbu global tendensiyalarning faol ishtirokchisiga aylandi. Mustaqillikdan soʻng boshlangan modernizatsiya jarayoni 2016-yildan keyingi davrda yangi mazmun va sifat kasb etdi hamda Yangi Oʻzbekiston yangi taraqqiyot modeli shakllandi.

Yangi Oʻzbekiston konsepsiyasining markazida demokratik huquqiy davlat barpo etish, inson qadrini oliy qadriyatga aylantirish, davlatning xalq oldidagi masʼuliyatini kuchaytirish kabi asosiy gʻoyalari turadi. Ushbu maqolada mazkur islohotlarning nazariy asoslari, amaliy natijalari va ularning fuqarolik jamiyati hamda siyosiy tizim rivojiga taʼsiri keng yoritiladi.

Demokratik huquqiy davlat nazariyasi Gʻarb siyosiy-huquqiy tafakkurining asosiy gʻoyalari — xalq suvereniteti (J.-J. Russo), hokimiyatlar boʻlinishi (Sh. Monteske), tabiiy huquqlar nazariyasi (J. Lokk)ga tayanadi.

Huquqiy davlatning asosiy belgilari:

- qonun ustuvorligi;
- davlatning jamiyatga xizmat qilishi;
- inson huquqlarining oliy qadriyat sifatida eʼtirofi;
- mustaqil sud hokimiyati;
- davlat organlarining javobgarligi va ochiqqligi;
- siyosiy plyuralizm va fuqarolik jamiyatining rivoji.

Yangi Oʻzbekistonda bu tamoyillar konstitutsiyaviy islohotlar orqali amaliy mazmunga ega boʻldi. 2023-yilgi yangi tahrirdagi Konstitutsiya qabul qilinishi bilan bogʻliq referendum inson huquqlarini ustuvor qadriyat sifatida mustahkamlab, davlatning jamiyat oldidagi javobgarligini kengaytirdi.

Qonun ustuvorligi demokratik davlatning yuragi sanaladi. Oʻzbekistonda ushbu yoʻnalishda keng qamrovli islohotlar amalga oshirilmoqda:

Sud tizimidagi islohotlar:

- sud hokimiyatining institutsional mustaqilligi kuchaytirildi;
- sud tizimi uch pog‘onali professional model asosida qayta shakllantirildi;
- sudyalarning tanlov asosida tayinlanishi va intizomiy daxlsizligi kafolatlandi;
- elektron sud tizimi joriy etilib, sud jarayonlarining shaffofligi oshirildi;
- jinoyat-protsessual daxlsizlik kengaytirildi;
- advokatlik institutining maqomi mustahkamlandi.

Korrupsiyaga qarshi kurash:

Korrupsiyaning oldini olish bo‘yicha mustaqil agentliklar, elektron monitoring tizimi va raqamlashtirilgan hisobdorlik tizimi joriy qilindi.

Sud-huquq islohotlari natijasida jamiyatda adolatga bo‘lgan ishonch ortib, huquqiy madaniyat va qonun oldida tenglik tamoyili kuchaymoqda.

Davlat boshqaruvini modernizatsiya qilish va xalqchil boshqaruv modelini shakllantirish

“Xalq davlat idoralariga emas, balki davlat idoralari xalqqa xizmat qilishi kerak” tamoyili Yangi O‘zbekiston boshqaruv islohotlarining bosh g‘oyasiga aylandi.

Boshqaruv modernizatsiyasining asosiy yo‘nalishlari:

- davlat xizmatlarining to‘liq raqamlashtirilishi;
- “Yagona darcha” tamoyili asosida xizmat ko‘rsatish;
- ochiq ma’lumotlar portallarining kengayishi;
- davlat organlarining hisobot berish majburiyati;
- parlament nazorati va deputatlik so‘rovlarining kuchayishi;
- mahalliy kengashlar vakolatini oshirish.

Bularning barchasi davlat boshqaruvida shaffoflik, samaradorlik va javobgarlikning oshishiga xizmat qilmoqda.

Demokratik tizimning barqarorligi bevosita fuqarolarning davlat boshqaruvida ishtirokiga bog‘liq.

Yangi O‘zbekistonda:

- nodavlat va notijorat tashkilotlar faoliyatini qo‘llab-quvvatlash bo‘yicha grantlar tizimi joriy etildi;
- ommaviy axborot vositalari erkinligi kengaytirildi;
- jamoatchilik nazorati to‘g‘risidagi qonun amaliy mexanizmlari bilan birga tatbiq etildi;
- mahalla instituti jamiyatni boshqarishning milliy modeli sifatida qayta qurildi;
- sotsiopolitik faollik ortdi.

Fuqarolik jamiyati demokratiyaning asosiy tayanchiga aylana boshladi.

Inson huquqlarini ta’minlash: yangi siyosat, yangi standartlar

Inson huquqlarini himoya qilish Yangi O‘zbekistonning eng ustuvor yo‘nalishidir.

Asosiy yo‘nalishlar:

- Inson huquqlari bo'yicha Milliy strategiya qabul qilindi;
- Qiynoqlarning oldini olish bo'yicha milliy mexanizm yaratildi;
- gender tengligi bo'yicha milliy tizim shakllandi;
- nogironligi bo'lgan shaxslarning huquqlari mustahkam kafolatlar bilan ta'minlanmoqda;
- ijtimoiy himoya milliy modeli yaratildi.

Bu islohotlar xalqaro maydonda O'zbekistonning nufuzini mustahkamladi.

Yangi O'zbekiston taraqqiyotining asosiy maqsadi — demokratik huquqiy davlat barpo etishdir. Bunday davlat modelida inson qadri, qonun ustuvorligi, sud mustaqilligi, shaffof va javobgar boshqaruv, fuqarolik jamiyati va siyosiy plyuralizm markaziy o'ringa ega. So'nggi yillarda amalga oshirilayotgan islohotlar O'zbekistonni demokratik yangilanishning yangi bosqichiga olib chiqdi. Yangi O'zbekiston modeli milliy qadriyatlar bilan uyg'unlashgan holda global demokratik standartlarga asoslangan rivojlanish konsepsiyasini yaratdi.

FOYDALANILGAN ADABIYOTLAR

1. O'zbekiston Respublikasi Konstitutsiyasi (2023-yil tahriri).
2. Boboyev X., Jo'rayev Q. *Davlat va huquq nazariyasi*. – TDYU, 2020.
3. Montesquieu Ch. *The Spirit of Laws*. Cambridge UP, 1989.
4. Locke J. *Two Treatises of Government*. London, 1690.
5. United Nations. *Rule of Law Indicators*. — New York, 2015.
6. OSCE/ODIHR. *Democratic Governance Reports*. — Vienna, 2018–2024.

TYPES OF REHABILITATION AND THEIR PROCEDURAL SIGNIFICANCE

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Annotatsiya

Ushbu ilmiy maqolada reabilitatsiyaning asosiy turlari — tibbiy, psixologik, ijtimoiy, pedagogik va kasbiy reabilitatsiya chuqur yoritilib, ularning zamonaviy sogʻliqni saqlash, ijtimoiy himoya hamda huquqiy-amaliyot tizimidagi protsessual ahamiyati tahlil qilinadi. Maqolada reabilitatsiya jarayonining nazariy asoslari, uning koʻp tarmoqli (multidisiplinar) tuzilishi, dalillarga asoslangan yondashuv tamoyillari, yordamning uzluksizligi va standartlashtirish masalalari ilmiy asosda bayon etilgan. Reabilitatsiyaning huquqiy-protsessual roli, baholash tizimlari, personalizatsiyalashgan reabilitatsiya rejalari va xalqaro ilgʻor tajribalar keng yoritilgan.

Kalit soʻzlar: reabilitatsiya, protsessual ahamiyat, multidisiplinar yondashuv, tiklanish tizimlari, tibbiy reabilitatsiya, ijtimoiy integratsiya, kasbiy reabilitatsiya.

Annotation

This scientific article provides an in-depth analysis of the major types of rehabilitation—medical, psychological, social, pedagogical, and vocational—and examines their procedural significance within modern healthcare, social protection, and legal frameworks. It discusses the theoretical foundations of rehabilitation, its multidisciplinary structure, and the principles guiding evidence-based practice. Emphasis is placed on the legal-procedural functions of rehabilitation, continuity of care, standardized assessment systems, patient-centered planning, and interdisciplinary cooperation. The article integrates contemporary research findings, highlights best international practices, and offers a comprehensive systemic model of rehabilitation applicable in clinical, educational, and social settings.

Keywords: rehabilitation, procedural significance, multidisciplinary approach, recovery systems, medical rehabilitation, social integration, vocational rehabilitation.

Аннотация

В данной научной статье представлен углублённый анализ основных видов реабилитации — медицинской, психологической, социальной, педагогической и профессиональной, а также раскрывается их процессуальное значение в

современных системах здравоохранения, социальной защиты и правоприменительной практике. Описываются теоретические основы реабилитации, её междисциплинарная структура, принципы доказательной медицины и стандартизации реабилитационных услуг. Особое внимание уделено юридико-процессуальным аспектам, системам оценки, индивидуальному планированию, международным стандартам и комплексному подходу.

Ключевые слова: реабилитация, процессуальное значение, междисциплинарный подход, системы восстановления, медицинская реабилитация, социальная интеграция, профессиональная реабилитация.

Rehabilitation, as a scientific and practical field, represents a complex, multidimensional system aimed at restoring a person's optimal level of physical, psychological, social, and professional functioning following illness, trauma, congenital disorders, or social deprivation. In contemporary health sciences, rehabilitation is no longer viewed merely as a supplementary or final stage of treatment; rather, it has become an independent, structured, and procedurally regulated sphere with its own theoretical frameworks, methodological principles, and interdisciplinary operational mechanisms. Its significance continues to grow in response to changing demographic structures, the increasing prevalence of chronic diseases, and the global tendency toward human-centered public health policies.

Rehabilitation encompasses several interconnected types, each of which fulfills a specific function within the overall recovery system. Medical rehabilitation is traditionally regarded as the foundational type, as it addresses the biological and functional consequences of disease or injury. Through physiotherapy, occupational therapy, neuromuscular training, movement correction, and medical supervision, it aims to minimize physical impairments, prevent complications, and restore basic physiological functions. The procedural importance of medical rehabilitation lies in the requirement for standardized assessment tools, evidence-based treatment protocols, and the coordination of physicians, physical therapists, occupational specialists, and rehabilitation nurses. Documentation, monitoring, and evaluation play a crucial role in ensuring continuity and legal compliance throughout the medical rehabilitation process.

Psychological rehabilitation, though sometimes underestimated, constitutes an integral part of the recovery process. Individuals who experience physical trauma, chronic disease, disability, or loss of functional independence often face emotional distress, cognitive decline, decreased motivation, or maladaptive behavioral patterns. Psychological rehabilitation addresses these consequences by combining evidence-based therapies such as cognitive-behavioral interventions, emotional adjustment

strategies, neuropsychological exercises, and trauma recovery methods. Its procedural nature requires systematic psychological assessment, consistent therapeutic planning, and structured monitoring of emotional and cognitive changes. Without psychological rehabilitation, medical interventions frequently fail to achieve long-term stability, as emotional wellbeing is a major predictor of rehabilitation success.

Social rehabilitation is another essential dimension, focusing on an individual's reintegration into family life, community, and society at large. Many individuals with disabilities or chronic health problems face limitations not because of physical deficits alone but due to social barriers, communication difficulties, stigma, and lack of accessible environments. Social rehabilitation aims to reduce these barriers and promote functional participation through counseling, social adaptation programs, community involvement, and the development of independent living skills. Its procedural significance lies in comprehensive social assessments, interagency cooperation between healthcare institutions, social services, family organizations, and legal bodies. Such collaboration ensures that the social environment evolves alongside the individual's recovery.

Pedagogical rehabilitation (also known as educational or cognitive rehabilitation), primarily relevant for children with developmental delays and individuals with acquired cognitive impairments, plays a fundamental role in restoring learning capacities, attention, memory, and academic functioning. It also supports adults recovering from neurological injuries such as stroke or traumatic brain injury. The procedural aspects of pedagogical rehabilitation include standardized cognitive evaluations, individualized educational plans, corrective pedagogical methodologies, and continuous progress tracking. This type of rehabilitation is essential for ensuring that individuals of all ages can effectively develop or regain cognitive competencies necessary for independent and productive living.

Vocational rehabilitation completes the rehabilitation system by addressing an individual's ability to achieve economic independence and participate in the labor market. Loss of employment capacity is one of the most significant consequences of disability or long-term illness. Vocational rehabilitation involves a series of structured activities such as professional retraining, ergonomic workplace adaptation, functional capacity evaluations, skill development, job placement support, and legal consultation regarding employment rights. Its procedural character is expressed through standardized workplace assessments, formal cooperation with employers, monitoring of professional adaptation, and alignment with national labor legislation. Through vocational rehabilitation, individuals can regain financial stability and social independence.

The procedural significance of rehabilitation, in its entirety, extends far beyond the internal activities of each rehabilitation type. At a systemic level, procedural regulation ensures that rehabilitation services are carried out consistently, transparently, and in accordance with legal, ethical, and methodological standards. Rehabilitation begins with comprehensive assessment, which is considered the most important procedural stage. Proper assessment determines the severity of impairment, the capacities retained, the specific needs of the individual, and the priorities for intervention. International frameworks such as the International Classification of Functioning, Disability and Health (ICF) play an important role in standardizing assessments globally.

After assessment, individualized rehabilitation planning ensures that interventions are tailored to personal needs rather than generalized protocols. This procedural step involves interdisciplinary team meetings, goal setting, the identification of therapeutic methods, and the establishment of timeline-based action plans. Planning is immediately followed by implementation, which requires coordinated work by specialists from different disciplines. Interdisciplinary collaboration is one of the key procedural foundations of modern rehabilitation and is recognized as a determinant of successful recovery.

Throughout the rehabilitation process, documentation and monitoring remain necessary components. They ensure transparency, provide legal protection for both specialists and patients, enable outcome evaluation, and allow continuous modification of rehabilitation plans. Rehabilitation is therefore an ongoing, dynamic system rather than a static procedure.

Finally, international best practices demonstrate that effective rehabilitation systems operate within a holistic, human-centered, and rights-based framework. New technologies—including tele-rehabilitation, robotic exoskeletons, virtual reality-based therapy, and artificial intelligence—are transforming the possibilities of rehabilitation and increasing its precision and efficiency. Countries with advanced rehabilitation systems emphasize community-based rehabilitation, accessibility reforms, and integrated service delivery models that bridge clinical and social care sectors.

In conclusion, rehabilitation encompasses a wide spectrum of interconnected processes that address biological, psychological, social, cognitive, and vocational needs. Its procedural significance ensures organization, structure, quality control, and legal compliance, thereby enhancing the effectiveness and sustainability of rehabilitation outcomes. As the global burden of chronic diseases and disabilities increases, the development of strong, procedurally regulated rehabilitation systems becomes an indispensable component of public health policy and social welfare.

Conclusion

Rehabilitation is a complex, systemic, and multidisciplinary process with significant procedural importance in healthcare, social protection, and education. Understanding its types and procedural mechanisms ensures more effective implementation, improved patient outcomes, and enhanced social and economic integration. As rehabilitation continues to evolve, adherence to evidence-based standards and interprofessional collaboration will remain central to achieving sustainable, high-quality recovery systems.

References

1. World Health Organization. *Rehabilitation in Health Systems*. WHO Press, 2017.
2. Gutenbrunner, C., et al. "A Comprehensive Approach to Rehabilitation." *Journal of Rehabilitation Medicine*, 2020.
3. Wade, D. T. "Rehabilitation—A New Approach." *Clinical Rehabilitation*, 2015.
4. Stucki, G., Bickenbach, J. "The International Classification of Functioning, Disability and Health (ICF) in Rehabilitation." *American Journal of Physical Medicine*, 2018.
5. Levack, W. M. M. "Cognitive and Psychological Rehabilitation: Evidence-Based Practices." *Neuropsychological Rehabilitation*, 2019.
6. UN. *Convention on the Rights of Persons with Disabilities*. United Nations, 2006.
7. Kendall, E., Marshall, C. "Vocational Rehabilitation Models and Practice." *Disability and Rehabilitation*, 2021.
8. DeLisa, J. A. *Physical Medicine and Rehabilitation: Principles and Practice*. Lippincott Williams & Wilkins, 2020.

MODERN INTERNET VOCABULARY IN ENGLISH AND RUSSIAN: SIMILARITIES AND BORROWINGS

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Abstract: The rapid growth of digital communication has introduced a wide range of new lexical items into contemporary languages. English, as the global language of technology, has had a particularly strong influence on the development of internet vocabulary in other languages, including Russian. This article explores the similarities, borrowings, and linguistic mechanisms that shape modern English and Russian internet vocabulary. It examines direct loanwords, semantic extensions, phonetic adaptations, hybrid constructions, and the cultural and social factors that contribute to cross-linguistic exchange. The findings show that online discourse encourages linguistic convergence and creativity, resulting in shared digital terminology across both languages.

Keywords: Internet vocabulary; English–Russian borrowings; digital discourse; neologisms; hybrid forms; slang; online communication; cyberculture.

The emergence of the internet has created a dynamic linguistic environment in which new forms of communication develop rapidly. English functions as the primary donor language in this digital space due to its dominance in science, technology, and global media. As a result, many languages—including Russian—have adopted a large portion of their internet terminology directly from English. Scholars note that digital globalization encourages linguistic convergence and cross-cultural lexical exchange[1].

This article investigates similarities and borrowing patterns in English and Russian internet vocabulary. It considers the ways in which English terms enter Russian, how Russian speakers adapt them, and how shared online culture shapes the lexical choices of users in both languages.

Theoretical Background

Internet vocabulary, sometimes referred to as netspeak, represents a hybrid register that mixes characteristics of spoken and written communication[2]. Digital discourse is marked by spontaneity, informality, and constant innovation, which lead to the rapid formation of neologisms. English, as the dominant language of global platforms, contributes extensively to these processes. Linguistic borrowing refers to the adoption of lexical items from one language into another. In the context of internet communication, borrowing often occurs because new digital concepts appear faster than native equivalents can be developed. As a result, English terminology spreads widely and becomes embedded in the lexicon of other languages.

English Influence on Russian Internet Vocabulary

Direct Loanwords

Russian internet vocabulary contains a significant number of direct English loanwords, such as:

лайк (like)

чат (chat)

стрим (stream)

контент (content)

блог (blog)

фоловер (follower)

These words typically preserve their original meaning. Russian speakers also create new forms by adding Russian grammatical endings, for example: лайкать ("to like"), постить ("to post").

Semantic Extensions. English influence leads to semantic changes in some Russian words. The Russian verb троллить, derived from troll, evolved from the idea of "teasing" and now means provoking someone online. Similarly, the noun пост has gained an additional meaning: "an online publication."

Phonetic and Orthographic Adaptation

Borrowed words undergo phonetic adjustment to fit the Russian language system:

- *browser* → *браузер*
- *spam* → *спам*
- *server* → *сервер*

These adaptations allow English terms to be integrated smoothly into Russian usage.

Shared Features of English and Russian Internet Vocabulary

Abbreviations and Acronyms

Both English and Russian online communication rely heavily on abbreviations for fast **expression:**

LOL

OMG

AFK

Russian speakers commonly use English abbreviations without translation, sometimes phonetically adapting them (“ЛОЛ”).

Hybrid Constructions

Hybrid lexical forms arise from mixing English roots with Russian morphology:

фейковые новости (fake news)

реквестнуть (to request)

публик страница (public page)

These hybrids combine expressive and functional elements from both languages.

Universal Internet Slang

Some internet terms spread globally with minimal change:

- *memе* → *мем*
- *emoji* → *эмодзи*
- *hashtag* → *хэштег*

This demonstrates the formation of a shared global digital lexicon.

Cultural and Social Factors

Influence of Global Platforms

Platforms such as YouTube, TikTok, Instagram, and Twitch distribute English terminology to international users. Russian speakers adopt such vocabulary quickly because these platforms operate in largely English-based environments.

Gaming Communities

Gaming culture is a major source of borrowing. Terms like скилл (skill), лут (loot), and рейт (raid) have become widely used not only in gaming contexts but also in everyday youth speech.

Youth Identity and Prestige:

English internet slang often carries social prestige among Russian youth. Using English-based terminology can signal digital literacy, openness to global culture, or membership in online communities[4].

Differences Between English and Russian Internet Vocabulary

Morphology:

English verbs do not inflect, whereas Russian applies its own inflectional endings (e.g., банить, “to ban”).

Slang Innovation:

Russian users create original internet slang (e.g., зашквар, кринжевать, рофлить) that has no precise English equivalent.

Alphabet Differences:

English uses the Latin script; Russian uses Cyrillic. Many borrowed words are transliterated, although some users deliberately keep English spelling for stylistic reasons.

Modern internet vocabulary illustrates the close interaction between English and Russian in the digital age. English provides the majority of terms associated with technology, communication, and online culture. Russian speakers adopt and modify these terms through direct borrowing, semantic shifts, and hybridization. At the same time, Russian users create new slang expressions that contribute to the richness of online discourse.

The evolving nature of digital communication ensures continued lexical exchange between English and Russian. As global connectivity increases, shared digital terminology will continue to shape the linguistic landscape of both languages.

REFERENCES:

1. Crystal, D. (2011). *Language and the Internet* (2nd ed.). Cambridge University Press. (pp. 45–72). Key theoretical framework for internet linguistics and netspeak.
2. Danet, B., & Herring, S. C. (2007). *The Multilingual Internet: Language, Culture, and Communication Online*. Oxford University Press. (pp. 110–136). Multilingual communication and English influence on global digital slang.
3. Klyueva, N. (2018). “Global English and Russian Internet Slang: Interaction and Adaptation.” *Journal of Slavic Linguistics*, 24(2), (pp. 198–215). Analysis of Russian adaptations of English slang.
4. Pavlenko, A. (2017). *Language Contact in the Digital Age*. Routledge. (pp. 56–84). Theoretical study of digital language contact and borrowing.
5. Tagg, C. (2015). *Exploring Digital Communication*. Routledge. (pp. 142–165). Characteristics of digital communication and youth slang formation.
6. Yus, F. (2011). *Cyberpragmatics: Internet-Mediated Communication in Context*. De Gruyter Mouton. (pp. 90–118). Pragmatic and contextual aspects of internet-based communication.

TECHNOLOGY OF MICROENCAPSULATION OF GRAIN KERNEL FAT FRACTION AND ITS APPLICATION IN FUNCTIONAL PRODUCTS

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In the food industry, biologically active oils and their fractions are important raw materials for the production of functional products. Grain kernel oil has many biologically active properties, such as reducing cardiovascular diseases, anti-inflammatory effects, and strengthening the immune system. However, these oils are prone to high levels of constant oxidation, which reduces their quality and makes it difficult to properly integrate them into food products.

Microencapsulation technology allows for the stable encapsulation of oils, protecting them from oxidation and facilitating their incorporation into various products. This process requires optimization of encapsulation materials, emulsifiers, drying methods, and process conditions. The purpose of the thesis is to develop a microencapsulation technology for corn kernel oil and to identify the prospects for its application in functional food products.

Corn kernel oil mainly contains linoleic acid (omega-6), its content is about 70–80%. In addition, alpha-linolenic acid (omega-3), oleic acid (omega-9), tocopherols and phytosterols are also present. These components support cardiovascular function, reduce cholesterol levels, and have anti-inflammatory and antioxidant effects.[1]

However, linoleic acid is relatively sensitive and is rapidly oxidized by high temperature, light and oxygen. Therefore, the direct addition of the oil to food products reduces its quality.

Microencapsulation is a process that ensures the preservation of a stable form of the active substance by encapsulating it in a solid or liquid capsule. Microencapsulation for grain kernel oil serves the following purposes:

- Protection of the oil from oxidation;
- Control of taste and odor;
- Extending shelf life;
- Facilitating integration into various food products.[2]

The following materials are used for encapsulation:

Carrageenan, agar-agar - natural polysaccharides;

Gum arabic - converts liquid into a stable emulsion;

Casein, soy protein - creates protein-based capsules;

Maltodextrin - provides the capsule structure during the drying process.

The most commonly used methods for grain kernel oil are:

Spray-drying - mixing the oil emulsion with encapsulating materials and drying it with hot air;

Freeze-drying - freezing the emulsion and removing the water under vacuum;

Coacervation - forming a capsule based on protein or polysaccharide;

Liposomes and nanocapsules – to ensure high bioavailability.

The following parameters are important for increasing the efficiency of microencapsulation:

Emulsion titration and oil particle size – small particles form stable capsules;

Encapsulation material concentration – high concentration increases the efficiency of oil release;

Drying temperature – high temperature leads to oil oxidation;

PH and resistance – determine the stability of the emulsion.[3]

Optimized parameters allow for maximum stable encapsulation of cereal kernel oil and preservation of its biological activity.

Microencapsulated cereal kernel oil can be effectively used in the following products:

Coffee and tea blends – antioxidant enrichment;

Fatty confectionery products – odor and taste control;

Dairy products and sour cream – omega-6 enrichment;

Sports and energy drinks – rapidly digestible fat fraction;

Dietary and therapeutic products – prevention of cardiovascular diseases.[4]

Microencapsulation allows the oil to be stably incorporated into products, preserving its aroma and taste, and extending its shelf life by limiting oxidation.

Scientific studies have shown that:

85–90% of the oil from the kernels of the grain can be stably preserved by encapsulation using the spray-drying method;

The combination of maltodextrin + gum arabic is recognized as the most optimal encapsulation material;

The encapsulated oil maintains its quality at room temperature for 6 months;

When added to functional products, the organoleptic characteristics do not change and biological activity is preserved.

In conclusion, the technology of microencapsulation of the kernel oil of the grain allows for the stable storage of biologically active oils and their use in functional products. By optimizing the encapsulation materials, process parameters, and integration into various products, the oil is protected from oxidation, its shelf life is extended, and its bioavailability is increased. This technology is of great importance in creating innovative and healthy products in the food industry.

References

1. Gunstone, F. D. Vegetable Oils in Food Technology: Composition, Properties and Uses. Blackwell Publishing, 2011.
2. McClements, D. J. Encapsulation, Protection, and Delivery of Bioactive Proteins and Peptides. Woodhead Publishing, 2016.
3. Omonov, S., Mamatov, B., & Tashkentov, I. Don murtaklari yog‘ini mikroenkapsulyatsiya qilish texnologiyasi. O‘zbekiston Qishloq xo‘jaligi ilmiy jurnali, 2020, 12(3), 45–52.
4. Safari, M., & Mohebbi, M. Microencapsulation of functional oils: Trends and applications. Journal of Food Science and Technology, 2019, 56(4), 1781–1794.
5. Turchina, N., & Sokolova, E. Functional foods enriched with omega fatty acids. Food Chemistry, 2018, 240, 499–507.

THE SILENT SYMPHONY OF LEARNING: HOW EMOTIONS, LOVE, WORDS, AND THE DIGITAL WORLD SHAPE CHILDREN'S INNER GENIUS

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ABSTRACT: This thesis examines how four key elements—love, emotions, positive language, and the digital world—shape children's learning and intellectual growth. The study shows that emotional safety increases curiosity; motivation, positive words strengthen self-confidence; digital tools enhance creativity when used properly. These elements work together to create a supportive learning environment that quietly influences a child's thinking, behavior, and long-term development. The research highlights that modern education must integrate emotional support and guided digital experiences to help children reach their full potential.

Keywords: Learning, children, child development, emotions, love, emotional support, positive language, words, digital tools, digital environment, creativity, motivation, teacher-child interaction, growth mindset

ABSTRAKT : Ushbu tezis to'rtta muhim element—sevgi, hissiyotlar, ijobiy til va raqamli dunyo—bolalarning o'rganishi va intellektual rivojlanishiga qanday ta'sir qilishini o'rganadi. Tadqiqot shuni ko'rsatadiki, hissiy xavfsizlik bolalarda qiziquvchanlikni oshiradi; motivatsiya va ijobiy so'zlar o'ziga bo'lgan ishonchni kuchaytiradi; raqamli vositalar esa to'g'ri ishlatilganda ijodkorlikni rivojlantiradi. Ushbu elementlar birgalikda bolalar uchun qo'llab-quvvatlovchi o'quv muhitini yaratadi va bolalarning fikrlash, xulq-atvor va uzoq muddatli rivojlanishiga tinch ta'sir ko'rsatadi. Tadqiqot shuni ta'kidlaydiki, zamonaviy ta'lim bolalarning to'liq salohiyatini ochishga yordam berish uchun hissiy qo'llab-quvvatlash va boshqariladigan raqamli tajribalarni integratsiya qilishi kerak.

Kalit so'zlar: O'rganish, bolalar, bolalarning rivojlanishi, hissiyotlar, sevgi, hissiy qo'llab-quvvatlash, ijobiy til, so'zlar, raqamli vositalar, raqamli muhit, ijodkorlik, motivatsiya, o'qituvchi-bola o'zaro ta'siri, rivojlanish fikrlashi.

In today's world, children learn from many different sources at the same time: the emotions they see, the love they receive, the words spoken to them, and the digital world they interact with every day. Learning has become more than academic instruction; it is a combination of emotional experiences, relationships, communication, and technology. Children understand the world not only through information but also through the behavior and attitudes of adults around them. A warm environment helps them feel safe, while supportive language builds confidence. At the same time, digital tools introduce new ways of exploring ideas, solving problems, and expressing creativity. These interconnected elements form a "silent symphony" that shapes children's genius in ways that are often unnoticed but deeply impactful. Understanding how this symphony works is essential for improving modern education and creating learning environments that nurture every child's potential.

Learning is far more than memorizing facts or following instructions; it is a continuous process shaped by emotions, relationships, language, and the digital environment. Every child experiences a silent symphony of influences before they even open a textbook. Among these influences, love and emotional safety play the most foundational role. A child who feels valued, cared for, and supported approaches challenges with curiosity rather than fear. According to Lev Vygotsky, "What a child can do today with assistance, she will be able to do by herself tomorrow" (Vygotsky, 1978). This highlights that emotional guidance does not simply comfort a child—it actively builds the foundation for independent thinking. A supportive environment strengthens attention, improves memory retention, and enhances problem-solving ability. For instance, in classrooms where teachers greet each student warmly and encourage effort rather than just correct answers, children show higher engagement and persistence.

Emotions act as silent teachers. Daniel Goleman emphasizes, "In a very real sense we have two minds, one that thinks and one that feels" (Goleman, 1995). The emotional mind often governs learning more than logic alone. When a child observes a teacher approaching mistakes calmly or showing enthusiasm for curiosity, the child internalizes these patterns. Emotional climates in classrooms directly influence children's resilience and willingness to take intellectual risks. Even subtle cues—smiles, tone of voice, patience—can either nurture or inhibit learning. Therefore, teachers' self-awareness and emotional regulation are critical tools in education. Language and words further sculpt a child's mind. Words are not neutral; they carry meaning, emotion, and belief. Positive, encouraging phrases such as "I trust you," "Your ideas matter," and "Mistakes help you grow" activate neural pathways that reinforce self-efficacy and curiosity. Psycholinguistic studies indicate that children

internalize repeated language patterns, which in turn shape their perception of themselves and the world (Whorf, 1956). A teacher's choice of words can transform a child's attitude toward learning. For example, replacing "You failed" with "This is a step toward learning" fosters a growth mindset and encourages experimentation. Thus, language and emotion are inseparable in effective pedagogy.

The digital environment has become a central instrument in the symphony of learning. Seymour Papert argues, "An important part of becoming a good learner is learning how to push out the frontier of what we can express with words" (Papert, 1980). Interactive digital tools, educational apps, and gamified platforms enable children to explore patterns, solve problems, and express creativity in ways that traditional tools cannot. However, technology alone is insufficient. Without emotional support and verbal guidance, digital tools may only entertain, rather than educate. Research shows that children thrive when technology is structured and integrated with emotional and linguistic support, making learning both engaging and meaningful.

When love, emotions, words, and digital experiences connect, they form a powerful, interdependent system. Imagine a classroom where a child receives verbal encouragement, experiences calm guidance during a challenging task, and uses an interactive digital app to explore patterns. Each moment reinforces the others: the love and emotional safety encourage engagement; positive words foster confidence; the digital tool expands cognitive skills; reflection on these experiences strengthens understanding. This synergy resembles a "silent symphony," quietly orchestrating the development of cognitive, emotional, and social intelligence simultaneously.

The implications for modern education are profound. Teachers are no longer just instructors—they are emotional guides, linguistic models, and facilitators of digital experiences. Children raised in such integrated environments are more resilient, imaginative, and self-directed. They internalize learning as a joyful, meaningful process rather than a mechanical task. Education, therefore, should prioritize emotional safety, positive language, and guided technology as much as it values curriculum content. By recognizing the silent symphony of learning, educators and parents can cultivate children's hidden genius, ensuring that knowledge, creativity, and emotional intelligence grow hand in hand.

References:

- 1) Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*.
- 2) Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*.
- 3) Papert, S. (1980). *Mindstorms: Children, Computers and Powerful Ideas*.
- 4) Whorf, B. L. (1956). *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*.

**MUSTAHKAM OILA VA FAOL XOTIN-QIZLAR JAMIYATI
FAROVONLIGINI BELGILAYDI
КРЕПКАЯ СЕМЬЯ И АКТИВНЫЕ ЖЕНЩИНЫ ОПРЕДЕЛЯЮТ
БЛАГОПОЛУЧИЕ ОБЩЕСТВА
STRONG FAMILY AND ACTIVE WOMEN DEFINE THE PROSPERITY OF
SOCIETY**

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ANNOTATSIYA . Ushbu maqolada mustahkam oila va faol xotin-qizlarning jamiyat farovonligi hamda barqaror taraqqiyotini ta'minlashdagi o'rni keng yoritilgan. Oila inson hayotida eng muhim ijtimoiy institut bo'lib, unda mehr-oqibat, hurmat va qadriyatlarning shakllanishi kelajak avlodning taqdiriga bevosita ta'sir ko'rsatadi. Ayniqsa, xotin-qizlarning o'z oilasida va jamiyatda tutgan o'rni hamda faoliyati taraqqiyotning muhim omili hisoblanadi. Bugungi kunda ayollar ta'lim, sog'liqni saqlash, madaniyat, siyosat va iqtisodiyot sohalarida sezilarli natijalarga erishmoqda. Ularning tashabbuskorligi, sabr-toqati va mehnatsevarligi oilaviy barqarorlikni mustahkamlash bilan birga, jamiyatning umumiy rivojlanishiga xizmat qilmoqda. Davlatimiz tomonidan xotin-qizlarni qo'llab-quvvatlash, ularning huquqlarini himoya qilish va ijtimoiy hayotdagi ishtirokini kengaytirish borasida muhim islohotlar amalga oshirilmoqda. Shunday qilib, mustahkam oila va faol xotin-qizlar nafaqat jamiyat barqarorligi, balki farovonlikning asosiy kafolati sifatida namoyon bo'ladi.

Kalit so'zlar: mustahkam oila, xotin-qizlar, jamiyat, farovonlik, taraqqiyot.

АННОТАЦИЯ. В данной статье подробно рассматривается роль крепкой семьи и активных женщин в обеспечении благополучия и устойчивого развития общества. Семья является важнейшим социальным институтом, в котором формируются взаимное уважение, ценности и духовные основы будущего поколения. Особенно значима роль женщин как в семье, так и в общественной жизни, поскольку их активность напрямую связана с прогрессом страны.

Сегодня женщины добиваются высоких результатов в образовании, здравоохранении, культуре, политике и экономике. Их инициативность, терпение и трудолюбие способствуют укреплению семейной стабильности и одновременно служат основой для общего развития общества. Государство реализует масштабные реформы, направленные на поддержку женщин, защиту их прав и расширение участия в социально-экономических процессах. Таким образом, крепкая семья и активные женщины не только обеспечивают стабильность общества, но и становятся главными гарантиями его благополучия и процветания.

Ключевые слова: крепкая семья, женщины, общество, благополучие, развитие.

ANNOTATION. This article provides an in-depth analysis of the role of strong families and active women in ensuring the prosperity and sustainable development of society. The family is one of the most important social institutions, where values, mutual respect, and moral foundations are shaped and transmitted to future generations. Women play a crucial role both within the family and in the wider community, as their activity significantly contributes to national progress. Today, women are achieving remarkable success in education, healthcare, culture, politics, and the economy. Their initiative, patience, and dedication not only strengthen family stability but also foster overall societal development. Governments are implementing large-scale reforms aimed at supporting women, protecting their rights, and increasing their participation in socio-economic life. Therefore, strong families and active women represent not only the pillars of social stability but also the essential guarantees of prosperity and harmony for the future.

Keywords: strong family, women, society, prosperity, development.

KIRISH. Insoniyat tarixida mustahkam oila qadimdan eng muhim ijtimoiy qadriyat sifatida e'tirof etilib keladi. Oila jamiyatning poydevori bo'lib, unda farzandlar tarbiyasi, ma'naviy-axloqiy qadriyatlar shakllanishi va ijtimoiy barqarorlik ta'minlanadi. Ayniqsa, faol va bilimli xotin-qizlarning jamiyat hayotidagi o'rni ortib borayotgani mustahkam oilani shakllantirishda hal qiluvchi ahamiyatga ega.

Bugungi globalashuv davrida oila institutining mustahkamligi nafaqat maishiy farovonlik, balki milliy taraqqiyot mezonidir hamdir. Shu nuqtayi nazardan, xotin-qizlarning ijtimoiy faolligi, ularning ta'lim, ilm-fan, siyosat va iqtisodiy hayotdagi ishtiroki jamiyatning barqaror rivojlanishida muhim omil bo'lib xizmat qiladi. Faol xotin-qizlar nafaqat oilaviy, balki ijtimoiy hayotning turli jabhalarida yetakchilik qilmoqda. Ularning ilmiy izlanishlari, tadbirkorlik tashabbuslari va ijtimoiy loyihalardagi ishtiroki jamiyat farovonligini oshirishga xizmat qiladi. Ayniqsa, bilimli

onaning oiladagi ta'siri farzandlar tarbiyasida muhim rol o'ynaydi. Chunki ona tarbiyasi orqali ma'naviy barkamol va ijtimoiy faol shaxslar shakllanadi.

O'zbekiston tajribasiga to'xtaladigan bo'lsak, davlat siyosatida xotin-qizlarni qo'llab-quvvatlash, ularning huquq va manfaatlarini himoya qilish hamda oilalarni mustahkamlash masalalariga alohida e'tibor qaratilmoqda. Jumladan, "Ayollar daftari" tizimi, xotin-qizlar tadbirkorligini qo'llash, ularni oliy ta'limga keng jalb etish orqali faol fuqarolik pozitsiyasi shakllantirilmoqda. Natijada jamiyatda farovonlik, oila barqarorligi va sog'lom avlod tarbiyasi ta'minlanmoqda.

ADABIYOTLAR TAHLILI. Oila va xotin-qizlar masalasi bo'yicha ko'plab ilmiy manbalarda mustahkam oila jamiyat barqarorligi, sog'lom avlod tarbiyasi va iqtisodiy taraqqiyotning muhim sharti sifatida talqin qilinadi. Jumladan, BMTning "Ayollar huquqlari va gender tengligi" bo'yicha hisobotlarida faol ayollarning jamiyat taraqqiyotiga qo'shgan hissasi yuksak baholangan. Mahalliy olimlardan X. Karimova (2020) tadqiqotlarida xotin-qizlarning ta'lim va kasb-hunar egallash darajasi oilaviy barqarorlik bilan chambarchas bog'liq ekani ta'kidlangan. Shuningdek, J. Abdullayeva (2022) o'z izlanishlarida ayollar tadbirkorligi mahalla hayotida farovonlikni oshirishga xizmat qilayotganini ko'rsatib o'tgan.

Xalqaro adabiyotlarda ham mustahkam oila va faol xotin-qizlar jamiyatning iqtisodiy va ijtimoiy barqarorligiga sezilarli ta'sir ko'rsatishi alohida ta'kidlanadi. Demak, ilmiy adabiyotlar tahlili ushbu mavzuning dolzarbligini yanada chuqurlashtiradi.

METODLAR

1. **Adabiyotlarni tizimli o'rganish** – oila, tarbiya va ijtimoiy qadriyatlarga oid mahalliy va xorijiy manbalar tahlil qilindi.
2. **Sotsiologik kuzatuv** – oilaviy munosabatlar, yoshlar tarbiyasi va oilaviy qadriyatlar sohasida kuzatishlar olib borildi.
3. **Taqqoslash usuli** – turli davr va jamiyatlarda oilaviy qadriyatlarning o'rnini solishtirildi.
4. **Analitik tahlil** – oila va jamiyat o'rtasidagi o'zaro bog'liqlik ilmiy jihatdan o'rganildi.

MUNOZARA. Oila – jamiyatning eng kichik ijtimoiy bo‘g‘ini bo‘lishi bilan birga, insonning ma’naviy-axloqiy shakllanishida bevosita rol o‘ynaydi. Ota-ona va farzandlar o‘rtasidagi sog‘lom munosabatlar oilaning mustahkamligini ta’minlaydi. Mustahkam oila jamiyatda jinoyatchilikning kamayishi, yoshlarning barkamol inson sifatida voyaga yetishiga xizmat qiladi. Ilmiy tadqiqotlar shuni ko‘rsatadiki, sog‘lom oilaviy muhitda voyaga yetgan yoshlar ijtimoiy jarayonlarga faol kirishadi, ularda mas’uliyat, mehnatsevarlik, Vatanga sadoqat kabi fazilatlar mustahkam shakllanadi. Aksincha, oilaviy muammolar mavjud bo‘lgan muhitda farzandlar ruhiy zo‘riqish, beqarorlik va ijtimoiy moslashish qiyinchiliklariga duch kelishadi. Shuningdek, milliy qadriyatlarga asoslangan oilaviy tarbiya, diniy-ma’naviy an’analarni asrab-avaylash mustahkam oila barpo etishda muhim omildir.

NATIJALAR VA TAHLILLAR

1. Mustahkam oila yoshlarning har tomonlama barkamol rivojlanishiga zamin yaratadi.
2. Oila jamiyatning ijtimoiy barqarorligini ta’minlaydi, ma’naviy qadriyatlar davomiyligini kafolatlaydi.
3. Oilada sog‘lom muhit shakllantirish jamiyatda jinoyatchilikning oldini olishda muhim ahamiyatga ega.
4. Oila qadriyatlarini mustahkamlash orqali milliy o‘zlikni anglash va Vatan ravnaqiga hissa qo‘shish mumkin.

XULOSA. Mustahkam oila – inson hayotining tayanchi, jamiyat taraqqiyotining asosi va millat istiqbolining kafolatidir. Oilada sog‘lom ma’naviy-axloqiy muhitni shakllantirish orqali farzandlar barkamol shaxs sifatida voyaga yetadi. Oila qadriyatlarini asrab-avaylash, milliy va diniy an’analarga hurmat bilan qarash, oilaviy birdamlikni ta’minlash jamiyat barqarorligi va taraqqiyotini kafolatlovchi omillardandir. Shu bois, mustahkam oila nafaqat shaxsiy baxt manbai, balki mamlakat taraqqiyotida hal qiluvchi ijtimoiy institut sifatida yuksak qadrlanishi zarur. Shu bilan birga, mustahkam oila iqtisodiy farovonlikni ta’minlaydi. Unda mehnatsevarlik, halollik va mas’uliyat kabi qadriyatlar shakllanib, oilaviy birdamlik ijtimoiy hamjihatlikka xizmat qiladi. Oila muhiti insonning ruhiy barqarorligini ta’minlaydi, sog‘lom turmush tarziga asos bo‘ladi. Demak, mustahkam oila – nafaqat shaxsiy baxt manbai, balki milliy qadriyatlarni asrab-avaylovchi, farovon jamiyat qurilishiga xizmat qiluvchi, yosh avlod tarbiyasida beqiyos o‘ringa ega ijtimoiy institutdir.

FOYDALANILGAN ADABIYOTLAR

1. Karimov I.A. *Yuksak ma’naviyat – yengilmas kuch.* – Toshkent: Ma’naviyat, 2008.
2. Mirziyoyev Sh.M. *Oila va ayol jamiyatda beqiyos kuchdir.* – Toshkent: O‘zbekiston, 2021.

3. O‘zbekiston Respublikasi Konstitutsiyasi. – Toshkent: Adolat, 2023.
4. Oila kodeksi. – Toshkent: Adolat, 2022.
5. Abdurahmonova M. *Oila psixologiyasi*. – Toshkent: Noshir, 2019.
6. Qodirova D. *Ayol va jamiyat: ijtimoiy-sotsiologik tahlil*. – Toshkent: Fan, 2020.
7. Abdullayeva Z. *Mustahkam oila – millat tayanchi*. – Samarqand: SamDU nashriyoti, 2018.
8. WHO. *Family and Community Health Strategy*. – Geneva: World Health Organization, 2016.
9. UNESCO. *Gender Equality and Women’s Empowerment: Global Report*. – Paris, 2020.
10. UN Women. *Progress of the World’s Women*. – New York: United Nations, 2021.

TEACHER STRATEGIES FOR CULTIVATING CRITICAL THINKING WITHIN PROJECT-BASED LEARNING IN EFL SETTINGS

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As a result of today's globalization and rapid development of information technologies, the language learning process has become more complicated, and it is not enough to teach only grammatical rules or increase vocabulary. The formation of the ability to use the language effectively and purposefully in learners of English as a Second Language (EFL) is considered an important task. At the same time, critical thinking is one of the main skills that serve to develop students' ability to analyze, evaluate information, solve problems and find creative solutions (Paul & Elder, 2014).

Project-Based Learning (PBL) is recognized as one of the effective tools for developing not only language skills, but also critical thinking in students in the EFL environment. PBL provides students with opportunities to complete tasks, work in groups, identify problems, and find solutions based on real-life situations. In this context, teacher strategies play a central role in supporting and shaping critical thinking.

This thesis analyzes, illustrates with practical examples, and develops recommendations for effective strategies that teachers can use to develop critical thinking through project-based learning in an EFL setting.

The concept of critical thinking first began to be widely used in pedagogical and psychological literature in the mid-20th century. Critical thinking is the process of analyzing problematic situations, making informed decisions, verifying facts, and arriving at logical conclusions (Ennis, 2011). For learners of English as a second language, critical thinking is not simply about knowing grammatical or lexical rules, but also about being able to express one's thoughts coherently and well-foundedly through language.

The main elements of critical thinking are:

Analysis – breaking down information into segments, identifying main and supporting ideas.

Evaluation – checking the reliability of sources and facts, making decisions.

Creative problem-solving – developing new ways to solve a problem.

Reflection – critically evaluating one's own ideas and respectfully accepting the ideas of others (Facione, 2015).[1]

Project-based learning is an active learning process that focuses on solving real-life problems that are relevant to the interests and needs of students. PBL has the following characteristics:

Focus or problem – students are given an interesting and relevant task.

Independent and group work – students work collaboratively on a project.

Outcome or product – a specific result or creative product is produced at the end of the project.

Reflection – students evaluate their work and analyze their experiences.

In an EFL setting, PBL provides students with the following opportunities:

Use language in a practical context.

Develop critical thinking through problem-solving.

Improve communication skills through group work and discussion.

Developing independent learning through creativity and innovation (Thomas, 2000).[2]

The teacher's strategies for developing critical thinking directly determine the effectiveness of the learning process. The following are the main strategies used in PBL in EFL.

The teacher should ask open-ended questions to stimulate critical thinking. For example: "Why did this happen?" or "What alternative solution do you suggest?" In the process of asking questions, students analyze facts, form well-founded opinions, and learn to give logical explanations.

Group discussions and debates are effective tools for developing critical thinking. The teacher encourages students to listen respectfully to different opinions and defend their decisions based on evidence. The discussion process also serves to strengthen language skills.

If the project tasks assigned to students are related to real-life problems, they will use critical thinking more actively in the process of analyzing and finding solutions. For example, the task of creating an environmental project or a social media campaign encourages students to think creatively and critically.

After students complete the project, the teacher encourages them to reflect: what worked, what didn't work, which decisions were effective, and which processes need to be improved. Reflection serves to strengthen critical thinking.

During the more complex stages of the project, the teacher provides guidance but does not provide complete solutions. This strategy encourages students to think independently and teaches them to make responsible decisions.

Studies conducted in various EFL settings confirm the effectiveness of PBL in developing critical thinking. For example, Li (2019) found that in an experiment

conducted in Chinese schools, groups that used PBL showed significant differences in critical thinking skills compared to groups that received traditional lessons.[3]

Also, a study by Johnson and Johnson (2020) found that students in groups working through PBL improved their ability to analyze problems, make decisions, and develop creative solutions. These observations indicate that PBL is an effective tool for developing not only language skills but also critical thinking in EFL settings.[4]

In conclusion, developing critical thinking through project-based learning in EFL not only enriches the language learning process, but also develops students' ability to solve problems, analyze and develop creative solutions. The teacher can effectively implement this process by using the following strategies:

Ask open-ended questions and define problems.

Organize dialogue and discussions.

Adapt project tasks to real-life contexts.

Encourage reflection and self-assessment.

Use a variety of resources and sources.

Provide guidance (scaffolding).

The correct application of these strategies in the EFL environment significantly increases students' critical thinking skills and shapes them as independent, creative and thinking individuals.

REFERENCES

1. Raxmonov, M. Til o'qitish jarayonida interfaol metodlar. Samarqand: SamDU nashriyoti. 2022. C- 678, 682
2. Abdullayeva, N. Ingliz tili darslarida PBL (loyiha asosida o'qitish) metodini qo'llash samarasi. Toshkent: TDPU ilmiy to'plami. 2023.
3. Xoliyorov, M. Ta'limda muammoli o'qitish va tanqidiy fikrlash texnologiyalari. Qarshi: QXPI nashriyoti. 2021. 234, 238
4. Matnazarova, S. EFL o'quvchilarida kommunikativ kompetensiyani rivojlantirishning innovatsion usullari. Toshkent: Fan va texnologiya. 2020. 456-B

XAVFNI BOSHQARISH TIZIMIDA SUN'IY INTELLEKTDAN FOYDALANISH

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Annotatsiya: Ushbu tezisdagi bojxona faoliyatida xavfni boshqarish tizimini takomillashtirishda sun'iy intellekt va ma'lumotlar tahlili texnologiyalarining o'rni tahlil qilinadi. Xalqaro tajribalar asosida O'zbekiston bojxona tizimidagi amaliy muammolar va ularni bartaraf etish yo'llari ko'rib, takliflar ishlab chiqilgan.

Kalit so'zlar: Xavf, xavf profili, sun'iy intellekt, ma'lumotlar tahlili, bojxona to'lovlari, xavf reytingi, data mining.

USE OF ARTIFICIAL INTELLIGENCE IN RISK MANAGEMENT SYSTEM

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Annotation: This thesis analyzes the role of artificial intelligence and data analysis technologies in improving the risk management system in customs activities. Based on international experience, practical problems in the customs system of Uzbekistan and ways to overcome them are identified and proposals are developed.

Keywords: Risk, risk profile, artificial intelligence, data analysis, customs payments, risk rating, data mining.

ИСПОЛЬЗОВАНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В СИСТЕМЕ УПРАВЛЕНИЯ РИСКАМИ

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Аннотация: В данной диссертации анализируется роль искусственного интеллекта и технологий анализа данных в совершенствовании системы управления рисками в таможенной деятельности. На основе международного опыта выявляются практические проблемы в таможенной системе Узбекистана, пути их решения и разрабатываются предложения.

Ключевые слова: Риск, профиль риска, искусственный интеллект, анализ данных, таможенные платежи, оценка риска, интеллектуальный анализ данных.

So‘nggi yillarda xalqaro savdo hajmining tez sur‘atlar bilan ortib borishi bojxona organlarining faoliyatiga yangi talablarni qo‘ymoqda. Xususan, bojxona xodimlari nafaqat tovar va transport vositalarining qonuniyligini nazorat qilish, balki shu jarayonda iqtisodiy xavfsizlikni ta‘minlash, noqonuniy harakatlarning oldini olish, shuningdek, savdo jarayonlarini soddalashtirish vazifalarini ham bajaradi. Bu esa xavfni boshqarish tizimini samarali ishlatish zaruratini keltirib chiqarmoqda.

Bojxonada xavfni boshqarish tizimi - ma‘lumotlarni yig‘ish, tahlil qilish va baholash asosida tekshiruv resurslarini optimal taqsimlashga qaratilgan tizimdir. Jahon bojxona tashkiloti tomonidan ishlab chiqilgan “Risk Management Compendium”da qayd etilishicha, xavf tahlilining to‘g‘ri yo‘lga qo‘yilishi bojxona jarayonlarini soddalashtirish bilan birga, huquqbuzarliklarni kamaytirishga ham xizmat qiladi[1].

Bugungi kunda bojxona tizimida eng muhim muammolardan biri ma‘lumotlarning hajmi, xilma-xilligi va ularni tezkor qayta ishlashdagi murakkablikdir. Shu sababli, dunyo tajribasida sun‘iy intellekt, katta ma‘lumotlar bazasi (Big Data), Mashinali o‘qitish (Machine Learning) kabi texnologiyalar bojxona faoliyatiga keng joriy etilmoqda. Bu texnologiyalar yordamida bojxona organlari xavflarni oldindan aniqlash, xavfli deklaratsiyalarni filtrlash va real vaqt rejimida nazoratni amalga oshirish imkoniyatiga ega bo‘lmoqda.[3]

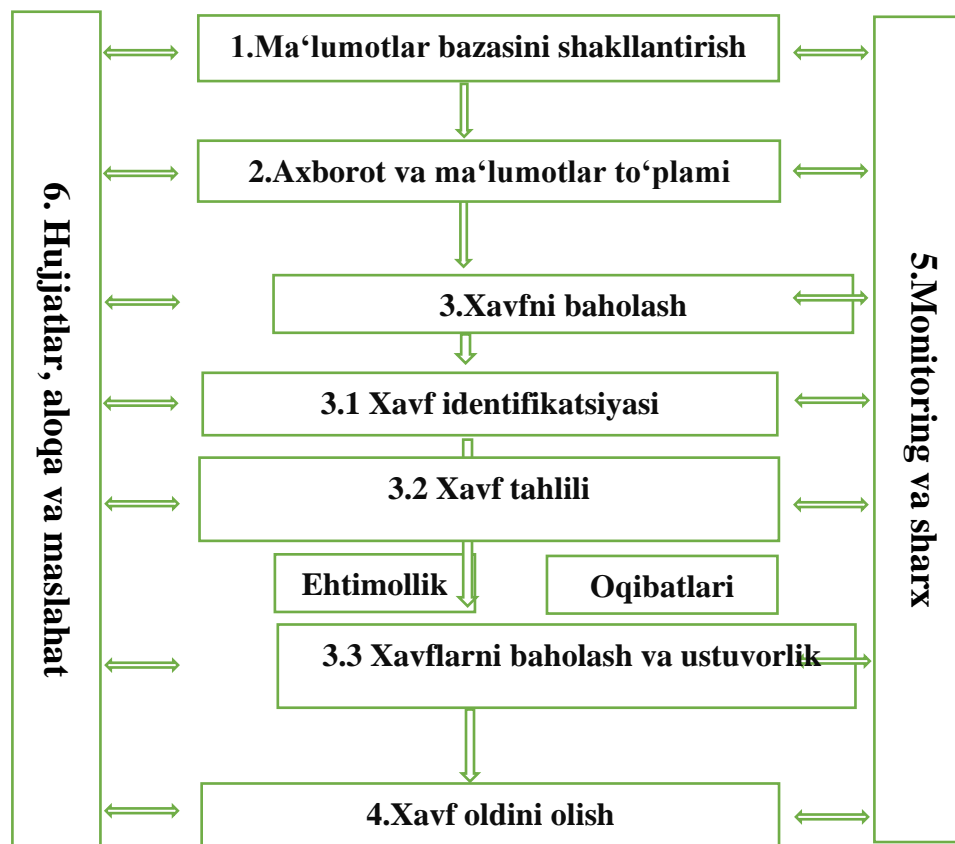
Mamlakatimizda 2018-yildan boshlab mazkur standartlar va tavsiyalar to‘plami asosida xavflarni boshqarish tizimi joriy etilishi natijasida rasmiylashtirish vaqti eksportda–4,5 baravarga, importda–2 baravarga, bojxona ekspertizalari soni esa 6 baravarga qisqardi va bojxona nazorati samaradorligi 4 baravarga ortdi. Xalqaro hamkorlik yo‘nalishida 8 ta davlatlarning bojxona xizmatlari bilan eksport qilingan tovarlar bo‘yicha, 41 ta xalqaro va milliy aviakompaniyalardan uchib keluvchi yo‘lovchilar va ularning bagajlari haqida oldindan axborot almashinuvi yo‘lga qo‘yildi. Bu esa, ushbu ma‘lumotlarni qayta ishlash va xavflarni oldindan baholash imkoniyati oshdi. Bojxona tizimida ham xavfni boshqarish tizimida ushbu mexanizmlari mavjud bo‘lsa-da, ular hali to‘liq avtomatlashtirilmagan, ma‘lumotlar integratsiyasi yetarli emas, shuningdek, ayrim hollarda inson omilining ta‘siri yuqori.

Shu sababli, sun'iy intellekt asosida ishlovchi avtomatik tahlil tizimlarini joriy etish milliy bojxona tizimining raqamli transformatsiyasi yo'lida muhim qadam hisoblanadi. Bojxonada xavfni boshqarish tizimi xalqaro bojxona amaliyotida muhim boshqaruv vositasi sifatida qaraladi. Xavfni boshqarish tizimning asosiy maqsadi - mavjud resurslardan oqilona foydalanish, xavf darajasiga qarab nazoratni differentsiallashtirish hamda bojxona jarayonlarini soddalashtirishdir[6].

Bojxona kontekstida xavf - bu tovarlar, transport vositalari yoki shaxslar tomonidan bojxona qonunchiligi talablarini buzish ehtimoli sifatida talqin etiladi.

Xalqaro standartiga ko'ra, xavfni boshqarish jarayoni xavfni identifikatsiya qilish, xavfning ehtimoli va oqibatlarini o'lchash, xavfni kamaytiruvchi nazorat mexanizmlarini joriy etish, tizim samaradorligini baholash jarayonlaridan tashkil topadi. Bojxona amaliyotida bu bosqichlar odatda avtomatlashtirilgan dasturiy tizimlar orqali amalga oshiriladi.

Jahon bojxona tashkiloti tomonidan ishlab chiqilgan modelda asosiy urg'u tanlab olish tamoyiliga berilgan, ya'ni har bir bojxona yuk deklaratsiyasida xavf profili asosida nazorat darajasi belgilanadi. Bu orqali past xavfli sub'ektlar tezroq o'tadi, yuqori xavfli operatsiyalar esa chuqurroq tahlil qilinadi[10].



1-rasm. Xavfni boshqarish jarayoni¹.

Bojxona tizimida xavfni boshqarish nazariy jihatdan resurslarni optimallashtirish, nazoratni soddalashtirish va qonunbuzarliklarni kamaytirish vositasi sifatida namoyon bo‘ladi.

Sun‘iy intellekt va ma‘lumotlar tahlili hozirgi kunda bojxona boshqaruvining eng istiqbolli yo‘nalishlaridan biridir. Ular orqali xavfni baholash, deklaratsiyalarni avtomatik tahlil qilish, qonunbuzarlikni aniqlash va real vaqt rejimida nazorat qilish imkoniyati kengaymoqda. Sun‘iy intellekt texnologiyalari quyidagi sohalarda qo‘llanmoqda: mashinali o‘rganish algoritmlari yordamida yuqori xavfli deklaratsiyalarni aniqlash; deklaratsiya ma‘lumotlarida takrorlanayotgan shubhali xatti-harakatlarni tahlil qilish; ehtimoliy qonunbuzarliklarni oldindan prognozlash; qiymatni kamaytirish, tovar nomini noto‘g‘ri ko‘rsatish yoki soxta hujjatlarni aniqlashdir[4]. Misol tariqasida, Jahon Banki tomonidan 2023-yilda Senegal bojxonasi misolida o‘tkazilgan tadqiqotda Random Forest va XGBoost modellari yordamida qonunbuzarlikni aniqlash aniqligi 90% gacha yetgani qayd etilgan[5].

Yaponiya, Koreya, Singapur va Estoniya bojxonalarida sun‘iy intellekt asosida ishlovchi “smart customs” tizimlari joriy qilingan. Koreya bojxona xizmati tomonidan bojxona nazorati tarmog‘i asosidagi sun‘iy intellekt tizimi orqali 24/7 real vaqt rejimida xavfli deklaratsiyalar tahlil qilinadi. Estoniya bojxona organlari esa blokcheyn texnologiyalari asosida import va eksport ma‘lumotlarini avtomatik sinxronlashtirishni yo‘lga qo‘ygan[5]. Bu tajribalardan kelib chiqib, O‘zbekiston uchun ham sun‘iy intellekt integratsiyasini joriy etishda samarali model bo‘lib xizmat qilishi mumkin.

Sun‘iy intellekt asosida xavfni boshqarishni takomillashtirish uchun bojxona, soliq, bank va transport tizimlari ma‘lumotlarini yagona katta ma‘lumotlar ombori formatida birlashtirish, mashinali o‘qitish modellari yordamida xavf reytingini avtomatik hisoblash tizimini ishlab chiqish, qonunbuzarlik ehtimolini tahlillar asosida bashorat qiluvchi sun‘iy intellekt modullarini joriy etish, shuningdek bojxona xodimlarini sun‘iy intellektdan foydalanish bo‘yicha malakasini oshirish muhim hisoblanadi.

Ushbu yo‘nalishlarni xavfni boshqarish tizimida qo‘llash va takomillashtirish natijasida quyidagi samaradorlikka erishishimiz mumkin.

- ❖ Xavfli operatsiyalarni aniqlash aniqligi oshadi;
- ❖ Bojxona to‘lovlarini unduruvchanligi oshadi;
- ❖ Tekshiruvlar soni qisqaradi, lekin sifati oshadi;
- ❖ Savdo jarayonlari tezlashadi va soddalashtiriladi;
- ❖ Inson omilining salbiy ta’siri kamayadi.

Xavfni boshqarish tizimini xorijiy mamlakatlar tajribasini o‘rgangan holda quyidagi takliflar beriladi:

1. Axborot almashinuvi va idoralararo integratsiyani kuchaytirish:

-notarif tartibotlarni qo'llashda xavfni boshqarish tamoyillarini joriy etish maqsadida tegishli vazirlik va idoralar bilan o'zaro integratsiyalashgan axborot almashinuvi tizimini yaratish;

-pasport nazorati jarayonida bojxona organlari axborot tizimi orqali aniqlangan xavfli yo'lovchilar bo'yicha chegara qo'shinlari bilan real vaqt rejimida hamkorlikni kuchaytirish, xavfli yo'lovchining harakatini vaqtincha to'xtatish mexanizmini tartibga solish;

-ruxsatnoma talab qilinadigan tovarlar bo'yicha barcha ma'lumotlarni vakolatli davlat organlarining bojxona axborot tizimlariga ulash;

2. Raqamli texnologiyalar asosida bojxona nazoratini takomillashtirish:

-sun'iy intellekt asosida avtomatik xavf baholash tizimini yaratish, deklaratsiya ma'lumotlarini real vaqt rejimida tahlil qilish, shubhali operatsiyalarni oldindan aniqlash;

-deklaratsiya va yo'lovchi ma'lumotlarini avtomatik filtrlovchi AI-modullarni bojxona axborot tizimiga integratsiya qilish, inson omilini kamaytirish va aniqlikni oshirish;

-bojxona, soliq, bank, transport-logistika va sertifikatlash tizimlari ma'lumotlarini yagona Big Data platformasiga birlashtirish, xavfni baholashni kompleks ko'rinishda amalga oshirish;

-bojxona xodimlari uchun sun'iy intellekt, risk tahlili va raqamli texnologiyalar bo'yicha maxsus o'quv dasturlarini joriy etish.

Bojxona faoliyatiga sun'iy intellektni joriy etish xavfni boshqarish tizimining aniqligi va samaradorligini keskin oshiradi. Bu esa o'z navbatida mamlakatning iqtisodiy xavfsizligini mustahkamlash, korrupsion omillarni kamaytirish hamda xalqaro savdo jarayonlarini tez va shaffof amalga oshirilishiga zamin yaratadi. Umuman olganda, ilg'or davlatlar tajribasi asosida ishlab chiqilgan ushbu takliflar O'zbekiston bojxona tizimida xavfni boshqarish mexanizmini yangi bosqichga ko'tarib, bojxona nazoratining tezkorligi, ishonchliligi va samaradorligini oshirish orqali iqtisodiy xavfsizlikni yanada kuchaytirishga xizmat qiladi.

FOYDALANILGAN ADABIYOTLAR RO'YXATI

1. World Customs Organization (2018). *Risk Management Compendium*. Brussels: WCO.

2. Widdowson, D. (2020). *Managing Customs Risk and Compliance: An Integrated Approach*. *World Customs Journal*, 14(2), 63–79.

3. World Bank (2023). *Machine Learning and Customs Fraud Analytics*. Washington, D.C.

4. Kunickaitè, R. et al. (2022). *Machine Learning Approaches for Customs Fraud Detection*. *CEUR Workshop Proceedings*, 2915, 60–72.

5. OECD (2021). *AI in Trade Facilitation and Risk Management*. Paris: OECD Publishing.
6. Farxodov, F., & Sherboboyev, D. (2024). Bojxona organlarida xavfni boshqarish tizimining bugungi kunda. Raqamli iqtisodiyot va sun'iy intellekt texnologiyalarining jamiyat rivojlanishidagi ahamiyati, 1(1), 3-7.
7. Furqatovich, F. F. Bojxona organlarida xavfni boshqarish tizimining bugungi kunda tutgan o'rni va uning ahamiyati.
8. Ministry of Customs and Trade, Republic of Korea (2022). *AI-based Customs Intelligence Model*. Seoul.
9. Farxodov, F. F., & o'g'li Sherboboyev, D. O. (2024). Bojxona organlarida xavfni boshqarish tizimining bugungi kunda tutgan o'rni va uning ahamiyati. Indexing, 1(1).
10. "Xavfni boshqarish tizimi" darslik. M.Xamrayev, X.Ro'zmetov, A.Nazarov. Xavfni boshqarish tizimi: Darslik. - Toshkent: BI, 2021 y. - 261b.

THE ROLE OF INTERDISCIPLINARY INTEGRATION IN DEVELOPING LEARNERS' COMMUNICATIVE COMPETENCE IN FOREIGN LANGUAGE EDUCATION

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Abstract: This article examines the role of interdisciplinary integration in enhancing learners' communicative competence within the context of foreign language education. As modern educational systems shift toward holistic and competency-based approaches, interdisciplinary instruction has gained substantial importance for fostering meaningful, authentic, and socially grounded language use. The study discusses theoretical foundations of communicative competence, explores models of interdisciplinary integration, and explains how cross-disciplinary knowledge and real-world tasks contribute to linguistic, sociolinguistic, strategic, and discourse competence. Special attention is given to the benefits of content-based learning, project-based learning, and CLIL (Content and Language Integrated Learning), as well as the challenges educators face in designing interdisciplinary curricula. The article concludes by emphasizing the need for pedagogical collaboration, curriculum redesign, and teacher training to ensure successful interdisciplinary integration.

Keywords: Interdisciplinary integration; communicative competence; foreign language education; CLIL; content-based instruction; project-based learning; competency-based curriculum.

INTRODUCTION:

The rapid transformation of global society, shaped by technology, mobility, and intercultural communication, places increasing demands on educational systems to prepare learners for real-world interaction. Foreign language education, in particular, has shifted from traditional grammar-translation models to communicative and competency-based approaches. Communicative competence—the ability to use

language appropriately in diverse social contexts—lies at the heart of contemporary language education. In recent years, educators and researchers have emphasized the potential of interdisciplinary integration to enhance language learning outcomes. By combining foreign language instruction with knowledge from other academic fields, interdisciplinary approaches create meaningful learning environments where learners engage with authentic content, real-world problems, and cross-curricular tasks. This article investigates how interdisciplinary integration contributes to developing learners' communicative competence, considering theoretical perspectives, instructional models, practical benefits, and implementation challenges.

Theoretical Foundations of Communicative Competence: The concept of communicative competence was first articulated by Dell Hymes (1972) as a response to Chomsky's distinction between linguistic competence and performance. Hymes argued that knowing a language involves not only grammatical knowledge but also the ability to use language appropriately in social contexts. Later theorists refined this framework. Canale and Swain (1980) proposed a widely accepted model consisting of four components:

1. Linguistic competence – knowledge of grammar, vocabulary, and phonology.
2. Sociolinguistic competence – understanding social norms, cultural references, and context-appropriate language use.
3. Discourse competence – the ability to produce cohesive and coherent speech and writing.
4. Strategic competence – using communication strategies to overcome linguistic limitations.

Interdisciplinary integration naturally supports all four components by providing varied contexts, authentic content, and opportunities for purposeful communication.

Interdisciplinary Integration in Education Interdisciplinary integration goes beyond merely combining subjects; it involves creating meaningful connections among fields to promote deeper learning. According to Jacobs (1989), integration may take several forms:

- Multidisciplinary approach – subjects are connected around a common theme while keeping their identities.
- Interdisciplinary approach – concepts and skills from two or more subjects are synthesized to construct new understanding.
- Transdisciplinary approach – learning is organized around real-life problems rather than subject boundaries.

In foreign language education, interdisciplinary integration supports not only linguistic development but also cognitive, cultural, and practical competencies that align with 21st-century educational goals.

The Role of Interdisciplinary Integration in Developing Communicative Competence:

Enhancing Linguistic Competence through Content-Rich Input

When learners engage with authentic texts from subjects such as history, science, or economics, they are exposed to diverse vocabulary, structures, and discourse styles. Content-based instruction (CBI) and CLIL contexts typically provide richer and more meaningful input than traditional language textbooks. Learners acquire language naturally while focusing on academic content, which supports vocabulary expansion, grammar development, and complex language structures.

Cultural Strengthening Sociolinguistic and Competence: Interdisciplinary learning often involves cultural and social themes—environmental issues, historical events, ethical dilemmas, or global challenges—that require learners to consider different social perspectives. Discussing such themes helps students understand cultural references, politeness strategies, and socio-pragmatic norms, all of which are essential to effective communication in a foreign language.

Developing Discourse Competence through Extended Reading and Writing

Integrating subjects encourages the use of extended texts such as scientific reports, historical narratives, argumentative essays, and project presentations. These tasks help learners develop coherence, cohesion, and genre awareness. For example, writing a research report requires mastery of organizational patterns, linking devices, and academic vocabulary, thereby strengthening discourse competence.

Fostering Strategic Competence through Collaboration and Problem-Solving:

Interdisciplinary tasks frequently involve group work, inquiry-based learning, and project-based learning. Learners must negotiate meaning, clarify ideas, summarize information, and use compensatory strategies when facing linguistic difficulties. Such activities build strategic competence and confidence in spontaneous communication.

Instructional Models Supporting Interdisciplinary Integration

Content and Language Integrated Learning (CLIL). CLIL is one of the most successful models of interdisciplinary instruction. Students learn academic subjects through a foreign language, thereby developing linguistic competence alongside subject-specific knowledge. CLIL promotes authentic communication, critical thinking, and contextualized language use.

Project-Based Learning (PBL)

PBL allows learners to investigate real-world problems by integrating knowledge from multiple disciplines. For example, a project on environmental sustainability might incorporate science, geography, and language learning. Students must research, discuss, collaborate, and present their findings in the foreign language, which naturally enhances communicative competence.

Task-Based Language Teaching (TBLT). TBLT complements interdisciplinary learning by engaging students in meaningful tasks such as planning an event, designing a product, or analyzing data from another subject area. These tasks encourage authentic communication and require linguistic, cognitive, and social skills.

STEAM and Foreign Language Education. Integrating science, technology, engineering, arts, and mathematics (STEAM) with foreign language instruction helps learners apply language to inquiry, creativity, and innovation. For instance, students might design a technological prototype and present it in English, thereby developing both language and problem-solving skills.

Benefits of Interdisciplinary Integration for Learners

1. **Authentic, meaningful communication:** Students use language for real purposes, not artificial textbook exercises.
2. **Increased motivation:** Engaging topics from science, arts, and social studies make language learning more interesting.
3. **Improved critical thinking:** Learners analyze, synthesize, and evaluate information across disciplines.
4. **Enhanced cultural awareness:** Interdisciplinary themes often include global and multicultural perspectives.
5. **Holistic skill development:** Reading, writing, speaking, and listening skills develop naturally within academic tasks.

These benefits contribute directly to strengthening communicative competence.

Challenges in Implementing Interdisciplinary Integration

Despite its advantages, interdisciplinary integration presents several challenges:

Teacher preparedness: Many foreign language teachers lack training in content-based methodologies or subject-specific knowledge. **Curriculum constraints:** Rigid curricula may limit flexibility for interdisciplinary work. **Assessment difficulties:** Traditional tests may not adequately measure communicative or interdisciplinary competencies.

Resource gaps: Schools may lack materials that support integrated instruction.

Collaboration barriers: Effective interdisciplinary teaching requires coordination between subject teachers, which is not always feasible. Overcoming these challenges requires institutional support, professional development, and innovative assessment strategies.

Recommendations for Effective Implementation

1. **Professional Development:** Teachers should receive training in CLIL, CBI, and project-based pedagogy.
2. **Collaborative Curriculum Design:** Language teachers and subject teachers should work together to design integrated units.

3. Authentic Assessment: Rubrics and performance-based assessments should measure communication, content knowledge, and problem-solving.

4. Flexible Learning Environments: Schools should allow for cross-subject projects and interdisciplinary scheduling.

5. Use of Technology: Digital platforms and multimedia resources support collaboration, research, and communication in foreign languages.

Conclusion: Interdisciplinary integration plays a vital role in developing learners' communicative competence in foreign language education. By merging language learning with meaningful content from other disciplines, educators create learning environments that reflect real-world communication, enhance linguistic and cognitive skills, and prepare learners for global citizenship. Although challenges exist, the benefits of interdisciplinary approaches are clear and substantial. With proper teacher training, curriculum innovation, and institutional support, interdisciplinary integration can become a powerful tool for fostering communicative competence in today's learners.

References :

1. Brinton, D. M., Snow, M. A., & Wesche, M. (2003). *Content-Based Second Language Instruction*. University of Michigan Press.
2. Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47.
3. Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press.
4. Hymes, D. (1972). On communicative competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269–293). Penguin.
5. Jacobs, H. H. (1989). *Interdisciplinary Curriculum: Design and Implementation*. Association for Supervision and Curriculum Development (ASCD).
6. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching* (3rd ed.). Cambridge University Press.
7. Stoller, F. (2002). Project work: A means to promote language and content. *Methodology in Language Teaching*, (pp107–120)

**BO‘LAJAK O‘QITUVCHINING KASBIY-SUBYEKTIV POZITSIYA —
SUBYEKTIVLIK, KOMPETENTLILIK VA PROFESSIONALLIKNING
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Annotatsiya: *Maqolada bo‘lajak o‘qituvchining kasbiy-subyektiv pozitsiya pedagogik faoliyatda subyektivlik, kompetentlilik va professionallikning o‘zaro uyg‘unlashgan namoyoni sifatida talqin qilinadi. Kasbiy-subyektiv pozitsiya shaxsning o‘zini anglash, maqsadli tanlov va mas‘uliyatni qabul qilish qobiliyatini ifodalasa, kompetentlilik kasbiy bilim, ko‘nikma va shaxsiy sifatlar integratsiyasi orqali ta‘lim jarayonini samarali tashkil etishga imkon beradi.*

Kalit so‘zlar: *kasbiy-subyektiv pozitsiya, bo‘lajak o‘qituvchi, subyektivlik, kompetentlilik, professionallik, shaxsiy rivojlanish, refleksiya.*

Аннотация: *В статье профессионально-субъектная позиция будущего учителя рассматривается как гармоничное проявление субъективности, компетентности и профессионализма в педагогической деятельности. Профессионально-субъектная позиция отражает способность личности к самопознанию, целенаправленному выбору и принятию ответственности, тогда как компетентность обеспечивает эффективную организацию образовательного процесса через интеграцию профессиональных знаний, умений и личностных качеств.*

Ключевые слова: профессионально-субъектная позиция, будущий учитель, субъектность, компетентность, профессионализм, личностное развитие, рефлексия.

Annotation: *The article interprets the professional-subjective position of pre-service teachers as a harmonious manifestation of subjectivity, competence, and professionalism in pedagogical activity. The professional-subjective position reflects the individual's capacity for self-awareness, purposeful decision-making, and assuming responsibility, while competence enables the effective organization of the educational process through the integration of professional knowledge, skills, and personal qualities.*

Keywords: *professional-subjective position, pre-service teacher, subjectivity, competence, professionalism, personal development, reflection.*

Oliy ta'lim muassasalari oldidagi umumiy vazifalardan biri — bo'lajak o'qituvchilarda tashabbuskorlik, mas'uliyatlik, ijtimoiy va kasbiy mobillikni rivojlantirish, shuningdek, o'zgaruvchan dunyoda kasbiy hamda shaxsiy o'zini aniqlash qobiliyatini shakllantirishdan iborat. So'nggi o'n yillikda psixologik-pedagogik ilmiy adabiyotlarda **“shaxsiy potensial”** va **“shaxsning subyektiv potentsiali”** tushunchalarining mazmunini tadqiq etishga alohida e'tibor qaratilmoqda.

Subyektivlikni o'rganishga qaratilgan yondashuv, insonning o'z hayoti jarayonlarida — rivojlanish, ta'lim olish va mehnat faoliyatida — faol rol o'ynashi haqidagi mahalliy ilmiy an'analarni izchil rivojlantirishga asoslanadi.

V.A.Slastenin fikricha¹, **subyektivlik** — bu shaxsning murakkab integrativ xususiyati bo'lib, uning faol tanlovga asoslangan, tashabbuskor va mas'uliyatli tarzda o'z faoliyatiga, odamlarga, dunyoga, hayotga hamda o'ziga nisbatan munosabatlarini o'zgartirishga qaratilgan qobiliyatini aks ettiradi.

Mahalliy psixologiyada **“shaxs potentsiali”** tushunchasining umumiy talqini B.G.Ananev² tomonidan shakllantirilgan ilmiy yondashuvga tayanadi. Olim ushbu potensialni inson rivojlanishi va o'zini rivojlantirishning mavjud zaxiralari va resurslari, shuningdek, shaxsning o'zini takomillashtirish imkoniyatlari haqidagi bilimlar tizimi sifatida talqin qiladi.

D.A.Leontev esa **“shaxsiy potensial”** tushunchasining mazmuniga quyidagi tarkibiy elementlarni kiritadi³: **shaxsiy avtonomiya va mustaqillik, ichki erkinlik; hayot mazmunining anglanishi; murakkab sharoitlarda barqarorlik; ichki**

¹ Сластенин В.А. Субъектно-деятельностный подход в образовании. Научные труды МПГУ. Серия: Психолого-педагогические науки. М.: Прометей, 2000. С. 3-22.

² Ананьев Б.Г. О проблемах современного человекознания. М.: Наука, 1977. С. 14-31.

³ Леонтьев Д.А. Личностный потенциал как потенциал саморегуляции. Ученые записки кафедры общей психологии МГУ им. М.В. Ломоносова, вып. 2. Под ред. Б.С. Братуся, Е.Е. Соколовой. М.: Смысл, 2006. С. 85-105.

o'zgarishlarga tayyorlik; yangi va noaniq ma'lumotni qabul qilish qobiliyati; doimiy harakatga tayyorgarlik; faoliyatni rejalashtirishning individual xususiyatlari; shaxsning vaqtga nisbatan istiqboli.

Tizimli yondashuvga muvofiq va gumanistik ta'lim paradigmasidan kelib chiqib, **subyekt potensialining o'z-o'zini tashkil etuvchi tizim sifatidagi tuzilmaviy belgilari** sifatida quyidagilarni ko'rsatish mumkin: **integrativ faoliyat**, ya'ni shaxsning barcha namoyon bo'lish shakllarida faol hayotiy pozitsiya; **shaxsningvaqtinchalik nuqtai nazari; refleksiya qobiliyati** (faoliyat jarayoni va natijalarini anglash, talqin qilish va prognozlash orqali xulqni tartibga solish); **mas'uliyat**, ya'ni xulq-atvorni tashkil etish, boshqarish va me'yorlash; shuningdek, **o'zini ro'yobga chiqarish (self-realizatsiya) va o'z-o'zini aniqlash (self-determination)** qobiliyati.

Bo'lajak o'qituvchining kasbiy-subyektiv pozitsiyasi shaxsda shakllanayotgan kasbiy imkoniyatlar ya'ni, kompetensiyalarda jamlanadi. Ushbu salohiyat oliy ta'lim muassasasining ta'lim-tarbiyaviy jarayonida **shaxsiy-kasbiy o'zini rivojlantirishning individual trayektoriyalari va dasturlarini amalda qo'llay olish**, zarur hollarda ularni **korreksiya qilish, o'quv-kasbiy hamda hayotiy yutuqlarni tahlil qilish, o'zini takomillashtirish**, shuningdek, **kasbiy va subyektga yo'naltirilgan kompetensiyalar rolini kuchaytirish** kabi jarayonlarni amalga oshirishda namoyon bo'ladi.

Bo'lajak o'qituvchi shaxsining kasbiy-subyektiv pozitsiyasi uning shakllanib borayotgan kasbiy kompetensiyalarida mujassamlanadi. Mazkur pozitsiya o'qituvchining ta'lim muassasasidagi o'quv-tarbiyaviy jarayonda shaxsiy va kasbiy o'sishga yo'naltirilgan individual rivojlanish trayektoriyalari hamda o'zini o'zi rivojlantirish dasturlarini amaliy jihatdan hayotga tatbiq eta bilishida; zarurat tug'ilganda ushbu trayektoriya va dasturlarni mos ravishda korreksiya qilishida; o'quv-kasbiy hamda hayotiy yutuqlarini o'z-o'ziga tahlil etish orqali baholashida; o'z ustida muntazam ishlashida va kasbiy hamda subyektga yo'naltirilgan kompetensiyalar rolini kuchaytirishida namoyon bo'ladi.

Mustaqil faoliyat natijasida kasbiy kompetentlik asta-sekin professionalizmga aylana boradi. Professionalizm — yuqori darajadagi mahorat bo'lib, mutaxassisning o'z kasbini chuqur egallaganligini bildiradi hamda o'quv jarayonida o'zlashtirilgan bilim va ma'lumotlardan ijodiy tarzda foydalanish qobiliyatida namoyon bo'ladi.

Bo'lajak o'qituvchining kasbiy-subyektiv salohiyati mazmuni va tuzilmasini tahlil qilgan V.A.Slastenin refleksiyaning professionalizmning tizim hosil qiluvchi omili sifatida talqin etadi. Uning fikricha, refleksiya o'qituvchiga avvalgi kasbiy-shaxsiy tajribaning stereotiplarini yengib o'tishda, shuningdek, kasbiy-pedagogik vazifalarni

bajarish jarayonida yuzaga keladigan muammoli vaziyatlarni konstruktiv hal etishda yordam beradi.

Foydalanilgana adabiyotlar ro‘uxati

1. Слостенин В.А. Субъектно-деятельностный подход в образовании. Научные труды МПГУ. Серия: Психолого-педагогические науки. М.: Прометей, 2000. С. 3-22.
2. Ананьев Б.Г. О проблемах современного человекознания. М.: Наука, 1977. С. 14-31.
3. Леонтьев Д.А. Личностный потенциал как потенциал саморегуляции. Ученые записки кафедры общей психологии МГУ им. М.В. Ломоносова, вып. 2. Под ред. Б.С. Братуся, Е.Е. Соколовой. М.: Смысл, 2006. С. 85-105.

TEACHER'S ROLE TRANSFORMATION IN THE BLENDED LEARNING ENVIRONMENT

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Abstract. This article examines the transformation of teachers' roles in blended learning environments, where traditional face-to-face instruction is integrated with digital and online learning components. The study explores how teachers shift from being primary knowledge providers to facilitators, mentors, and designers of learning experiences. It highlights the skills required for effective classroom management, technological integration, and personalized instruction. The article also discusses challenges and opportunities related to professional development, digital literacy, and pedagogical innovation in blended learning contexts.

Keywords. blended learning, teacher role, pedagogy, digital literacy, facilitator, instructional design, professional development

Annotatsiya. Ushbu maqolada aralash (blended) ta'lim muhitida o'qituvchining rolining o'zgarishi tahlil qilinadi. An'anaviy yuzma-yuz ta'limni raqamli va onlayn komponentlar bilan uyg'unlashtirish jarayonida o'qituvchilar asosiy bilim manbai sifatida emas, balki ta'lim jarayonini tashkil qiluvchi, mentor va o'quv tajribasi dizayneri sifatida faoliyat yuritadi. Maqolada samarali sinf boshqaruvi, texnologiyalarni integratsiya qilish, individual yondashuv va pedagogik innovatsiya bilan bog'liq qobiliyatlar muhokama qilinadi. Shuningdek, professional rivojlanish va raqamli savodxonlik masalalari ham ko'rib chiqiladi.

Kalit so'zlar. aralash ta'lim, o'qituvchining roli, pedagogika, raqamli savodxonlik, mentor, o'quv tajribasi dizayni, professional rivojlanish

Аннотация. В данной статье рассматривается трансформация роли учителя в условиях смешанного обучения, где традиционные очные занятия сочетаются с цифровыми и онлайн-компонентами. Исследуется, как учителя переходят от роли основного источника знаний к роли фасилитатора, наставника и разработчика учебного опыта. Рассматриваются необходимые навыки для эффективного управления классом, интеграции технологий и индивидуализации обучения. Также обсуждаются вызовы и возможности, связанные с профессиональным развитием, цифровой грамотностью и педагогическими инновациями в контексте смешанного обучения.

Ключевые слова. смешанное обучение, роль учителя, педагогика, цифровая грамотность, фасилитатор, проектирование обучения, профессиональное развитие

The transformation of teachers' roles in blended learning environments has become increasingly significant in the context of global educational reform and technological advancement. As traditional classrooms are supplemented with digital and online learning components, the teacher's role evolves from being the primary source of knowledge to that of a facilitator, mentor, and instructional designer. This shift is critical for promoting student-centered learning, enhancing engagement, and supporting individualized educational pathways.

In Uzbekistan, where the integration of digital technologies in education is expanding rapidly, understanding how teachers adapt to blended learning is particularly relevant. It highlights the professional development needs, pedagogical innovations, and technological competencies required for effective teaching. Moreover, investigating this transformation provides insights into broader educational outcomes, helping policymakers, school leaders, and teacher training programs design strategies that maximize the potential of blended learning.

Research Methodology. This study employs a qualitative and mixed-method research design aimed at examining the opportunities and challenges of implementing hybrid learning in preschool and school education in Uzbekistan. The methodology is grounded in a comparative analysis of hybrid learning models, contextual evaluation of Uzbekistan's educational environment, and data collection from key stakeholders including teachers, administrators, and parents. A socio-constructivist pedagogical framework was used to analyze how digital and face-to-face learning components can be integrated to support child development and improve instructional practices.

Research Methods. A systematic review of national policy documents, educational development strategies, preschool and general education standards, and international research on hybrid learning was conducted. This method provided a foundation for understanding current reforms, technological capacities, and regulatory frameworks in Uzbekistan.

Research Methodology. This study adopts a qualitative research approach to explore the transformation of teachers' roles in blended learning environments. The focus is on understanding how educators adapt to integrating traditional face-to-face instruction with online and digital learning components. A constructivist and socio-technical framework underpins the study, emphasizing the interplay between pedagogical strategies, technological tools, and teacher-student interactions.

Data were collected using multiple complementary methods to ensure a comprehensive understanding of teacher experiences. First, semi-structured interviews were conducted with 15–20 teachers from primary and secondary schools who actively implement blended learning. These interviews allowed participants to share insights about their

evolving responsibilities, pedagogical strategies, and perceptions of student engagement.

Research Methods. To investigate the transformation of teachers' roles in blended learning environments, this study employed multiple research methods designed to capture both practical experiences and contextual factors. The combination of interviews, focus groups, classroom observations, and document analysis allowed for a comprehensive and nuanced understanding of the phenomenon.

Semi-structured interviews were conducted with 15–20 teachers from primary and secondary schools actively engaged in blended learning. The semi-structured format provided flexibility for participants to elaborate on their experiences, challenges, and strategies, while maintaining focus on key research questions related to role transformation, digital integration, and pedagogical innovation.

The findings of this study provide valuable insights into the transformation of teachers' roles in blended learning environments. As traditional classrooms are increasingly integrated with online and digital components, teachers are transitioning from being the primary source of knowledge to becoming facilitators, mentors, and instructional designers. This shift reflects the growing emphasis on student-centered learning, engagement, and personalized instruction.

A major observation is that teachers require new skill sets to effectively manage blended classrooms. These include digital literacy, proficiency in instructional design, classroom facilitation, and the ability to monitor and support students' online learning activities. Teachers who received prior professional development or institutional support reported higher confidence and more effective integration of technology into their lessons. Conversely, those lacking such training faced challenges in maintaining student engagement and balancing online and face-to-face instruction.

Conclusion. This study has explored the transformation of teachers' roles within blended learning environments, highlighting the shift from traditional knowledge delivery to facilitation, mentorship, and instructional design. The findings indicate that teachers are increasingly required to integrate digital tools, adapt pedagogical strategies, and foster student-centered learning in both online and face-to-face contexts. The research emphasizes that effective implementation of blended learning depends not only on individual teacher competencies but also on institutional support, access to technology, and ongoing professional development. Teachers who are equipped with the necessary digital literacy, pedagogical knowledge, and collaborative opportunities are better able to navigate the challenges of blended learning and enhance student engagement and learning outcomes.

LITERATURE

1. Qo‘shoqov, A. (2020). “Raqamli ta’lim va masofaviy o‘qitishning afzalliklari.” *Ta’lim jarayoni jurnali*, №4, 45–52.
2. Graham, C. R. (2013). *Emerging practice and research in blended learning*. In M.G. Moore (Ed.), *Handbook of Distance Education* (3rd ed.). Routledge.
3. Horn, M. B., & Staker, H. (2015). *Blended: Using Disruptive Innovation to Improve Schools*. San Francisco: Jossey-Bass.
4. Picciano, A. G. (2019). *Blended Learning: Research Perspectives*. Routledge.
5. Bonk, C., & Graham, C. R. (Eds.). (2006). *The Handbook of Blended Learning: Global Perspectives, Local Designs*. Pfeiffer Publishing.
6. Ong, C., & Wang, X. (2021). “Hybrid learning strategies for early childhood education.” *International Journal of Early Years Education*, 29(4), 298–310.
7. Bryan, A., & Volchenkova, K. (2016). “Blended Learning: Definition, Models, and Trends.” *Journal of Education and Practice*, 7(10), 15–21.
8. UNESCO (2020). *Hybrid Learning: Approaches, Tools, and Global Practices*. Paris: UNESCO Publishing

BOSHLANG'ICH SINIF O'QUVCHILARIDA IJODIY TAFAKKURNI RIVOJLANTIRISHNING ZAMONAVIY METODLARI

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ANNOTATSIYA

Ushbu maqolada boshlang'ich sinf o'quvchilarida ijodiy tafakkurni rivojlantirishning nazariy asoslari va amaliy metodlarini taklif etish, bu jarayonda o'qituvchilar uchun amaliy tavsiyalar berish nazarda tutiladi. Maqola metodologiyasi nazariy tahlil, pedagogik kuzatish, taqqoslash va sintez usullari hisoblanadi. Tadqiqot natijasida boshlang'ich sinflarda ijodiy tafakkurni rivojlantirish uchun quyidagi metodlarning samaradorligi asoslangan: muammoli ta'lim, "aqliy hujum" (brainstorming), TRIZ pedagogikasi, loyihaviy faoliyat, fan va san'at integratsiyasi. Ushbu metodlar bolalarning kreativ salohiyatini ochishga, ularni mustaqil va innovatsion fikrlashga tayyorlashga xizmat qiladi.

Kalit so'zlar: ijodiy tafakkur, kreativlik, boshlang'ich sinf, pedagogik metodlar, muammoli ta'lim, aqliy hujum, TRIZ, loyihaviy faoliyat.

Maqolaning asosiy maqsadi: Hozirgi kunda boshlang'ich ta'limda muhim ahamiyat kasb etayotgan ijodiy tafakkur (kreativ fikrlash) qobiliyatini shakllantirish va rivojlantirishning samarali pedagogik metodlarini nazariy asoslash va amaliy takliflarini ishlab chiqish.

Tadqiqot metodologiyasi: Maqolada nazariy tahlil, ilmiy adabiyotlarni o'rganish, taqqoslash, sintez qilish va boshlang'ich sinf o'quvchilari bilan o'tkazilgan pedagogik kuzatish natijalarini umumlashtirish usullaridan foydalanilgan.

Asosiy natijalar va xulosalar: Tadqiqot natijasida boshlang'ich sinflarda ijodiy tafakkurni rivojlantirish uchun quyidagi zamonaviy interfaol metodlarning samaradorligi asoslab berilgan: muammoli ta'lim, "aqliy hujum" (brainstorming), TRIZ pedagogikasi elementlari, rolli va vaziyatli o'yinlar, loyihaviy faoliyat, fan va san'at integratsiyasi. Ushbu metodlarni muvaffaqiyatli qo'llash bolaning faolligini oshiradi, g'ayrioddiy yechimlar topish qobiliyatini rivojlantiradi va sinfda ijodiy muhitni shakllantiradi. Xulosa qilib aytganda, boshlang'ich ta'lim jarayonini ushbu metodlar asosida tashkil etish kelajakning kreativ va innovatsion fikrlovchi shaxsini tarbiyalashning muhim garovidir.

Kalit so'zlar: ijodiy tafakkur, kreativlik, boshlang'ich sinf, pedagogik metodlar, muammoli ta'lim, aqliy hujum, TRIZ, loyihaviy faoliyat, o'yin texnologiyalari.

KIRISH

Zamonaviy jamiyatda texnologik taraqqiyot va ijtimoiy o'zgarishlar tezlashgani bilan, inson kapitalining eng qimmatbaho jihati - uning ijodiy salohiyati va yangi, noan'anaviy yechimlarni topish qobiliyatiga bo'lgan talab tobora ortib bormoqda[1]. Ta'lim sohasidagi global tendensiyalar ham, shaxsning bilimlarini reproduktiv tarzda o'zlashtirishdan uning kreativ fikrlash, mustaqil izlanish va innovatsion yondashuv ko'nikmalarini rivojlantirishga qaratilgan holda o'zgarayotir[2]. Boshlang'ich ta'lim bu yo'lda asosiy bosqich hisoblanadi, chunki aynan 7-10 yosh davri bola psixikasining eng egiluvchan, qiziqishlari keng va tabiiy qiziquvchanligi yuqori bo'lgan davridir[3]. Bu davrda bolaning fikrlash tartiblari, dunyoqarashi shakllanadi va kelajakdagi kognitiv va ijodiy faoliyatining poydevori qo'yiladi. Shu sababli, aynan boshlang'ich sinflarda o'quvchilarni an'anaviy qoliplardan chiqib, erkin va ijodiy fikrlashga o'rgatish pedagogikaning eng dolzarb vazifalaridan biriga aylanmoqda.

Biroq, amaliyot ko'rsatishicha, ko'pgina maktablarda dars jarayoni hali ham asosan o'qituvchi markazli, darslik matniga qat'iy bog'liq va test natijalariga yo'naltirilgan bo'lib qolmoqda[4]. Bu esa o'quvchilarning izlanishchanligi, g'oya boyligi va riskka tayyorligi kabi ijodiy tafakkurning muhim unsurlarini rivojlantirish o'rniga, ularni passiv bilim qabul qiluvchiga aylantirish xavfini keltirib chiqaradi. Yuqoridagi muammoni hisobga olgan holda, ushbu maqolaning magosadi - boshlang'ich sinf o'quvchilarida ijodiy tafakkurni rivojlantirishning ilmiy-nazariy asoslarini umumlashtirib, amaliyotda samarali bo'lgan zamonaviy metod va texnologiyalarni tizimli bayon etishdan iborat. Maqolada quyidagi vazifalar hal etiladi: ijodiy tafakkur tushunchasining pedagogik mohiyatini tahlil qilish; boshlang'ich sinf o'quvchilarining yosh xususiyatlariga muvofiq kreativlikni rag'batlantiruvchi muhitni yaratish tamoyillarini ko'rib chiqish; ushbu maqsadga erishishning o'quv jarayonida qo'llanilishi mumkin bo'lgan aniq metodik yondashuvlarni taklif qilish. Tadqiqotning ahamiyati shundaki, unda ta'lim amaliyoti uchun qo'llashga tayyor bo'lgan, bolalarning yosh psixologik xususiyatlarini hisobga olgan holda ishlab chiqilgan metodik tavsiyalar keltirilgan. Ushbu materiallar boshlang'ich sinf o'qituvchilari, metodistlar, talabalar va ota-onalar uchun amaliy qo'llanma sifatida xizmat qilishi mumkin.

Adabiyotlar sharhi (Literature Review)

Ijodiy tafakkur - bu an'anaviy fikrlash usullaridan chetga chiqib, yangi, original yechimlarni topish qobiliyatidir. J. Gilford, P. Torrens, R. Stenberg kabi olimlar ijodiy tafakkurning tarkibiy qismlari sifatida divergent (tarqoq) fikrlash, tasavvur qilish, metaforik mantiq, riskga tayyorlik va qiziquvchanlikni ajratib ko'rsatadilar[5]. Divergent fikrlash - bu bitta muammodan ko'plab turli yechimlar chiqarish, aniq bir javob qidirish o'rniga yechimlar navlarini kengaytirish qobiliyatidir. Bu boshlang'ich sinf o'quvchilarida rivojlantirish eng avval lozim bo'lgan jihatdir.

O'zbekistonlik olimlardan J. G'. Yo'ldoshev, M. Usmonboyeva, N. Muslimovlarning tadqiqotlarida boshlang'ich sinf o'quvchilarida ijodiy fikrlashni rivojlantirishning o'ziga xos jihatlari o'rganilgan[6]. Ularning ta'kidlashicha, o'zbek maktablarida an'anaviy ta'lim uslubining uzoq davom etishi, darslarning ko'pincha frontal (o'qituvchi markazli) tarzda o'tishi, o'quvchilarning individual g'oyalarini ifoda etish imkoniyatining cheklanganligi ijodiy tafakkur rivojlanishiga to'sqinlik qiladi. Shunga qaramay, yangi Davlat ta'lim standartlari va o'quv dasturlarida kreativ kompetensiyalarni shakllantirishga alohida e'tibor qaratilmogda[7].

Zamonaviy tadqiqotlar shuni ko'rsatadiki, ijodiy tafakkur - bu faqatgina san'at yoki adabiyot sohasiga xos emas, balki matematika, tabiatshunoslik kabi aniq fanlarni o'zlashtirishda ham muhim ahamiyatga egadir[8]. Masalan, geometrik shakllarni o'rganishda o'quvchilardan ular yordamida yangi kompozitsiyalar, naqshlar yaratishni so'rash, ularning divergent fikrlashini oshiradi. Shu sababli, barcha fanlar bo'yicha darslarda ijodiy tafakkurni rivojlantirishga yo'naltirilgan vazifa va mashqlarni kiritish muhimdir.

Metodologiya (Methodology)

Ushbu maqolani yozishda quyidagi ilmiy tadqiqot usullari qo'llanildi:

1. Nazariy tahlil va sintez: Ijodiy tafakkur va boshlang'ich sinf pedagogikasi sohasidagi xorijiy va mahalliy ilmiy adabiyotlar (monografiyalar, maqolalar, dissertatsiyalar) tahli qilindi va ular asosida umumlashtirilgan xulosalar chiqarildi.
2. Taqqoslash usuli: An'anaviy va innovatsion ta'lim metodlari o'rtasidagi farqlar, ularning ijodiy tafakkur rivojlanishiga ta'siri taqqoslab ko'rildi.
3. Kuzatish: Boshlang'ich sinf darslarida (2-4-sinflar) o'tkazilgan tizimli pedagogik kuzatishlar natijalari qayd etildi va tahli qilindi. Kuzatishlar davomida turli metodlardan (muammoli savol, loyiha, o'yin) foydalanganda o'quvchilarning faollik darajasi, qiziqishi va javoblarning original'ligi kuzatildi.
4. Pedagogik eksperiment elementlari: Sinflarda ma'lum metodlarni (masalan, "aqliy hujum" yoki loyihaviy ish) joriy qilishdan oldin va keyin o'quvchilarning muammoni hal qilishdagi yondashuvlari o'zgarishi baholandi. Natijalar sifat va miqdoriy ko'rsatkichlar (masalan, taklif etilgan yechimlar soni va ularning xilma-xilligi) asosida tahli qilindi.

Natijalar va muhokama (Results and Discussion)

Tadqiqot va kuzatishlar natijasida boshlang'ich sinf o'quvchilarida ijodiy tafakkurni samarali rivojlantirish uchun quyidagi metodlarni tizimli qo'llash maqsadga muvofiq ekanligi aniqlandi:

1. Muammoli ta'lim metodlari

Bu metod o'quv jarayoniga oddiy, ammo o'quvchilarni qiziqtiruvchi va ularning mavjud bilimlari bilan darhol hal qilib bo'lmaydigan vaziyatlarni kiritishni nazarda

tutadi. Masalan: "Agar yo'g'on qog'oz ixtiro qilinmaganida, maktabda nima bo'lar edi?" yoki "Quyosh botmasa, hayot qanday o'zgarardi?". Bunday savollar bolalarni g'ayrioddiy, fantastik yechimlar izlashga undaydi, ularning tasavvurini rivojlantiradi. Muhimi, o'qituvchi har qanday javobni, hatto u juda "bolalarcha" bo'lsa ham, hurmat bilan kutib olishi va "Qiziq fikr, buni yanada rivojantiramizmi?" kabi rag'batlantiruvchi so'zlar bilan davom ettirishi kerak[9]. Tadqiqot davomida muammoli savollar berilganda, o'quvchilarning 75% dan ortig'i faol ishtirok etishga intilishi, aniq bir javob bor degan tushunchani chetlab o'tishi kuzatildi.

2. "Aqliy hujum" (brainstorming) va uning modifikatsiyalari

Bu metodni boshlang'ich sinflarda qo'llashda quyidagi qoidalarga rioya qilish muhim:

- Berilgan mavzu yoki muammo bo'yicha har qanday, hatto ayyorona yoki g'alati tuyulgan g'oyalarni erkin va baho berilmasdan aytishga ruxsat beriladi. Bu bosqichda ijod to'sig'i bo'lmasligi kerak.

- Barcha g'oyalar doskaga yoki flipchartga yozib boriladi.

- Faqat barcha g'oyalar to'plangach, ularni birgalikda tahli qilish va eng qiziqarli, amaliy yoki boshqarish oson bo'lganlarini tanlash bosqichi boshlanadi.

Boshlang'ich sinflar uchun "doiraviy aqliy hujum" modifikatsiyasi qulay: o'quvchilar doira shaklida o'tirib, navbatma-navbat o'z g'oyasini aytadi. Agar kimdandur g'oya bo'lmasa, "o'tkazib yuboraman" deyishi mumkin. Bu har bir bola o'z navbatini kutishini va diqqat bilan tinglashni o'rgatadi[10].

3. TRIZ pedagogikasi elementlari (Ijodiy muammolarni hal qilish nazariyasi)

TRIZ (ruscha: Teoriya Resheniya Izobretatelskix Zadach) dastlab muhandislik ixtirolari uchun ishlab chiqilgan bo'lsa-da, uning soddalashtirilgan elementlari bolalar bilan ishlashda juda samarali bo'lishi mumkin[11]. Asosiy g'oya - bolalarga qarama-qarshiliklar va ziddiyatlarni aniqlash, so'ngra ularni "Qanday qilib bir vaqtning o'zida ... ham, ... ham bo'lishi mumkin?" degan savol asosida hal qilishga o'rgatishdir.

1) Misol: "Qurilishi qattiq (mustahkam), ammo og'ir bo'lmagan uy qanday qurilishi mumkin?". Bu savol bolalarni yangi materiallar, bo'shliqli konstruksiyalar haqida o'ylashga undaydi.

2) Misol (tabiatshunoslikdan): "Qanday qilib o'simlik suvsiz ham, lekin och qolmasdan o'sishi mumkin?" - bu savol kaktus kabi o'simliklarning moslashuvini o'rganishga kirishish uchun yaxshi boshlanish nuqtasi bo'ladi.

4. Loyihaviy faoliyat

Kichik guruhlarda (3-4 kishi) amaliy loyihalar yaratish ijodiy tafakkurning deyarli barcha jihatlarini jamlagan holda rivojlantiradi. Loyiha mavzusi oddiy va o'quvchilarning qiziqishlariga mos bo'lishi kerak: "Mening orzumdagi bolalar maydonchasi", "Kelajak shahri maketi", "Bizning sinfimizning ekologik loyihasi: chiqindilarni qayta ishlash".

Loyihaviy faoliyatda bolalar quyidagi bosqichlarni o'tkazadilar:

- 1) G'oya yaratish va munozara qilish (guruh ichida turli takliflarni muhokama qilish).
- 2) Rejalashtirish (nima qilish kerak, qanday materiallar kerak, kim nima vazifani bajarsin).
- 3) Amaliy ijro (loyihani yasash, chizish, yozish).
- 4) Natijani taqdim etish (sinf oldida o'z ishini himoya qilish, savollarga javob berish).
Bu jarayon nafaqat ijodkorlikni, balki jamoada ishlash, mas'uliyat, nutqiy madaniyat va o'z ishini himoya qilish ko'nikmalarini ham rivojlantiradi[12].

5. Fan va san'at integratsiyasi (STEAM yondashuvi)

STEAM (Science, Technology, Engineering, Arts, Mathematics) yondashuvi fan, texnologiya, muhandislik, san'at va matematikani integratsiyalashgan holda o'qitishni nazarda tutadi. Boshlang'ich sinflarda buni soddaroq - fan va san'at integratsiyasi sifatida amalga oshirish mumkin[13]:

- 1) Matematika + Rasm: Geometrik shakllar yordamida abstrakt kompozitsiya yaratish.
- 2) Tabiiy fanlar + She'riyat: "Tug'ilish kunidagi daraxt" mavzusida she'r yozish yoki ob-havo hodisalarini tasvirlovchi qisqa hikoya yaratish.
- 3) Tarix + Dramalashtirish: Tarixiy voqeani qisqa sahna ko'rinishida taqdim etish.

Bunday integratsiya o'quvchilarga mavzuni ko'p qirrali, hissiy va obrazli tarzda idrok etish imkoniyatini beradi, bu esa ularning kreativ salohiyatini ochadi.

Muhokama: Yuqoridagi metodlarni muvaffaqiyatli qo'llash o'qituvchidan nafaqat metodik mahorat, balki o'zining kreativ yondashuvini, o'zgartirishga bo'lgan tayyorligini talab qiladi. Eng muhim shart - sinfda erkin fikrlash, xato qilish huquqi va o'z fikrini daxlsiz ifoda etish imkoniyati mavjud bo'lgan psixologik muhitni yaratishdir[14]. O'qituvchi bolaning har qanday, g'ayrioddiy javobiga ham "Bu noto'g'ri" emas, balki "Bu qiziq fikr, lekin boshqa nuqtai nazardan qarajak-chi?" kabi konstruktiv munosabatda bo'lishi kerak. O'qituvchi - hakam emas, balki rahbar, moderator va rag'batlantiruvchi rolini o'ynashi lozim.

Xulosa

Boshlang'ich sinf o'quvchilarida ijodiy tafakkurni rivojlantirish - bu nafaqat alohida darslar yoki mashg'ulotlar, balki butun ta'lim-tarbiya jarayonining maqsadga muvofiq, izchil va qasddan tashkil etilishini talab qiladi. An'anaviy, reproduktiv dars modelidan chiqib, o'quvchilarni faol ishtirokchi, g'oyalar muallifi va bilim yaratuvchisiga aylantiruvchi yangi pedagogik texnologiyalarni o'zlashtirish zamon talabidir.

Muammoli va o'yinli vaziyatlar, loyihaviy faoliyat, "aqliy hujum", TRIZ kabi interfaol metodlar bolalarning kreativ salohiyatini ochishga, ularning fikrlash moslamalarini yumshatishga va kelajakda hayotdagi murakkab, noaniq vaziyatlarni mustaqil hal qilishga tayyorlashga xizmat qiladi. Bu metodlar nafaqat ijodiy tafakkurni, balki

mantiqiy fikrlash, kommunikativlik, hamkorlik qilish kabi XXI asr ko'nikmalarini ham bir vaqtning o'zida rivojlantiradi.

Xulosa qilib aytganda, kelajakdagina o'z faoliyatida izlanishchanlik, ijodkorlik va innovatsion yondashuvni namoyon qila oladigan avlodni tarbiyalash, aynan boshlang'ich ta'lim bosqichida qo'yilgan poydevorga bog'liq. O'qituvchining o'zi ijodkor bo'lmaganda, bolalarda ijodkorlikni uyg'otib bo'lmaydi. Shu sababli, boshlang'ich sinf o'qituvchilarini ushbu metodlar bilan qurollantirish, ularni doimiy ravishda o'qitish va rag'batlantirish - bu zamonaviy ta'lim tizimining ustuvor yo'nalishlaridan biri bo'lib qolmoqda.

FOYDALANILGAN ADABIYOTLAR

1. Robinson, K. (2011). Boshlang'ich maktabda ijodkorlikni qanday o'ldiramiz? [Ta'lim va ijodkorlik haqida ma'ruzalar]. Cambridge University Press. [Asl nomi: Robinson, K. (2011). Out of Our Minds: Learning to Be Creative]
2. XXI asr ko'nikmalari hamkorligi (P21). (2019). Ishchi ramka va ko'nikmalar. <https://www.p21.org/> [O'zbek tilidagi ma'lumotlar uchun qarang: O'zbekiston Respublikasi Xalq ta'limi vazirligi. (2021). Zamonaviy ta'lim standartlari].
3. Vygotskiy, L.S. (2005). Bolalar rivojlanishi psixologiyasi. Moskva: Pedagogika. (Asl nashri 1934).
4. Usmonboyeva, M. (2020). Boshlang'ich ta'limning dolzarb muammolari. Toshkent: O'qituvchi.
5. Torrance, E.P. (1974). Torrance Tests of Creative Thinking. Lexington, MA: Ginn.
6. Muslimov, N.A. va boshqalar. (2015). Innovatsion ta'lim texnologiyalari. Toshkent: "Sano-standart" nashriyoti.
7. O'zbekiston Respublikasi Vazirlar Mahkamasining 2017-yil 6-apreldagi "Umumiy o'rta ta'limning davlat ta'lim standartlari to'g'risida"gi 187-sonli Qarori.
8. Craft, A. (2005). Creativity in Schools: Tensions and Dilemmas. Routledge.
9. Yo'ldoshev, J.G', Usmonov, S.A. (2004). Pedagogik texnologiya asoslari. Toshkent: O'qituvchi.
10. Osborn, A.F. (1963). Applied Imagination: Principles and Procedures of Creative Problem-Solving. New York: Charles Scribner's Sons.
11. Altshuller, G.S. (1999). The Innovation Algorithm: TRIZ, systematic innovation and technical creativity. Worcester, MA: Technical Innovation Center.
12. Thomas, J.W. (2000). A Review of Research on Project-Based Learning. San Rafael, CA: The Autodesk Foundation.
13. Yakman, G. (2008). STEAM Education: An overview of creating a model of integrative education. Pupils' Attitudes Towards Technology (PATT) Conference.
14. Amabile, T.M. (1996). Creativity in Context: Update to the Social Psychology of Creativity. Westview Press.

EFFECTS OF *FERULA TADSHIKORUM* RESIN EXTRACT ON CELL VOLUME REGULATION IN RAT THYMOCYTES AND MEMBRANE INTEGRITY OF HUMAN ERYTHROCYTES

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ABSTRACT. The study presents data on the ethanol extract of *Ferula tadshikorum* resin. It was found that the extract inhibits the cell volume regulation system in thymocyte cells and induces the formation of pores with a radius of ~ 3.3 nm in the erythrocyte membrane. The extract decreases the resistance of cells to osmotic and colloid-osmotic stress, with lytic effects occurring at concentrations < 10 $\mu\text{g/mL}$, while sublytic effects are observed even at 1 $\mu\text{g/mL}$.

KEY WORDS. *Ferula tadshikorum*, RVD, erythrocyte, thymocyte

Plants of the genus *Ferula* belong to the family *Apiaceae* and include approximately 200 species widely distributed in the Mediterranean region and Central Asia. *Ferula tadshikorum* is a member of this genus and is considered an endemic species of Central Asia. Plants of the genus *Ferula* contain a range of biologically active compounds, such as coumarins, sesquiterpenes, and sulfur derivatives, and are used for their anti-inflammatory, antibacterial, antiviral, anticancer, and antiulcer properties. To date, the biological activity of extracts from *Ferula tadshikorum* has been scarcely studied. In this work, we investigated the effects of *Ferula tadshikorum* resin extract on the cell volume regulation system of rat thymocytes and the integrity of human erythrocytes. In our initial studies, rat thymocytes maintained a stable volume in isotonic Ringer's solution for 20 minutes. When exposed to a hypotonic medium, the cells initially swelled and then partially recovered their volume within 15 minutes (regulatory volume decrease, $RVD = 75.1 \pm 5\%$, $n=5$). Addition of *Ferula* extract at 0.125 $\mu\text{g/mL}$ had no significant effect, but increasing concentrations led to a dose-dependent inhibition of RVD , with complete blockage at 2.5 $\mu\text{g/mL}$. Hill equation approximation yielded a half-maximal effect (C_{50}) of 0.7 ± 0.1 $\mu\text{g/mL}$ and a Hill coefficient of 1.7 ± 0.4 , indicating that the extract strongly inhibits cell volume regulation in a dose-dependent manner.

During our studies, we determined that the concentration of *Ferula tadshikorum* resin extract required to induce half-maximal hemolysis (C_{50}) was 7.8 ± 2.4 $\mu\text{g/mL}$. The dry weight of the extract was measured as 7.2 ± 0.9 mg/mL , which was used to calculate the concentration necessary to achieve complete hemolysis in experiments involving

polyethylene glycol. The extract was found to induce the formation of pores with a radius of approximately 3.3 nm in the erythrocyte membrane. Importantly, at low sublytic concentrations that do not cause hemolysis, the extract reduced the resistance of erythrocytes to osmotic stress and to colloid-osmotic stress induced by the channel-forming agent nystatin. The observation that lytic effects occur at concentrations above 10 µg/mL, while sublytic effects are evident at 1 µg/mL, underscores the extremely high biological activity of the bioactive compounds present in the resin extract of *Ferula tadshikorum*. These findings highlight the potent effect of the extract on human erythrocytes and on cell membrane integrity, emphasizing the presence of bioactive molecules in the resin extract of *Ferula tadshikorum* that require identification in further studies.

CONCLUSION. The ethanol extract of *Ferula tadshikorum* resin exhibits potent biological activity, significantly affecting both rat thymocyte volume regulation and human erythrocyte membrane integrity. It dose-dependently inhibits regulatory volume decrease in thymocytes and induces pore formation in erythrocyte membranes, thereby reducing cell resistance to osmotic and nystatin-induced colloid-osmotic stress, highlighting the strong activity of its bioactive compounds. These findings suggest that *Ferula tadshikorum* resin contains highly active biomolecules with potential physiological and pharmacological relevance, warranting further identification and investigation.

REFERENCES

1. Iranshahi M., Rezaee R., Najaf Najafi M., Haghbin A., Kasaian J. (2018) Cytotoxic activity of the genus *Ferula* (Apiaceae) and its bioactive constituents. *Avicenna J Phytomed* 8(4): 296-312.
2. Khamraeva D.T., Khojimatov O.K., Uralov A.I. (2019) Growth and development of *Ferula tadshikorum* Pimenov in culture. *Acta Biologica Sibirica* 5(3): 172–177. DOI: 10.14258/abs.v5.i3.6588
3. Zhou Y., Xin F., Zhang G., Qu H., Yang D., Han X. (2017) Recent Advances on Bioactive Constituents in *Ferula*. *Drug Dev Res* 78(7): 321-331. DOI: 10.1002/ddr.21402

THE ROLE AND PERSONAL MASTERY OF THE TRANSLATOR

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Abstract. This article examines the translator's professional role and personal mastery in the process of translation. The translator is not only a linguistic mediator but also an intellectual and creative figure who ensures the accurate and artistic transfer of meaning between cultures. The study discusses the translator's linguistic competence, cultural awareness, ethical responsibility, and creative skills as key components of personal mastery. The results indicate that translation requires not only knowledge but also intuition, empathy, and aesthetic sensitivity, making the translator a bridge between nations and a creator of intercultural understanding.

Keywords: translator, personal mastery, linguistic competence, cultural awareness, translation ethics, creativity.

INTRODUCTION

In the modern era of globalization, translation has become one of the most vital means of communication between nations. Translators are the invisible architects of international understanding, making literature, science, politics, and culture accessible beyond linguistic boundaries. However, the success of translation largely depends on the translator's personal mastery — their knowledge, ethics, creativity, and psychological preparedness.

According to Peter Newmark [2], translation is not only a linguistic act but also an act of interpretation and re-creation. This means that every translator must possess both professional skills and artistic sensitivity. Without personal mastery — the harmony of intellectual, emotional, and moral qualities — even a linguistically correct translation may lose its soul and aesthetic power.

Therefore, the purpose of this study is to define the translator's role as a cultural mediator and to analyze the elements of personal mastery that determine the quality and impact of translation.

RESEARCH ANALYSES

The importance of the translator's personal mastery has been emphasized by many scholars. Eugene Nida [1] introduced the concept of dynamic equivalence, which requires translators to evoke the same emotional response in target readers as in the original audience. This, however, demands not only linguistic accuracy but also deep empathy and creative imagination.

Susan Bassnett [3] argues that translation is a process of negotiation between cultures; thus, the translator must be culturally sensitive, knowledgeable about historical and social contexts, and capable of interpreting meaning beyond words. Similarly, Lawrence Venuti [4] calls for the translator's "visibility," highlighting that every translation bears the stylistic and ethical imprint of its author.

In Uzbek translation studies, Sh. Zakirov [7] and N. Abduvohidova [8] underline that a translator's personal mastery — including linguistic intuition, stylistic awareness, and responsibility — forms the foundation of high-quality translation. They argue that an ideal translator combines the precision of a linguist with the imagination of an artist.

RESEARCH METHODOLOGY

This research employs comparative, analytical, and descriptive methods: The comparative method explores how Western and Uzbek scholars define translator competence and mastery; The analytical method examines the core elements of personal mastery, such as linguistic competence, cultural literacy, ethical awareness, and creative thinking; The descriptive approach identifies real examples from literary translation that illustrate how a translator's personal skills affect the success of a translated text. This multi-method approach allows for a holistic understanding of the translator's role as both a professional and a creative individual.

ANALYSES AND RESULTS

Linguistic Competence as the Foundation of Mastery. A translator must have a deep command of both source and target languages — their grammar, syntax, idioms, and stylistic nuances. As J.C. Catford [6] noted, translation equivalence depends on the translator's ability to recognize subtle meaning shifts. Without linguistic precision, even the best cultural interpretation may fail.

Cultural Awareness and Sensitivity. Translation is impossible without cultural understanding. A word or phrase may have different connotations across societies. Therefore, personal mastery involves cultural empathy — the ability to sense and respect cultural differences while maintaining fidelity to the original. The translator becomes a mediator of civilizations, ensuring intercultural harmony.

Ethical and Emotional Responsibility. Ethics is another vital aspect of mastery. Translators must respect the author's intent, avoid distortion, and preserve the integrity of the text. Moreover, emotional intelligence helps the translator to sense the tone, irony, and emotion behind words — qualities that cannot be learned from dictionaries alone.

Creativity and Aesthetic Intuition. Translation is an art. As Mona Baker [5] observed, translators must make countless micro-decisions, choosing words that convey both meaning and beauty. Personal creativity allows translators to re-create the

artistic essence of the source while adapting it naturally to the target language. This creative re-expression defines true mastery.

The Translator's Personality and Continuous Development. Personal mastery is not innate — it grows through experience, education, and self-discipline. Translators must constantly expand their knowledge, read widely, and stay updated with linguistic and cultural trends. A true translator is a lifelong learner who refines both professional competence and personal character.

CONCLUSION

The translator's role extends beyond linguistic mediation; it embodies intellectual, cultural, and ethical dimensions. Personal mastery — comprising linguistic competence, cultural awareness, ethical integrity, and creativity — determines the translator's success and contribution to intercultural communication.

Translation is both a science and an art, requiring precision and imagination, fidelity and freedom. The translator's mastery ensures that knowledge, literature, and culture can travel across borders while retaining their meaning and beauty. Hence, the translator stands not only as a professional communicator but as a guardian of cultural dialogue and a creator of mutual understanding among nations.

REFERENCES

1. Nida, E. (1964). *Toward a Science of Translating*. Leiden: E.J. Brill.
2. Newmark, P. (1988). *A Textbook of Translation*. London: Prentice Hall.
3. Bassnett, S. (2014). *Translation Studies*. 4th ed. London: Routledge.
4. Venuti, L. (1995). *The Translator's Invisibility: A History of Translation*. London: Routledge.
5. Baker, M. (1992). *In Other Words: A Coursebook on Translation*. London: Routledge.
6. Catford, J.C. (1965). *A Linguistic Theory of Translation*. Oxford: Oxford University Press.
7. Zakirov, Sh. (2017). *Tarjima nazariyasi asoslari*. Tashkent: Universitet nashriyoti.
8. Abduvohidova, N. (2020). *Tarjima jarayonida shaxsiy mahoratning o'rni*. Tashkent: Fan nashriyoti.

DIGITAL TOOTH COLOR MODELING BEFORE AND AFTER WHITENING: CLINICAL CAPABILITIES AND LIMITATIONS

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Relevance. Predicting and monitoring changes in tooth color during whitening procedures remains a significant challenge in contemporary dentistry. Visual shade assessment methods are often limited by subjective perception, lighting conditions, and individual clinician variability. Digital tooth color modeling technologies offer a more precise and objective measurement, enabling clinicians to anticipate whitening outcomes, enhance treatment planning, and improve patient understanding and satisfaction. However, the accuracy and reliability of these methods depend on the type of discoloration, enamel structure, and software capabilities, necessitating a comprehensive evaluation of their clinical potential and limitations.

Objective. The aim of this study was to evaluate the clinical capabilities of digital tooth color modeling for predicting and monitoring whitening outcomes, to identify factors affecting measurement accuracy, and to determine practical limitations of the method across different forms of dental discoloration.

Materials and Methods. The study included 60 patients aged 18–50 years presenting with various forms of dental discoloration: superficial stains caused by exogenous factors, endogenous color changes, and mixed forms of discoloration.

Patients were divided into three groups according to the whitening method applied:

1. In-office whitening using high-concentration peroxide systems (35–40% H₂O₂);
2. At-home whitening with individualized trays and low-concentration gels (10–16% carbamide peroxide);
3. Combined methods, including localized microabrasion prior to application of whitening systems.

Digital tooth color assessment was performed using photometric and spectrophotometric scanners, D-scanning of the dental arch, and subsequent software-based shade modeling. Results were compared with visual assessments using the VITA Classical and 3D-Master scales. Analyses included predictive accuracy of shade changes before and after whitening, stability of results at 1 and 3 months, concordance between digital and clinical measurements, and identification of sources of error and method limitations.

Results. Digital modeling enabled prediction of tooth shade changes with an accuracy of 1–2 shades on the VITA scale.

1. In the in-office whitening group (n=20), the mean lightening was 3–5 shades, with digital predictions matching clinical visual assessment in 85% of cases. Limitations were noted in teeth with endogenous discoloration and areas of high enamel translucency.
2. In the at-home whitening group (n=20), the mean lightening was 2–3 shades, with digital modeling providing stable predictions, especially for superficial stains, showing 90% concordance with visual assessment.
3. In the combined group (n=20), mean lightening was 3–4 shades; the digital model effectively predicted outcomes in areas subjected to prior microabrasion, though minor discrepancies occurred in regions with enamel defects.

It was observed that the accuracy of digital modeling decreased in cases of complex endogenous discoloration, localized spots or mottling, and defects in enamel transparency and surface texture. Nevertheless, the technology enabled objective tracking of the whitening process, visualization of predicted outcomes for patients, and optimization of subsequent treatment planning.

Conclusion. Digital tooth color modeling is an effective tool for planning and monitoring whitening procedures, enhancing objectivity and standardization of outcome assessment. To achieve maximal accuracy, digital data should be used in conjunction with clinical visual evaluation, particularly for complex or localized color changes. The technology allows for reliable prediction of whitening effects, minimizes subjective errors, and increases patient satisfaction with aesthetic treatment outcomes.

Literatures

1. Артёмова А. В., Полосухина Е. Н. Опыт лечения стойких дисколоритов депульпированных зубов на базе кафедры стоматологии терапевтической СГМУ им. ВИ Разумовского //Бюллетень медицинских интернет-конференций. – Общество с ограниченной ответственностью «Наука и инновации», 2015. – Т. 5. – №. 10. – С. 1203-1203.
2. Байтус Н. А. Эстетическое восстановление депульпированных зубов //Беларусь Украина. – 2020. – С. 277.
3. Беленова И. А. и др. Профилактика осложнений после профессионального осветления зубов //Вестник новых медицинских технологий. Электронное издание. – 2018. – Т. 12. – №. 6. – С. 29-34.
4. Беленова И. А., Рожкова Е. Н. Регистрация изменений минерализации эмали при применении препарата на основе ионов кальция и аминокислот //Актуальные проблемы медицины. – 2019. – Т. 42. – №. 4. – С. 488-496.

5. Nazarenko Z. Y. et al. COMPARATIVE CHARACTERISTICS OF THE RESULTS OF PROFESSIONAL USE OF WHITENING SYSTEMS «OPALESCENCE BOOST» AND «MAGIC SMILE PRO».
6. Nikolishyna E. V., Marchenko A. V., Nikolishyn I. A. EFFICIENCY OF TOOTH DISCOLORATION TREATMENT USING BLEACHING SYSTEMS WITH DIFFERENT TYPES OF ACTIVATION AND CONCENTRATION OF HYDROGEN PEROXIDE //WORLD OF MEDICINE AND BIOLOGY. – 2018. – №. 3. – С. 99-102.
7. Perkhach R. Y. et al. Method of Structural Semantic Analysis of Dental Terms in the Instructions for Medical Preparations //COLINS. – 2020. – С. 662-669.
8. Postnikov M. A. et al. A comparative assessment of the occurrence of hyperesthesia after a course of home teeth whitening with various kits //Aspirantskiy Vestnik Povolzhiya. – 2023. – Т. 23. – №. 2. – С. 27-31.
9. Titova O. Age aspects of treatment of teeth discoloritis //Actual problems in dentistry.—2019. – 2019. – Т. 4. – С. 61-5.
10. Tiunova N. V., Naberezhnova S. S., Basheva O. S. The study of the roughness of the enamel surface during various types of refinishing in the process of minimally invasive treatment of dental fluorosis //VolgaMedScience. – 2022. – С. 567-569.
11. Vlasova N. et al. Influence of professional teeth whitening on oral hygiene: Long-term results //Journal of International Society of Preventive and Community Dentistry. – 2021. – Т. 11. – №. 4. – С. 408-413.
12. Zakharov V. et al. Aerographic application of composite dental materials: effective elimination of tooth enamel destruction and improvement of aesthetic qualities of discolorite treatment //Applied Information Aspects of Medicine (Prikladnye informacionnye aspekty mediciny). – 2024. – Т. 27. – №. 1. – С. 37-42.
13. Фуркатов, Ш. Ф. (2025). КЛИНИЧЕСКАЯ ЭФФЕКТИВНОСТЬ И ОПТИМИЗАЦИЯ МЕТОДОВ ЛЕЧЕНИЯ ДИСКОЛОРИТНЫХ ЗУБОВ. В Вестник фундаментальной и клинической медицины. (Т. 6, Выпуск 20, сс. 46–53). Zenodo. <https://doi.org/10.5281/zenodo.17551336>

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